N00296.000910
MOFFETT FIELD
SSIC NO. 5090.3

PHASE I CHARACTERIZATION REPORT

Naval Air Station
Moffett Field, California

Volume 2
Tables and Figures

August 1990

Submitted By:

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Submitted To:

DEPARTMENT OF THE NAVY
WESTERN DIVISION

NAVAL FACILITIES ENGINEERING COMMAND
SAN BRUNO, CALIFORNIA 94066-0727

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N00296.000910
MOFFETT FIELD
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PHASE I CHARACTERIZATION REPORT

DATED 01 AUGUST 1990

THIS RECORD CONTAINS MULTIPLE VOLUMES
WHICH HAVE BEEN ENTERED SEPARATELY

VOLUME 1 OF 5 IS FILED AS ADMINISTRATIVE
RECORD NO. **N00296.000909**

VOLUME 3 OF 5 IS FILED AS ADMINISTRATIVE
RECORD NO. **N00296.000911**

VOLUME 4 OF 5 IS FILED AS ADMINISTRATIVE
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VOLUME 5 OF 5 IS FILED AS ADMINISTRATIVE
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MOFFETT FIELD
SSIC NO. 5090.3

SECTION 1.0

PHASE I CHARACTERIZATION REPORT

DATED 01 AUGUST 1990

Table 1.4-1. Status of Underground Tanks Being Investigated Under the IRP at NAS Moffett Field

Tank No.	Type	Location (Site)	Responsible Program	Next Step
1	Abandoned tank	Site 9	IRP	Remove tank
2	Leaking tank	Site 19	IRP	Tank has been removed
4	Bulk tank	Site 5	IRP	Monitor for leakage
5	Bulk tank	Site 5	IRP	Monitor for leakage
6	Bulk tank	Site 5	IRP	Monitor for leakage
7	Bulk tank	Site 5	IRP	Monitor for leakage
8	Bulk tank	Site 5	IRP	Monitor for leakage
9	Bulk tank	Site 5	IRP	Monitor for leakage
10	Bulk tank	Site 5	IRP	Monitor for leakage
11	Bulk tank	Site 5	IRP	Monitor for leakage
12	Bulk tank	Site 5	IRP	Monitor for leakage
13	Bulk tank	Site 5	IRP	Monitor for leakage
14	Leaking tank	Site 19	IRP	Tank has been removed
15	Abandoned tank	Near runway	IRP	Remove tank
16	Bulk tank	Site 4	IRP	Monitor for leakage
19	Tank	Site 14	IRP	Tank has been removed
20	Tank	Site 14	IRP	Tank has been removed
27	Abandoned tank	Site 5	IRP	Remove tank
43	Leaking tank	Site 19	IRP	Tank has been removed
47	Abandoned tank	Site 9	IRP	Remove tank
48	Abandoned tank	Site 9	IRP	Remove tank
49	Abandoned tank	Site 9	IRP	Remove tank
50	Abandoned tank	Site 9	IRP	Remove tank
51	Abandoned tank	Site 10	IRP	Remove tank
52	Abandoned tank	Site 10	IRP	Remove tank
53	Leaking tank	Site 19	IRP	Tank has been removed
55	Abandoned tank	Site 7	IRP	Remove tank
56A	Abandoned tank	Site 9	IRP	Remove tank
56B	Abandoned tank	Site 9	IRP	Remove tank
56C	Abandoned tank	Site 9	IRP	Remove tank
56D	Abandoned tank	Site 9	IRP	Remove tank
67	Abandoned tank	Site 14	IRP	Tank has been removed
68	Abandoned tank	Site 14	IRP	Closed in place

IRP = Installation Restoration Program

Table 1.4-2. Status of Sumps and Ponds Being Investigated Under the IRP at NAS Moffett Field

Pond/Sump No.	Type	Location (Site)	Responsible Program	Next Step
23	Pond	Site 4 area	IRP	Closure
24	Pond	Site 4 area	IRP	Closure
25	Sump	Site 15	IRP	Monitor for leakage
42	Sump	Site 15	IRP	Monitor for leakage
54	Sump	Site 15	IRP	Monitor for leakage
58	Sump	Site 15	IRP	Monitor for leakage
59	Sump	Site 15	IRP	Monitor for leakage
60	Sump	Site 16	IRP	Remove sump
61	Sump	Site 17	IRP	Remove sump
62	Sump	Site 15	IRP	Monitor for leakage
63	Sump	Site 15	IRP	Monitor for leakage
64	Sump	Site 15	IRP	Monitor for leakage
65	Sump	Site 15	IRP	Monitor for leakage
66	Sump	Site 18	IRP	Sump has been removed

IRP = Installation Restoration Program

Table 1.4-3. List of Potentially Contaminated Sites for Remedial Investigation at NAS Moffett Field

Site	Type of Waste
1. Runway landfill	Solvents, oils
2. Golf course landfill	Solvents, oils
3. Marriage Road ditch	Solvents, fuels, paints
4. Former industrial wastewater surface impoundment	Solvents, fuels, oils
5. Fuel farm french drains	Fuels
6. Runway apron	Solvents, oils, fuels, paints
7. Unpaved areas surrounding hangars 2 and 3	Paints, oils, solvents, fuels
8. Waste oil transfer area	Transformer oil, PCBs, solvents
9. Old fuel farm	Oils, solvents
10. Chase Park area (and runway)[a]	Oils, fuels, solvents
11. Engine test stand area	Oils, metals, fuels
12. Fire fighting training area	Fuels, solvents, fire fighting agents
13. Equipment parking area (B-142)	Fuels, oils, solvents
14. Abandoned tanks, 19, 20, 67, and 68	Fuels
15. Sumps and oil/water separators (nine)	Oils, neutralized battery acid, lead
16. Public works steam rack sump 60	Oils
17. Paint shop sump 61	Paints, solvents
18. Dry cleaners sump 66	Solvents
19. Leaking tanks 2, 14, 43, 53	Fuels, solvents, oils, paint, battery acid, lead

[a]Site 10 was identified in the Verification Step of the Confirmation Study (ESA, 1986a) as the Chase Park Area. The Site 10 designation has also been given to the active industrial wastewater surface impoundments (holding ponds). The active impoundments have been investigated under a different study and are not directly included in the Remedial Investigation as part of Site 4. Therefore, the designation "Site 10" applies only to the Chase Park Area and runways in the sampling plan (IT, 1988b).

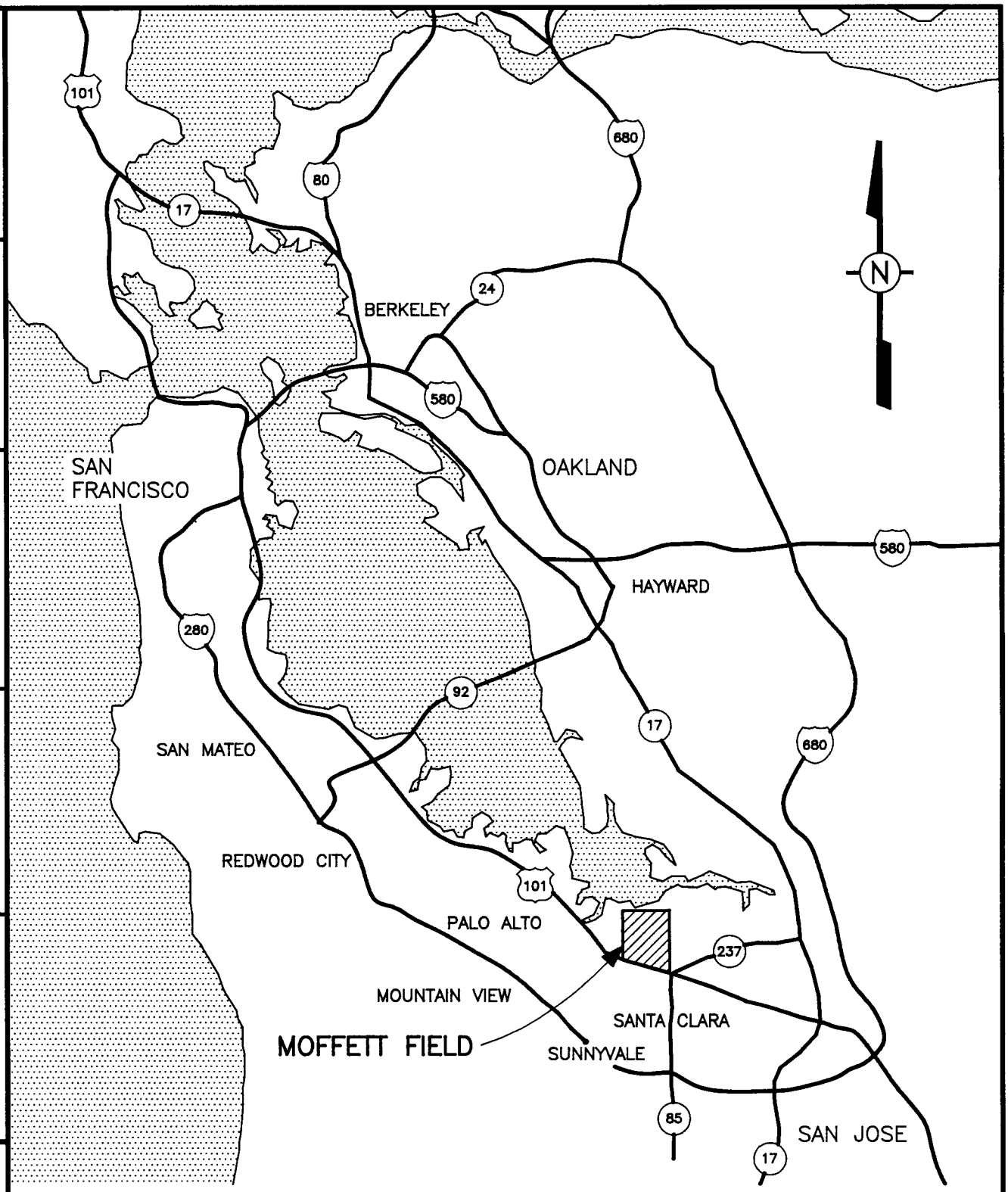

FIGURE 1.3–1

VICINITY MAP

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

0 5 10 MILES

INTERNATIONAL TECHNOLOGY CORPORATION

STARTING DATE: 3/12/90	DATE LAST REV.:	DRAFT. CHCK. BY:	INITIATOR: K. BRADLEY	DWG. NO.: 409700-A-G10
DRAWN BY: D.HIGGS	DRAWN BY:	ENGR. CHCK BY:	PROJ. MGR.: K. BRADLEY	PROJ. NO.: 409700

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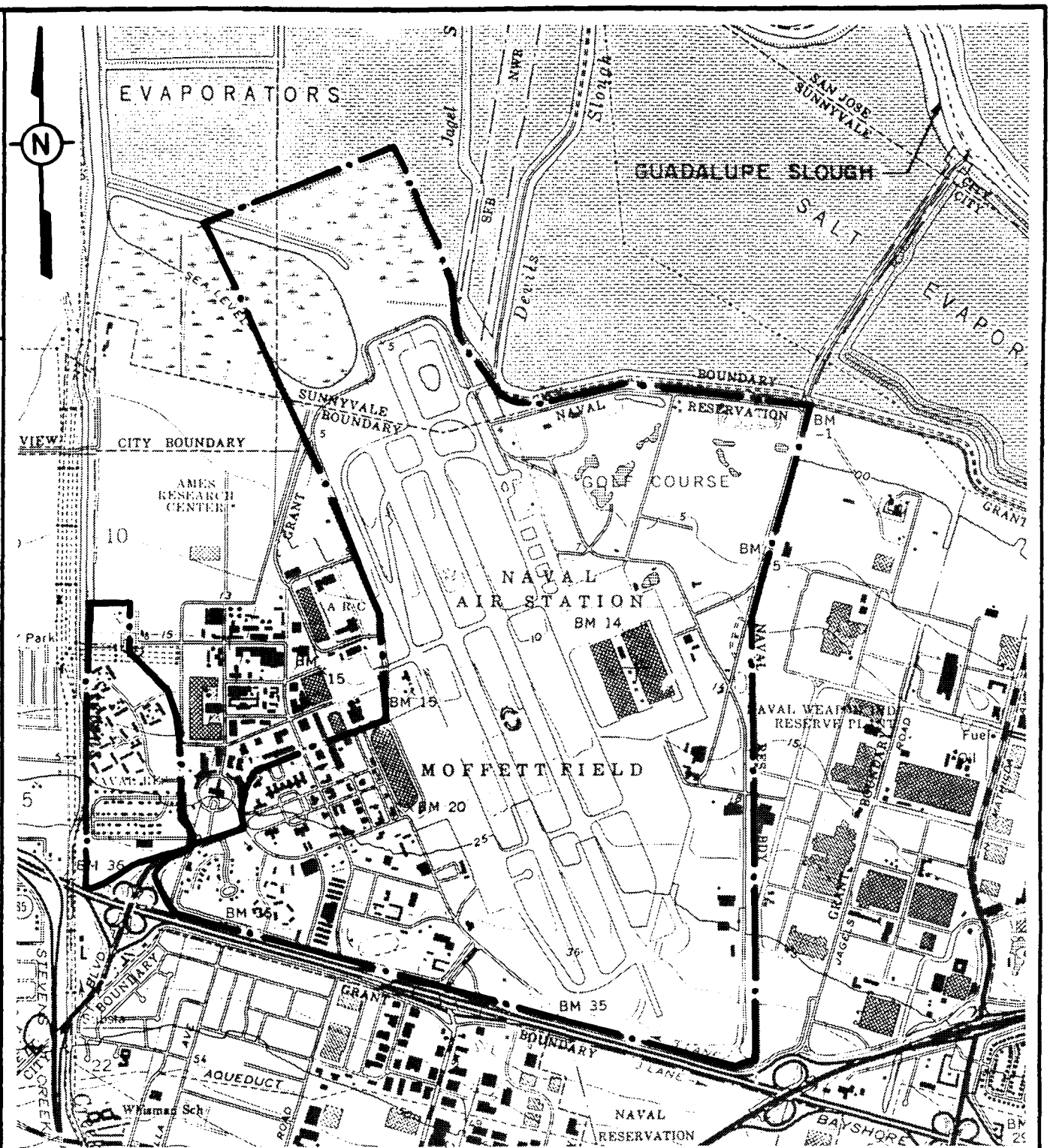


SCALE

0 2000 4000 FEET

LEGEND:

—·— NAS MOFFETT FIELD BOUNDARY

SOURCE: MOUNTAIN VIEW, CA QUADRANGLE 1981

FIGURE 1.3-2

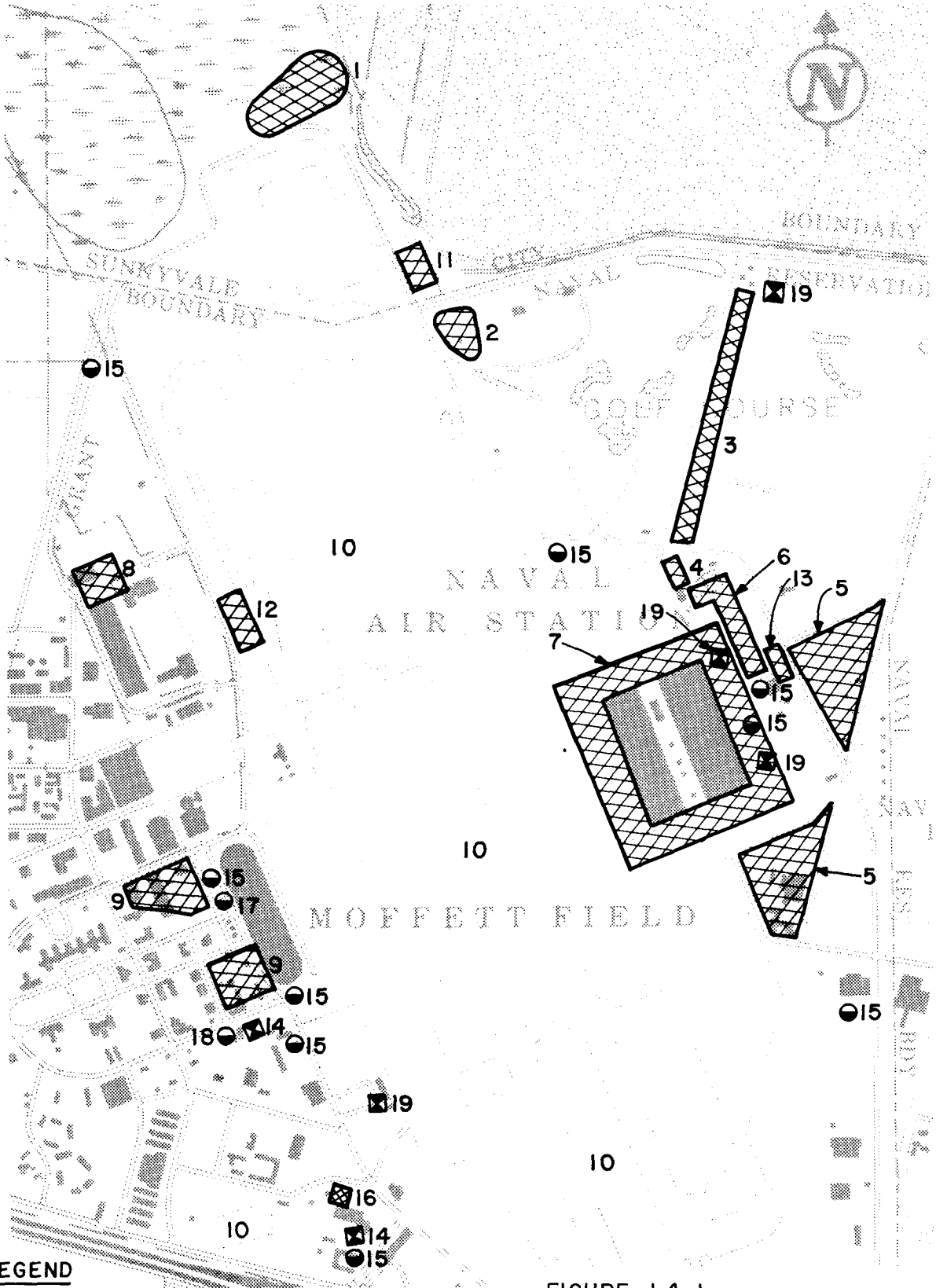
NAS MOFFETT FIELD VICINITY MAP

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

STARTING DATE: 9-20-89	DATE LAST REV.:	INITIATOR: D. WILLEN	DRAWING NO.: 409616-A-C39
DRAWN BY: C. K. ROBERTSON	DRAWN BY:	PROJ. MGR. K. BRADLEY	PROJECT NO.: 409616

BRUNING 72425-00 FORM # 0262



STARTING DATE: 8-14-89 | DATE LAST REV.: | INITIATOR: T. WEDEKIND | DRAWING NO.: 409616-A-C05

DRAWN BY: C. HINSHAW | DRAWN BY: | PROJ. MGR. K. BRADLEY | PROJECT NO.: 409616

LEGEND

- TANKS
- SUMPS
- SITE LOCATIONS

SCALE

1000 0 1000 FEET

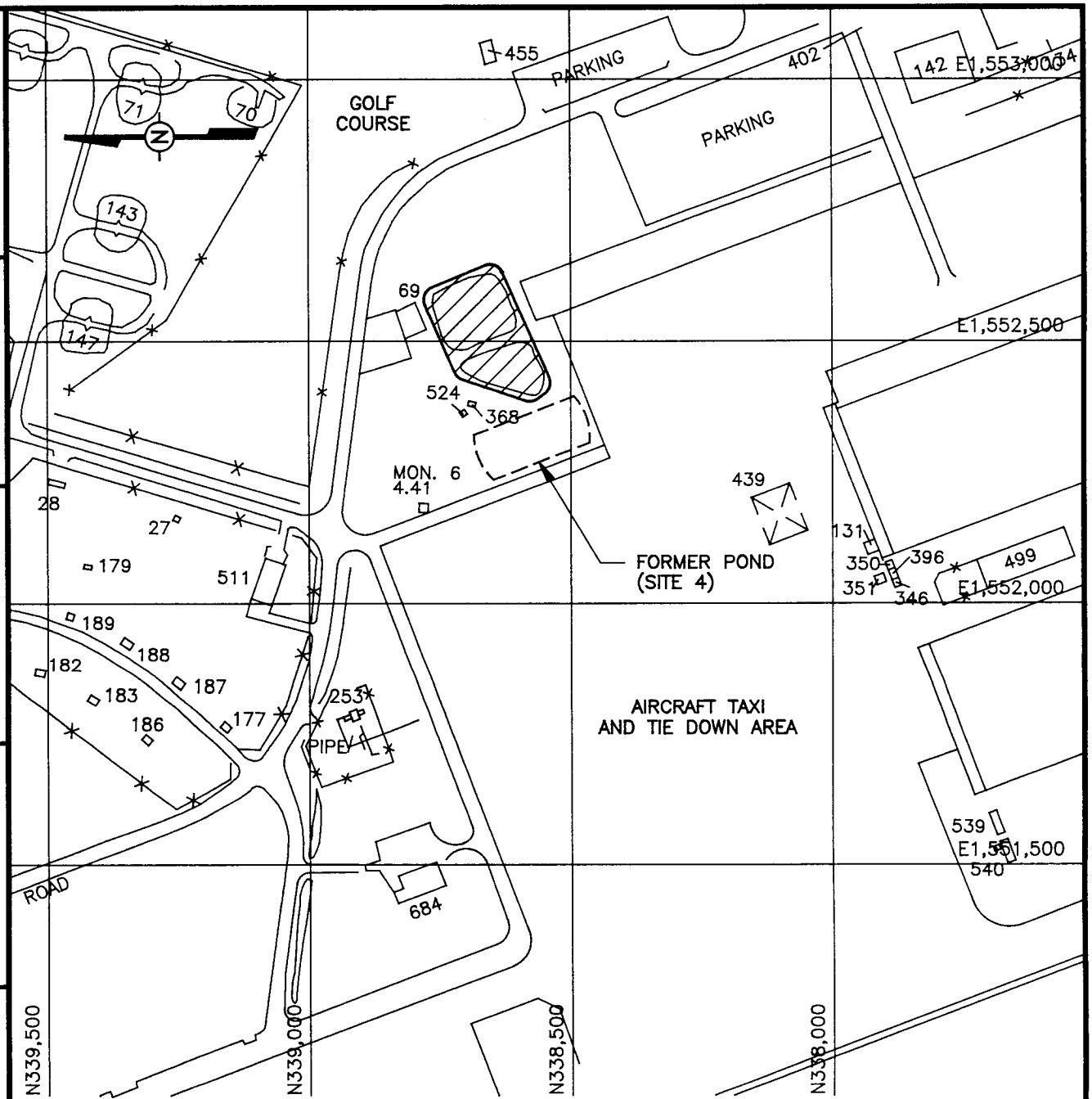
FIGURE 1.4-1

STUDY SITES LOCATIONS

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

BRUNING 72425



LEGEND

FLUX PONDS

0 300 600 FEET

FIGURE 1.4-2

SITE 4
FORMER INDUSTRIAL WASTEWATER
FLUX PONDS

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

SOURCE: AERO-GEODETIC CORP.
JOB NO. 811822 3/16/81

STARTING DATE: 3/12/90	DATE LAST REV.: 7/26/90	DRAFT. CHCK. BY:	INITIATOR: K. BRADLEY	DWG. NO.: 409700-A-GXX	
DRAWN BY: D.HIGGS	DRAWN BY: D.HIGGS	ENGR. CHCK BY:	PROJ. MGR.: K. BRADLEY	PROJ. NO.: 409700	

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Table 2.3-1 Unified Soil Classification System

			Group Symbols	Typical Names
COARSE GRAINED Soils	GRAVELS	CLEAN GRAVELS	GW	Well graded gravels, gravel-sand mixtures little or no fines
			GP	Poorly graded gravels, gravel-sand mixtures little or no fines
(More than half of material is larger than No. 200 sieve size)		GRAVELS WITH FINES	GM	Silty gravels, poorly graded gravel-sand silt with mixtures
			GC	Clayey gravels, poorly graded gravel-sand clay mixtures
	SANDS	CLEAN SANDS	SW	Well-graded sands, gravelly sands, little or no fines
			SP	Poorly graded sands, gravelly sands, little or no fines
		SANDS WITH FINES	SM	Silty sands, poorly graded sand-silt mix
			SC	Clayey sands, poorly graded sand-clay mix
FINE GRAINED SOILS			ML	Inorganic silts and very fine sands, rock flour silty or clayey fine sands with slight plasticity
(More than half of material is smaller than No. 200 sieve size)	SILTS AND CLAYS		CL	Inorganic clays of low to medium plasticity gravelly clays, sandy clays, silty clays, lean clays
			OL	Organic silts and organic silt-clays of low plasticity
			MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts
			CH	Inorganic clays of high plasticity, fat clays
			OH	Organic clays of medium to high plasticity
HIGHLY ORGANIC SOILS			Pt	Peat and other highly organic soils

REFERENCE: Earth Manual (U.S. Bureau of Reclamation, 1974)

Table 2.3-2

Boring and Well Construction Information

Aquifer	Boring/ Well No.	Northing	Easting	Well Depth (ft.)	Casing Diameter (in.)	Casing Material	Screen Type	Slot Size	Screen (Top) (ft.)	Screen (Bottom) (ft.)	Date Installed
	GB01-04	343376.6	1549589.7	212.0	N/A	N/A	N/A	N/A	N/A	N/A	06/08/88
	GB01-05	342514.2	1548942.4	253.0	N/A	N/A	N/A	N/A	N/A	N/A	08/22/88
	GB01-06	342233.1	1549873.7	153.0	N/A	N/A	N/A	N/A	N/A	N/A	06/14/88
	GB02-01	340763.7	1550917.3	157.0	N/A	N/A	N/A	N/A	N/A	N/A	06/17/88
	GB02-02	340190.1	1550859.7	157.0	N/A	N/A	N/A	N/A	N/A	N/A	06/29/88
	GB02-03	341038.2	1550380.7	243.0	N/A	N/A	N/A	N/A	N/A	N/A	06/27/88
	GB03-13	341152.1	1552413.7	252.0	N/A	N/A	N/A	N/A	N/A	N/A	08/30/88
	GB03-14	339680.7	1552418.9	252.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	GB03-15	340339	1552260.7	252.0	N/A	N/A	N/A	N/A	N/A	N/A	09/15/88
	GB03-16	340212.8	1552577.1	252.0	N/A	N/A	N/A	N/A	N/A	N/A	09/07/88
	GB03-17	340942	1552822.9	257.0	N/A	N/A	N/A	N/A	N/A	N/A	09/13/88
	GB04-18	339027.7	1552291.4	252.0	N/A	N/A	N/A	N/A	N/A	N/A	09/28/88
	GB04-19	339004.7	1552974.3	252.0	N/A	N/A	N/A	N/A	N/A	N/A	09/26/88
	GB04-20	339443.4	1552021.4	257.0	N/A	N/A	N/A	N/A	N/A	N/A	10/06/88
	GB05-21	338458.4	1553646.6	232.0	N/A	N/A	N/A	N/A	N/A	N/A	08/23/88
	GB05-22	337159.6	1553394.6	248.0	N/A	N/A	N/A	N/A	N/A	N/A	07/05/88
	GB05-23	336115.1	1553062.2	252.0	N/A	N/A	N/A	N/A	N/A	N/A	08/17/88
	GB07-24	336753.9	1551962.9	257.0	N/A	N/A	N/A	N/A	N/A	N/A	10/04/88
	GB08-25	338975.3	1547877.4	257.0	N/A	N/A	N/A	N/A	N/A	N/A	10/12/88
	GB08-26	338741.2	1547844.5	257.0	N/A	N/A	N/A	N/A	N/A	N/A	10/10/88
	GB09-07	336983.7	1548070.8	260.0	N/A	N/A	N/A	N/A	N/A	N/A	07/20/88
	GB09-08	336699.7	1548645.9	253	N/A	N/A	N/A	N/A	N/A	N/A	07/15/88
	GB09-09	336157.4	1548016	253.0	N/A	N/A	N/A	N/A	N/A	N/A	07/12/88
	GB09-10	335503.7	1548645.3	250.0	N/A	N/A	N/A	N/A	N/A	N/A	07/28/88

FOOTNOTES N/A :Not Applicable or Not Available
S.S. :Stainless Steel
C.S. :Carbon Steel
P.V.C. :Polyvinyl Chloride

Table 2.3-2
Boring and Well Construction Information

Aquifer	Boring/ Well No.	Northing	Easting	Well Depth (ft.)	Casing Diameter (in.)	Casing Material	Screen Type	Slot Size	Screen (Top) (ft.)	Screen (Bottom) (ft.)	Date Installed
	GB09-11	335839	1548601	255.0	N/A	N/A	N/A	N/A	N/A	N/A	07/25/88
	GB09-12	335819.1	1548307.5	253.0	N/A	N/A	N/A	N/A	N/A	N/A	08/03/88
	GB10-27	337219.9	1550995.8	252.0	N/A	N/A	N/A	N/A	N/A	N/A	08/19/88
	GB10-30	334869.1	1553159.5	252.0	N/A	N/A	N/A	N/A	N/A	N/A	09/20/88
	GB14-28	333680.8	1549926.3	260.0	N/A	N/A	N/A	N/A	N/A	N/A	08/08/88
	GB19-29	338113.9	1552447.9	250.0	N/A	N/A	N/A	N/A	N/A	N/A	08/12/88
B2	MEW-121(B2)	335939.9	1547048.5	88.0	N/A	N/A	N/A	N/A	81.0	86.0	11/03/86
B1	MEW-46(B1)	335071.4	1548884	50.0	N/A	N/A	N/A	N/A	38.0	48.0	08/13/85
A	MEW-72(A)	333302.1	1549559.8	31.0	N/A	N/A	N/A	N/A	20.0	25.0	11/26/85
A	MEW-74(A)	334261.7	1549505	27.0	N/A	N/A	N/A	N/A	15.0	25.0	08/09/85
A	MEW-75(A)	334275	1547732.5	30.0	N/A	N/A	N/A	N/A	18.0	28.0	11/25/85
B	MEW-78(B1)	335935.4	1547055.6	51.0	N/A	N/A	N/A	N/A	39.0	49.0	06/10/86
A	MEW-81(A)	335064.1	1548889.5	25.0	N/A	N/A	N/A	N/A	13.0	23.0	08/14/85
B2	MEW-82(B2)	338682.1	1547669.8	88.0	N/A	N/A	N/A	N/A	71.0	86.0	06/18/86
B1	MEW-83(B1)	338022.4	1549379.8	58.0	N/A	N/A	N/A	N/A	46.0	56.0	06/17/86
A	MEW-88(A)	335940.1	1547057.4	32.0	N/A	N/A	N/A	N/A	20.0	30.0	06/09/86
	SB01-01	342458.6	1549818.9	25.0	N/A	N/A	N/A	N/A	N/A	N/A	07/15/88
	SB02-01	340550	1550680	25.0	N/A	N/A	N/A	N/A	N/A	N/A	08/01/88
	SB02-04	340190.1	1550859.7								
	SB02-07	340763.7	1550917.3								
	SB05-01	337745	1553637.4	45.0							08/02/88
	SB14-01	333559.7	1550068.1	15.0	N/A	N/A	N/A	N/A	N/A	N/A	08/08/88
	SB14-02	333605.7	1550004.6	15.0	N/A	N/A	N/A	N/A	N/A	N/A	08/08/88
	SB14-03	333691.7	1549917.6	15.0	N/A	N/A	N/A	N/A	N/A	N/A	08/10/88

FOOTNOTES N/A :Not Applicable or Not Available
S.S. :Stainless Steel
C.S. :Carbon Steel
P.V.C. :Polyvinyl Chloride

Table 2.3-2
Boring and Well Construction Information

Aquifer	Boring/ Well No.	Northing	Easting	Well Depth (ft.)	Casing Diameter (in.)	Casing Material	Screen Type	Slot Size	Screen (Top) (ft.)	Screen (Bottom) (ft.)	Date Installed
	SB19-01	337530.8	1552686.9	15.0	N/A	N/A	N/A	N/A	N/A	N/A	09/15/88
	SB19-02	337552	1552689.2	15.0	N/A	N/A	N/A	N/A	N/A	N/A	09/15/88
	SB19-03	337574.1	1552659.1	15.0	N/A	N/A	N/A	N/A	N/A	N/A	09/15/88
	SB19-04	338094.1	1552473.9	15.0	N/A	N/A	N/A	N/A	N/A	N/A	09/14/88
	SB19-05	338087.8	1552450.3	15.0	N/A	N/A	N/A	N/A	N/A	N/A	09/14/88
A1	W01-01(A1)	342250.8	1549859.9	25.0	2.0	S.S.	S.S.	N/A	15.0	25.0	08/23/85
A1	W01-02(A1)	342610.3	1549037	25.0	2.0	S.S.	S.S.	N/A	15.0	25.0	08/23/85
F	W01-03(F)	342928.7	1549425.9	35.0	2.0	S.S.	S.S.	N/A	25.0	35.0	08/22/85
A1	W01-05(A1)	343385.2	1549579.4	21.5	4.0	PVC	PVC	.01	14.50	19.50	06/27/88
A2	W01-06(A1)	342228.3	1549584.4	34.0	4.0	PVC	PVC	.01	15.0	30.0	07/18/88
A2	W01-07(A2)	342492.2	1548950.5	75.0	4.0	PVC	PVC	.01	40.0	70.0	06/29/88
A1	W01-08(A1)	342968	1549752.4	25.0	4.0	PVC	PVC	.01	13.0	18.0	07/11/88
F	W01-09(F)	342934.3	1549596.1	44.0	4.0	PVC	PVC	.01	19.0	29.0	07/06/88
F	W01-10(F)	342552.4	1549695.1	19.5	4.0	PVC	PVC	.01	7.0	14.80	07/06/88
F	W01-10(F)(ABAN)	342387.9	1549541.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
F	W01-11(F)	342833.1	1549395.4	30.0	4.0	PVC	PVC	.01	15.50	25.50	07/12/88
A1	W01-12(A1)	342976.1	1549346.4	40.0	4.0	S.S.	S.S.	.01	12.50	22.50	09/02/88
F	W01-13(F)	342564.5	1549062.2	22.0	4.0	PVC	PVC	.01	6.60	16.60	08/10/88
A1	W02-05(A1)	340610.3	1550345.9	21.5	4.0	PVC	PVC	.01	7.0	17.0	07/13/88
A1	W02-06(A1)	340883.6	1550506.5	22.5	4.0	PVC	PVC	.01	15.0	20.0	07/14/88
A2	W02-07(A2)	340756.6	1550917.8	40.0	4.0	PVC	PVC	.01	30.0	35.0	07/07/88
F	W02-08(F)	340596.8	1550669	15.25	4.0	PVC	PVC	.01	7.0	12.0	06/30/88
A1	W02-09(A1)	340506.8	1550675.6	26.75	4.0	PVC	PVC	.01	14.50	19.50	06/28/88
F	W02-10(F)	340872.7	1550636.6	16.0	4.0	PVC	PVC	.01	6.0	11.0	07/13/88

FOOTNOTES N/A :Not Applicable or Not Available
S.S. :Stainless Steel
C.S. :Carbon Steel
P.V.C. :Polyvinyl Chloride

Table 2.3-2

Boring and Well Construction Information

Aquifer	Boring/ Well No.	Northing	Easting	Well Depth (ft.)	Casing Diameter (in.)	Casing Material	Screen Type	Slot Size	Screen (Top) (ft.)	Screen (Bottom) (ft.)	Date Installed
F	W02-11(F)	340675.9	1550744.3	24.0	4.0	PVC	PVC	.01	11.0	21.0	07/14/88
A1	W03-01(A1)	339573.7	1552398	25.0	2.0	S.S.	S.S.	N/A	10.0	20.0	08/15/85
A1	W03-02(A1)	341113.2	1552429	20.0	2.0	S.S.	S.S.	N/A	5.0	15.0	08/14/85
A1	W03-03(A1)	340911.7	1552806.9	20.0	2.0	S.S.	S.S.	N/A	8.0	18.0	08/14/85
B2	W03-04(B2)	340908.4	1552806.9	80.0	2.0	S.S.	S.S.	N/A	55.0	75.0	07/23/85
B2	W03-07(B2)	340356	1552268.2	80.0	2.0	S.S.	S.S.	N/A	69.0	79.0	07/25/85
A1	W03-08(A1)	340365	1552672.3	18.0	2.0	PVC	PVC	N/A	8.0	18.0	11/01/83
B2	W03-09(B2)	340368	1552663.7	78.0	4.0	PVC	PVC	N/A	58.0	78.0	11/17/83
A1	W03-11(A1)	340120.9	1553082.3	21.5	2.0	PVC	PVC	N/A	9.0	19.0	11/07/83
A2	W03-12(A2)	341114.2	1552411	80.5	4.0	C.S.	S.S.	.01	42.0	52.0	09/20/88
A2	W03-13(A2)	340320.3	1552252.2	68/5	4.0	C.S.	S.S.	.01	43.0	53.0	10/12/88
B2	W03-14(B2)	339665.7	1552414.4	79.0	4.0	C.S.	S.S.	.01	61.0	71.0	09/22/88
B3	W03-15(B3)	340303.5	1552603	130.0	4.0	C.S.	S.S.	.01	83.0	88.0	09/29/88
C	W03-16(C)	340925.4	1552823.9	178.0	4.0	C.S.	S.S.	.01	168.0	173.0	10/07/88
A2	W03-22(A2)	340923.8	1554609.5	54.0	4.0	C.S.	S.S.	.01	45.0	50.0	09/02/88
A1	W03-23(A1)	341149.5	1552892.9	17.8	4.0	C.S.	S.S.	.01	10.0	15.0	08/29/88
A1	W04-02(A1)	339206	1552641.8	25.0	2.0	S.S.	S.S.	N/A	10.0	20.0	08/16/85
A1	W04-03(A1)	338882.4	1552169.4	19.0	2.0	PVC	PVC	N/A	9.0	19.0	05/18/83
A1	W04-04(A1)	338848.3	1552418.1	20.0	2.0	PVC	PVC	N/A	10.0	20.0	05/18/83
A2	W04-06(A2)	338826.9	1552331.3	50	2.0	S.S.	S.S.	N/A	35.0	50.0	07/25/85
C	W04-07(C)	339015.3	1552299.7	186.0	4.0	C.S.	S.S.	.02	169.0	174.0	10/07/88
B4	W04-08(B4)	338989.5	1552975.3	152.5	4.0	S.S.	C.S.	.01	147.0	152.0	11/04/88
B3	W04-09(B3)	339427.4	1552031.7	111.0	4.0	C.S.	S.S.	.01	94.0	99.0	10/20/88
A	W04-11(A)(ABAN)	339000.2	1552963.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

FOOTNOTES N/A :Not Applicable or Not Available
S.S. :Stainless Steel
C.S. :Carbon Steel
P.V.C. :Polyvinyl Chloride

Table 2.3-2
Boring and Well Construction Information

Aquifer	Boring/ Well No.	Northing	Easting	Well Depth (ft.)	Casing Diameter (in.)	Casing Material	Screen Type	Slot Size	Screen (Top) (ft.)	Screen (Bottom) (ft.)	Date Installed
A2	W05-04(A2)	338498.7	1553744.2	67.5	4.0	C.S.	S.S.	.01	50.0	55.0	09/08/88
B4	W05-05(B4)	338477.9	1553704.9	160.0	4.0	C.S.	S.S.	.01	145.0	155.0	09/15/88
A1	W05-06(A1)	337751.8	1553628.1	20.0	4.0	C.S.	S.S.	.01	10.0	15.0	08/16/88
A2	W05-07(A2)	336916.8	1553377.6	70.0	4.0	C.S.	S.S.	.01	31.0	41.0	08/10/88
B1	W05-08(A2)	337193.8	1553499.5	50.0	4.0	C.S.	S.S.	.01	38.1	43.1	08/08/88
A1	W05-09(A1)	336107.9	1553067.7	28.0	4.0	C.S.	S.S.	.01	11.9	16.9	08/02/88
A1	W05-10(A1)	337143.2	1553410.7	28.0	4.0	C.S.	S.S.	.01	20.0	25.0	08/22/88
A1	W05-14(A1)	338214.1	1553576.2	70.0	4.0	C.S.	S.S.	.01	12.0	17.0	08/15/88
A1	W05-15(A1)	337958.3	1553451.5	40.0	4.0	C.S.	S.S.	.01	15.0	20.0	08/17/88
A1	W05-16(A1)	336630.8	1553269.6	37.7	4.0	C.S.	S.S.	.01	8.0	13.0	08/16/88
A1	W05-17(A1)	336692.9	1553136.6	26.2	4.0	C.S.	S.S.	.01	16.0	21.0	08/18/88
A1	W05-18(A1)	336525.1	1553246.1	22.5	4.0	C.S.	S.S	.01	11.0	16.0	08/10/88
A2	W05-19(A2)	336583	1553093.2	41.0	4.0	C.S.	S.S.	.01	27.0	37.0	08/04/88
A2	W06-02(A2)	338461.9	1552708.5	45.0	2.0	S.S.	S.S.	N/A	33.5	43.5	07/29/85
A1	W06-03(A1)	338454.1	1552712.4	18.0	2.0	PVC	PVC	N/A	10.0	18.0	05/17/83
A1	W07-01(A1)	336750.5	1551979.8	30.0	2.0	S.S.	S.S.	N/A	20.0	30.0	08/20/85
A2	W07-04(A2)	337917.5	1551986.5	80.0	2.0	S.S.	S.S.	N/A	63.0	73.0	07/30/85
A2	W07-08(A2)	338103.3	1552454	34.0	2.0	PVC	PVC	N/A	29.0	34.0	05/18/83
A1	W07-13(A1)	337088.2	1882860	25.0	2.0	PVC	PVC	N/A	15.0	25.0	05/17/83
A2	W07-15(A2)	337522.2	1551570.9	76.5	4.0	PVC	PVC	N/A	60.0	75.0	11/04/83
B4	W07-16(B4)	336745.1	1551965.7	167.0	4.0	C.S.	S.S.	.01	159.2	164.2	11/19/88
A2	W07-18(A2)	336879.2	1552435.3	42.2	4.0	C.S.	S.S.	.01	27.0	32.0	09/28/88
A1	W07-19(A1)	337991.9	1552000.7	26.1	4.0	C.S.	S.S.	.01	15.0	20.0	09/26/88
A2	W07-20(A2)	337581.6	1552681.1	41.8	4.0		S.S.	.01	28.0	33.0	09/20/88

FOOTNOTES N/A :Not Applicable or Not Available
S.S. :Stainless Steel
C.S. :Carbon Steel
P.V.C. :Polyvinyl Chloride

Table 2.3-2

Boring and Well Construction Information

Aquifer	Boring/ Well No.	Northing	Easting	Well Depth (ft.)	Casing Diameter (in.)	Casing Material	Screen Type	Slot Size	Screen (Top) (ft.)	Screen (Bottom) (ft.)	Date Installed
A1	W07-21(A1)	337678.1	1551472.9	25.3	4.0	C.S.	S.S.	.01	17.1	22.1	09/21/88
A2	W08-01(A2)	338851.3	1547879.7	30.0	2.0	S.S.	S.S.	N/A	20.0	30.0	08/27/85
A2	W08-02(A2)	338964.9	1547887	65.0	4.0	C.S.	S.S.	.01	43.0	48.0	10/25/88
B4	W08-03(B4)	338725.9	1547848.6	166.6	4.0	C.S.	S.S.	.01	152.0	162.0	10/31/88
A1	W08-04(A1)	338701.9	1547853.3	22.5	4.0	C.S.	S.S.	.01	17.0	22.0	08/18/88
A2	W08-05(A2)	339162.4	1547850.4	30.0	4.0	C.S.	S.S.	.01	21.5	26.5	08/22/88
A2	W08-06(A2)	338986.4	1547845.8	43.0	4.0	C.S.	S.S.	.01	17.0	37.0	08/24/88
A1	W09-01(A1)	336383.4	1548241	30.0	2.0	C.S.	S.S.	N/A	20.0	30.0	08/29/85
B4	W09-03(B4)	335811.3	1548305.4	174.7	4.0	C.S.	S.S.	.01	157.2	167.2	08/18/88
B2	W09-04(B2)	336979.6	1548121.6	94.3	4.0	C.S.	S.S.	.01	78.3	83.3	07/21/88
B3	W09-05(B3)	336993.2	1548115.8	124.1	4.0	C.S.	S.S.	.01	97.7	117.7	07/26/88
A1	W09-06(A1)	336389.7	1548272.7	35.0	4.0	C.S.	S.S	.01	15.2	25.2	07/18/88
A2	W09-07(A2)	336158.5	1548028.6	40.0	4.0	C.S.	S.S.	.01	13.3	33.3	07/21/88
A2	W09-13(A2)	336152.5	1548014.9	48.0	4.0	C.S.	S.S.	.01	38.0	43.0	07/19/88
A2	W09-14(A2)	335498.3	1548647.7	54.7	4.0.	C.S.	S.S.	.01	39.0	49.0	08/08/88
B2	W09-15(B2)	335826	1548606	108.0	4.0	C.S.	S.S.	.01	87.3	97.3	08/04/88
A2	W09-27(A2)	336676.4	1548653.8	53.2	4.0	C.S.	S.S.	.01	37.8	47.8	08/22/88
A1	W10-05(A1)	337187.5	1551008.7	20.0	4.0	C.S.	S.S.	.01	8.0	13.0	08/03/88
B4	W10-06(B4)	334869.4	1553189.6	178.0	4.0	C.S.	S.S.	.01	166.0	171.0	10/03/88
A1	W11-01(A1)	341246.4	1550374.8	25.0	4.0	C.S.	S.S.	.01	15.0	20.0	08/24/88
A1	W11-02(A1)	341444.3	1550241.1	80.0	4.0	C.S.	S.S.	.01	17.5	22.5	08/29/88
A2	W12-01(A2)	338009.7	1549044.6	35.0	4.0	C.S.	S.S.	.01	24.0	29.0	09/08/88
A2	W12-02(A2)	338270.3	1549017	32.8	4.0	C.S.	S.S.	.01	26.4	31.4	09/09/88
A1	W12-03(A1)	338291.6	1548912.3	27.6	4.0	C.S.	S.S.	.01	16.0	21.0	09/12/88

FOOTNOTES N/A :Not Applicable or Not Available
S.S. :Stainless Steel
C.S. :Carbon Steel
P.V.C. :Polyvinyl Chloride

Aquifer	Boring/ Well No.	Northing	Easting	Well Depth (ft.)	Casing Diameter (in.)	Casing Material	Screen Type	Slot Size	Screen (Top) (ft.)	Screen (Bottom) (ft.)	Date Installed
A2	W14-01(A2)	333688.5	1549923.9	56.2	4.0	C.S.	S.S.	.01	43.0	48.0	08/24/88
A1	W14-02(A1)	333682.5	1549915.5	28.0	4.0	C.S.	S.S.	.01	15.0	25.0	08/01/88
A1	W14-03(A1)	333561.9	1549910.7	35.0	4.0	C.S.	S.S.	.01	15.0	30.0	07/20/88
A1	W14-04(A1)	333735.9	1549948.9	28.0	4.0	C.S.	S.S.	.01	16.0	21.0	07/28/88
A2	W14-05(A2)	333567.8	1549900.6	58.7	4.0	C.S.	S.S	.01	44.9	49.9	08/12/88
A2	W14-06(A2)	333732.7	1549944.3	56.3	4.0	C.S.	S.S.	.01	43.2	53.2	08/26/88
A2	W19-01(A2)	338105.4	1552444.2	40.0	4.0	C.S.	S.S	.01	30.0	35.0	07/27/88
A2	W19-02(A2)	337975.5	1552511.4	60.2	4.0	C.S.	S.S.	.01	50.9	55.9	08/29/88
A2	W19-03(A2)	338304.3	1552227.1	61.1	4.0	C.S.	S.S.	.01	51.0	56.0	09/01/88
A2	W19-04(A2)	338292.7	1552236.2	40.0	4.0	C.S.	S.S.	.01	31.0	36.0	07/28/88

FOOTNOTES N/A :Not Applicable or Not Available
S.S. :Stainless Steel
C.S. :Carbon Steel
P.V.C. :Polyvinyl Chloride

Table 2.3-3. Existing Wells Used In Monthly Water Level Program
NAS Moffett Field

Site 3	Site 4	Site 6	Site 7	Site 8
W3-1A	W4-2A	W6-2A	W7-1A	W8-1A
W3-2A	W4-3A	W6-3A	W7-4B1	82(B2)
W3-3A	W4-4A		W7-8A	
W3-4B2	W4-6A		W7-13A	
W3-7B2			W7-15B1	
W3-8A				
W3-9B1				
W3-11A				
Site 9	**Site 10**	**Site 12**	**Site 14**	
W9-1A	W10-2A	83(B1)	72A	
W9-2A	W10-3B2		74A	
75(A)	W10-4B1			
81(A)				
46(B1)				
88(A)				
78(B1)				
121(B2)				

Table 2.4-1. Sample Analytical Methods

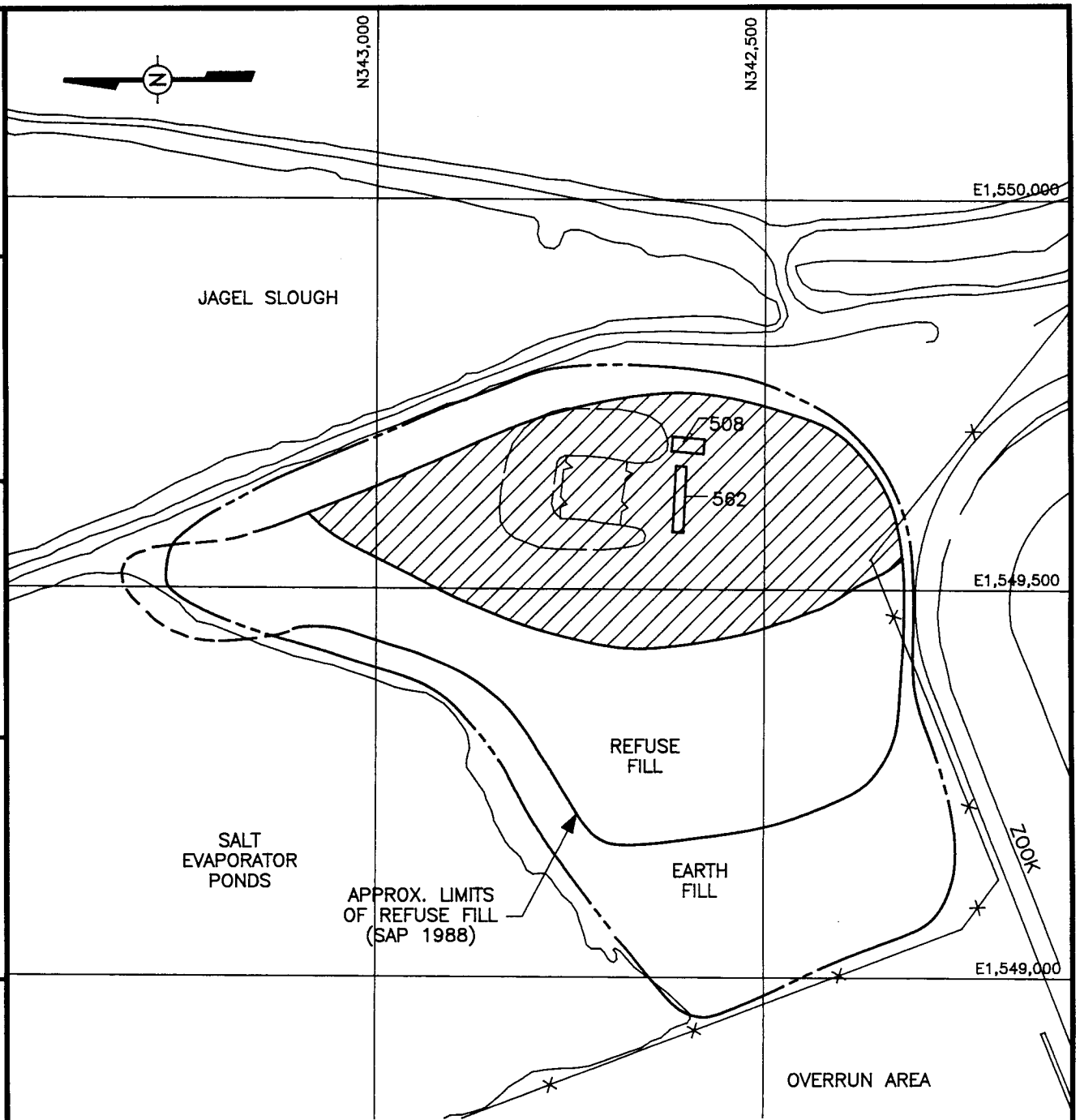
Parameter	Method Number Water	Method Number Soils
pH	150.1[1]	9040[2]
Specific conductance	120.1[1]	9050[2]
Total dissolved solids (TDS)	160.1[1]	--
Major anions		
Fluoride	300.0[1]	300.1
Nitrate	300.0	300.0
Sulfate	300.0	300.0
Chloride	300.0	300.0
Bicarbonate/carbonate	310.1[1]	310.1
Major cations		
Calcium	CLP[3]	CLP
Magnesium	CLP	CLP
Potassium	CLP	CLP
Sodium	CLP	CLP
Volatile organic target compound list	CLP	CLP
Base, neutral, and acid extractable target compound list (BNAs)	CLP	CLP
Polychlorinated biphenyls (PCBs)	CLP	CLP
Metals		
Aluminum	CLP	CLP
Antimony	CLP	CLP
Arsenic	CLP	CLP
Barium	CLP	CLP
Beryllium	CLP	CLP
Cadmium	CLP	CLP
Calcium	CLP	CLP
Chromium	CLP	CLP
Cobalt	CLP	CLP
Copper	CLP	CLP
Iron	CLP	CLP
Lead	CLP	CLP
Magnesium	CLP	CLP
Manganese	CLP	CLP
Mercury	CLP	CLP
Nickel	CLP	CLP
Potassium	CLP	CLP
Selenium	CLP	CLP

Table 2.4-1 (Continued)

Parameter	Method Number Water	Method Number Soils
Metals (continued)		
Silver	CLP	CLP
Sodium	CLP	CLP
Thallium	CLP	CLP
Vanadium	CLP	CLP
Zinc	CLP	CLP
Miscellaneous Parameters		
Cyanide	CLP	CLP
Phenols	9065[2]	9065
Total petroleum hydrocarbons	Mod. 8015[7]	Modified 8015
Tetraethyl lead	LUFT[4]	LUFT
2,3,7,8-TCDD[8]	613[5]	EPA REG. VII[6]
Tetra-Octa dioxins/furans	EPA 8280[2]	EPA 8280

REFERENCES:

[1]"Methods for Chemical Analysis and Wastes," EPA-600/4-79-020, latest revision.
[2]"Test Methods for Evaluating Solid Waste," EPA, SW-846, 2nd revision.
[3]U.S. Environmental Protection Agency Contract Laboratory Program.
[4]"Leaking Underground Fuel Tank Field Manual," State Water Resources Control Board, December 1987. The procedure is included in the Quality Assurance Project Plan.
[5]EPA Method 613 "Methods for Organic Chemical Analysis of Municipal and Industrial Waste Waters" EPA-600/4-82-057.
[6]U.S. EPA Region VII "Methods for Analysis of Dioxin and Furans".
[7]"Modified Method 8015 for TPHC by Gas Chromatograph." The procedure is included in the Quality Assurance Project Plan.
[8]Samples collected for dioxin/furan analysis were first analyzed for tetra through octa cogeners of dioxin/furans. If the tetra chlorinated species were identified, additional samples were collected for 2,3,7,8 chlorinated isomers of dioxin/furans.



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PROJ. NO.: 409700	
INITIATOR: J. WILLE	
PROJ. MGR.: K. BRADLEY	
DRAFT. CHCK. BY:	
ENGR. CHCK BY:	
DATE LAST REV.:	
DRAWN BY:	
STARTING DATE: 3-24-90	
DRAWN BY: B. SMITH	

LEGEND

- - - - BOUNDARY OF RUNWAY LANDFILL

▨ APPROXIMATE LOCATION OF GRAVEL SOIL COVER

0 200 400 FEET

FIGURE 2.2-1

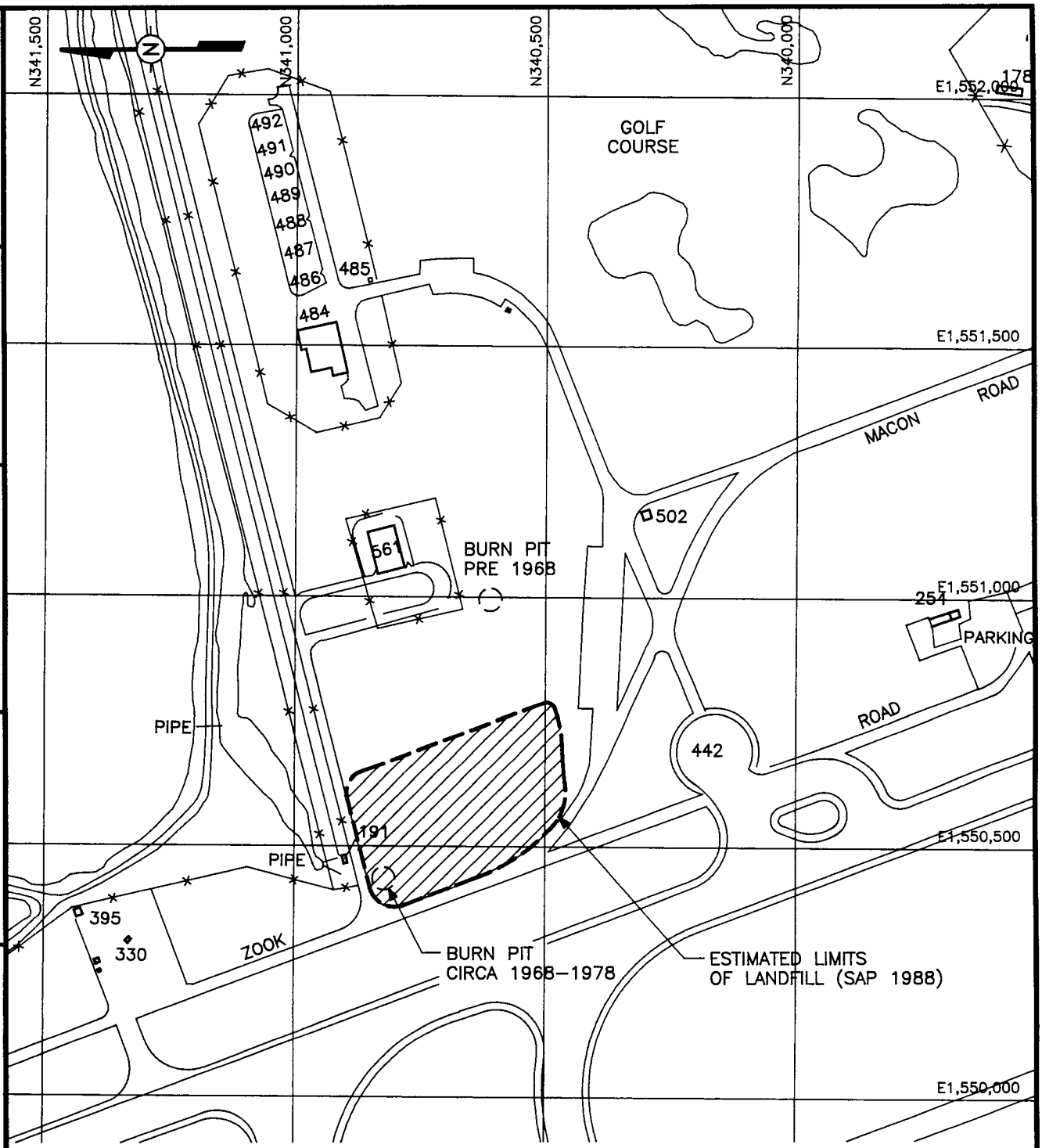
SITE 1
LANDFILL BOUNDARY (1988)

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

SOURCE: AERO-GEODETIC CORP.
JOB NO. 811822 3/16/81

\DRAWINGS\409700-M



LEGEND

LANDFILL BOUNDARY

GOLF COURSE LANDFILL

0 300 600 FEET

FIGURE 2.2–2

SITE 2
LANDFILL BOUNDARY (1988)

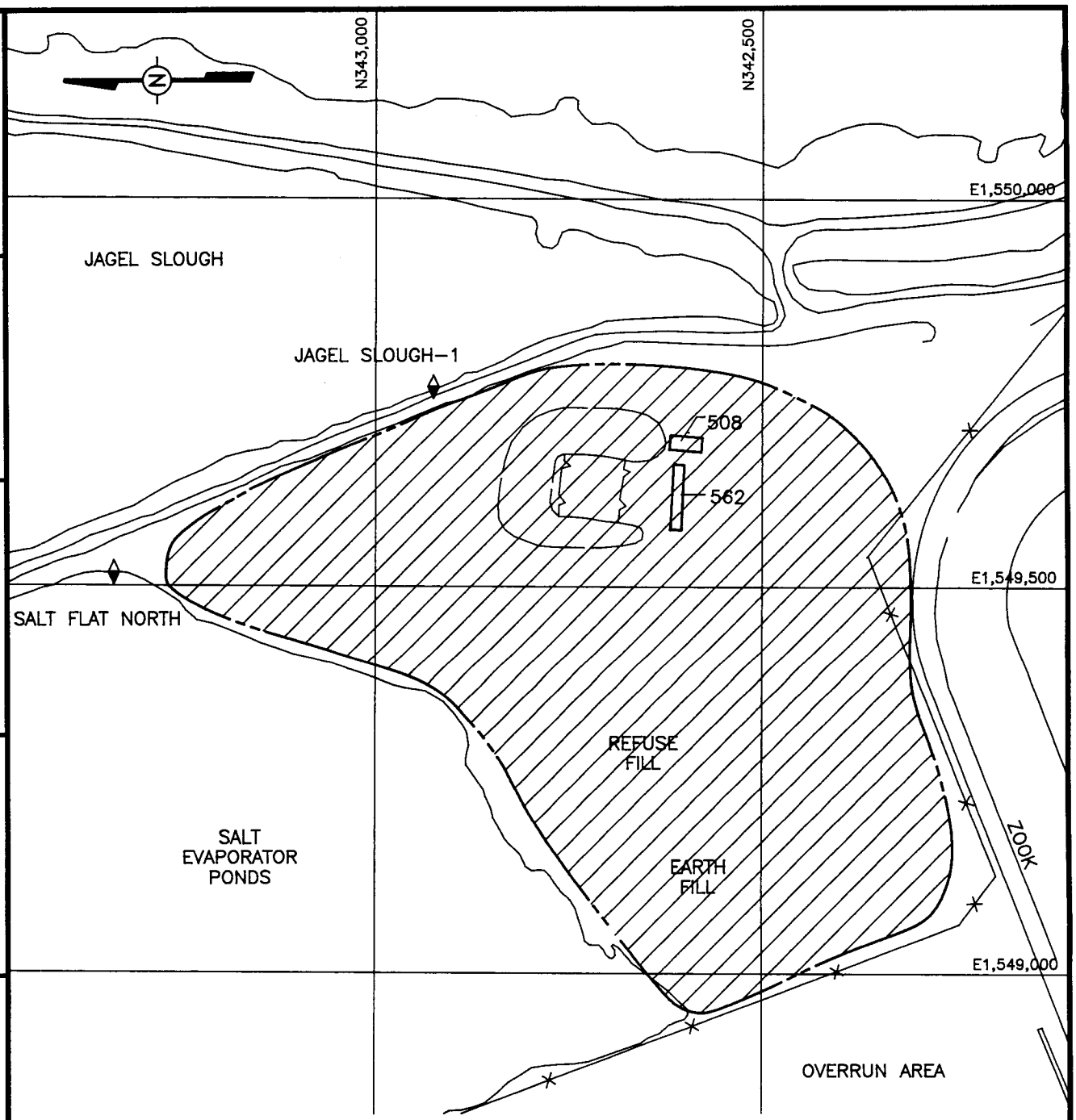
NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

SOURCE: AERO–GEODETIC CORP.
JOB NO. 811822 3/16/81

STARTING DATE: 3/12/90	DATE LAST REV.:	DRAFT. CHCK. BY:	INITIATOR: J. WILLE	DWG. NO.: 409700–A–GXX	
DRAWN BY: D.HIGGS	DRAWN BY:	ENGR. CHCK BY:	PROJ. MGR.: K. BRADLEY	PROJ. NO.: 409700	

\DRAWINGS\409700–F



LEGEND

- SURFACE WATER/SEDIMENT SAMPLING POINT
- APPROXIMATE BOUNDARY OF RUNWAY LANDFILL
- RUNWAY LANDFILL

0 200 400 FEET

FIGURE 2.3-1

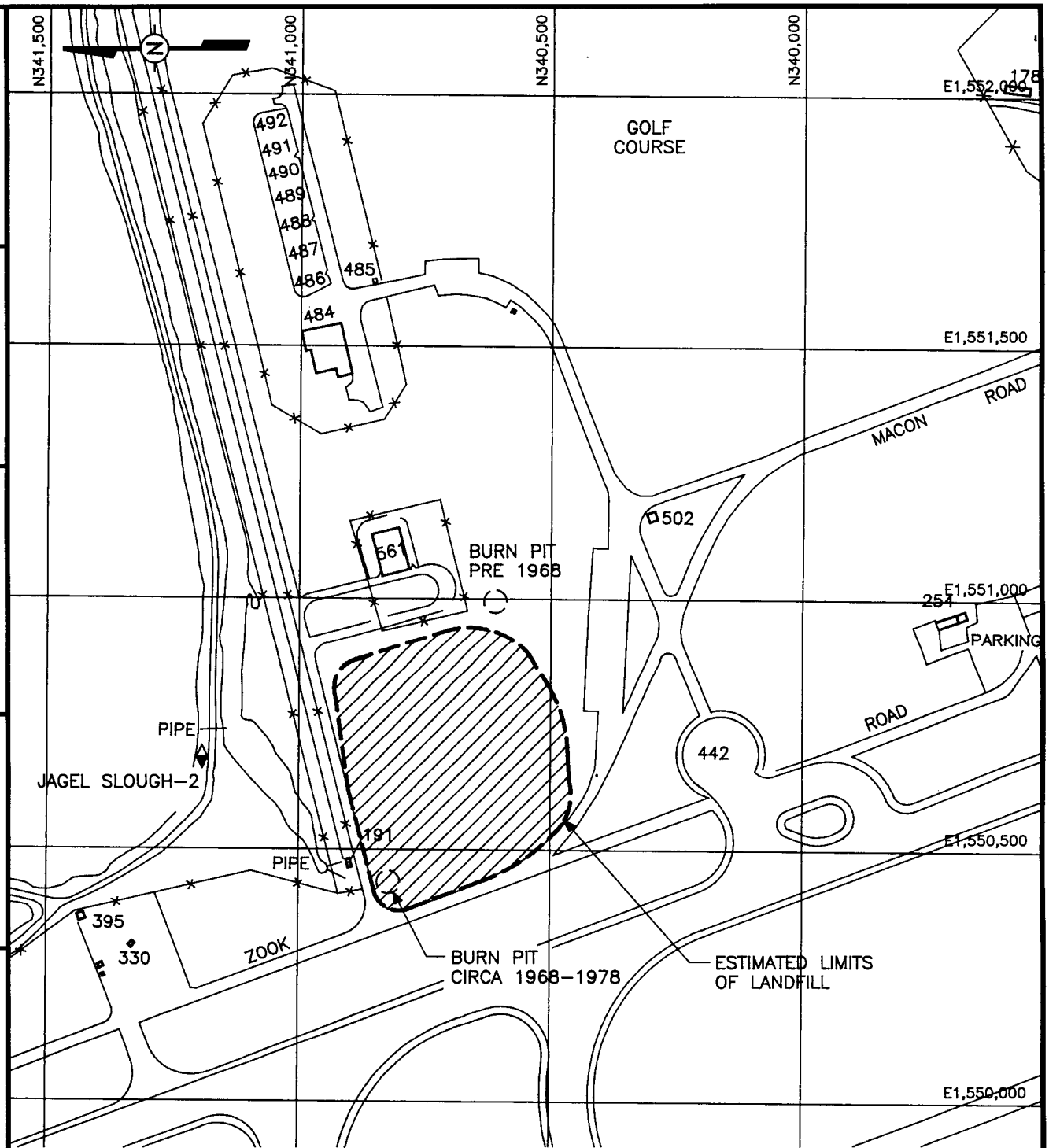
SITE 1
SURFACE WATER AND SEDIMENT SAMPLING LOCATIONS
RUNWAY LANDFILL

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

DWG. NO.: 409700-A-G07	PROJ. NO.: 409700
INITIATOR: J. WILLE	PROJ. MGR.: K. BRADLEY
DRAFT. CHCK. BY:	ENGR. CHCK BY:
DATE LAST REV.:	DRAWN BY:
STARTING DATE: 3-24-90	DRAWN BY: B. SMITH

\DRAWINGS\409700-K



LEGEND

- SURFACE WATER/SEDIMENT SAMPLING POINT
- LANDFILL BOUNDARY
- GOLF COURSE LANDFILL

0 300 600 FEET

FIGURE 2.3-2

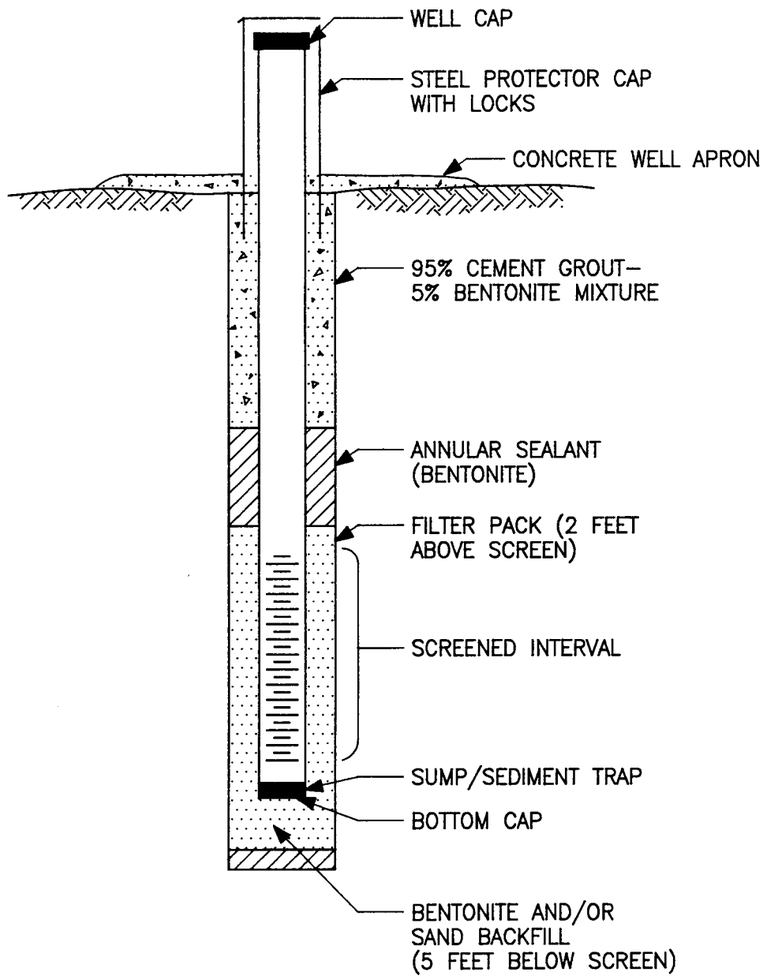
SITE 2
SURFACE WATER AND SEDIMENT SAMPLING LOCATION

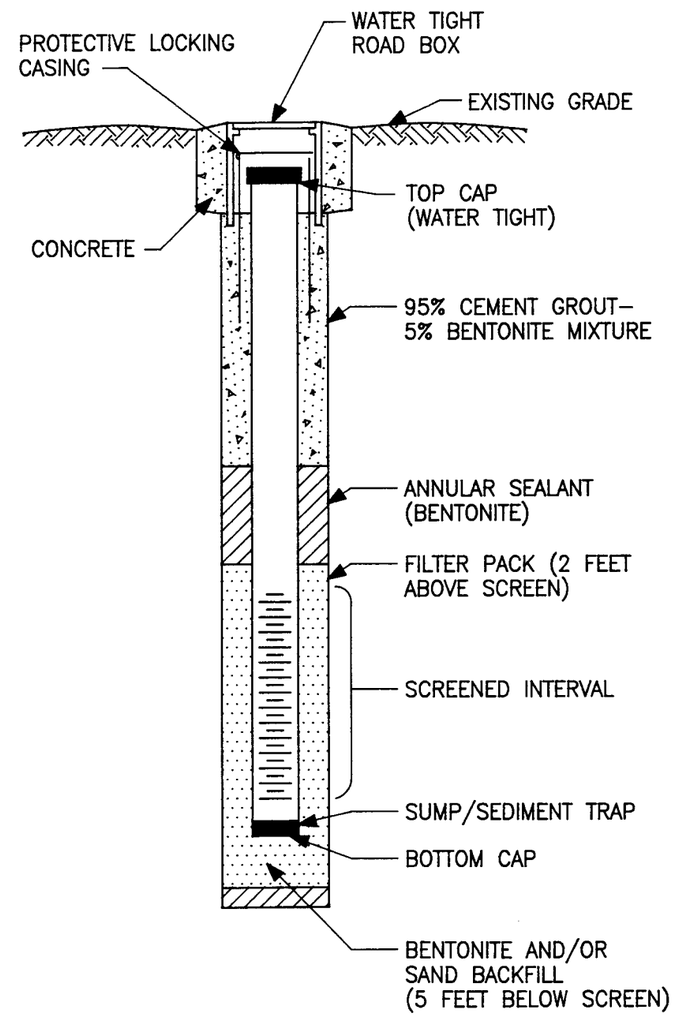
NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

STARTING DATE: 3/12/90	DATE LAST REV.:	DRAFT. CHCK. BY:	INITIATOR: J. WILLE	DWG. NO.: 409700-A-G08	
DRAWN BY: D.HIGGS	DRAWN BY:	ENGR. CHCK BY:	PROJ. MGR.: K. BRADLEY	PROJ. NO.: 409700	

\DRAWINGS\409700-G





FLUSH MOUNT INSTALLATION
(OPTIONAL)

FIGURE 2.3–3

TYPICAL MONITORING WELL CONSTRUCTION

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

STARTING DATE: 3-22-90	DATE LAST REV.: 7/26/90	DRAFT. CHCK. BY:	INITIATOR: J. WILLE	DRAWING NO.#409700-B-G09
DRAWN BY: B. SMITH	DRAWN BY: D. HIGGS	ENGR. CHCK BY:	PROJ. MGR.: K. BRADLEY	PROJ. NO.: 409700

\DRAWINGS\409700-9

N00296.000910
MOFFETT FIELD
SSIC NO. 5090.3

SECTION 3.0

PHASE I CHARACTERIZATION REPORT

DATED 01 AUGUST 1990

Table 3.2-1. Baseline Element Concentrations of Soils in the NAS Moffett Field Area

Metal	USGS Range[a] (mg/kg)	Hetch-Hetchy[b] (mg/kg)	Mountain View Well 18[b] (mg/kg)	Moffett Range[c] (mg/kg)	Whaler[d] (mg/kg)
Aluminum	70000			14,065 - 24,287	
Antimony	<1 - 10			4.8 - 54.4	0.4 - 1
Arsenic	6.5 - 10	5.6 - 6.3	5.9 - 11	1.2 - 8.8	0.4 - 1
Barium	700 - 5000			77.6 - 220.4	
Beryllium	<1	0.7 - 0.8	0.9 - 1.2	1.3 - 3.7	0.7 - 1.1
Cadmium	1 - 10	4	<1 - 3	0.5 - 3.5	
Calcium	18000 - 28000			9485 - 83,385	17 - 130
Chromium	100 - 2000	56 - 60	62 - 72	48.3 - 76.5	
Cobalt	15 - 70			12.2 - 18.6	15 - 28
Copper	30 - 700	44 - 47	39 - 44	24.1 - 56.7	
Iron	30000 - >100000			23,201 - 38,347	19 - 110
Lead	30 - 700	45 - 48	49 - 54	3.9 - 28.3	
Magnesium	15000 - >100000			11,417 - 19,567	
Manganese	500 - 7000			343 - 721	
Mercury	0.2 - 5.1	0.1	0.15 - 1.3	0.1 - 0.5	
Nickel	30 - 700	41 - 47	52 - 58	46.3 - 88.5	
Potassium	11000 - 16000			508 - 2846	
Selenium	<0.1 - 0.5	ND(0.3)	ND(0.3)		
Silver	0.7 - 5	0.3 - 0.8	<0.2 - 0.4	1.8 - 5.0	
Sodium	7000 - 100000			1,417 - 13,609	
Thallium	NA	ND(0.2)	ND(0.2)	0.2 - 0.6	
Vanadium	150 - 500			46.40 - 78.2	
Zinc	120 - 3500	100 - 110	100 - 110	54.5 - 104.1	31 - 93

NA - Range not available.
ND - All samples nondetect, reported value is the method detection limit.
[a]Taken from USGS Professional Paper 1270, 1984. Data include samples from the contiguous United States.
[b]Range from two samples, taken from Harding Lawson Associates 1987b.
[c]Ranges obtained as described in Section 3.2.2.
[d]Data from Harding Lawson Associates, 1987b.

Table 3.3-1. Generalized Local Geologic Column
NAS Moffett Field

Depth Range (MSL)	System	Geologic Units	Informal Unit Name	Lithologic Character
	Holocene	Surficial Sediments	Alluvium (Qb and Qal)	Stream-laid gravel, sand, and slit
			Bay Mud and clay (Qobm)	Brackish marine-gray to nearly black, commonly alkaline, in places with small molluscan fossils
Quarter-nary	Pleistocene	Older alluvium	Alluvium	Stream-laid gravel composed of cobbles and pebbles in a matrix of light brown to reddish-brown sand and slit, derived from adjacent hills. Generally undeformed; dissected where elevated; thickness unknown
		Santa Clara		Terrestrial sedimentary rocks, weakly consolidated; consisting of stream-laid conglomerate and inter-bedded soft gritty sandstone, siltstone, and clay as well as lacustrian clay and sandstone at the base of the section. Northeast of the San Andreas Fault, the formation rests with profound unconformity on the Franciscan Formations and other Tertiary formations

Table 3.4-1. Typical Depth Intervals of Geohydrologic Units

Harding Lawson Associates, 1987

Hydrogeologic unit zone	Depth[a] (feet)	Thickness (feet)
A aquifer	<45	10-25
A/B1 aquitard	40-50	5-10
B1 aquifer	50-75	15-25
B1/B2 aquitard	70-80 (?)	15-25
B2 aquifer	75-100(?)	15-25
B2/B3 aquitard	100-120	20-40
B3 aquifer	120-160(?)	10-40
B3/C aquitard	160-200	20-40
C aquifer	>200	40

[a]Below land surface.

IT Corporation, 1990

Hydrogeologic unit zone	Depth (feet bls)[a]	Thickness (feet)
A1 aquifer	<25	0-10
A1/A2 aquitard	10-35	0-15
A2 aquifer	35-55	0-20
A2/B2 aquitard	45-60	5-25
B1 aquifer	N/A[b]	N/A
B2 aquifer	60-105	10-30
B2/3 aquitard	80-120	25-40
B3 aquifer	110-125	10-25
B/C aquitard	115-155	25-45
C aquifer	>155	unknown (>100)

[a]Below land surface.

[b]N/A - not applicable.

Table 3.5-1. Background Mineral Content of Ground Water In The NAS Moffett Area

Chemical	California DWR Range (a) [µg/l (b)]	Well W10-6(C)(c) [µg/l (b)]
Aluminum	<10 - 110	6.8 - 73
Antimony	<10 - 10	40.8 - 47.2
Arsenic	< 10	6.0 - 8.3
Barium	80 - 710	55.1 - 97.5
Beryllium	<1	0.93 - 1.5
Bicarbonate (mg/l)	NA	190 - 250
Cadmium	<1 - 5	ND < 5
Calcium (mg/l)	0.5 - 94	26.5 - 28.5
Carbonate (mg/l)	NA	ND < 1
Chloride (mg/l)	0.14 - 120	14 - 20
Chromium	<1 - 4	ND < 10
Cobalt	NA	ND < 50
Copper	<10 - 50	ND < 25
Iron	<10 - 2700	29.2 - 78.3
Lead	<10 - 30	ND < 5
Magnesium (mg/l)	0.16 - 81	10.3 - 11.9
Manganese	<10-410	52.1 - 66.1
Mercury	NA	1.4
Nickel	<10 - 10	13.2
Nitrate (mg/l)	<.01 - 78	ND < 0.1
Potassium (mg/l)	0.01 - 4.9	2.36 - 4.45
Selenium	<10 - 140	ND < 5
Silver	< 1	3.6 - 6.9
Sodium (mg/l)	0.13 - 207	55.9 - 60.4
Sulfate (mg/l)	0.06 - 138	18 - 22
Total Dissolved Solids (mg/l)	40 - 751	150 - 290
Thallium	NA	ND < 10
Vanadium	<100	2.9 - 9.4
Zinc	<10 - 100	3.4

NA - No data available.
ND - None detected

(a) Data for the Coyote Creek Hydrologic Area in the Santa Clara Hydrologic unit from the State of California, Department of Water Resources Hydrologic Data 1985, Vol III, 1988.

(b) All values are µg/l unless otherwise noted.

(c) Data from Well W10-6(C) at NAS Moffett Field. All concentrations except calcium, magnesium, manganese, and sodium are estimated below quantitation limits.

Table 3.5-2. Average Composition of Seawater

Constituent	Concentration	Units
Chloride	19,000	mg/l
Sulfate	2,700	mg/l
Bicarbonate	142	mg/l
Fluoride	1.3	mg/l
Nitrate	0.7	mg/l
Aluminum	1	µg/l
Antimony	0.3	µg/l
Arsenic	3	µg/l
Barium	20	µg/l
Beryllium	0.0006	µg/l
Cadmium	0.11	µg/l
Calcium	410,000	µg/l
Chromium	0.05	µg/l
Cobalt	0.4	µg/l
Copper	0.03	µg/l
Iron	3	µg/l
Lead	0.03	µg/l
Magnesium	1,350,000	µg/l
Manganese	2	µg/l
Mercury	0.2	µg/l
Nickel	7	µg/l
Potassium	390,000	µg/l
Selenium	0.09	µg/l
Silver	0.3	µg/l
Sodium	10,500,000	µg/l
Thallium	0.1	µg/l
Vanadium	2	µg/l
Zinc	10	µg/l

Reference: Goldberg, E. D., Broecker, W. S., Gross, M. G., and Turekian, K. K., 1971, Marine Chemistry, in Radioactivity in the Marine Environment: Washington D.C., National Academy of Sciences, p. 137-146.

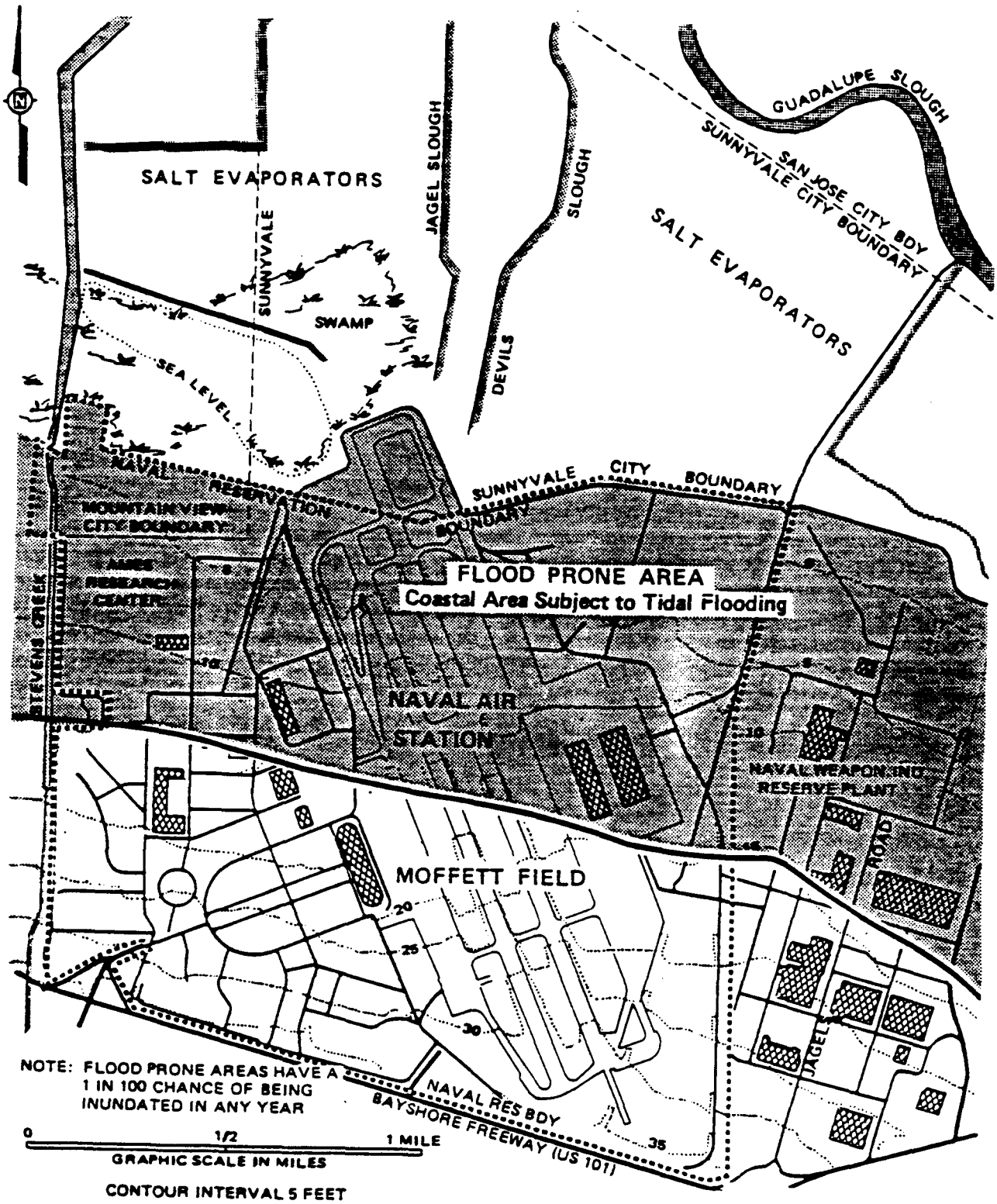


FIGURE 3.1-1

FLOOD PRONE AREA

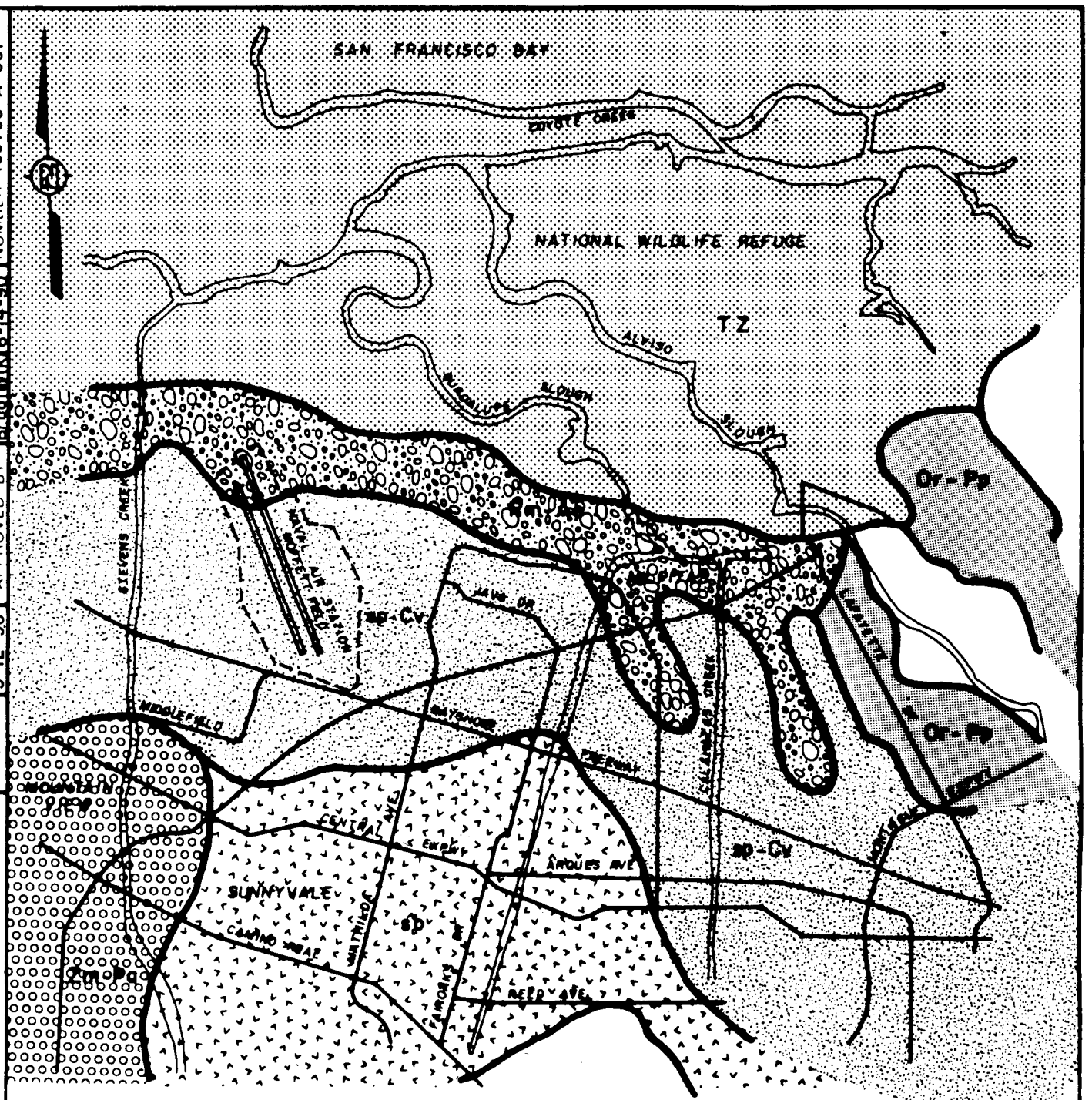
REF: US GEOLOGICAL SURVEY, 1972
US GEOLOGICAL SURVEY, 1981

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

STARTING DATE: 3-12-90 | DATE LAST REV.: | INITIATOR: J. WILLIE | DRAWING NO.: 409700-A-C60
DRAWN BY: F.C.R. | DRAWN BY: | PROJ. MGR K. BRADLEY | PROJECT NO.: 409700

BRUNING 72425



Or-Pp ORESTIMBA-PESCADERO ASSOCIATION

Rm-Ao REYES-ALVISO ASSOCIATION

sb SORRENTO ASSOCIATION

sp-Cv SUNNYVALE-CASTRO ASSOCIATION

TZ TIDAL FLATS

Zm-PA ZAMORA-PLEASANTON ASSOCIATION

SOIL BOUNDARY

SCALE

0 5000 10000 FEET

FIGURE 3.2-1

GENERAL SOIL ASSOCIATIONS

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

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Do Not Scale This Drawing

DRAWN BY	T R S	CHECKED BY	PAK	6-14-90	DRAWING NUMBER 409700-A-C61
	3-12-90	APPROVED BY	Bradley(K)	6-14-90	

126076

DRAWN BY	S L C	CHECKED BY	PAK	6-14-90	DRAWING NUMBER 409700-A-C61
	3-12-90	APPROVED BY	K.Bradley	6-14-90	

129076
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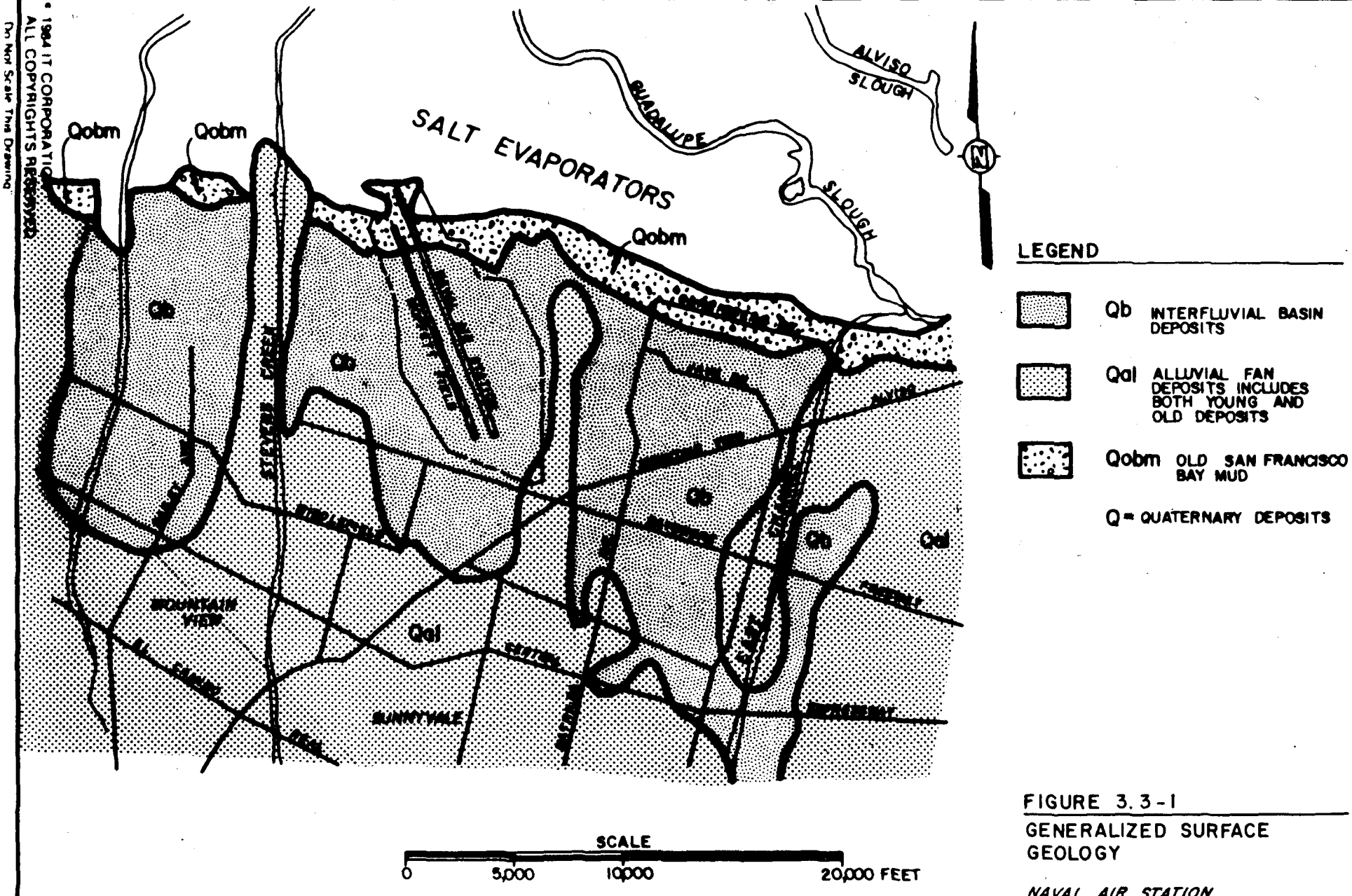


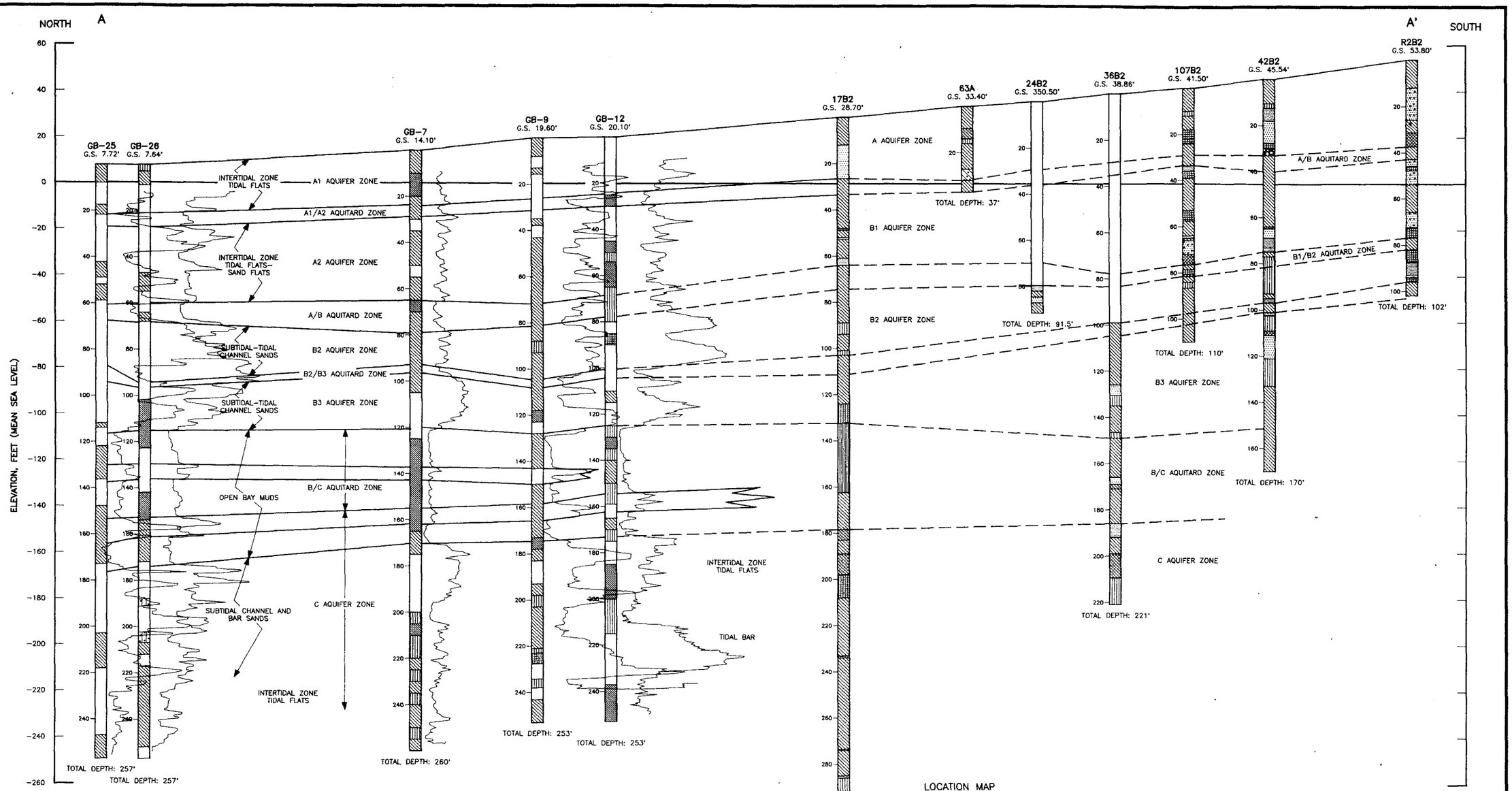
REFERENCE: FROM IWAMURA, 1980

FIGURE 3.3-1

GENERALIZED SURFACE GEOLOGY

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION



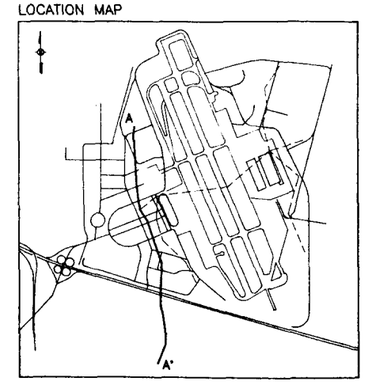
LEGEND

- (GW) – WELL-GRADED GRAVELS AND GRAVEL-SAND MIXTURES, LITLE OR NO FINES.
- (GP) – POORLY GRADED GRAVELS AND GRAVEL-SAND MIXTURES, LITLE OR NO FINES.
- (GM) – SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES
- (GC) – CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES
- (SW) – WELL-GRADED SANDS AND GRAVELLY SANDS, LITTLE OR NO FINES
- (SP) – POORLY GRADED SANDS AND GRAVELLY SANDS, LITTLE OR NO FINES
- (SM) – SILTY SANDS, SAND-SILT MIXTURES
- (SC) – CLAYEY SANDS, SAND-CLAY MIXTURES
- (ML) – INORGANIC SILTS, VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS, LIQUID LIMIT 50% OR LESS
- (MH) – INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SANDS OR SILTS, ELASTIC SILTS, LIQUID LIMIT GREATER THAN 50%
- (CL) – INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAY,LE CLAYS, LIQUID LIMIT 50% OR LESS
- (CH) – INORGANIC CLAYS OF HIGH PLASTICITY FAT CLAY
- (OL) – ORGANIC SILTS OR ORGANIC CLAYS OF LOW PLASTICITY
- (OH) – ORGANIC CLAYS OR ORGANIC SILTS OF MEDIUM TO LOW PLASTICITY

NOTES

1. BLANKS INDICATE ZONES OF NO SAMPLE RECOVERY
2. LINES DASHED OR QUERIED WHERE INFERRED.
3. G.S. = GROUND SURFACE ELEVATION
4. E--LOG PROFILE SHOWN IS POINT RESISTIVITY.
5. CORRELATIONS SOUTH OF GB-12 ARE MODIFIED FROM MEW RI REPORT (HLA, 1986)

LOCATION MAP



HORIZONTAL SCALE
0 300 600 900 FEET

VERTICAL SCALE
0 20 40 60 FEET

(VERTICAL EXAGGERATION = 15X)

FIGURE 3.3-2
GEOLOGICAL CROSS SECTION A-A'

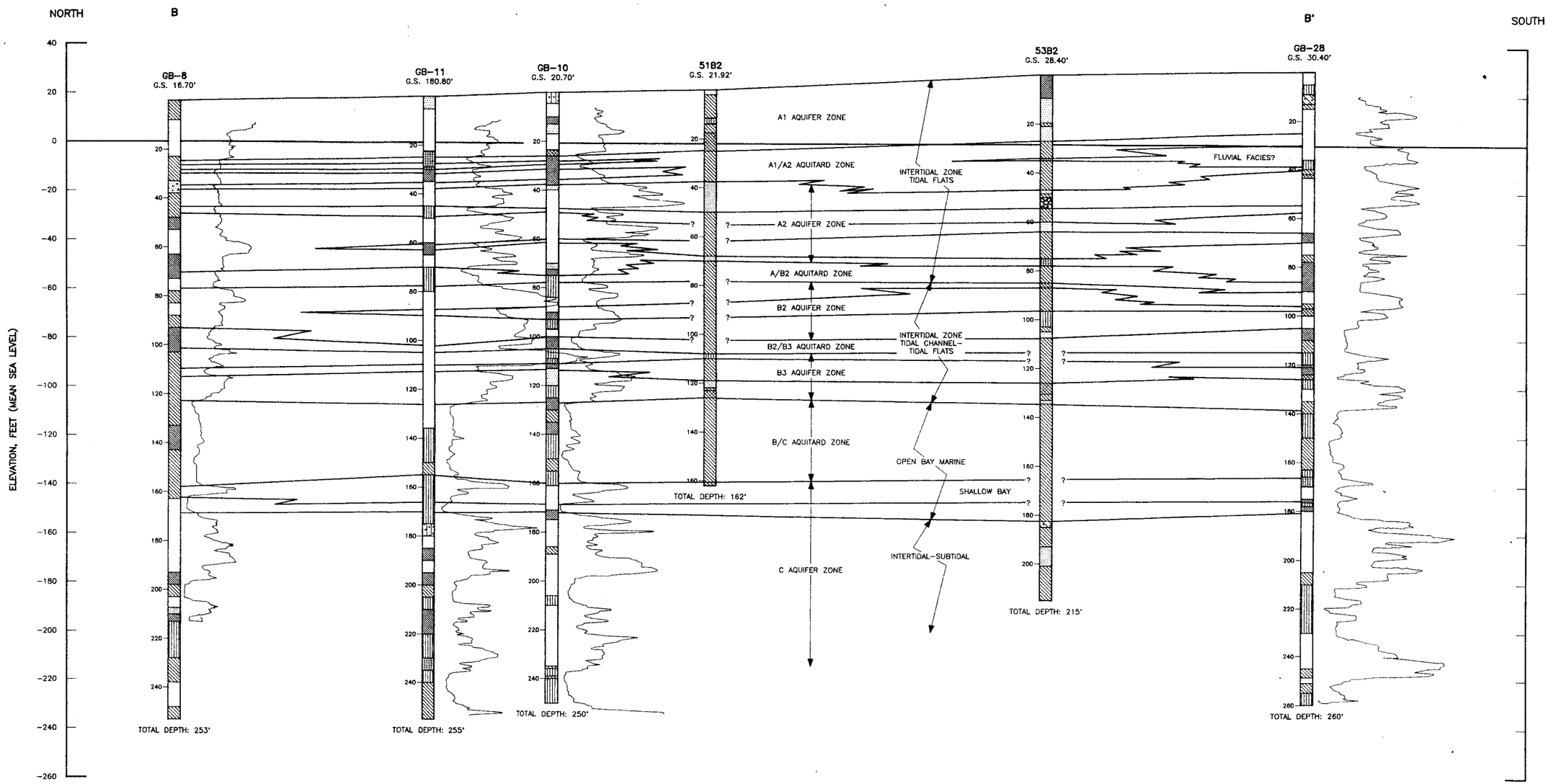
NAVAL AIR STATION MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

STARTING DATE: 4/26/90 | DATE LAST REV.: 7/24/90 | INITIATOR: S. BARTLING | DRAWING NO.:409700-D-45
DRAWN BY: D. HIGGS | DRAWN BY: D. HIGGS | PROJ. MGR: K. BRADLEY | PROJ. NO: 409700

\IMAGES\XSECA-A

STARTING DATE: 4/26/90	DATE LAST REV.: 7/25/90	INITIATOR: S. BARTLING	DRAWING NO.:409700-D-46
DRAWN BY: D. HIGGS	DRAWN BY: D. HIGGS	PROJ. MGR: K. BRADLEY	PROJ. NO: 409700



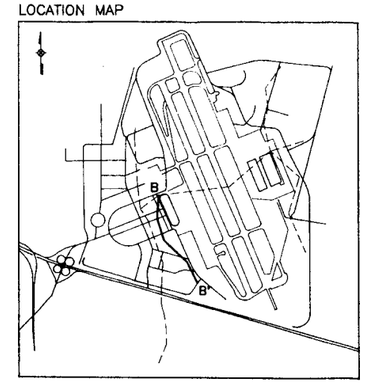
LEGEND

- (GW) – WELL-GRADED GRAVELS AND GRAVEL-SAND MIXTURES, LITLE OR NO FINES.
- (GP) – POORLY GRADED GRAVELS AND GRAVEL-SAND MIXTURES, LITLE OR NO FINES.
- (GM) – SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES
- (GC) – CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES
- (SW) – WELL-GRADED SANDS AND GRAVELLY SANDS, LITTLE OR NO FINES
- (SP) – POORLY GRADED SANDS AND GRAVELLY SANDS, LITTLE OR NO FINES
- (SM) – SILTY SANDS, SAND-SILT MIXTURES
- (SC) – CLAYEY SANDS, SAND-CLAY MIXTURES
- (ML) – INORGANIC SILTS, VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS, LIQUID LIMIT 50% OR LESS
- (MH) – INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SANDS OR SILTS, ELASTIC SILTS, LIQUID LIMIT GREATER THAN 50%
- (CL) – INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAY,LE CLAYS, LIQUID LIMIT 50% OR LESS
- (CH) – INORGANIC CLAYS OF HIGH PLASTICITY FAT CLAY
- (OL) – ORGANIC SILTS OR ORGANIC CLAYS OF LOW PLASTICITY
- (OH) – ORGANIC CLAYS OR ORGANIC SILTS OF MEDIUM TO LOW PLASTICITY

NOTES

1. BLANKS INDICATE ZONES OF NO SAMPLE RECOVERY.
2. LINES DASHED OR QUERIED WHERE INFERRED.
3. G.S. = GROUND SURFACE ELEVATION
4. E-LOG PROFILE SHOWN IS POINT RESISTIVITY.

LOCATION MAP



HORIZONTAL SCALE
0 150 300 450 FEET

VERTICAL SCALE
0 20 40 60 FEET

(VERTICAL EXAGGERATION = 7.5X)

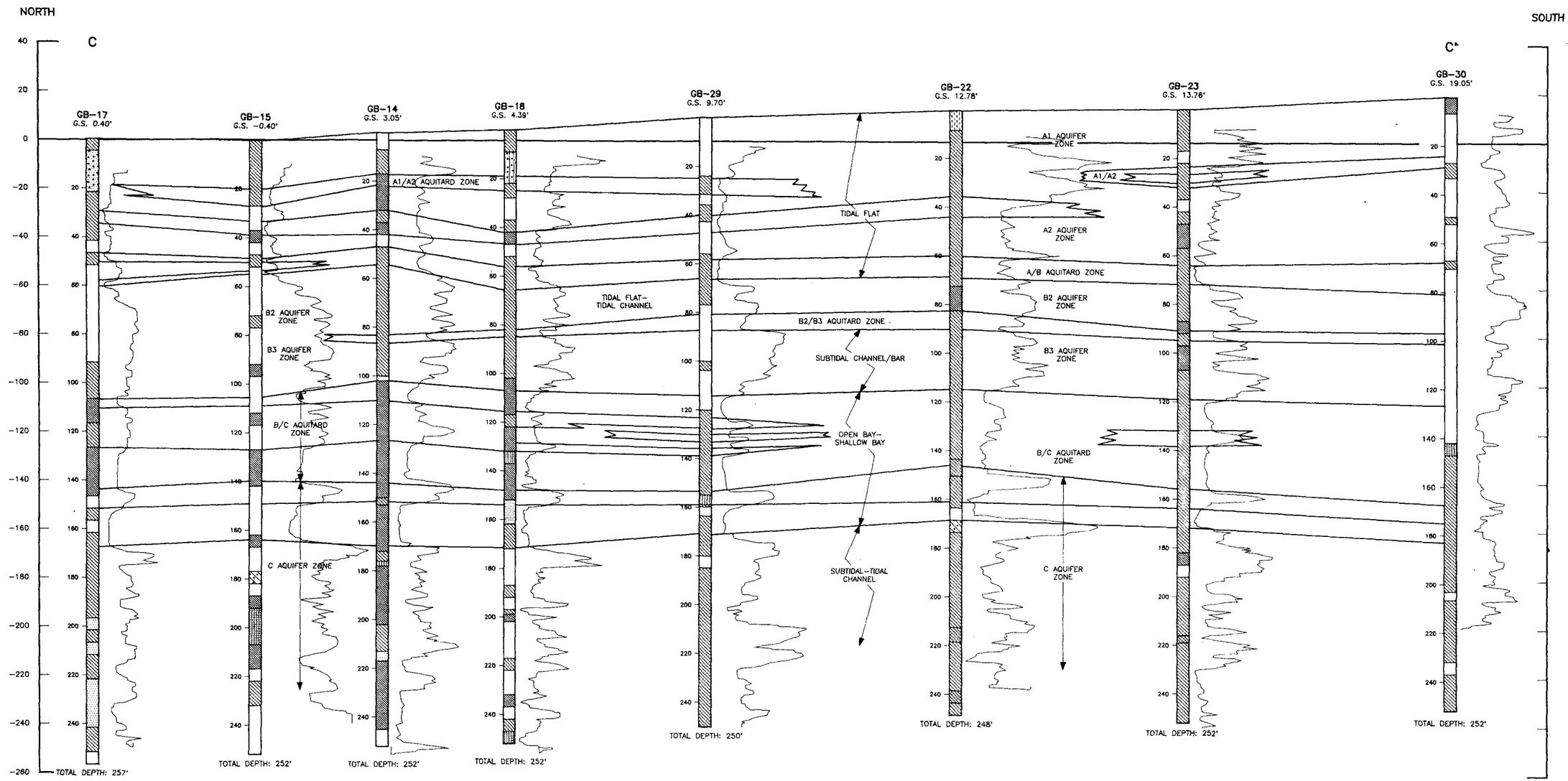
FIGURE 3.3-3
GEOLOGICAL CROSS SECTION B-B'

NAVAL AIR STATION MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

\IMAGES\XSECB-B

STARTING DATE: 4/26/90	DATE LAST REV.: 7/25/90	INITIATOR: S. BARTLING	DRAWING NO.:409700-D-47
DRAWN BY: BILL SMITH	DRAWN BY: D. HIGGS	PROJ. MGR: K. BRADLEY	PROJ. NO: 409700



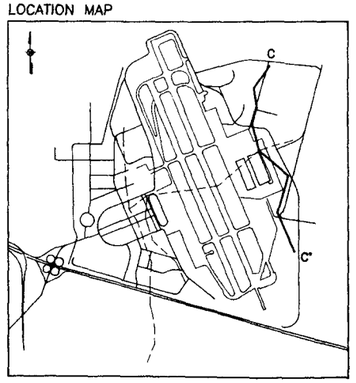
LEGEND

- (GW) – WELL-GRADED GRAVELS AND GRAVEL-SAND MIXTURES, LITLE OR NO FINES.
- (GP) – POORLY GRADED GRAVELS AND GRAVEL-SAND MIXTURES, LITLE OR NO FINES.
- (GM) – SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES
- (GC) – CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES
- (SW) – WELL-GRADED SANDS AND GRAVELLY SANDS, LITTLE OR NO FINES
- (SP) – POORLY GRADED SANDS AND GRAVELLY SANDS, LITTLE OR NO FINES
- (SM) – SILTY SANDS, SAND-SILT MIXTURES
- (SC) – CLAYEY SANDS, SAND--CLAY MIXTURES
- (ML) – INORGANIC SILTS, VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS, LIQUID LIMIT 50% OR LESS
- (MH) – INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SANDS OR SILTS, ELASTIC SILTS, LIQUID LIMIT GREATER THAN 50%
- (CL) – INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAY, LEAN CLAYS, LIQUID LIMIT 50% OR LESS
- (CH) – INORGANIC CLAYS OF HIGH PLASTICITY FAT CLAY
- (OL) – ORGANIC SILTS OR ORGANIC CLAYS OF LOW PLASTICITY
- (OH) – ORGANIC CLAYS OR ORGANIC SILTS OF MEDIUM TO LOW PLASTICITY

NOTES

1. LINES DASHED OR QUERIED WHERE INFERRED.
2. G.S. = GROUND SURFACE ELEVATION
3. E-LOG PROFILE SHOWN IS POINT RESISTIVITY.

LOCATION MAP



HORIZONTAL SCALE

0 250 500 750 FEET

VERTICAL SCALE

0 20 40 60 FEET

(VERTICAL EXAGGERATION = 12.5X)

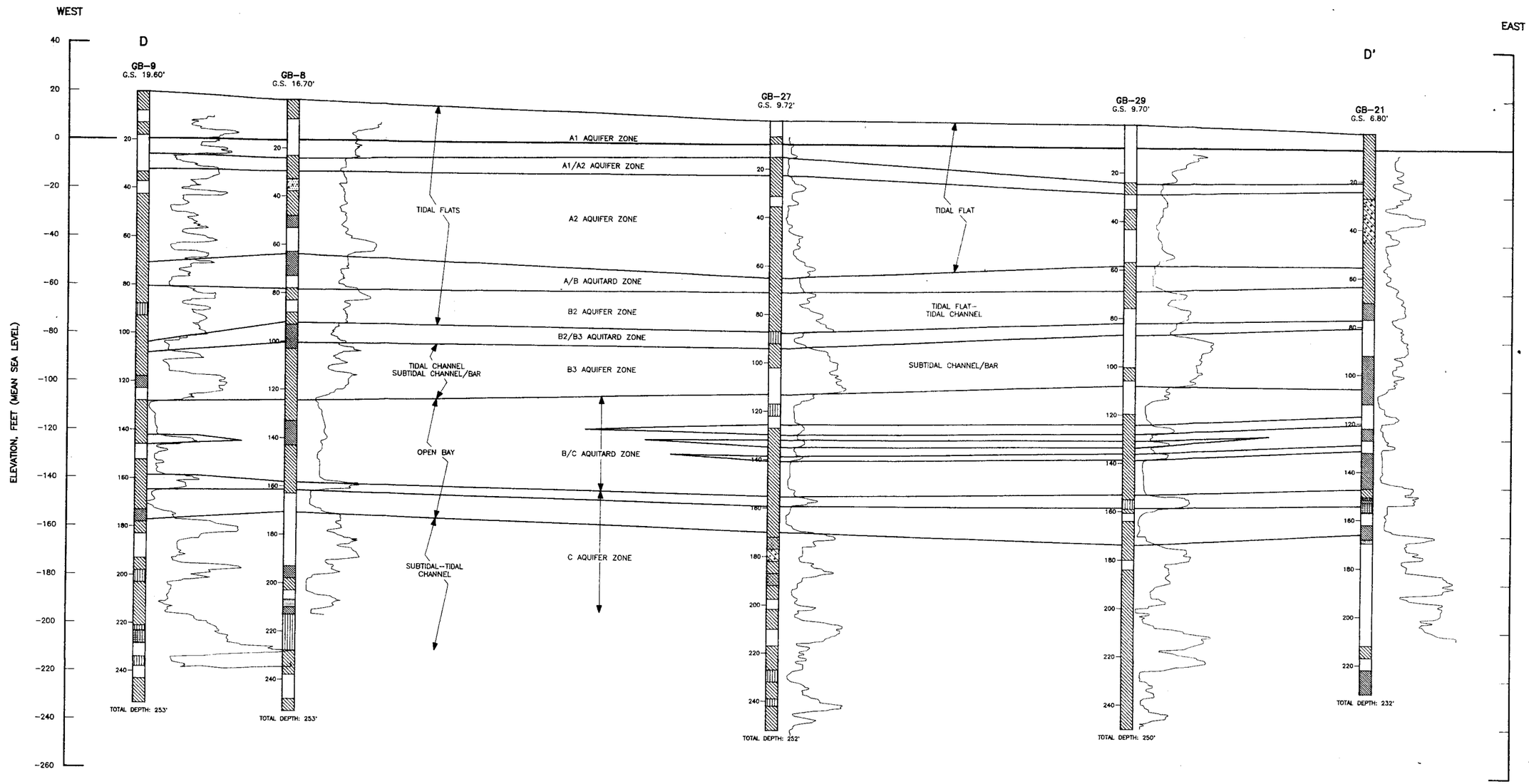
FIGURE 3.3-4

GEOLOGICAL CROSS SECTION C-C'

NAVAL AIR STATION MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

IMAGES\VSECC-C



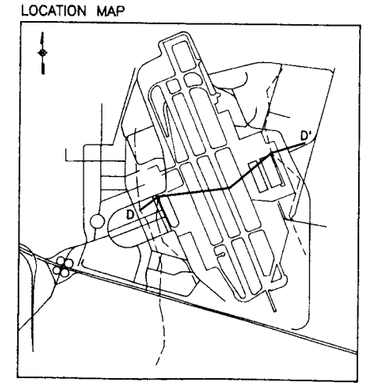
LEGEND

- (GW) – WELL-GRADED GRAVELS AND GRAVEL-SAND MIXTURES, LITLE OR NO FINES.
- (GP) – POORLY GRADED GRAVELS AND GRAVEL-SAND MIXTURES, LITLE OR NO FINES.
- (GM) – SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES
- (GC) – CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES
- (SW) – WELL-GRADED SANDS AND GRAVELLY SANDS, LITTLE OR NO FINES
- (SP) – POORLY GRADED SANDS AND GRAVELLY SANDS, LITTLE OR NO FINES
- (SM) – SILTY SANDS, SAND-SILT MIXTURES
- (SC) – CLAYEY SANDS, SAND-CLAY MIXTURES
- (ML) – INORGANIC SILTS, VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS, LIQUID LIMIT 50% OR LESS
- (MH) – INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SANDS OR SILTS, ELASTIC SILTS, LIQUID LIMIT GREATER THAN 50%
- (CL) – INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAY, LEAN CLAYS, LIQUID LIMIT 50% OR LESS
- (CH) – INORGANIC CLAYS OF HIGH PLASTICITY FAT CLAY
- (OL) – ORGANIC SILTS OR ORGANIC CLAYS OF LOW PLASTICITY
- (OH) – ORGANIC CLAYS OR ORGANIC SILTS OF MEDIUM TO LOW PLASTICITY

NOTES

1. BLANKS INDICATE ZONES OF NO SAMPLE RECOVERY.
2. G.S. = GROUND SURFACE ELEVATION
3. E-LOG PROFILE SHOWN IS POINT RESISTIVITY.

LOCATION MAP



HORIZONTAL SCALE

0 250 500 750 FEET

VERTICAL SCALE

0 20 40 60 FEET

(VERTICAL EXAGGERATION = 12.5X)

FIGURE 3.3-5

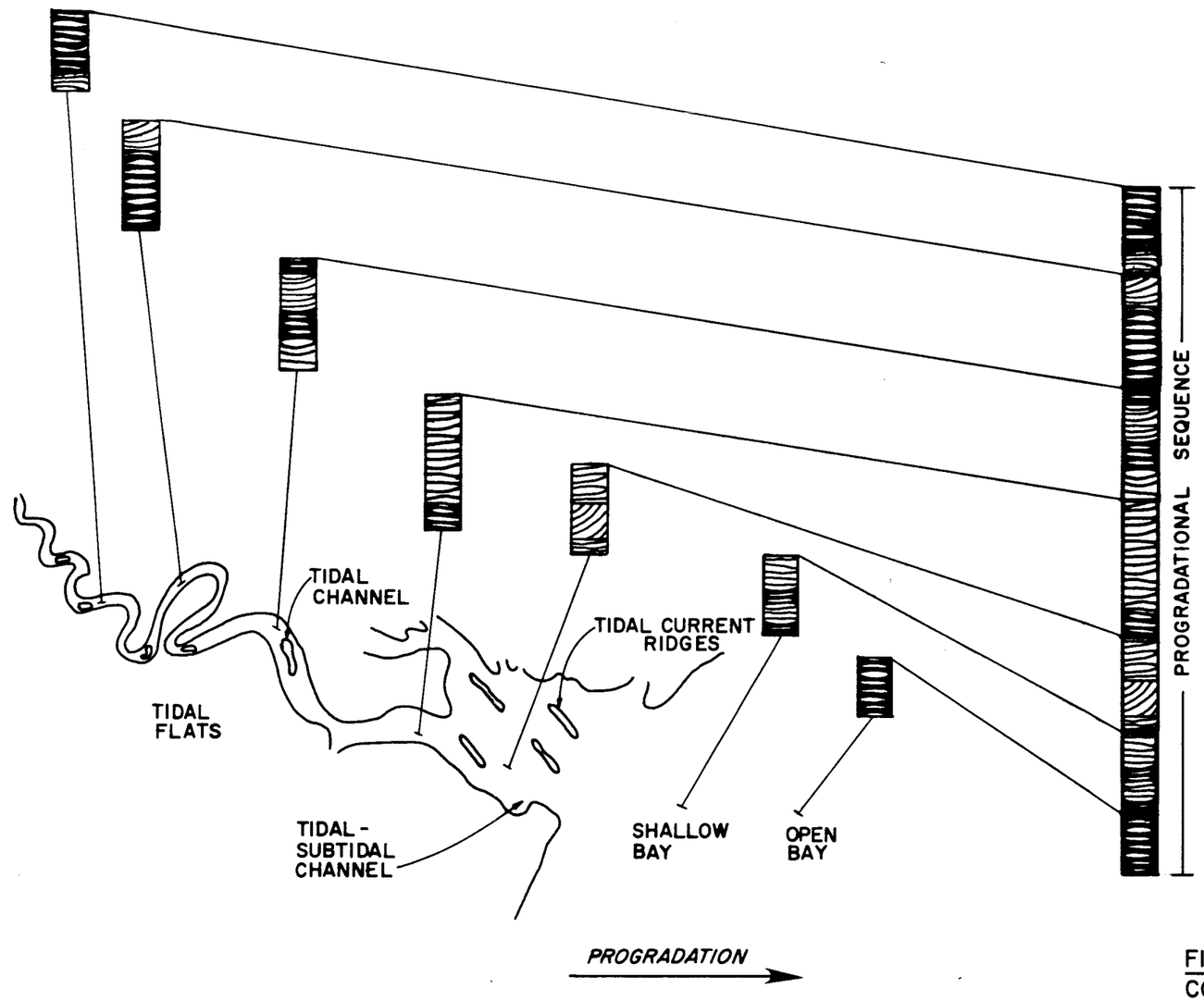
GEOLOGICAL CROSS SECTION D-D'

NAVAL AIR STATION MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

STARTING DATE: 4/26/90	DATE LAST REV.: 7/25/90	INITIATOR: S. BARTLING	DRAWING NO.:409700-D-48
DRAWN BY: D. HIGGS	DRAWN BY: D. HIGGS	PROJ. MGR: K. BRADLEY	PROJ. NO: 409700

\IMAGES\XSECD-D



LEGEND:

- TROUGH CROSSBEDDED SAND
- RIPPLE LAMINATED SAND
- LAMINATED MUD and SAND

(MODIFIED AFTER READING, 1980)

FIGURE 3.3-6
CONCEPTUAL MODEL OF PROGRADING ESTUARINE SYSTEM

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

STARTING DATE: 6-11-90	DATE LAST REV.:
DRAWN BY: r e pitts	DRAWN BY:
INITIATOR: S. BARTLING	DRAWING NO.: 409700-B-C59
PROJ. MGR.: K. BRADLEY	PROJECT NO.: 409700

BRUNING 72425

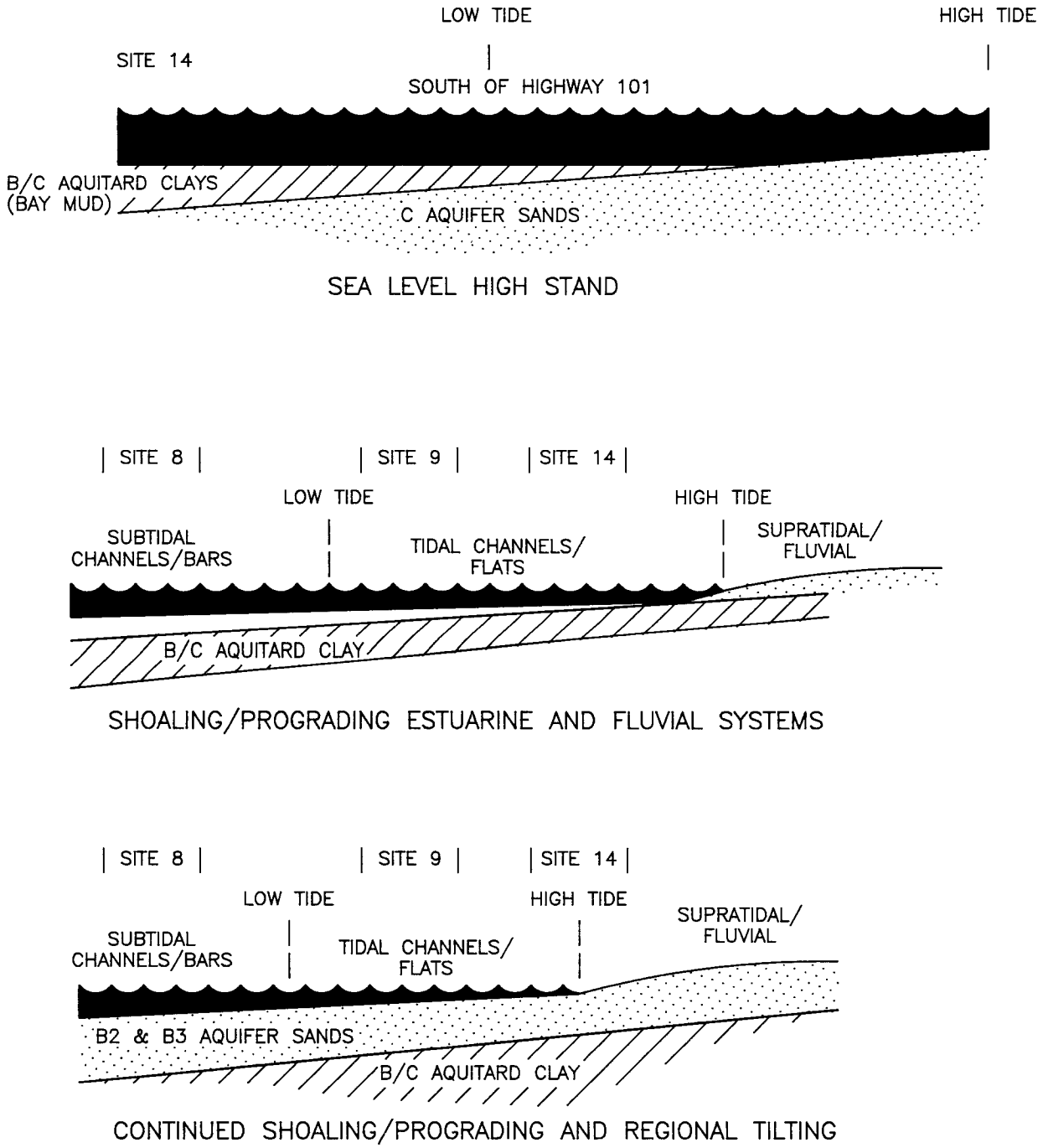


FIGURE 3.3–7

CONCEPTUAL MODEL OF PALEO–DEPOSITIONAL ENVIRONMENTS IN THE MOFFETT FIELD/MOUNTAIN VIEW AREA

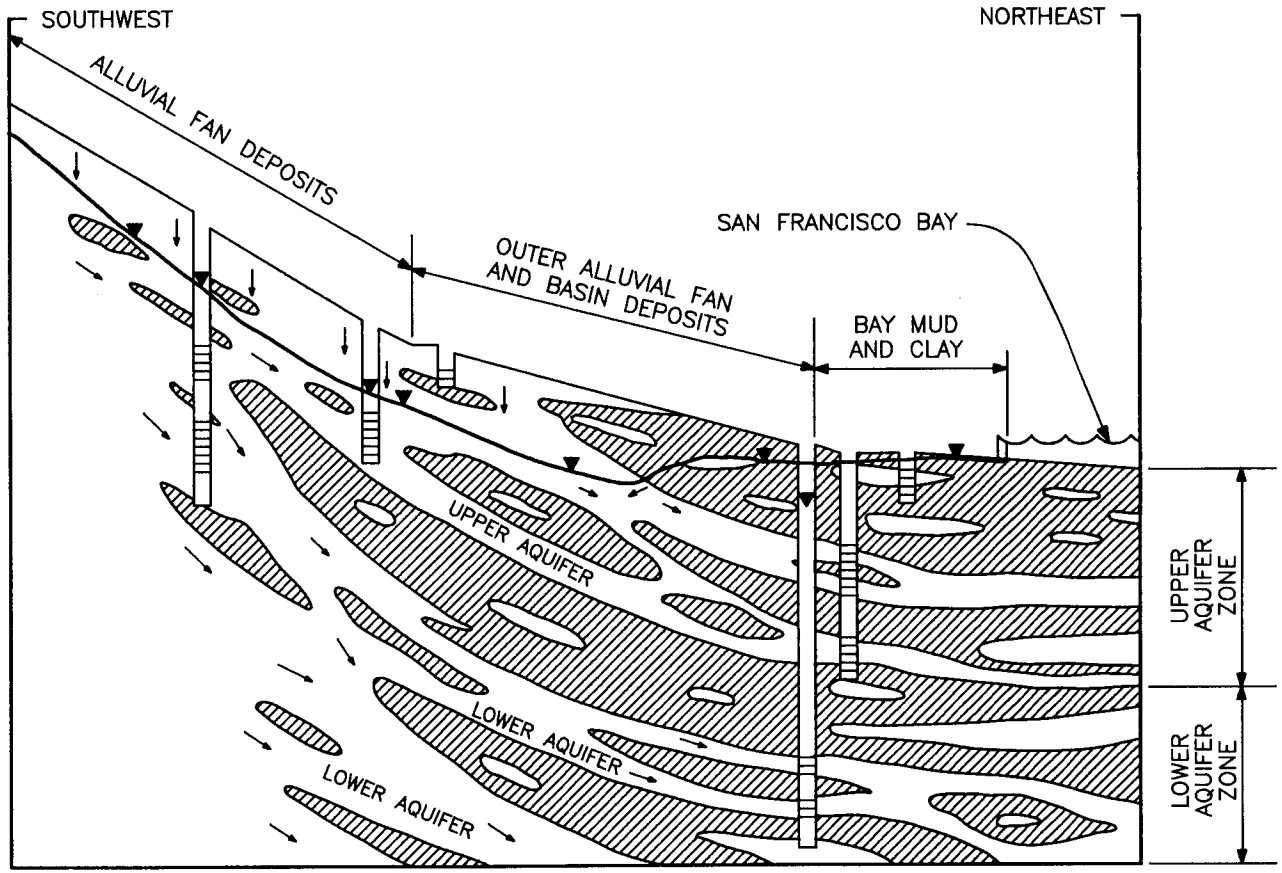
NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

DWG. NO.: 409700-A-G42	INITIATOR: K. BRADLEY	DRAFT. CHCK. BY:	DATE LAST REV.:
PROJ. NO.: 409700	PROJ. MGR.: K. BRADLEY	ENGR. CHCK BY:	DRAWN BY:
			STARTING DATE: 3/12/90
			DRAWN BY: D.HIGGS

\DRAWINGS\40970058

\DRAWINGS\409700-7	STARTING DATE: 3-20-90	DATE LAST REV.:	DRAFT. CHCK. BY:	INITIATOR: J. WILLE	DWG. NO.: 409700-A-G14
	DRAWN BY: B. SMITH	DRAWN BY:	ENGR. CHCK BY:	PROJ. MGR.: K. BRADLEY	PROJ. NO.: 409700



NOTE: ARROWS INDICATE DIRECTION OF GROUNDWATER MOVEMENT WITHOUT REGARD TO QUANTITY.

LEGEND

SAND AND GRAVEL DEPOSITS

CLAY DEPOSITS

WELL SYMBOLS

STATIC WATER LEVEL

PERFORATED INTERVAL

FIGURE 3.4-1

GENERALIZED GEOLOGIC CROSS SECTION SHOWING AQUIFERS

NAVAL AIR STATION MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

SOURCE: MODIFIED FROM IWAMURA, 1980

N00296.000910
MOFFETT FIELD
SSIC NO. 5090.3

SECTION 4.0

PHASE I CHARACTERIZATION REPORT

DATED 01 AUGUST 1990

Table 4.3-1. Summary of Site 1 Geotechnical Test Results
NAS Moffett Field

Well/Sample Identification	Soil Description	Sample Depth (ft)	Effective Porosity (percent)	Conductivity (cm/sec)
W1-5(A)S5	Clay	21-21.5	42.7	3.05×10^{-8}
W1-6(A)MD5	Silty Clay	15.0-16.5	37.5	8.67×10^{-8}
W1-7(A)MD5	Clay	15-16.5	45.8	7.20×10^{-8}
W1-7(A)MD6	Clay	30-31.5	49.0	2.49×10^{-8}
W1-7(A)MD7	Sand	50-51.5	37.9	1.01×10^{-5}
W1-9(F)MD3	Clay	29-29.5	35.9	5.13×10^{-8}
W1-10(F)MD4	Clay	18-19.5	49.8	1.44×10^{-8}
W1-11(F)MD5	Clay	28.5-30	39.8	7.15×10^{-8}
W1-12(A)MD2	Sand	12.5-14	Not computed[a]	9.76×10^{-6}
W1-13(F)MD5	Clay	20.5-22	46.1	9.76×10^{-9}
EMB-5[b]	Sandy clay	3-3.5	59	7.21×10^{-6}
EMB-6[b]	Sandy clay	3-3.5	61	1.02×10^{-6}

[a]The sample appeared disturbed and was remolded in the laboratory.
[b]The samples were remolded in the laboratory.

Table 4.4-1
Summary of Detected Chemicals
Site 1 Soil Samples
1 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Acetone	ug/kg	12	122	217	26.0	12.0-760
Ethyl benzene	ug/kg	1	55.0	0.0	55.0	55.0-55.0
Methylene chloride	ug/kg	14	19.6	17.1	12.5	7.0-73.0
Tetrachloroethene	ug/kg	1	7.0	0.0	7.0	7.0-7.0
Toluene	ug/kg	2	54.0	70.0	54.0	19.0-89.0
Total xylenes	ug/kg	2	134	172	134	48.0-220
4-Methylphenol	ug/kg	1	4300	0.0	4300	4300-4300
Bis(2-Ethylhexyl)phthalate	ug/kg	2	14700	24600	14700	2400-27000
Di-n-octyl phthalate	ug/kg	1	9700	0.0	9700	9700-9700
Phenol	ug/kg	1	2500	0.0	2500	2500-2500
AROCLOR-1242	ug/kg	2	380	320	380	220-540
AROCLOR-1254	ug/kg	2	2700	1000	2700	2200-3200
AROCLOR-1260	ug/kg	1	18000	0.0	18000	18000-18000
Aluminum	mg/kg	15	24667	7270	25000	13900-41500
Arsenic	mg/kg	3	8.3	4.1	10.1	3.6-11.1
Barium	mg/kg	15	178	92.9	203	61.7-396
Beryllium	mg/kg	4	2.8	1.6	2.4	1.3-5.0
Cadmium	mg/kg	4	2.2	1.2	2.1	1.1-3.5
Calcium	mg/kg	15	25708	19439	20500	3410-57300
Chromium	mg/kg	15	75.1	22.5	70.0	37.8-114
Cobalt	mg/kg	11	16.7	2.7	17.2	12.9-21.2
Copper	mg/kg	15	72.3	63.3	45.8	25.8-257
Iron	mg/kg	15	35040	5761	35400	24600-43000
Lead	mg/kg	15	37.7	39.5	17.2	6.5-128
Magnesium	mg/kg	15	14691	3773	14900	6600-20500
Manganese	mg/kg	15	498	158	527	271-738
Mercury	mg/kg	14	0.7	1.1	0.3	0.2-4.6
Nickel	mg/kg	15	71.7	18.5	78.6	37.2-94.7
Potassium	mg/kg	14	2940	1628	2365	1340-6190
Silver	mg/kg	5	3.3	1.1	3.4	2.2-4.9
Sodium	mg/kg	11	7675	13053	2270	1050-45000
Vanadium	mg/kg	15	73.1	14.5	77.7	39.3-95.5
Zinc	mg/kg	15	151	126	95.4	49.4-553
pH		15	7.6	1.6	8.3	3.9-9.1

Note: "1 Foot Depth" is comprised of Samples
from 0.0 to 2.0 feet below land surface.

This table does not include SED, EMB and duplicate sample results, or detections estimated below sample quantitation limits. The table does include all original sample data including "F" wells and data from split samples.

Table 4.4-2
Summary of Detected Chemicals
Site 1 Soil Samples
3 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
2-Butanone	ug/kg	2	38.5	23.0	38.5	27.0-50.0
Acetone	ug/kg	5	111	77.0	120	16.0-190
Carbon disulfide	ug/kg	2	16.5	7.0	16.5	13.0-20.0
Ethyl benzene	ug/kg	1	10.0	0.0	10.0	10.0-10.0
Methylene chloride	ug/kg	5	38.0	31.8	28.0	12.0-93.0
Tetrachloroethene	ug/kg	1	1.0	0.0	1.0	1.0-1.0
Toluene	ug/kg	1	13.0	0.0	13.0	13.0-13.0
Bis(2-Ethylhexyl)phthalate	ug/kg	1	480	0.0	480	480-480
Aluminum	mg/kg	5	28340	10425	25000	16100-39500
Arsenic	mg/kg	2	7.5	0.5	7.5	7.2-7.7
Barium	mg/kg	4	137	52.9	116	102-216
Beryllium	mg/kg	2	2.0	0.5	2.0	1.7-2.2
Cadmium	mg/kg	1	1.9	0.0	1.9	1.9-1.9
Calcium	mg/kg	5	18858	21787	4620	3780-52600
Chromium	mg/kg	5	81.6	33.0	72.6	37.8-118
Cobalt	mg/kg	3	16.0	2.5	17.2	13.2-17.7
Copper	mg/kg	5	86.8	87.7	48.8	31.4-241
Iron	mg/kg	5	32000	5207	30600	27600-40900
Lead	mg/kg	5	19.4	9.9	19.4	10.5-34.7
Magnesium	mg/kg	5	13760	2085	13800	11100-16900
Manganese	mg/kg	5	408	125	354	282-580
Mercury	mg/kg	5	0.5	0.4	0.4	0.2-1.2
Nickel	mg/kg	5	81.2	29.3	96.6	37.5-108
Potassium	mg/kg	4	5188	2210	4940	2810-8060
Sodium	mg/kg	3	13173	3892	13300	9220-17000
Vanadium	mg/kg	5	80.8	14.4	81.8	66.2-100
Zinc	mg/kg	5	135	101	94.5	72.4-313
pH		5	7.4	1.6	8.2	4.6-8.5

Note: "3 Foot Depth" is comprised of Samples
from 2.1 to 4.0 feet below land surface.

This table does not include SED, EMB and duplicate sample results, or detections estimated below sample quantitation limits. The table does include all original sample data including "F" wells and data from split samples.

Table 4.4-3
Summary of Detected Chemicals
Site 1 Soil Samples
5 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Acetone	ug/kg	6	227	346	107	39.0-930
Carbon disulfide	ug/kg	2	16.0	6.0	16.0	13.0-19.0
Methylene chloride	ug/kg	6	31.5	24.1	25.5	11.0-75.0
Toluene	ug/kg	1	2.0	0.0	2.0	2.0-2.0
Total xylenes	ug/kg	2	17.5	5.0	17.5	15.0-20.0
Bis(2-Ethylhexyl)phthalate	ug/kg	1	530	0.0	530	530-530
Aluminum	mg/kg	6	25765	10627	26100	8290-36400
Arsenic	mg/kg	3	6.9	3.2	8.5	3.3-9.0
Barium	mg/kg	5	88.5	37.1	83.6	43.2-145
Beryllium	mg/kg	2	2.7	1.3	2.7	2.0-3.3
Cadmium	mg/kg	2	2.1	0.2	2.1	2.0-2.2
Calcium	mg/kg	6	13155	13453	4960	3730-32200
Chromium	mg/kg	6	77.8	35.2	84.0	23.7-115
Cobalt	mg/kg	3	25.6	5.4	27.0	19.6-30.2
Copper	mg/kg	6	45.6	27.6	44.9	9.5-93.1
Iron	mg/kg	6	37243	14801	41650	9160-51200
Lead	mg/kg	6	68.0	96.1	28.8	2.9-259
Magnesium	mg/kg	6	15210	5269	16650	5060-19100
Manganese	mg/kg	6	491	224	501	186-808
Mercury	mg/kg	4	0.5	0.3	0.5	0.3-0.9
Nickel	mg/kg	6	82.6	35.6	86.7	32.9-118
Potassium	mg/kg	6	3957	2615	3940	1010-7250
Silver	mg/kg	1	4.2	0.0	4.2	4.2-4.2
Sodium	mg/kg	6	10997	8082	12110	1010-19200
Vanadium	mg/kg	6	80.1	28.3	89.1	27.1-106
Zinc	mg/kg	6	170	144	115	24.5-427
pH		6	8.1	0.3	8.1	7.6-8.6

Note: "5 Foot Depth" is comprised of Samples
from 4.1 to 5.5 feet below land surface.

This table does not include SED, EMB and duplicate sample results, or detections estimated below sample quantitation limits. The table does include all original sample data including "F" wells and data from split samples.

Table 4.4-4
Summary of Detected Chemicals
Site 1 Soil Samples
> 5 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
2-Butanone	ug/kg	3	64.7	32.8	80.0	27.0-87.0
Acetone	ug/kg	11	146	136	100	3.0-430
Carbon disulfide	ug/kg	4	21.3	13.1	21.0	7.0-36.0
Chlorobenzene	ug/kg	1	18.0	0.0	18.0	18.0-18.0
Ethyl benzene	ug/kg	2	53.0	30.0	53.0	38.0-68.0
Methylene chloride	ug/kg	11	23.8	9.8	26.0	9.0-42.0
Toluene	ug/kg	2	25.0	34.0	25.0	8.0-42.0
Total xylenes	ug/kg	2	110	0.0	110	110-110
4-Methylphenol	ug/kg	1	890	0.0	890	890-890
Bis(2-Ethylhexyl)phthalate	ug/kg	1	1100	0.0	1100	1100-1100
Butyl benzyl phthalate	ug/kg	1	760	0.0	760	760-760
AROCLOR-1260	ug/kg	2	205	50.0	205	180-230
Aluminum	mg/kg	11	22582	5380	20700	16500-32100
Arsenic	mg/kg	3	7.1	3.5	5.5	4.7-11.1
Barium	mg/kg	10	169	84.1	166	75.6-370
Beryllium	mg/kg	3	2.0	0.8	1.9	1.3-2.8
Calcium	mg/kg	11	27743	28709	17300	3390-79000
Chromium	mg/kg	11	66.9	13.7	65.1	51.3-98.4
Cobalt	mg/kg	10	18.0	4.2	17.6	10.6-24.2
Copper	mg/kg	11	38.7	14.7	37.5	20.1-72.8
Iron	mg/kg	11	29945	8221	29300	19100-45500
Lead	mg/kg	11	24.9	20.5	15.5	6.1-64.4
Magnesium	mg/kg	11	14345	3025	13900	8700-18600
Manganese	mg/kg	11	418	107	412	190-604
Mercury	mg/kg	7	1.2	2.1	0.4	0.2-6.0
Nickel	mg/kg	11	71.2	17.1	73.7	43.6-95.8
Potassium	mg/kg	10	3394	1184	3575	927-5000
Silver	mg/kg	1	11.5	0.0	11.5	11.5-11.5
Sodium	mg/kg	10	9360	5471	7740	1040-18700
Vanadium	mg/kg	11	68.9	14.6	71.8	46.6-91.2
Zinc	mg/kg	11	117	104	79.5	45.6-393
pH		11	8.1	0.2	8.2	7.8-8.4

Note: "> 5 Foot Depth" is comprised of Samples
from 5.6 feet deep and below.

This table does not include SED, EMB and duplicate sample results, or detections estimated below sample quantitation limits. The table does include all original sample data including "F" wells and data from split samples.

Table 4.4-5
Summary of Detected Chemicals
Site 1 Water Samples
Aquifer A Monitor Wells

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Acetone	ug/L	9	15.2	6.7	13.0	10.0-31.0
Carbon disulfide	ug/L	2	24.0	36.0	24.0	6.0-42.0
Methylene chloride	ug/L	13	9.5	4.5	10.0	5.0-21.0
Toluene	ug/L	1	5.0	0.0	5.0	5.0-5.0
2-Chlorophenol	ug/L	1	36.0	0.0	36.0	36.0-36.0
4-Chloro-3-methylphenol	ug/L	1	22.0	0.0	22.0	22.0-22.0
Di-n-octyl phthalate	ug/L	1	23.0	0.0	23.0	23.0-23.0
Phenol	ug/L	1	33.0	0.0	33.0	33.0-33.0
Aluminum	ug/L	10	1764	1129	1520	400-3560
Antimony	ug/L	12	994	572	995	88.9-1860
Arsenic	ug/L	1	11.5	0.0	11.5	11.5-11.5
Barium	ug/L	5	335	97.6	381	196-421
Beryllium	ug/L	3	5.0	3.8	5.1	1.2-8.8
Cadmium	ug/L	4	25.1	20.2	26.0	5.2-43.0
Calcium	ug/L	30	446333	171775	456000	31400-704000
Chromium	ug/L	4	95.3	81.8	99.1	10.0-173
Cobalt	ug/L	3	64.0	5.0	62.1	60.2-69.6
Copper	ug/L	4	194	323	35.9	26.5-678
Iron	ug/L	25	17329	67284	3140	181-340000
Lead	ug/L	3	92.7	31.8	110	56.0-112
Magnesium	ug/L	30	1431893	481782	1570000	24200-1960000
Manganese	ug/L	30	3813	2617	3350	169-8260
Mercury	ug/L	4	0.3	0.1	0.4	0.2-0.4
Nickel	ug/L	5	77.7	37.9	53.6	44.7-121
Potassium	ug/L	28	356279	110451	363500	17400-560000
Selenium	ug/L	2	34.0	56.1	34.0	5.9-62.0
Silver	ug/L	6	109	96.1	81.3	25.9-276
Sodium	ug/L	30	11225960	4021359	11800000	67800-16400000
Thallium	ug/L	3	65.7	42.1	90.0	17.0-90.0
Vanadium	ug/L	6	241	261	89.7	43.0-615
Zinc	ug/L	7	202	162	298	26.0-365
Bicarbonate	mg/L	18	1253	439	1290	660-2100
Carbonate	mg/L	1	2000	0.0	2000	2000-2000
Chloride	ug/L	19	29689	16251	25400	20800-94000
Fluoride	ug/L	3	64.0	6.6	65.0	57.0-70.0
Sulfate	ug/L	19	2104	1088	2180	6.9-3900

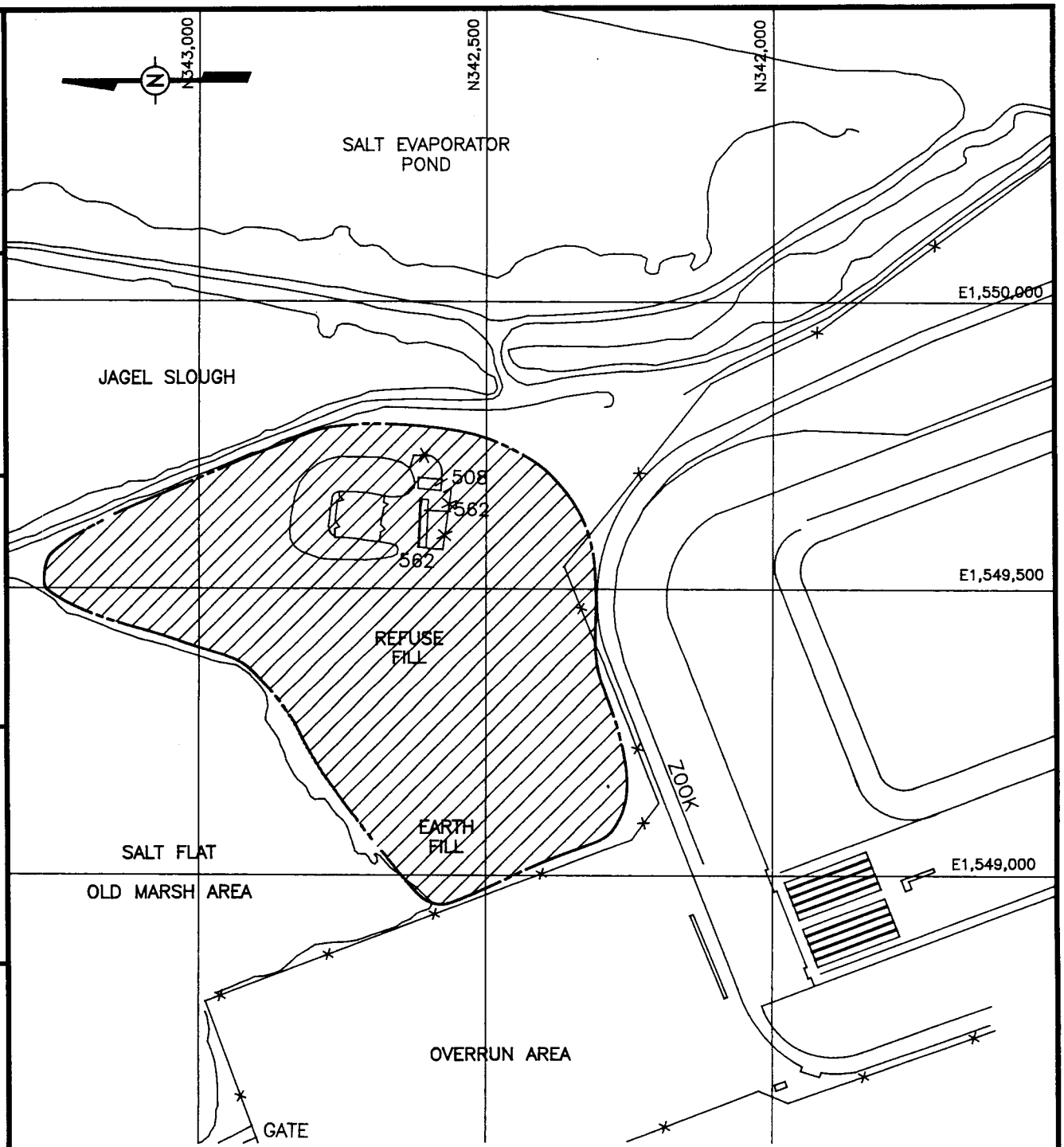
Note: "Aquifer A Monitor Wells" combine A1 & A2 subaquifers

This table does not include SED, EMB and duplicate sample results, or detections estimated below sample quantitation limits. The table does include all original sample data including "F" wells and data from split samples.

Table 4.4-6
Summary of Detected Chemicals
in Site 1 Water Samples
Aquifer F Monitor Wells

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
2-Butanone	ug/L	5	10104	21747	290	110-49000
4-Methyl-2-pentanone	ug/L	9	1065	2723	74.0	16.0-8300
Acetone	ug/L	17	711	938	470	12.0-3200
Benzene	ug/L	2	8.5	7.0	8.5	5.0-12.0
Ethyl benzene	ug/L	9	52.4	56.7	26.0	5.0-150
Methylene chloride	ug/L	21	92.2	279	22.0	5.0-1300
Toluene	ug/L	13	172	150	130	7.0-440
Total xylenes	ug/L	15	92.1	93.7	56.0	6.0-350
1,4 Dichlorobenzene	ug/L	7	19.7	8.0	17.0	12.0-33.0
2,4 Dimethylphenol	ug/L	6	134	141	74.0	13.0-370
2-Methylphenol	ug/L	2	26.5	21.0	26.5	16.0-37.0
4-Methylphenol	ug/L	13	2149	2391	1600	23.0-7900
Benzoic acid	ug/L	5	4760	3804	4400	1600-11000
Bis(2-Ethylhexyl)phthalate	ug/L	2	24.5	13.0	24.5	18.0-31.0
Butyl benzyl phthalate	ug/L	1	20.0	0.0	20.0	20.0-20.0
Di-n-octyl phthalate	ug/L	1	48.0	0.0	48.0	48.0-48.0
Diethylphthalate	ug/L	2	16.0	12.0	16.0	10.0-22.0
N-nitroso-dipropylamine	ug/L	1	54.0	0.0	54.0	54.0-54.0
N-nitrosodiphenylamine	ug/L	1	25.0	0.0	25.0	25.0-25.0
Naphthalene	ug/L	2	13.5	1.0	13.5	13.0-14.0
Phenol	ug/L	3	74.3	31.9	87.0	38.0-98.0
AROCLOR-1242	ug/L	1	1.4	0.0	1.4	1.4-1.4
Aluminum	ug/L	5	1114	945	704	136-2140
Antimony	ug/L	9	896	728	593	84.2-1950
Arsenic	ug/L	6	21.6	9.0	21.2	11.0-34.1
Barium	ug/L	14	3813	2182	4525	315-6580
Cadmium	ug/L	4	68.8	66.5	55.8	6.7-157
Calcium	ug/L	25	294168	174326	279000	11600-570000
Chromium	ug/L	4	13.2	5.2	10.7	10.3-20.9
Iron	ug/L	20	32027	31935	23450	411-108000
Lead	ug/L	3	33.5	49.8	6.4	3.2-91.0
Magnesium	ug/L	25	927852	609624	1040000	27800-1790000
Manganese	ug/L	24	976	935	645	26.7-3600
Nickel	ug/L	3	349	502	63.8	53.9-928
Potassium	ug/L	23	311217	256418	255000	14400-812000
Silver	ug/L	1	53.5	0.0	53.5	53.5-53.5
Sodium	ug/L	25	7860520	6632160	6980000	153000-23600000
Thallium	ug/L	2	135	10.0	135	130-140
Zinc	ug/L	5	250	142	296	34.2-375
Bicarbonate	mg/L	16	1960	580	2100	375-2600
Carbonate	mg/L	1	2600	0.0	2600	2600-2600
Chloride	mg/L	17	22251	16684	15000	3960-53000
Fluoride	mg/L	4	54.3	58.2	32.5	12.0-140
Nitrate	mg/L	2	12.0	16.0	12.0	4.0-20.0
Sulfate	mg/L	13	186	239	90.0	26.0-780
TDS	ug/L	7	12844	3707	10800	9090-18300

This table does not include SED, EMB and duplicate sample results, or detections estimated below sample quantitation limits. The table does include all original sample data including "F" wells and data from split samples.



LEGEND

---- BOUNDARY OF RUNWAY LANDFILL

RUNWAY LANDFILL

0 300 600 FEET

FIGURE 4.1-1

SITE 1
RUNWAY LANDFILL

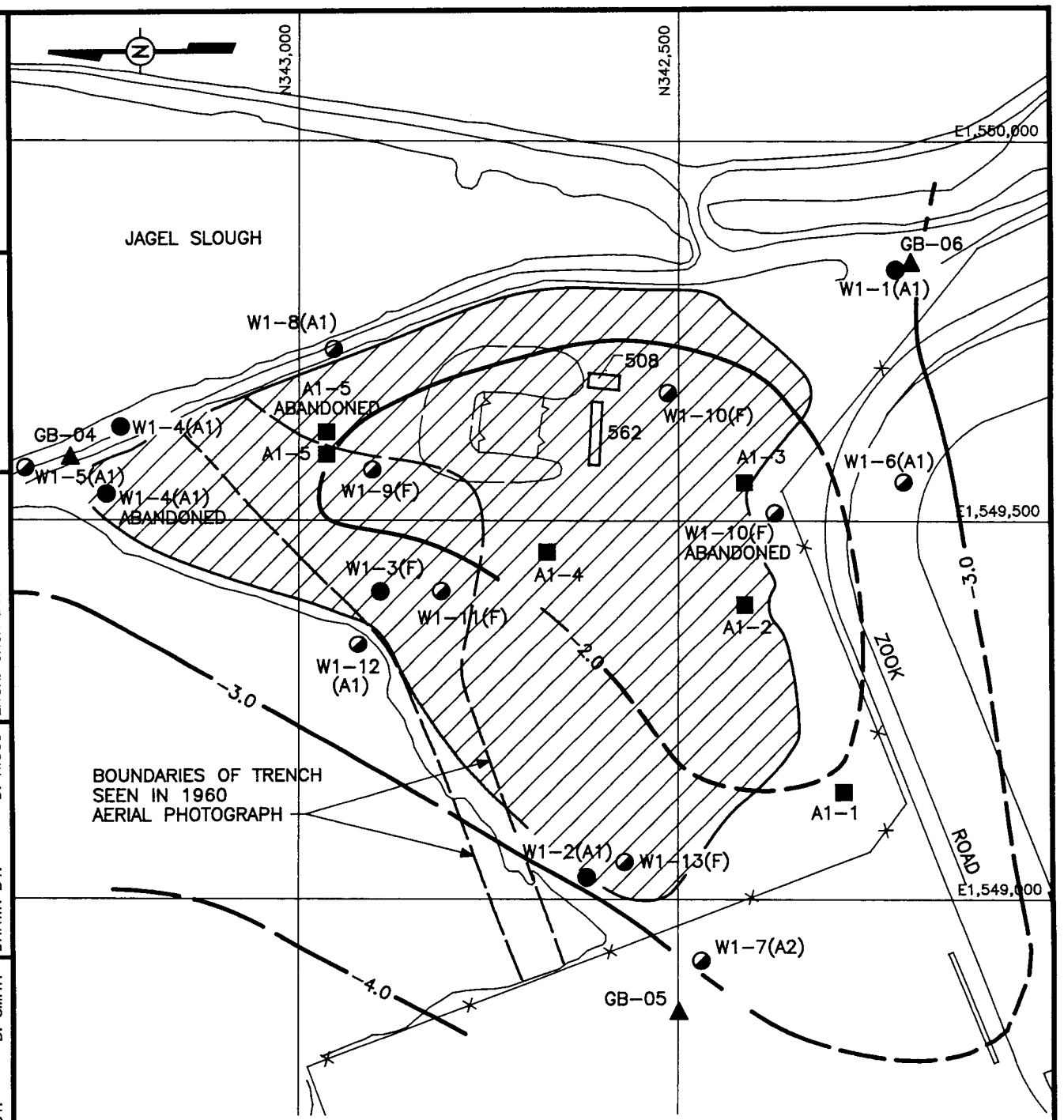
NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

SOURCE: AERO-GEODETIC CORP.
JOB NO. 811822 3/16/81

STARTING DATE: 3-24-90	DATE LAST REV.: 7/27/90	DRAFT. CHCK. BY:	INITIATOR: J. WILLE	DWG. NO.: 409700-A-G43	
DRAWN BY: B. SMITH	DRAWN BY: B. SMITH	ENGR. CHCK BY:	PROJ. MGR.: K. BRADLEY	PROJ. NO.: 409700	

\DRAWINGS\409700-L



LEGEND

- IT WELL
- IT GEOPHYSICAL BORING
- ESA WELL
- ESA SOIL BORING
- —3— POTENTIOMETRIC SURFACE CONTOURS
- LANDFILL

0 200 400 FEET

FIGURE 4.2-1

SITE 1
A-AQUIFER POTENTIOMETRIC
SURFACE CONTOURS
(SEPTEMBER 1988)

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

DWG. NO.: 409700-A-G32	INITIATOR: J. WILLE	DRAFT. CHCK. BY:	DATE LAST REV.: 3-24-90
PROJ. NO.: 409700	PROJ. MGR.: K. BRADLEY	ENGR. CHCK BY:	DRAWN BY: D. HIGGS
STARTING DATE: 3-24-90	DRAWN BY: B. SMITH		

\DRAWINGS\409700-0

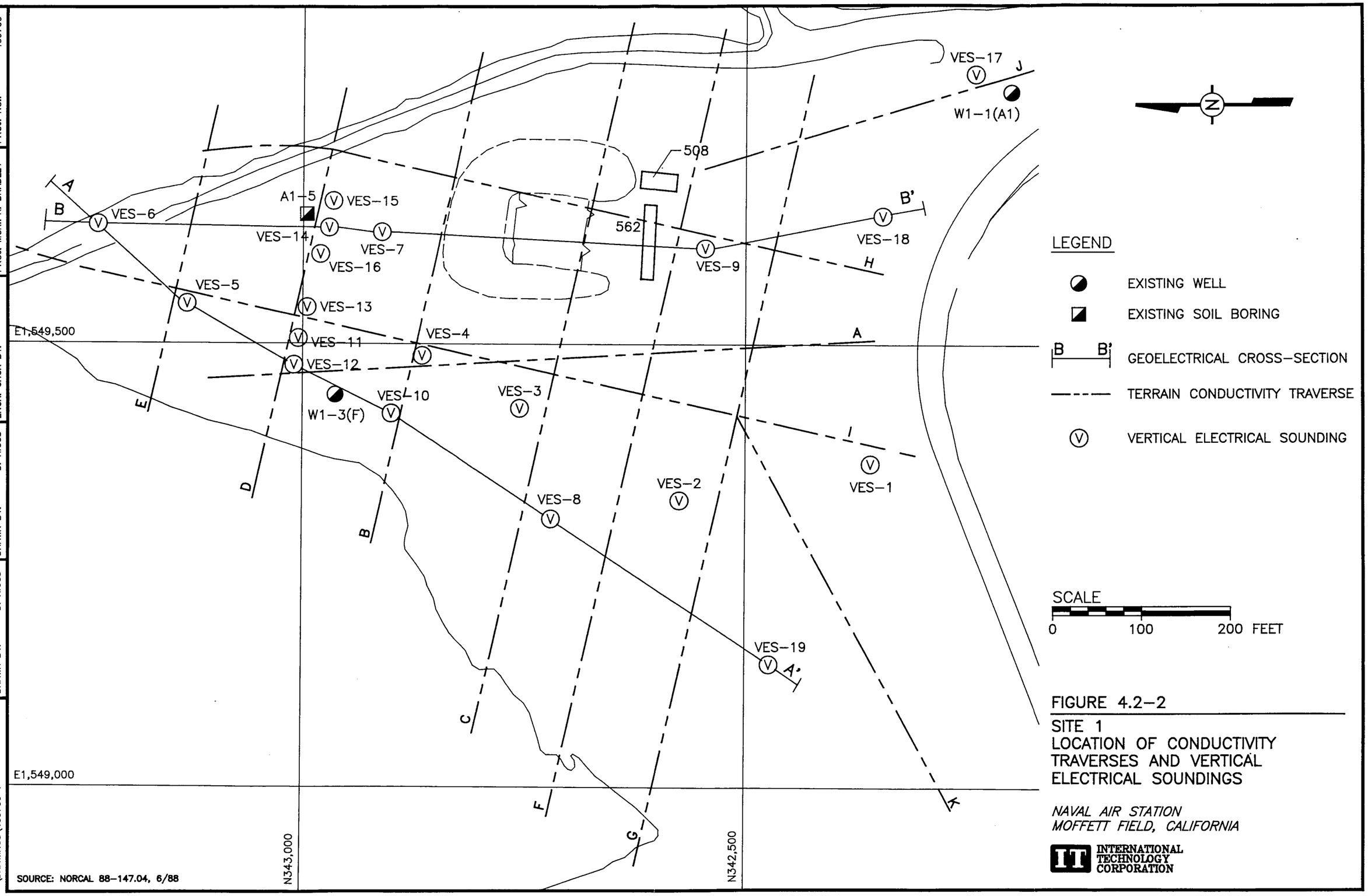
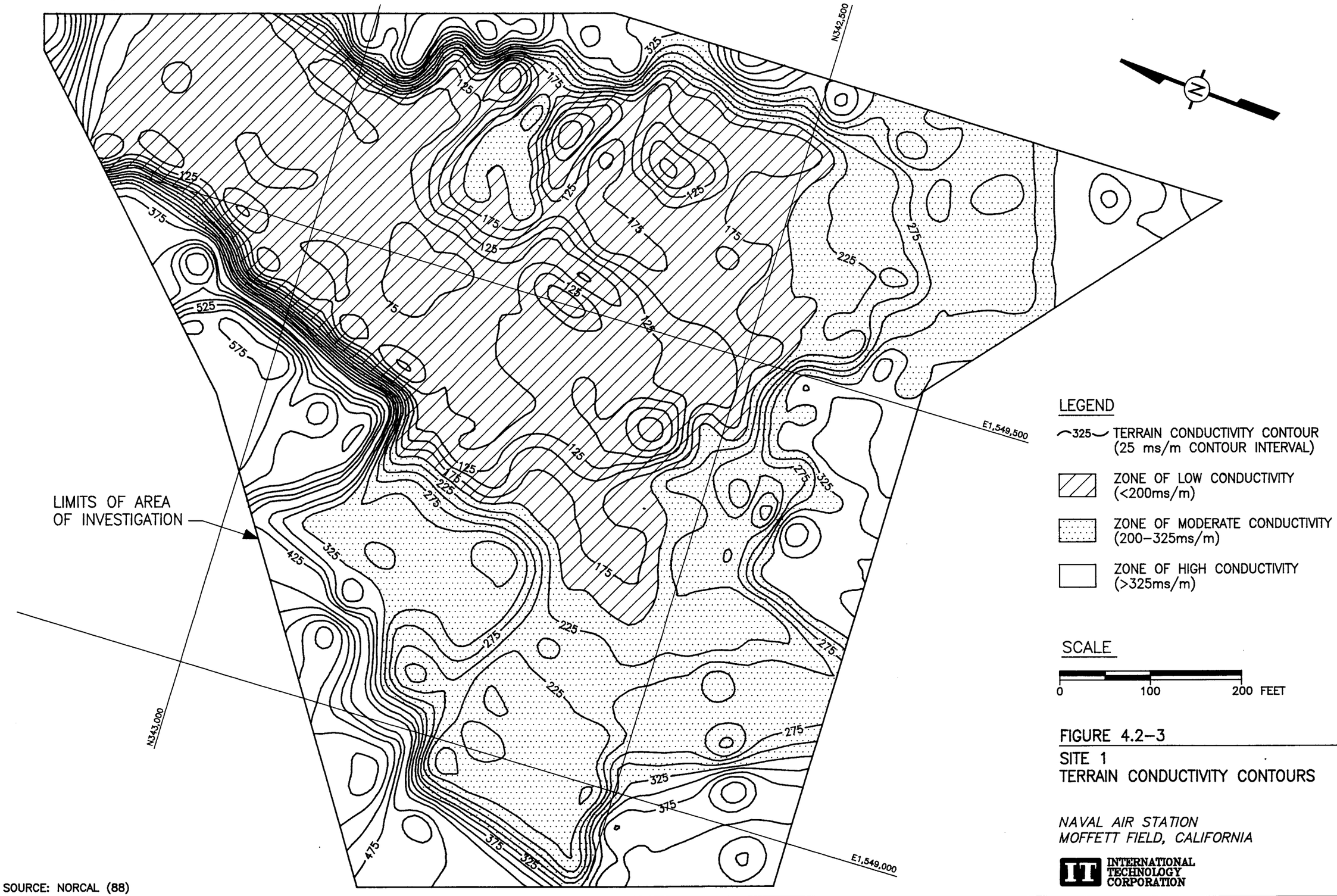


FIGURE 4.2-2

SITE 1
LOCATION OF CONDUCTIVITY TRAVERSES AND VERTICAL ELECTRICAL SOUNDINGS

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA



SOURCE: NORCAL (88)

FIGURE 4.2–3

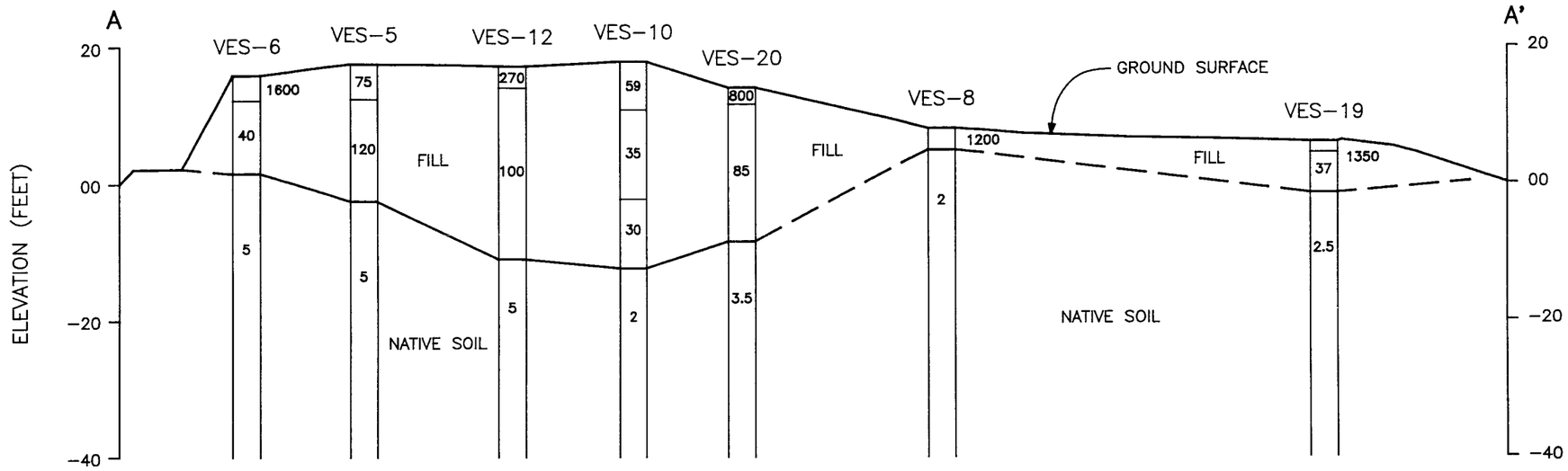
SITE 1
TERRAIN CONDUCTIVITY CONTOURS

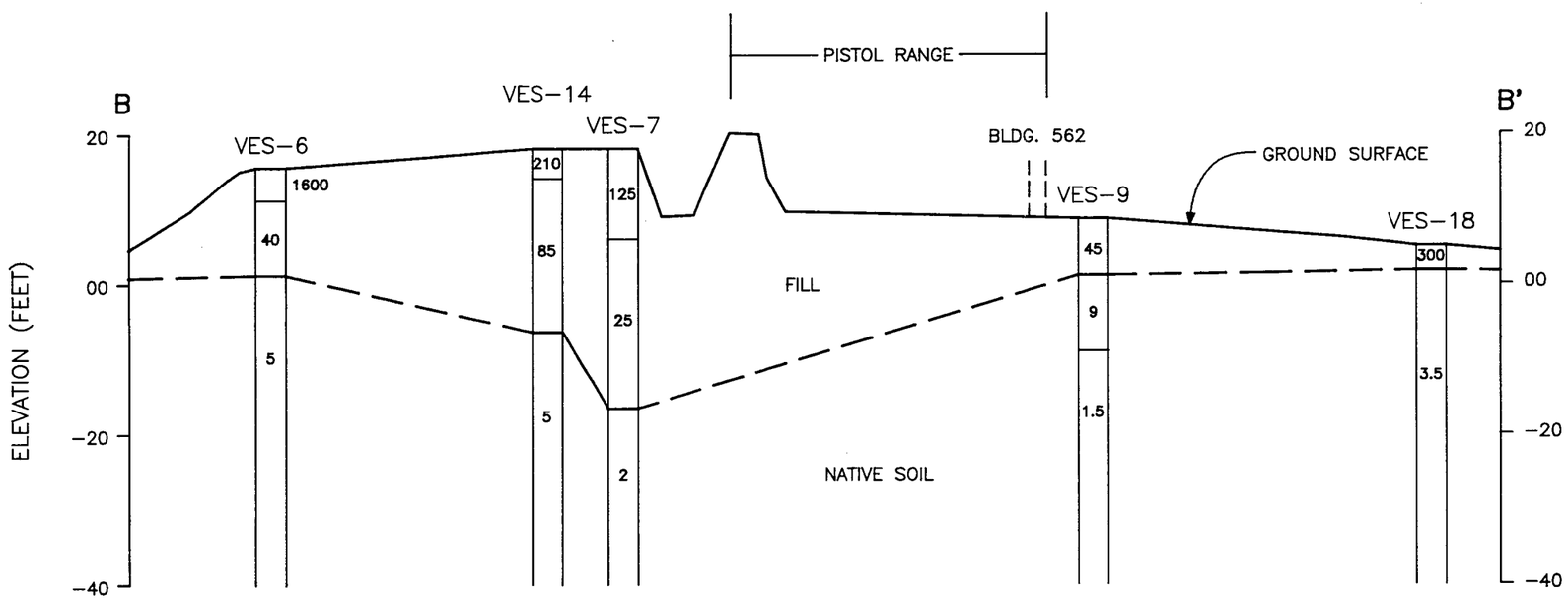
NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

STARTING DATE: 3–24–90	DATE LAST REV.: 7/26/90	DRAFT. CHCK. BY:	INITIATOR: J. WILLE
DRAWN BY: B. SMITH	DRAWN BY: D. HIGGS	ENGR. CHCK BY:	PROJ. MGR.: K. BRADLEY
			DRAWING NO.409700–B–G21
			PROJ. NO.: 409700

\DRAWINGS\40970012





LEGEND

———	LOWER LIMITS OF RESISTIVE LAYER (DASHED WHERE INFERRED)
VES-18	VERTICAL ELECTRICAL SOUNDING
45	RESISTIVITY (OHM-FT.)

SCALE

0 100 200 FEET

VERTICAL EXAGGERATION 5:1

FIGURE 4.2-4

SITE 1
GEOELECTRIC PROFILES A-A' & B-B'

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

SOURCE: NORCAL (88)

DRAWING NO.: 409700-B-C51	INITIATOR: S. BARTLING	DRAFT. CHCK. BY:	STARTING DATE: 6/13/90
PROJ. NO.: 409700	PROJ. MGR.: K. BRADLEY	ENGR. CHCK BY:	DRAWN BY: D. HIGGS
			DATE LAST REV.:
			DRAWN BY:

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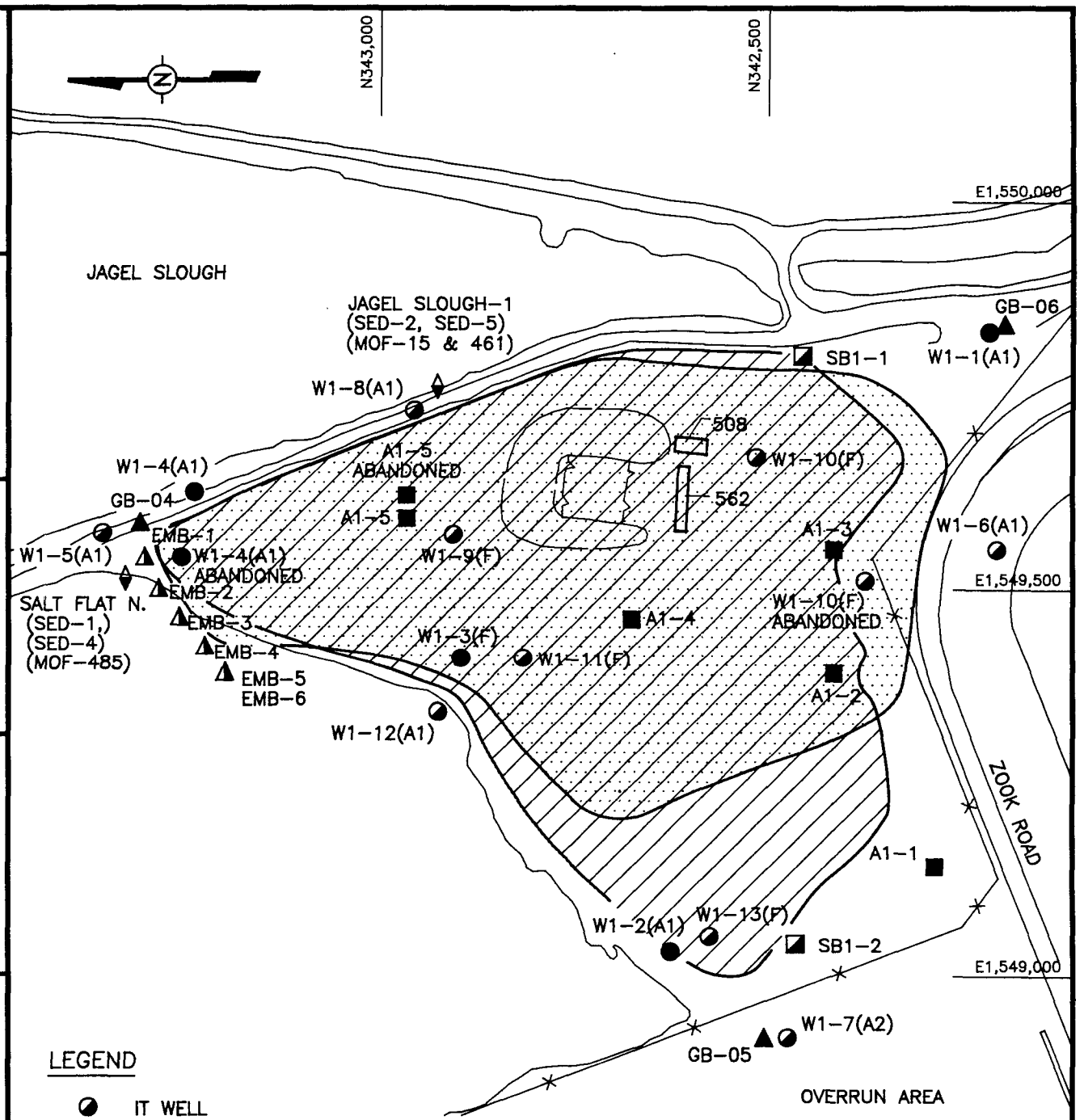


LEGEND

- IT WELL
- IT GEOPHYSICAL BORING
- SHALLOW SOIL SAMPLE
- IT SOIL BORING
- SURFACE WATER/SEDIMENT SAMPLING POINT
- ESA WELL
- ESA SOIL BORING
- 1988 ESTIMATED AREA OF REFUSE FILL
- 1989 ESTIMATED AREA OF REFUSE FILL

0 200 400 FEET

FIGURE 4.2-5

SITE 1
RUNWAY LANDFILL
MONITORING WELL, BORING AND SAMPLING LOCATIONS

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

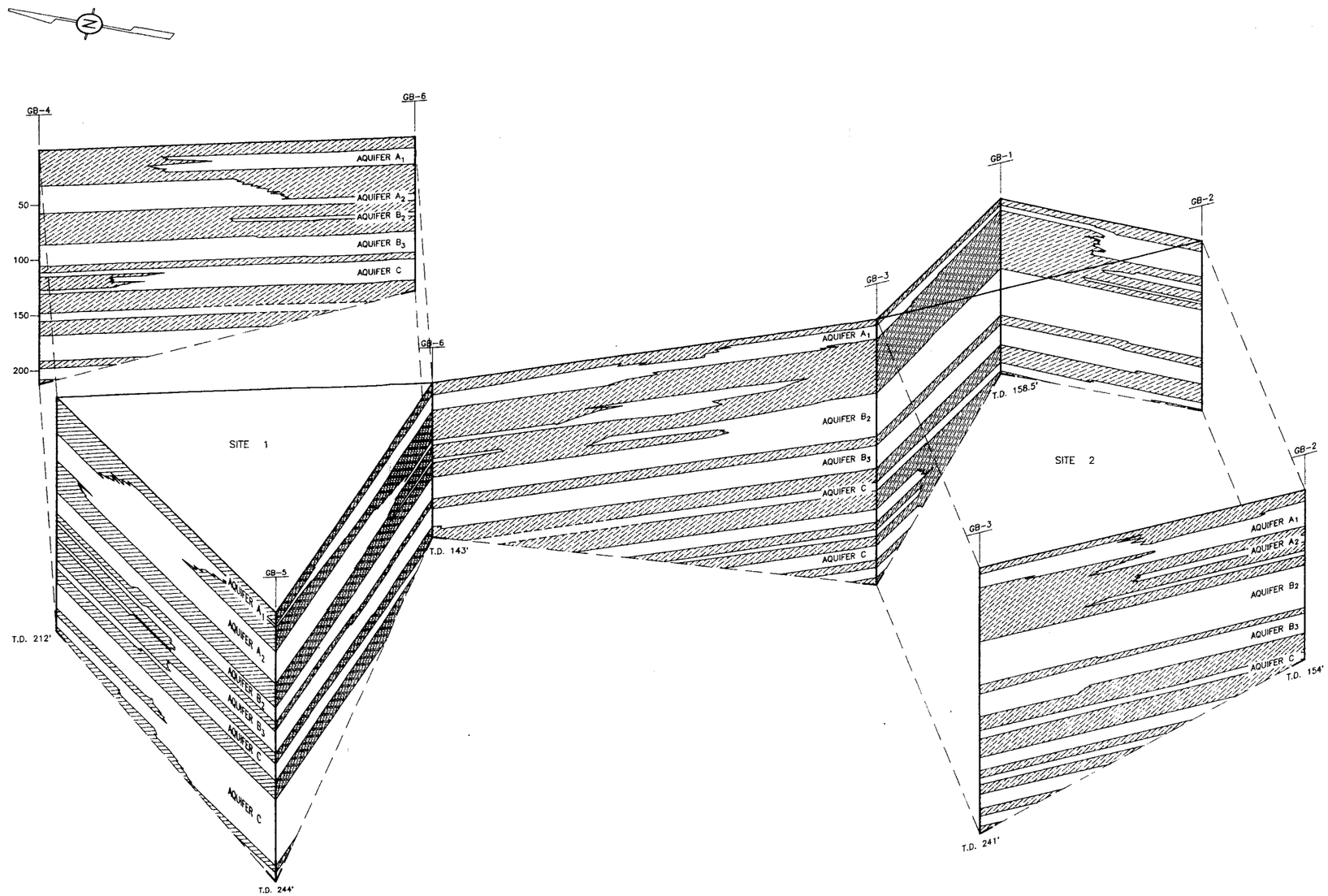
INTERNATIONAL TECHNOLOGY CORPORATION

SOURCE: AERO-GEODETIC CORP.
JOB NO. 811822 3/16/81

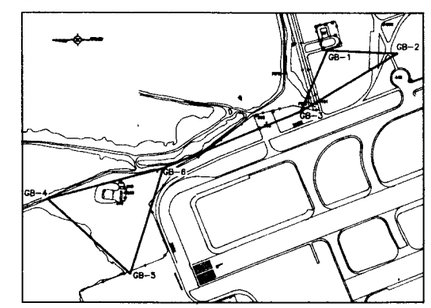
STARTING DATE: 3-24-90	DATE LAST REV.: 7/26/90	DRAFT. CHCK. BY:	INITIATOR: J. WILLE	DWG. NO.: 409700-A-G15	
DRAWN BY: B. SMITH	DRAWN BY: D. HIGGS	ENGR. CHCK BY:	PROJ. MGR.: K. BRADLEY	PROJ. NO.: 409700	

\DRAWINGS\409700-N

STARTING DATE: 5/15/90	DATE LAST REV.: 7/25/90	INITIATOR: P. SMITH	DRAWING NO.:409700-D-63
DRAWN BY: D. HIGGS	DRAWN BY: D. HIGGS	PROJ. MGR: K. BRADLEY	PROJ. NO: 409700



LOCATION MAP



HORIZONTAL SCALE:
0 250 500 FEET

VERTICAL SCALE:
0 50 100 FEET

VERTICAL EXAGGERATION: 5X

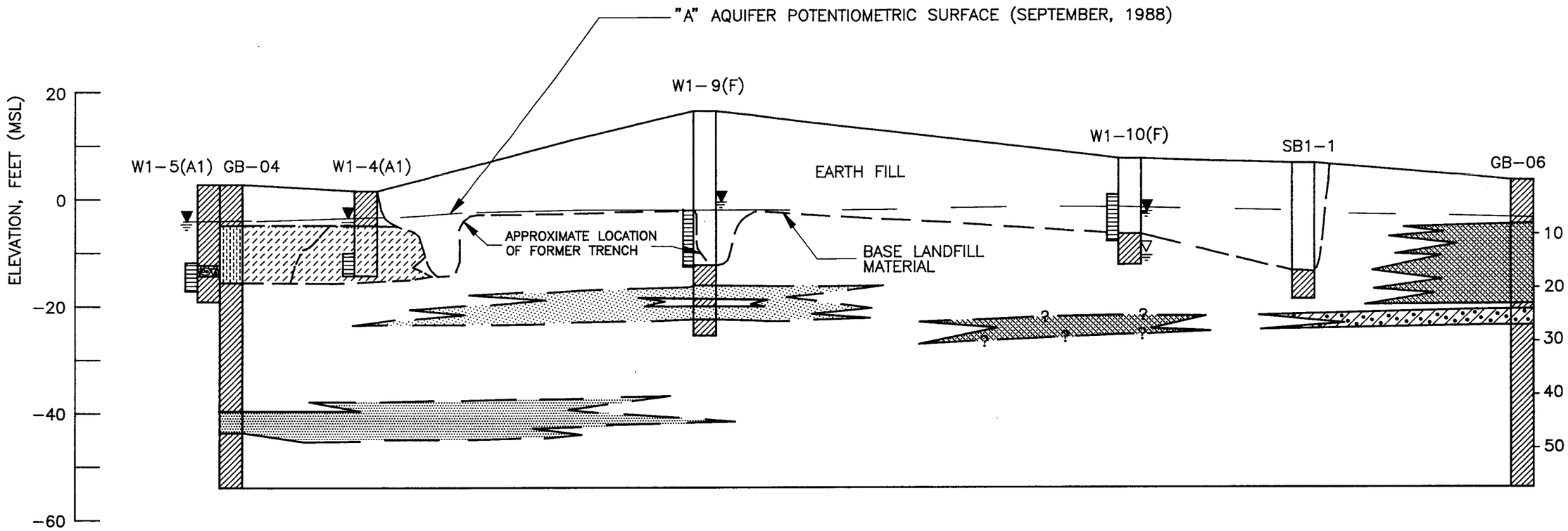
FIGURE 4.2-6

SITES 1, 2, AND 11
FENCE DIAGRAM

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

\IMAGES\FENCE120



LEGEND:

- (GW) – WELL-GRADED GRAVELS AND GRAVEL-SAND MIXTURES, LITTLE OR NO FINES.
- (GC) – CLAYEY GARVELS, GRAVEL-SAND-SILT MIXTURES
- (SW) – WELL-GRADED SANDS AND GRAVELLY SANDS, LITTLE OR NO FINES
- (SP) – POORLY GRADED SANDS AND GRAVELLY SANDS, LITTLE OR NO FINES
- GROUNDWATER FIRST ENCOUNTERED
- (SC) – CLAYEY SANDS, SAND-CLAY MIXTURES
- (CL) – INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAY, LEAN CLAYS, LIQUID LIMIT 50% OR LESS.
- (OL) – ORGANIC SILTS OR ORGANIC CLAYS OF LOW PLASTICITY
- (OH) – ORGANIC CLAYS OR ORGANIC SILTS OF MEDIUM TO LOW PLASTICITY
- STATIC WATER LEVEL

NOTES:

1. LINES DASHED WHERE INFERRED; QUERIED WHERE HYPOTHETICAL
2. UNPATTERNED AREAS REPRESENT LESS PERVIOUS MATERIALS (CLAYS).
3. INTERPRETATION BASED ON ESTUARINE MODEL WHERE NO DATA ARE AVAILABLE, SAND/GRAVEL UNITS ARE INFERRED BASED ON THIS MODEL; THICKNESSES, CHARACTERISTICS, AND LOCATIONS OF SAND/GRAVEL UNITS ARE HYPOTHETICAL.

FIGURE 4.3-1

SITE 1
BURIED TRENCH

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

STARTING DATE: 3/23/90	DATE LAST REV.: 7/26/90	DRAFT. CHCK. BY:	INITIATOR: J.WILLE	DRAWING NO.: 409700-B-G11
DRAWN BY: G.COLE	DRAWN BY: D. HIGGS	ENGR. CHCK BY:	PROJ. MGR.: K.BRADLY	PROJ. NO.: 409700

\DRAWINGS\40970011

N00296.000910
MOFFETT FIELD
SSIC NO. 5090.3

SECTION 5.0

PHASE I CHARACTERIZATION REPORT

DATED 01 AUGUST 1990

Table 5.2-1. Summary of Site 2 Geotechnical Test Results
NAS Moffett Field

Well/Sample Identification	Soil Description	Sample Depth (ft bls)	Effective Porosity (percent)	Conductivity (cm/sec)
W02-05(A1)MD5	Clayey Sand	15.5-16.5	27.4	3.64×10^{-4}
W02-05(A1)MD6	Clay	21.0-21.5	36.8	2.92×10^{-8}
W02-06(A1)MD5	Clay	15.0-15.5	41.8	2.07×10^{-8}
W02-07(A2)MD6	Clay	30.0-31.5	35.8	4.60×10^{-8}
W02-09(A1)MD4	Clay	21.0-21.5	38.6	5.37×10^{-8}
W02-10(F)MD5	Clay	14.5-16.0	44.2	5.92×10^{-8}
W02-11(F)MD5	Clay	21.5-23.0	38.5	2.49×10^{-8}

Table 5.4-1
Summary of Detected Chemicals
Site 2 Soil Samples
1 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Acetone	ug/kg	9	57.4	50.6	35.0	11.0-170
Carbon disulfide	ug/kg	2	7.5	5.0	7.5	5.0-10.0
Methylene chloride	ug/kg	9	20.9	12.7	17.0	9.0-48.0
Total xylenes	ug/kg	1	10.0	0.0	10.0	10.0-10.0
4-Methylphenol	ug/kg	1	1200	0.0	1200	1200-1200
Phenol	ug/kg	1	1000	0.0	1000	1000-1000
Aluminum	mg/kg	9	17981	7050	18500	8670-32000
Antimony	mg/kg	2	54.8	5.0	54.8	52.3-57.3
Arsenic	mg/kg	6	4.9	2.7	5.0	1.4-8.0
Barium	mg/kg	7	220	132	217	97.5-459
Beryllium	mg/kg	1	1.2	0.0	1.2	1.2-1.2
Cadmium	mg/kg	2	2.2	1.7	2.2	1.3-3.0
Calcium	mg/kg	9	48886	49153	29000	4910-153000
Chromium	mg/kg	9	56.7	19.6	56.3	27.1-98.0
Cobalt	mg/kg	5	15.3	3.0	14.8	11.8-20.0
Copper	mg/kg	9	41.9	24.6	40.6	12.5-93.2
Iron	mg/kg	9	26600	7478	27800	16100-41700
Lead	mg/kg	8	21.7	16.9	15.6	5.5-48.0
Magnesium	mg/kg	9	14256	2949	14300	9700-20200
Manganese	mg/kg	9	500	221	430	338-1050
Mercury	mg/kg	5	0.4	0.3	0.2	0.2-0.9
Nickel	mg/kg	9	61.6	24.1	59.0	29.0-105
Potassium	mg/kg	6	2395	1361	1960	1020-4460
Sodium	mg/kg	4	11928	7774	10670	4270-22100
Vanadium	mg/kg	9	55.5	16.9	64.7	34.0-77.7
Zinc	mg/kg	9	75.1	27.8	66.1	38.7-113
pH		7	8.1	0.2	8.1	7.9-8.5

Note: "1 Foot Depth" is comprised of Samples
from 0.0 to 2.0 feet below land surface.

This table does not include SED, EMB and duplicate sample results, or detections estimated below sample quantitation limits. The table does include all original sample data including "F" wells and data from split samples.

Table 5.4-2
Summary of Detected Chemicals
Site 2 Soil Samples
3 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Acetone	ug/kg	5	40.2	25.3	37.0	13.0-80.0
Methylene chloride	ug/kg	5	15.0	3.6	15.0	10.0-20.0
AROCLOR-1242	ug/kg	1	680	0.0	680	680-680
AROCLOR-1254	ug/kg	2	1365	1270	1365	730-2000
Aluminum	mg/kg	5	20380	2211	19600	18500-23900
Antimony	mg/kg	1	63.5	0.0	63.5	63.5-63.5
Arsenic	mg/kg	4	11.6	15.7	4.3	2.6-35.1
Barium	mg/kg	5	252	46.9	224	216-324
Beryllium	mg/kg	2	1.2	0.2	1.2	1.1-1.3
Cadmium	mg/kg	4	2.9	1.0	2.9	1.7-4.1
Calcium	mg/kg	5	54600	26990	58500	29000-95100
Chromium	mg/kg	5	63.9	14.1	62.2	50.3-85.2
Cobalt	mg/kg	5	16.2	2.5	16.6	13.8-20.0
Copper	mg/kg	5	59.8	18.1	60.0	35.2-86.0
Iron	mg/kg	5	31820	5553	31700	25600-39100
Lead	mg/kg	4	50.8	25.0	51.3	25.4-75.2
Magnesium	mg/kg	5	12646	2610	13000	9430-16200
Manganese	mg/kg	5	530	122	531	418-727
Mercury	mg/kg	3	0.3	0.2	0.3	0.2-0.5
Nickel	mg/kg	5	66.7	10.3	70.6	54.7-77.3
Potassium	mg/kg	4	1446	701	1185	955-2460
Vanadium	mg/kg	5	64.6	5.4	63.8	57.3-70.0
Zinc	mg/kg	5	117	41.4	105	70.6-170
pH		5	8.0	0.4	8.1	7.3-8.4

Note: "3 Foot Depth" is comprised of Samples
from 2.1 to 4.0 feet below land surface.

This table does not include SED, EMB and duplicate sample results, or detections estimated below sample quantitation limits. The table does include all original sample data including "F" wells and data from split samples.

Table 5.4-3
Summary of Detected Chemicals
Site 2 Soil Samples
5 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Acetone	ug/kg	4	25.0	6.7	22.0	21.0-35.0
Methylene chloride	ug/kg	4	14.3	2.5	14.5	11.0-17.0
Benzo(b)fluoranthene	ug/kg	1	390	0.0	390	390-390
AROCLOR-1254	ug/kg	1	28000	0.0	28000	28000-28000
Aluminum	mg/kg	4	25100	2563	25250	22000-27900
Antimony	mg/kg	1	83.9	0.0	83.9	83.9-83.9
Arsenic	mg/kg	2	3.8	1.6	3.8	3.0-4.6
Barium	mg/kg	4	291	146	252	167-492
Beryllium	mg/kg	1	1.2	0.0	1.2	1.2-1.2
Cadmium	mg/kg	2	11.8	19.5	11.8	2.0-21.5
Calcium	mg/kg	4	35925	16801	31950	22000-57800
Chromium	mg/kg	4	90.0	32.9	81.3	60.3-137
Cobalt	mg/kg	4	18.0	2.2	18.4	15.3-20.0
Copper	mg/kg	4	233	369	55.0	34.7-786
Iron	mg/kg	4	39900	16593	32900	29200-64600
Lead	mg/kg	3	463	769	28.5	9.4-1350
Magnesium	mg/kg	4	14875	3284	14600	11400-18900
Manganese	mg/kg	4	551	172	567	326-743
Mercury	mg/kg	2	0.3	0.0	0.3	0.3-0.3
Nickel	mg/kg	4	80.8	21.6	72.7	66.0-112
Potassium	mg/kg	3	2317	348	2260	2000-2690
Silver	mg/kg	1	5.6	0.0	5.6	5.6-5.6
Sodium	mg/kg	1	1440	0.0	1440	1440-1440
Vanadium	mg/kg	4	73.7	13.4	74.3	57.6-88.4
Zinc	mg/kg	4	490	813	89.0	72.6-1710
pH		4	8.0	0.2	8.1	7.7-8.2

Note: "5 Foot Depth" is comprised of Samples
from 4.1 to 5.5 feet below land surface.

This table does not include SED, EMB and duplicate sample results, or detections estimated below sample quantitation limits. The table does include all original sample data including "F" wells and data from split samples.

Table 5.4-4
Summary of Detected Chemicals
Site 2 Soil Samples
> 5 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Acetone	ug/kg	6	41.0	32.2	24.5	14.0-87.0
Methylene chloride	ug/kg	5	19.6	9.2	16.0	14.0-36.0
Styrene	ug/kg	1	16.0	0.0	16.0	16.0-16.0
Aluminum	mg/kg	6	22100	7505	23150	12900-30500
Antimony	mg/kg	1	66.8	0.0	66.8	66.8-66.8
Arsenic	mg/kg	3	3.5	0.9	3.5	2.7-4.4
Barium	mg/kg	6	180	89.4	162	65.2-289
Beryllium	mg/kg	3	1.5	0.3	1.6	1.2-1.8
Cadmium	mg/kg	1	1.0	0.0	1.0	1.0-1.0
Calcium	mg/kg	6	17653	7668	15850	9220-28500
Chromium	mg/kg	6	79.0	26.9	81.3	46.0-119
Cobalt	mg/kg	6	21.1	9.3	22.0	10.0-36.4
Copper	mg/kg	6	48.6	20.8	50.0	20.0-79.1
Iron	mg/kg	6	37083	12499	38900	22500-53300
Lead	mg/kg	5	13.4	6.5	11.3	7.7-24.0
Magnesium	mg/kg	6	16233	4499	17850	10500-21800
Manganese	mg/kg	6	807	664	669	280-2120
Mercury	mg/kg	3	0.2	0.1	0.2	0.2-0.3
Nickel	mg/kg	6	92.6	36.6	94.1	52.0-150
Potassium	mg/kg	4	1855	369	1720	1580-2400
Sodium	mg/kg	4	1730	789	1470	1100-2880
Vanadium	mg/kg	6	82.2	27.9	81.1	50.0-123
Zinc	mg/kg	6	86.5	31.5	84.6	48.9-125
pH		6	7.9	0.3	7.9	7.6-8.4

Note: "> 5 Foot Depth" is comprised of Samples
from 5.6 feet deep and below.

This table does not include SED, EMB and duplicate sample results, or detections estimated below sample quantitation limits. The table does include all original sample data including "F" wells and data from split samples.

Table 5.4-5
Summary of Detected Chemicals
Site 2 Water Samples
Aquifer A Monitor Wells

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Acetone	ug/L	7	10.3	8.8	11.0	2.0-24.0
Methylene chloride	ug/L	18	9.1	4.6	8.5	3.0-18.0
Total xylenes	ug/L	1	8.0	0.0	8.0	8.0-8.0
Bis(2-Ethylhexyl)phthalate	ug/L	3	26.7	34.2	10.0	4.0-66.0
Aluminum	ug/L	1	13300	0.0	13300	13300-13300
Antimony	ug/L	6	559	581	254	78.4-1560
Calcium	ug/L	23	612348	564100	307000	208000-2020000
Copper	ug/L	2	186	294	186	39.3-333
Lead	ug/L	3	15.0	8.7	19.0	5.0-21.0
Magnesium	ug/L	23	706565	551460	319000	213000-1720000
Manganese	ug/L	20	2210	1583	1840	19.6-4950
Mercury	ug/L	2	0.4	0.1	0.4	0.3-0.4
Potassium	ug/L	7	121729	118685	73800	20600-369000
Sodium	ug/L	23	2989739	2467428	810000	596000-6010000
Thallium	ug/L	1	35.0	0.0	35.0	35.0-35.0
Vanadium	ug/L	1	2120	0.0	2120	2120-2120
Bicarbonate	mg/L	13	495	129	510	330-720
Chloride	mg/L	16	7472	5521	5865	1900-16000
Fluoride	mg/L	7	20.9	17.7	7.8	6.6-46.0
Nitrate	mg/L	4	5.0	0.4	5.1	4.4-5.3
Sulfate	mg/L	16	1654	3347	530	120-14000
TDS	mg/L	13	10148	8078	4430	3500-20000

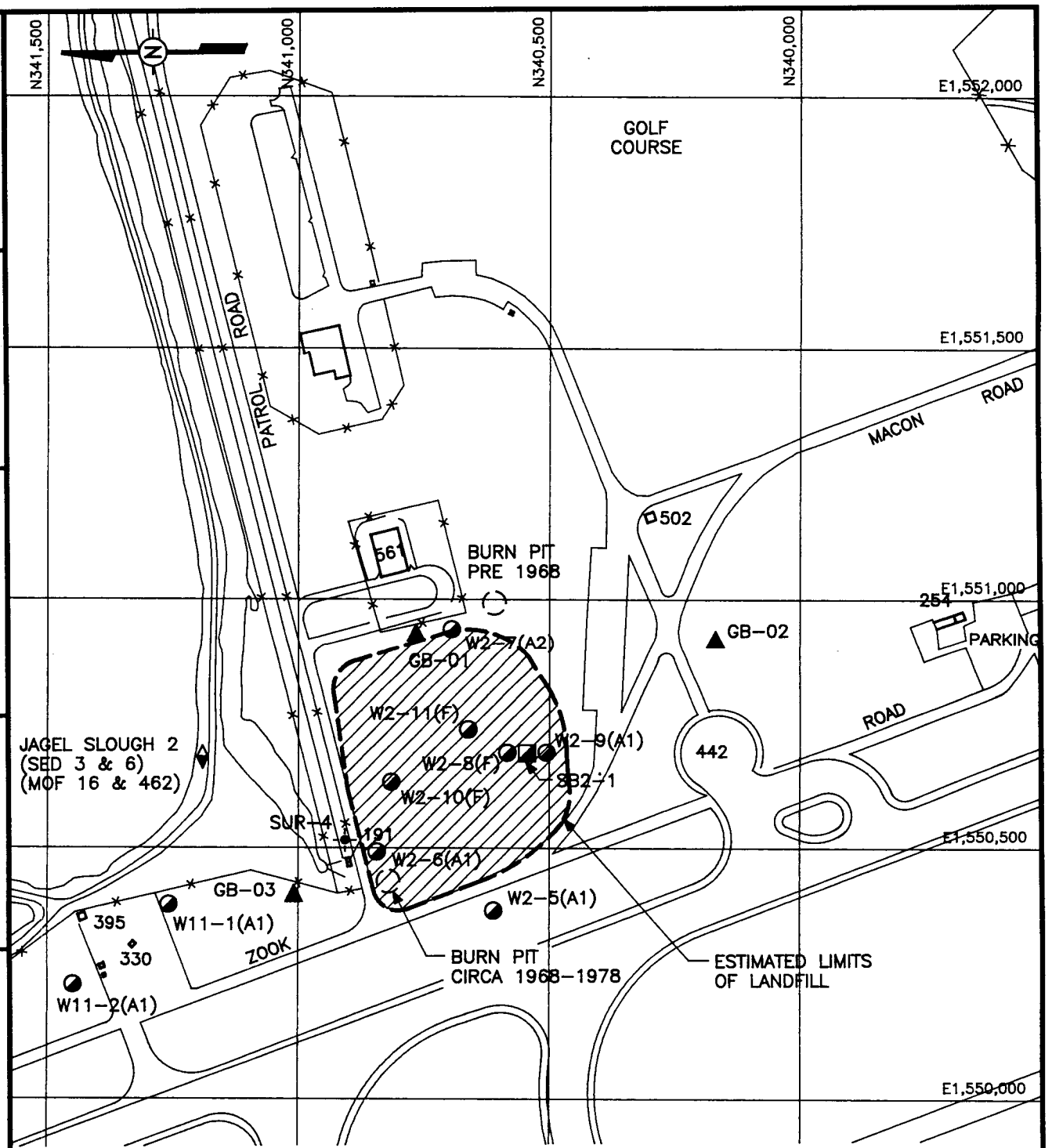
Note: "Aquifer A Monitor Wells" combine A1 & A2 subaquifers.

This table does not include SED, EMB and duplicate sample results, or detections estimated below sample quantitation limits. The table does include all original sample data including "F" wells and data from split samples.

Table 5.4-6
Summary of Detected Chemicals
Site 2 Water Samples
Aquifer F Monitor Wells

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
1,2-Dichloroethenes(Total)	ug/L	5	22.4	6.3	22.0	16.0-31.0
Acetone	ug/L	4	16.5	4.2	17.0	11.0-21.0
Benzene	ug/L	10	17.8	13.4	12.5	6.0-38.0
Chlorobenzene	ug/L	1	5.0	0.0	5.0	5.0-5.0
Ethyl benzene	ug/L	6	17.0	6.4	16.0	10.0-28.0
Methylene chloride	ug/L	12	14.6	16.5	9.5	2.0-65.0
Tetrachloroethene	ug/L	2	6.5	1.0	6.5	6.0-7.0
Total xylenes	ug/L	3	11.3	5.5	14.0	5.0-15.0
Trichloroethene	ug/L	1	8.0	0.0	8.0	8.0-8.0
Vinyl chloride	ug/L	5	26.0	10.7	21.0	17.0-42.0
Bis(2-Ethylhexyl)phthalate	ug/L	3	2.3	0.6	2.0	2.0-3.0
Butyl benzyl phthalate	ug/L	1	2.0	0.0	2.0	2.0-2.0
N-nitrosodiphenylamine	ug/L	1	3.0	0.0	3.0	3.0-3.0
Naphthalene	ug/L	6	31.8	17.3	34.5	12.0-50.0
Aluminum	ug/L	3	8465	13886	470	426-24500
Antimony	ug/L	4	613	579	334	302-1480
Arsenic	ug/L	5	1766	2499	730	354-6200
Barium	ug/L	6	2585	1432	2910	479-4160
Beryllium	ug/L	2	13.3	3.4	13.3	11.6-15.0
Cadmium	ug/L	1	9.4	0.0	9.4	9.4-9.4
Calcium	ug/L	18	322556	115361	329500	163000-495000
Copper	ug/L	1	46.4	0.0	46.4	46.4-46.4
Iron	ug/L	9	82503	84490	91700	126-217000
Lead	ug/L	1	462	0.0	462	462-462
Magnesium	ug/L	18	426539	305879	427500	98700-1490000
Manganese	ug/L	18	1031	1256	391	196-5020
Mercury	ug/L	1	0.5	0.0	0.5	0.5-0.5
Nickel	ug/L	1	52.3	0.0	52.3	52.3-52.3
Potassium	ug/L	13	56755	78529	30500	212-300000
Silver	ug/L	1	69.0	0.0	69.0	69.0-69.0
Sodium	ug/L	18	1676278	2459527	1070000	799000-11500000
Vanadium	ug/L	2	60.6	8.8	60.6	56.2-65.0
Zinc	ug/L	3	351	543	50.3	25.5-978
Bicarbonate	mg/L	11	309	154	260	1.7-480
Carbonate	mg/L	1	97.0	0.0	97.0	97.0-97.0
Chloride	mg/L	12	3347	503	3410	2350-4000
Fluoride	mg/L	3	9.9	4.0	9.5	6.1-14.0
Nitrate	mg/L	8	2.5	1.4	3.0	0.5-4.2
Sulfate	mg/L	12	341	311	335	5.4-790
TDS	mg/L	12	5558	1174	5465	3580-7120

This table does not include SED, EMB and duplicate sample results, or detections estimated below sample quantitation limits. The table does include all original sample data including "F" wells and data from split samples.



LEGEND

- IT WELL
- IT GEOPHYSICAL BORING
- IT SOIL BORING
- SURFACE WATER/SEDIMENT SAMPLING POINT
- SURFACE WATER ELEVATION POINT
- FENCE
- LANDFILL BOUNDARY
- GOLF COURSE LANDFILL

0 300 600 FEET

FIGURE 5.1-1

SITE 2
GOLF COURSE LANDFILL

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

STARTING DATE: 3/12/90	DATE LAST REV.: 7/26/90	DRAFT. CHCK. BY:	INITIATOR: J. WILLE	DWG. NO.: 409700-A-G12	
DRAWN BY: D.HIGGS	DRAWN BY: D.HIGGS	ENGR. CHCK BY:	PROJ. MGR.: K. BRADLEY	PROJ. NO.: 409700	

\DRAWINGS\409700-B

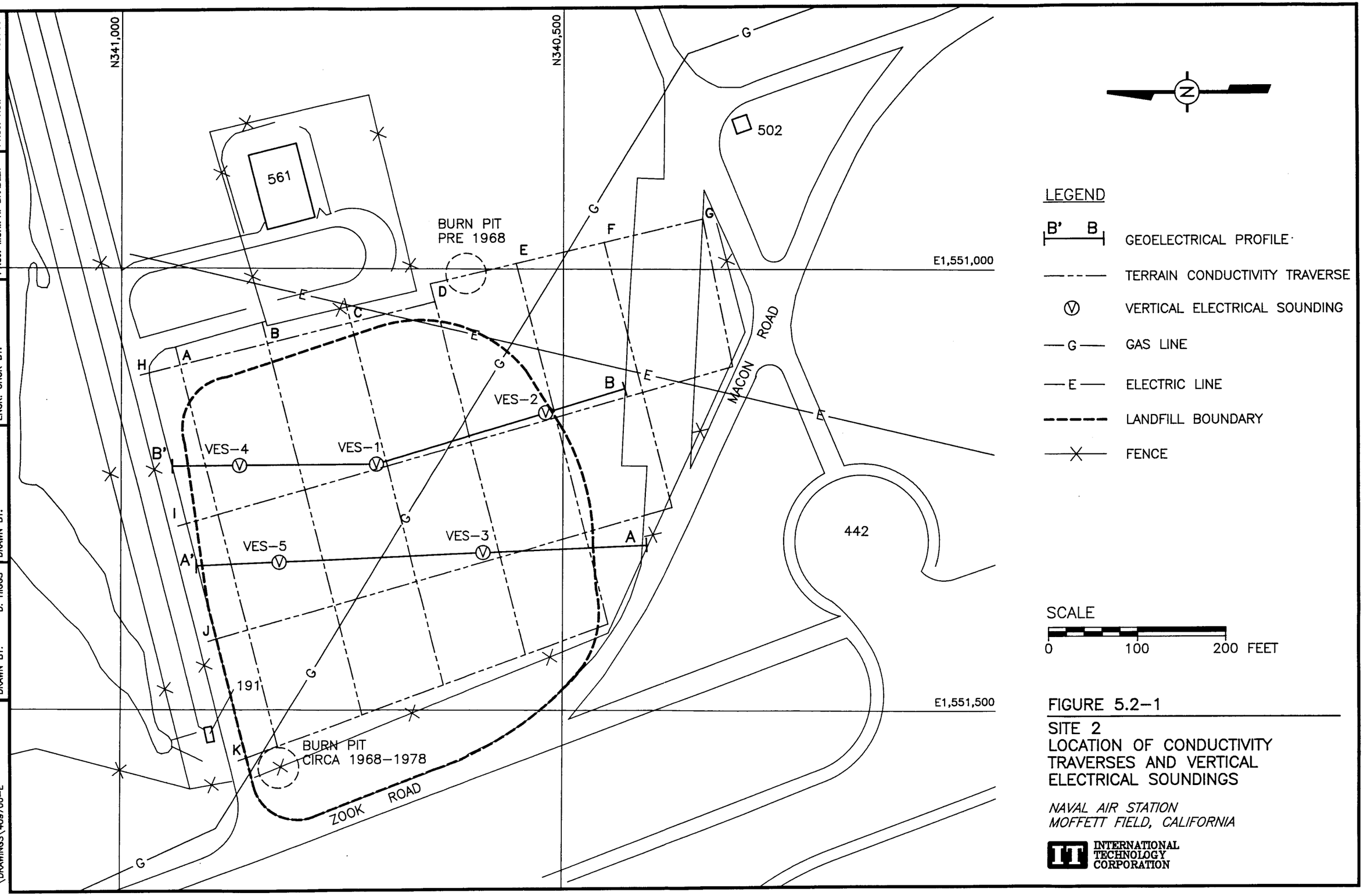
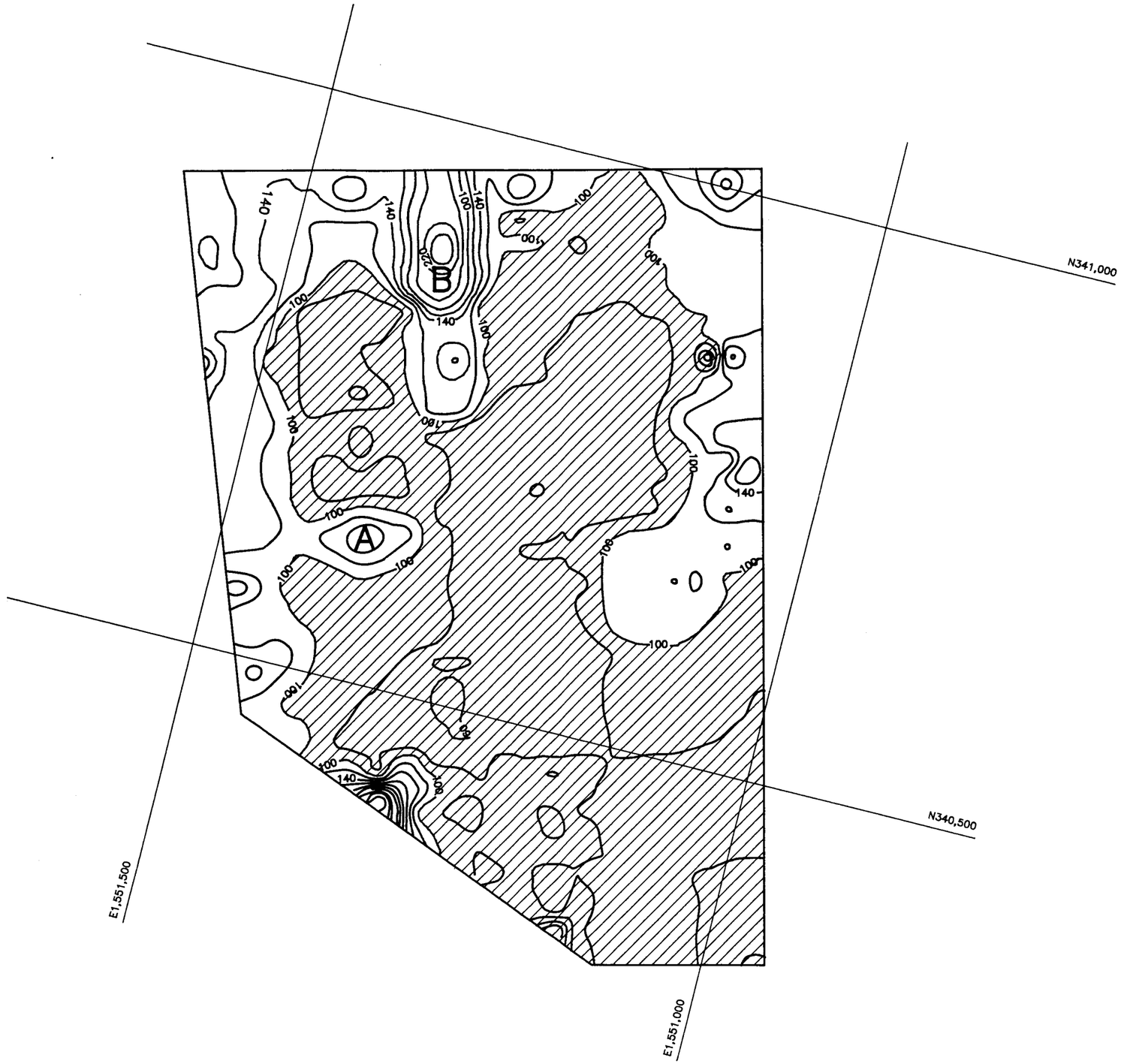
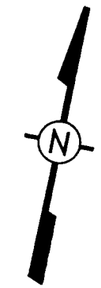


FIGURE 5.2–1

SITE 2
LOCATION OF CONDUCTIVITY TRAVERSES AND VERTICAL ELECTRICAL SOUNDINGS

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA





LEGEND

320 TERRAIN CONDUCTIVITY CONTOUR (20ms/m CONTOUR INTERVAL)

ZONE OF LOW CONDUCTIVITY (<100ms/m)

ZONE OF HIGH CONDUCTIVITY (>100ms/m)

A B ANOMALOUS CONDUCTIVITY ZONE

SCALE

0 100 200 FEET

FIGURE 5.2-2

SITE 2
TERRAIN CONDUCTIVITY CONTOURS

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

SOURCE: NORCAL (88)

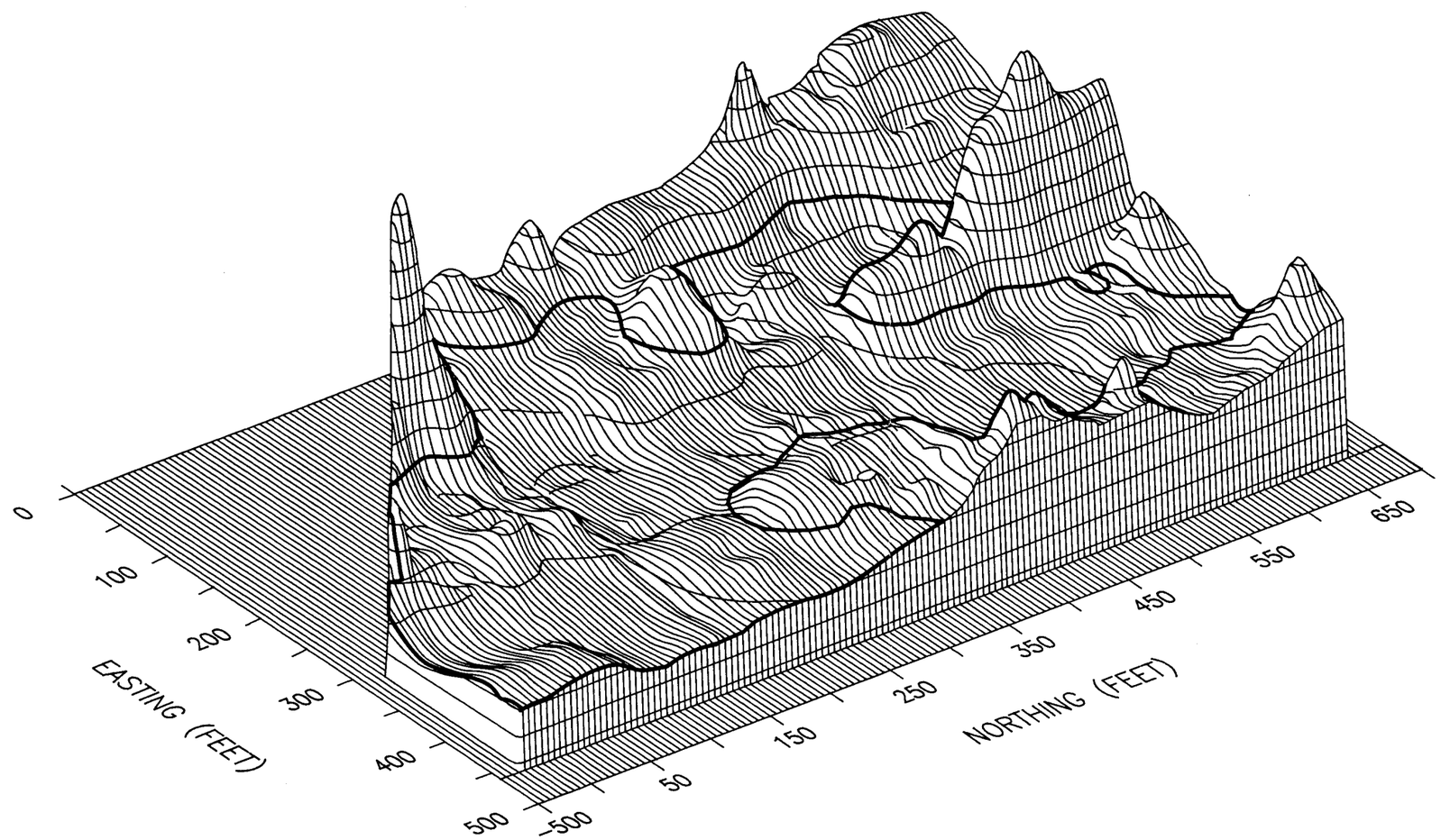
STARTING DATE: 3/21/90	DATE LAST REV.: 7/26/90	DRAFT. CHCK. BY:	INITIATOR: J.WILLE	DRAWING NO.409700-B-G17	
DRAWN BY: G. COLE	DRAWN BY: D. HIGGS	ENGR. CHCK BY:	PROJ. MGR.: K. BRADLEY	PROJ. NO.: 490700	

\DRAWINGS\409700-8

STARTING DATE: 3/25/90	DATE LAST REV.:	DRAFT. CHCK. BY:	INITIATOR: J. WILLE
DRAWN BY: G.COLE	DRAWN BY:	ENGR. CHCK BY:	PROJ. MGR.: K. BRADLEY

DRAWING NO.409700-B-G18

PROJ. NO.: 409700



LEGEND

LIMITS OF LOW CONDUCTIVITY AREA

FIGURE 5.2-3

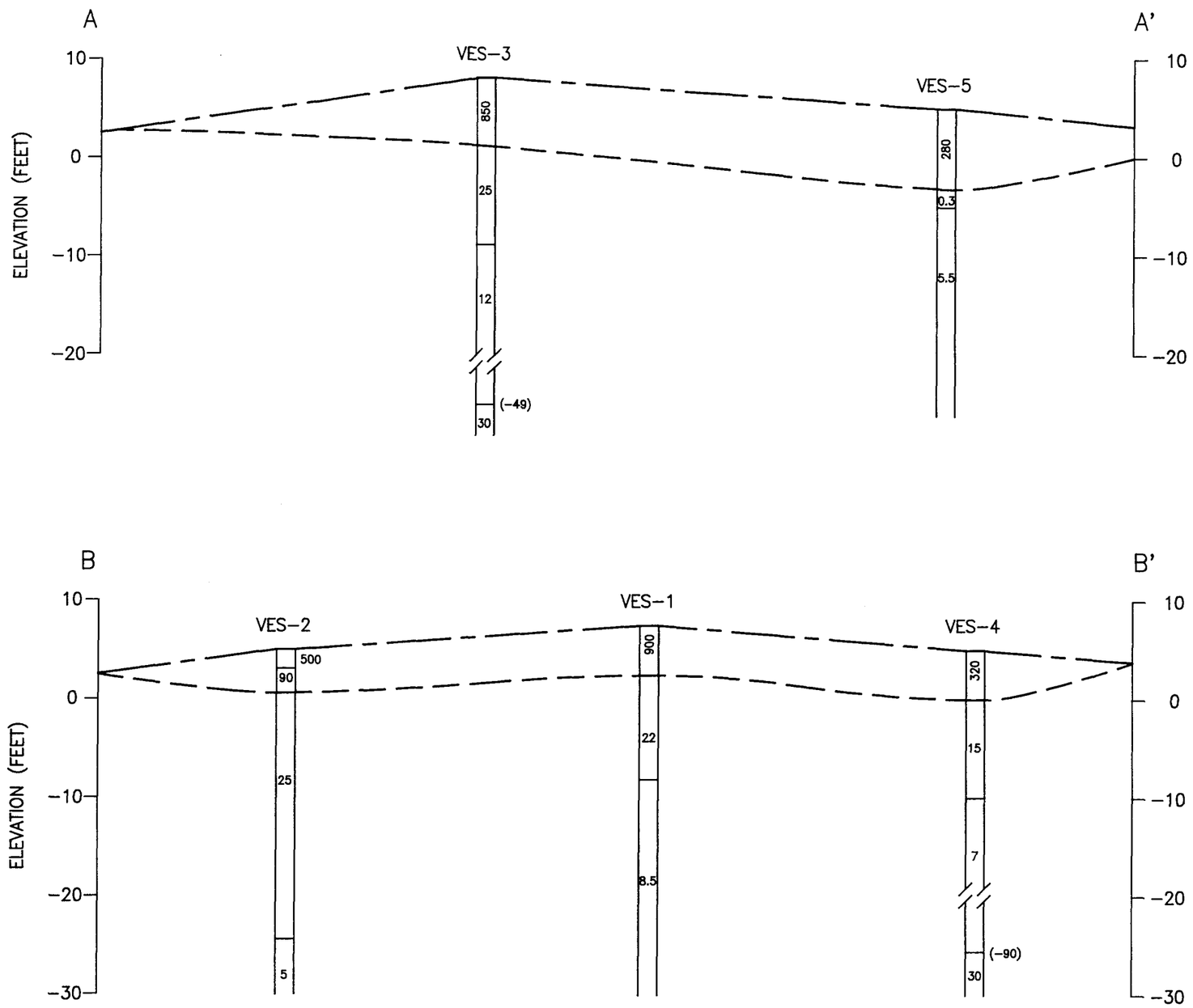
SITE 2
TERRAIN CONDUCTIVITY
ORTHAGONAL PROJECTION

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

SOURCE: NORCAL (88)

\DRAWINGS\ 40970015



LEGEND

VES-1	VERTICAL ELECTRICAL SOUNDING
100	RESISTIVITY (OHM-FT.)
— - —	APPROXIMATE GROUND SURFACE
— —	LOWER LIMITS OF RESISTIVE LAYER

SCALE

0 50 100 FEET

VERTICAL EXAGGERATION 5:1

FIGURE 5.2-4

SITE 2
GEOELECTRIC PROFILES A-A' & B-B'

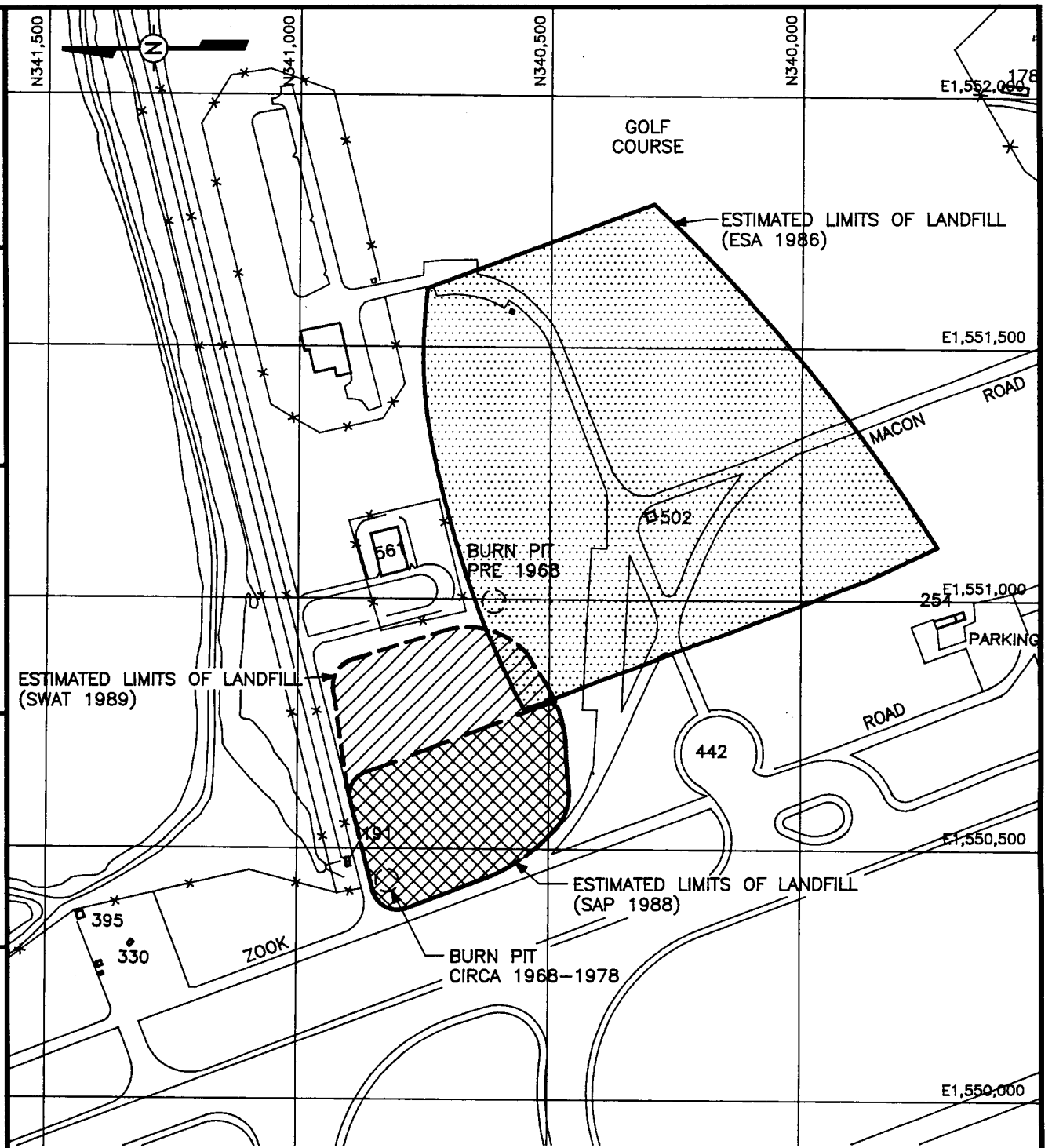
NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

SOURCE: NORCAL (88)

DRAWING NO.409700-B-G22	INITIATOR: J. WILLE	DRAFT. CHCK. BY:	STARTING DATE: 3-20-90
PROJ. NO.: 409700	PROJ. MGR.: K. BRADLEY	ENGR. CHCK BY:	DATE LAST REV.:
			DRAWN BY: B. SMITH
			DRAWN BY:

\DRAWINGS\409700-6



DWG. NO.: 409700-A-G19	INITIATOR: J. WILLE	DRAFT. CHCK. BY:	DATE LAST REV.:	STARTING DATE: 3/12/90
PROJ. NO.: 409700	PROJ. MGR.: K. BRADLEY	ENGR. CHCK BY:	DRAWN BY:	DRAWN BY: D.HIGGS

LEGEND

- ESTIMATED LIMITS OF LANDFILL (ESA 1986)
- ESTIMATED LIMITS OF LANDFILL (SAP 1988)
- ESTIMATED LIMITS OF LANDFILL (SWAT 1989)

0 300 600 FEET

FIGURE 5.2–5

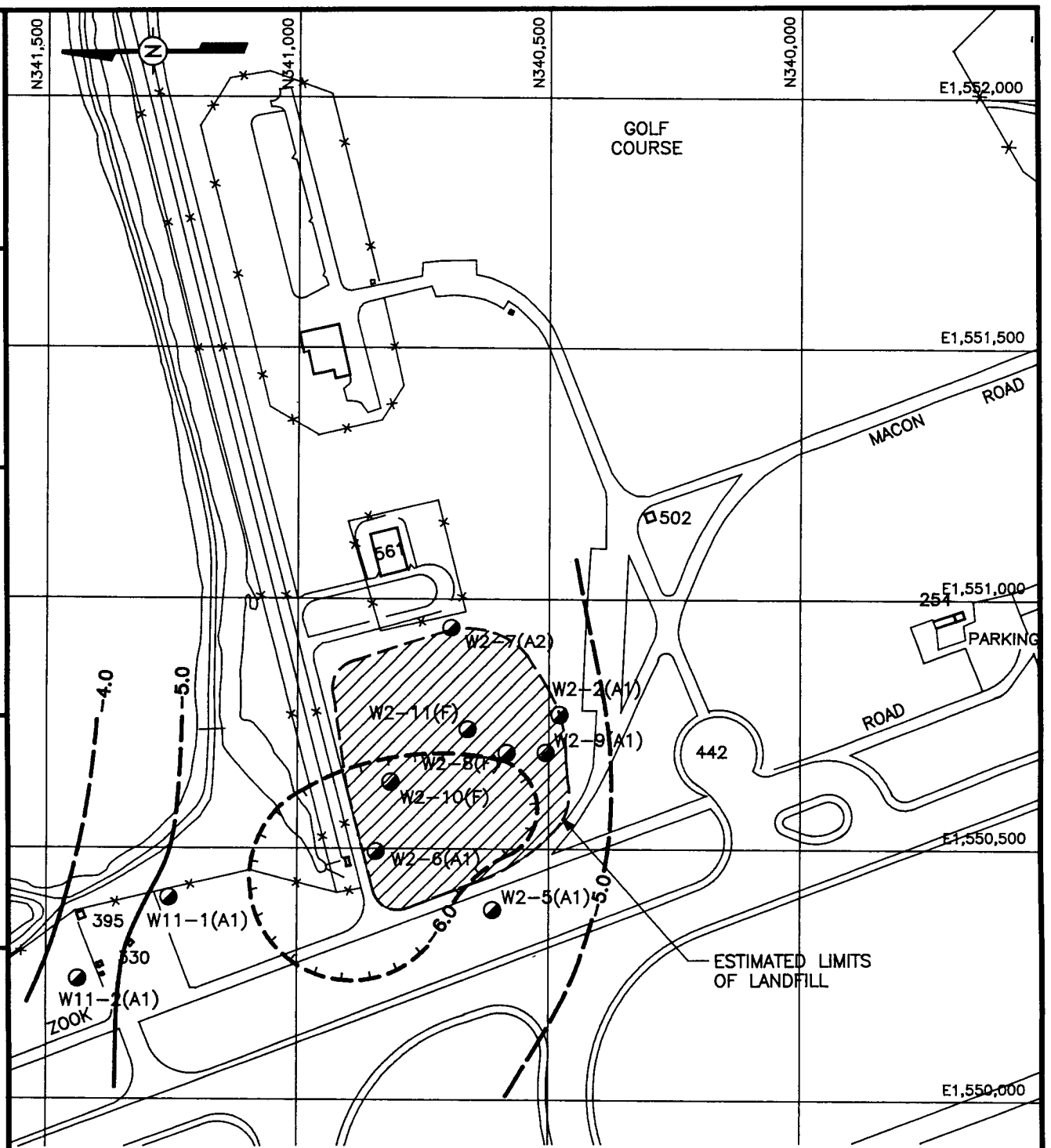
SITE 2
LIMITS OF LANDFILL

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

SOURCE: AERO–GEODETIC CORP.
JOB NO. 811822 3/6/81

INTERNATIONAL TECHNOLOGY CORPORATION

\DRAWINGS\409700–D



0 300 600 FEET

LEGEND

- IT WELL
- LANDFILL BOUNDARY
- GOLF COURSE LANDFILL
- -5.0 POTENTIOMETRIC SURFACE ELEVATION CONTOURS

FIGURE 5.3-1

SITE 2
A-AQUIFER
POTENTIOMETRIC SURFACE CONTOURS
(SEPT. 1988)

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

STARTING DATE: 3/12/90	DATE LAST REV.:	DRAFT. CHCK. BY:	INITIATOR: J. WILLE	DWG. NO.: 409700-A-G30	
DRAWN BY: D.HIGGS	DRAWN BY:	ENGR. CHCK BY:	PROJ. MGR.: K. BRADLEY	PROJ. NO.: 409700	

\DRAWINGS\409700-H

N00296.000910
MOFFETT FIELD
SSIC NO. 5090.3

SECTION 6.0

PHASE I CHARACTERIZATION REPORT

DATED 01 AUGUST 1990

Table 6.4-1
Summary of Detected Chemicals
Site 3 Soil Samples
1 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Acetone	ug/kg	9	40.3	23.6	29.0	19.0-82.0
Methylene chloride	ug/kg	18	27.2	24.2	23.0	11.0-120
Bis(2-Ethylhexyl)phthalate	ug/kg	5	11974	16685	4000	370-41000
AROCLOR-1260	ug/kg	2	430	400	430	230-630
Aluminum	mg/kg	18	19411	7335	17600	10700-37200
Arsenic	mg/kg	5	2.6	0.5	2.5	2.1-3.1
Barium	mg/kg	18	214	97.0	203	114-531
Beryllium	mg/kg	13	2.8	1.6	2.1	1.5-6.5
Cadmium	mg/kg	8	7.5	5.9	5.1	1.8-18.2
Calcium	mg/kg	18	50992	39608	32650	6350-125000
Chromium	mg/kg	18	68.9	28.7	66.0	33.5-153
Cobalt	mg/kg	12	14.7	2.7	14.3	10.8-19.7
Copper	mg/kg	18	44.1	15.1	38.8	29.3-79.8
Iron	mg/kg	18	27433	10436	26600	11300-53800
Lead	mg/kg	18	110	155	39.9	6.6-490
Magnesium	mg/kg	18	16429	6825	15300	3850-31800
Manganese	mg/kg	18	496	282	470	26.5-1470
Mercury	mg/kg	4	0.3	0.1	0.3	0.2-0.5
Nickel	mg/kg	18	64.2	18.2	60.2	32.9-107
Potassium	mg/kg	9	1822	581	1730	1270-3070
Silver	mg/kg	1	3.5	0.0	3.5	3.5-3.5
Sodium	mg/kg	4	2870	1627	2690	1340-4760
Vanadium	mg/kg	18	59.2	17.1	53.3	32.1-102
Zinc	mg/kg	18	121	92.6	79.9	49.1-359
TPHC	mg/kg	5	292	264	140	91.0-700

Note: "1 Foot Depth" is comprised of Samples
from 0.0 to 2.0 feet below land surface.

This table does not include duplicate sample results or detections estimated below sample quantitation limits.
This table does include all original sample data and data from split samples.

Table 6.4-2
Summary of Detected Chemicals
Site 3 Soil Samples
3 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Acetone	ug/kg	3	19.0	6.2	21.0	12.0-24.0
Methylene chloride	ug/kg	10	19.0	7.0	16.0	12.0-31.0
Bis(2-Ethylhexyl)phthalate	ug/kg	1	750	0.0	750	750-750
Aluminum	mg/kg	10	17200	3816	17200	10200-22800
Arsenic	mg/kg	5	2.7	0.3	2.7	2.3-3.1
Barium	mg/kg	10	187	61.3	196	93.2-299
Beryllium	mg/kg	8	2.2	1.0	2.0	1.2-4.4
Cadmium	mg/kg	1	4.2	0.0	4.2	4.2-4.2
Calcium	mg/kg	10	57210	33566	51350	19000-120000
Chromium	mg/kg	10	55.5	13.4	55.1	35.4-74.8
Cobalt	mg/kg	9	14.2	2.1	13.8	11.1-18.0
Copper	mg/kg	10	34.7	6.5	35.7	22.5-42.8
Iron	mg/kg	10	26090	5022	25750	16700-34500
Lead	mg/kg	10	40.5	48.0	23.1	5.0-138
Magnesium	mg/kg	10	15090	3480	14650	7500-19500
Manganese	mg/kg	10	558	250	532	318-1200
Mercury	mg/kg	3	0.2	0.1	0.2	0.2-0.3
Nickel	mg/kg	10	60.4	12.5	60.1	42.4-84.5
Potassium	mg/kg	4	1565	303	1505	1290-1960
Sodium	mg/kg	3	1540	410	1470	1170-1980
Vanadium	mg/kg	10	56.5	10.3	54.8	43.6-74.4
Zinc	mg/kg	10	68.7	20.9	62.0	48.1-123

Note: "3 Foot Depth" is comprised of Samples
from 2.1 to 4.0 feet below land surface.

This table does not include duplicate sample results or detections estimated below sample quantitation limits.
This table does include all original sample data and data from split samples.

Table 6.4-3
Summary of Detected Chemicals
Site 3 Soil Samples
5 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Acetone	ug/kg	3	40.0	20.3	44.0	18.0-58.0
Methylene chloride	ug/kg	6	23.8	9.5	24.5	12.0-39.0
Aluminum	mg/kg	6	15958	5631	15450	7350-23900
Arsenic	mg/kg	4	3.2	0.9	3.1	2.3-4.3
Barium	mg/kg	6	147	53.2	133	82.9-226
Beryllium	mg/kg	5	1.9	0.5	1.9	1.2-2.6
Cadmium	mg/kg	1	2.5	0.0	2.5	2.5-2.5
Calcium	mg/kg	6	27887	14244	32950	5520-42700
Chromium	mg/kg	6	54.9	11.6	53.6	38.2-70.2
Cobalt	mg/kg	5	15.7	2.9	16.1	12.5-19.3
Copper	mg/kg	6	39.4	11.1	40.9	24.8-53.8
Iron	mg/kg	6	40700	27731	31550	23900-96800
Lead	mg/kg	6	13.1	14.3	7.5	4.9-41.7
Magnesium	mg/kg	6	14185	5941	16450	2710-18700
Manganese	mg/kg	6	487	122	546	294-580
Mercury	mg/kg	1	0.2	0.0	0.2	0.2-0.2
Nickel	mg/kg	6	67.6	9.7	69.8	50.1-79.4
Potassium	mg/kg	3	1273	170	1340	1080-1400
Sodium	mg/kg	1	1400	0.0	1400	1400-1400
Vanadium	mg/kg	6	54.2	13.7	56.2	28.9-70.3
Zinc	mg/kg	6	69.7	17.5	65.3	49.8-92.2

Note: "5 Foot Depth" is comprised of Samples
from 4.1 to 5.5 feet below land surface.

This table does not include duplicate sample results or detections estimated below sample quantitation limits.
This table does include all original sample data and data from split samples.

Table 6.4-4
Summary of Detected Chemicals
Site 3 Soil Samples
> 5 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Acetone	ug/kg	2	46.0	14.0	46.0	39.0-53.0
Methylene chloride	ug/kg	2	28.0	6.0	28.0	25.0-31.0
Aluminum	mg/kg	2	14850	700	14850	14500-15200
Barium	mg/kg	2	171	188	171	77.5-265
Beryllium	mg/kg	2	2.0	0.1	2.0	1.9-2.0
Calcium	mg/kg	2	66950	112100	66950	10900-123000
Chromium	mg/kg	2	51.2	5.9	51.2	48.2-54.1
Cobalt	mg/kg	2	13.0	0.3	13.0	12.8-13.1
Copper	mg/kg	2	28.0	4.4	28.0	25.8-30.2
Iron	mg/kg	2	25200	5800	25200	22300-28100
Lead	mg/kg	2	5.0	2.0	5.0	4.0-6.0
Magnesium	mg/kg	2	15400	3000	15400	13900-16900
Manganese	mg/kg	2	370	51.0	370	344-395
Nickel	mg/kg	2	56.3	2.2	56.3	55.2-57.4
Potassium	mg/kg	1	1680	0.0	1680	1680-1680
Sodium	mg/kg	1	1420	0.0	1420	1420-1420
Vanadium	mg/kg	2	60.8	5.1	60.8	58.2-63.3
Zinc	mg/kg	2	49.2	2.2	49.2	48.1-50.3

Note: "> 5 Foot Depth" is comprised of Samples
from 5.6 feet deep and below.

This table does not include duplicate sample results or detections estimated below sample quantitation limits.
This table does include all original sample data and data from split samples.

Table 6.4-5
Summary of Detected Chemicals
Site 3 Water Samples
Aquifer A Monitor Wells

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
1,1-Dichloroethane	ug/L	4	6.0	0.8	6.0	5.0-7.0
1,2-Dichloroethane	ug/L	4	15.0	3.4	13.5	13.0-20.0
1,2-Dichloroethenes(Total)	ug/L	4	12.3	1.3	12.0	11.0-14.0
Acetone	ug/L	5	17.2	6.1	15.0	10.0-24.0
Methylene chloride	ug/L	21	13.4	7.4	13.0	5.0-27.0
Trichloroethene	ug/L	4	13.8	1.5	14.0	12.0-15.0
Bis(2-Ethylhexyl)phthalate	ug/L	1	250	0.0	250	250-250
Di-n-octyl phthalate	ug/L	1	59.0	0.0	59.0	59.0-59.0
Aluminum	ug/L	2	2445	710	2445	2090-2800
Antimony	ug/L	7	1894	844	1460	1110-3170
Calcium	ug/L	23	1502957	794200	1440000	307000-3060000
Iron	ug/L	8	2556	1327	2945	140-4000
Lead	ug/L	3	23.6	16.6	30.0	4.7-36.0
Magnesium	ug/L	23	1722391	920063	1130000	287000-3130000
Manganese	ug/L	23	10050	8880	5980	2800-28000
Mercury	ug/L	1	0.6	0.0	0.6	0.6-0.6
Potassium	ug/L	5	83240	89008	65200	19900-237000
Sodium	ug/L	23	7544783	5277086	5240000	1080000-17900000
Zinc	ug/L	3	169	106	207	49.3-252
Bicarbonate	mg/L	26	416	98.4	450	240-570
Chloride	mg/L	26	15685	14645	11000	32.0-45000
Nitrate	mg/L	5	5.2	2.9	6.0	0.4-7.5
Sulfate	mg/L	26	1641	1491	1250	130-5200
TDS	mg/L	18	9330	7493	7395	850-20000

Note: "Aquifer A Monitor Wells" combine A1 & A2 subaquifers

This table does not include duplicate sample results or detections estimated below sample quantitation limits.
This table does include all original sample data and data from split samples.

Table 6.4-6
Summary of detected Chemicals
Site 3 Water Samples
Aquifer B Monitor Wells

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Acetone	ug/L	2	21.0	10.0	21.0	16.0-26.0
Methylene chloride	ug/L	13	13.2	7.5	15.0	5.0-24.0
Aluminum	ug/L	2	417	326	417	254-580
Barium	ug/L	1	37.0	0.0	37.0	37.0-37.0
Calcium	ug/L	12	20383	4073	21150	13500-25100
Iron	ug/L	5	226	99.6	239	131-370
Magnesium	ug/L	12	12248	1414	12550	9270-136[illegible]
Manganese	ug/L	10	73.5	26.2	82.0	33.7-104
Potassium	ug/L	2	12990	14820	12990	5580-20400
Sodium	ug/L	12	89650	10688	86100	77800-112100
Bicarbonate	mg/L	14	219	20.2	225	180-240
Carbonate	mg/L	5	7.6	7.6	5.0	1.1-18.0
Chloride	mg/L	14	48.5	32.9	37.0	24.0-150
Nitrate	mg/L	1	0.2	0.0	0.2	0.2-0.2
Sulfate	mg/L	14	23.3	5.0	21.0	18.0-31.0
TDS	mg/L	14	419	136	375	320-850

Note: "Aquifer B Monitor Wells" combine
all applicable B subaquifers.

This table does not include duplicate sample results or detections estimated below sample quantitation limits.
This table does include all original sample data and data from split samples.

Table 6.4-7
Summary of Detected Chemicals
Site 3 Water Samples
Aquifer C Monitor Wells

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Acetone	ug/L	1	15.0	0.0	15.0	15.0-15.0
Methylene chloride	ug/L	4	14.8	5.9	13.5	9.0-23.0
Bis(2-Ethylhexyl)phthalate	ug/L	1	45.0	0.0	45.0	45.0-45.0
Barium	ug/L	1	108	0.0	108	108-108
Calcium	ug/L	6	30467	907	30300	29600-32000
Magnesium	ug/L	6	9510	465	9670	8790-10000
Manganese	ug/L	6	36.9	1.0	37.0	35.6-38.3
Sodium	ug/L	6	57483	3289	56150	53600-62200
Bicarbonate	mg/L	4	190	0.0	190	190-190
Chloride	mg/L	4	17.5	1.7	17.0	16.0-20.0
Sulfate	mg/L	4	23.8	4.3	22.5	20.0-30.0
TDS	mg/L	4	283	12.6	280	270-300

This table does not include duplicate sample results or detections estimated below sample quantitation limits.
This table does include all original sample data and data from split samples.

TABLE 6.4-8
GC AND TIP RESULTS FOR SITE 3 SOIL GAS SURVEY
NAS MOFFETT FIELD

SAMPLE LOCATION	TIP[a] READING (ppm)	GC RESULTS (ppb)										UNKNOWNS[b] (sec)	DATE (1988)
		1,1-DCE	1,1-DCA	cis-DCE	1,1,1-TCA	BENZENE	TCE	1,1,2-TCA	TOLUENE	m- and p-XYLENE	O-XYLENE		
TL-7 AS2	3.6						47						10-07
TL-7 AS3	46.9											1169 1400	12-01
TL-7 AS5	1191.8											573.1 1135.2 1300	10-07
TL-7 AS9	5.1											1213.7	10-10
TL-7 AS10	5.5				267								12-09
TL-7 AS14												1251	12-14
TL-8 AS4										283	425	347.3- 566.1 917.7- 1311	12-08
TL-8 AS11	6.1											1241	10-05
TL-8 AS12	3.2											573	10-05
TL-8 AS13	3.5			240								585	10-05
TL-8 AS15									118			1155 1289.3	12-09

TABLE 6.4-8
GC AND TIP RESULTS FOR SITE 3 SOIL GAS SURVEY
NAS MOFFETT FIELD
(CONTINUED)

SAMPLE LOCATION	TIP[a] READING (ppm)	GC RESULTS (ppb)										UNKNOWNS[b] (sec)	DATE (1988)
		1,1-DCE	1,1-DCA	cis-DCE	1,1,1-TCA	BENZENE	TCE	1,1,2-TCA	TOLUENE	m- and p-XYLENE	O-XYLENE		
TL-9 AS3									26				12-02
TL-9 AS6	332											1222 1400	10-03
TL-9 AS7	37											1400	10-03
TL-9 AS8	1.7					440	40					619 1347	10-03
TL-14 AS1	10.2												10-11
TL-14 AS2	395.5											1400	10-11
TL-14 AS3	432.6											1335	10-13
TL-14 AS6	104.1											1200	10-12
TL-14 AS7	3.4												10-12
TL-14 AS11	12.8											1400	10-13
TL-14 AS13	17.4											1400	10-13
TL-14 AS19													12-06
TL-14 AS21	1923.5									43.6			12-06
TL-14 AS20	6.9												10-17
TL-14 AS26													12-06

TABLE 6.4-8
GC AND TIP RESULTS FOR SITE 3 SOIL GAS SURVEY
NAS MOFFETT FIELD
(CONTINUED)

SAMPLE LOCATION	TIP[a] READING (ppm)	GC RESULTS (ppb)										UNKNOWNS[b] (sec)	DATE (1988)
		1,1-DCE	1,1-DCA	cis-DCE	1,1,1-TCA	BENZENE	TCE	1,1,2-TCA	TOLUENE	m- and p-XYLENE	O-XYLENE		
TL-14 AS28	1504.5											1260	12-6
TL-14 AS30							28						12-06
TL-15 AS4												1241	12-14
TL-15 AS2													12-08
TL-15 AS6					219							37 1080 1300	12-14
TL-39 AS4	198.4									10,300	15,600	301 351 373 486 573	11-30
TL-39 AS5										240	273	345 1052	12-08
TL-39 AS6												1189	12-14
TL-44 AS1							153						12-09
TL-44 AS2													12-09
TL-44 AS25									23			38 1347	12-14
TL-14 AS23												37 1151 1286	12-14

TABLE 6.4-8
GC AND TIP RESULTS FOR SITE 3 SOIL GAS SURVEY
NAS MOFFETT FIELD
(CONTINUED)

Blank indicates none detected.
GC - Gas chromatograph
ppm - Parts per million
ppb - Parts per billion
[a]Total ionizables present in ppm with respect to 100 ppm isobutylene.
[b]Peak of unknown compound eluted at time reported in seconds. Ranges (347-1151) indicate numerous peaks were present in this time interval.
NOTE: TIP readings taken at time samples were collected for GC analysis may not match initial TIP readings plotted on Figures 3-1 and 3-2 following.

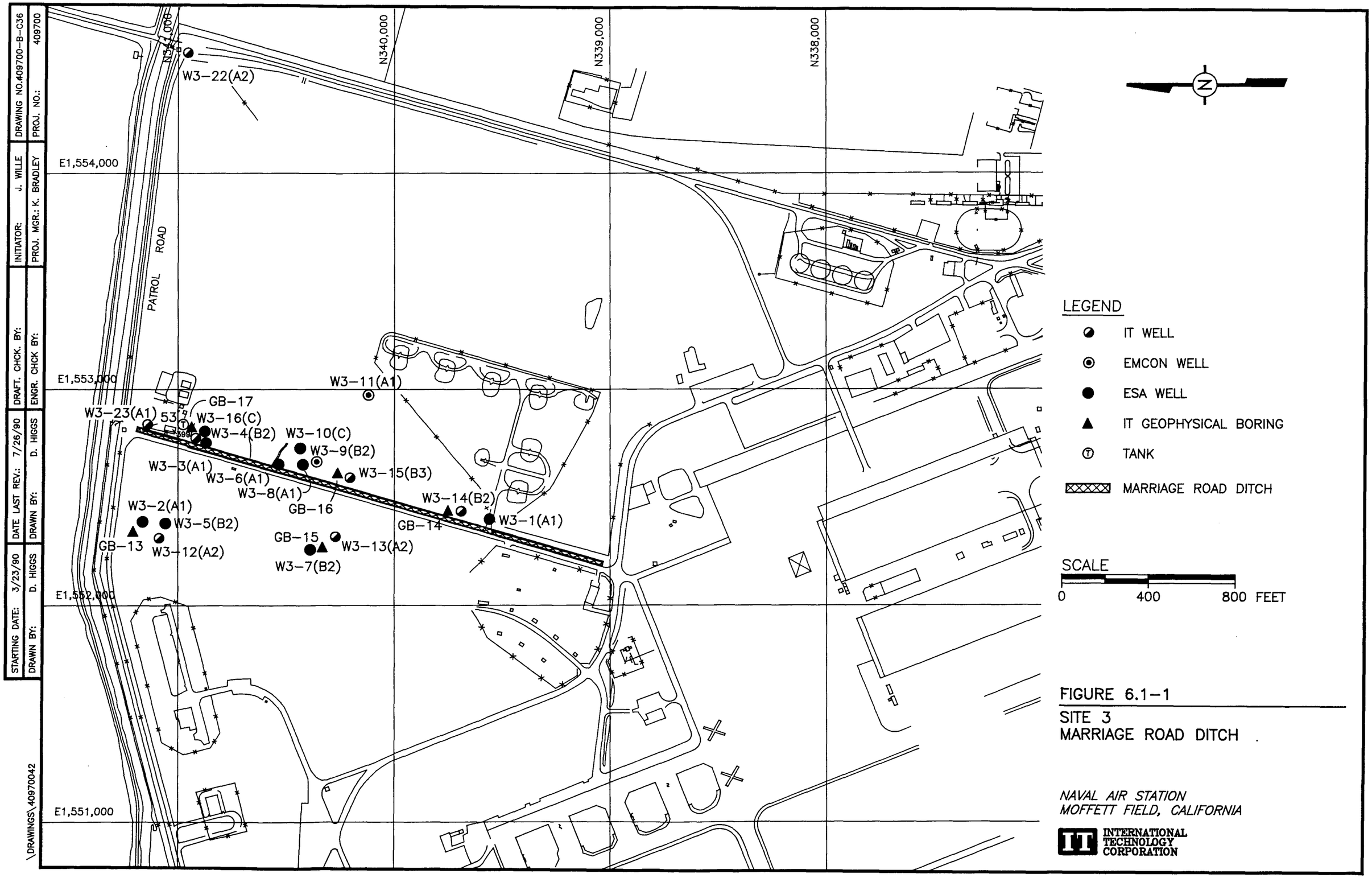
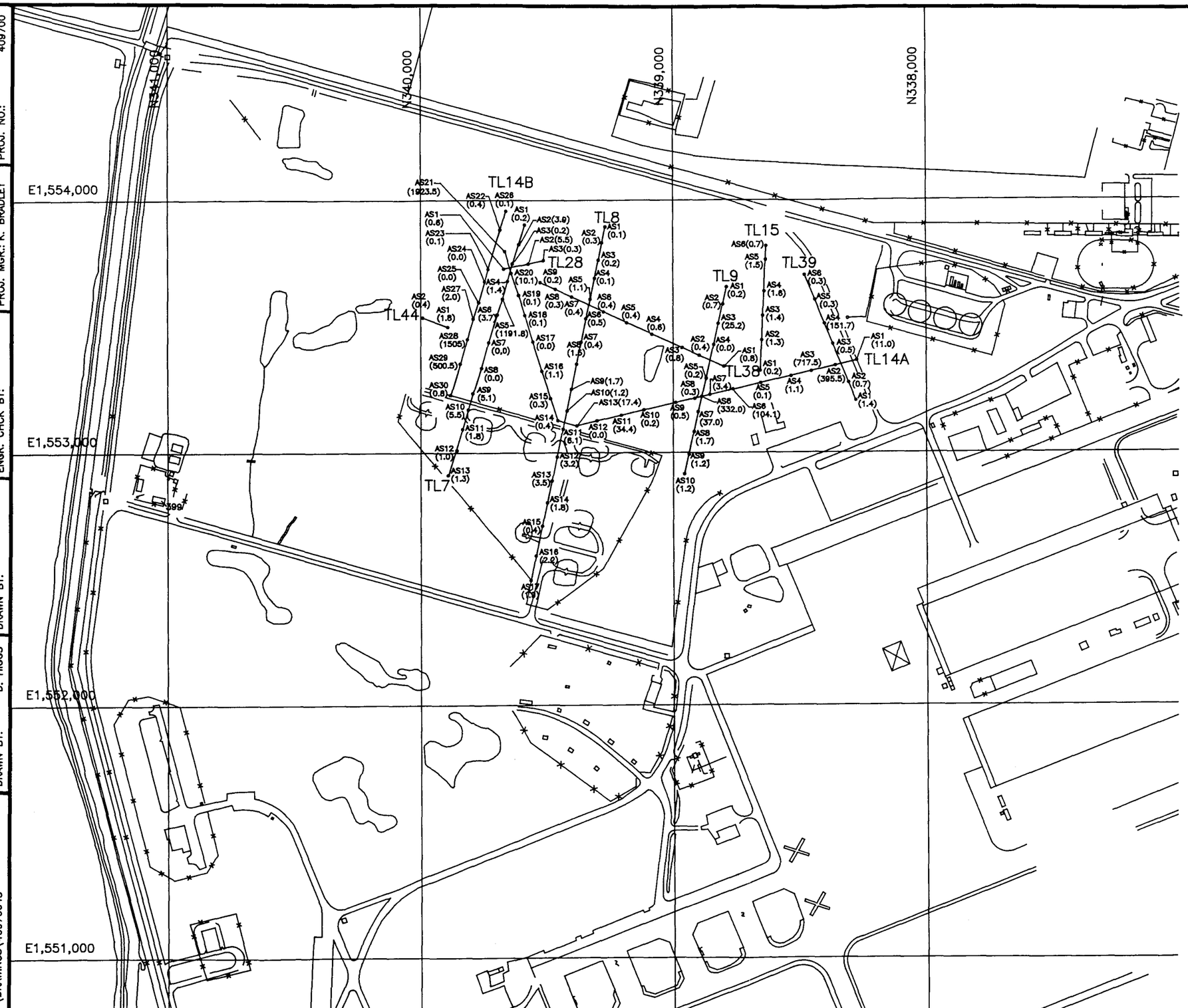


FIGURE 6.1-1
SITE 3
MARRIAGE ROAD DITCH



LEGEND

SOIL GAS TRANSECT LINE AND LINE NUMBER

• AS17 (1.9) SOIL GAS SAMPLE STATION NUMBER AND SOIL GAS CONCENTRATION IN ppm.

SCALE

0 400 800 FEET

FIGURE 6.2-1

SITE 3
SOIL GAS SURVEY
TRANSECT LINES

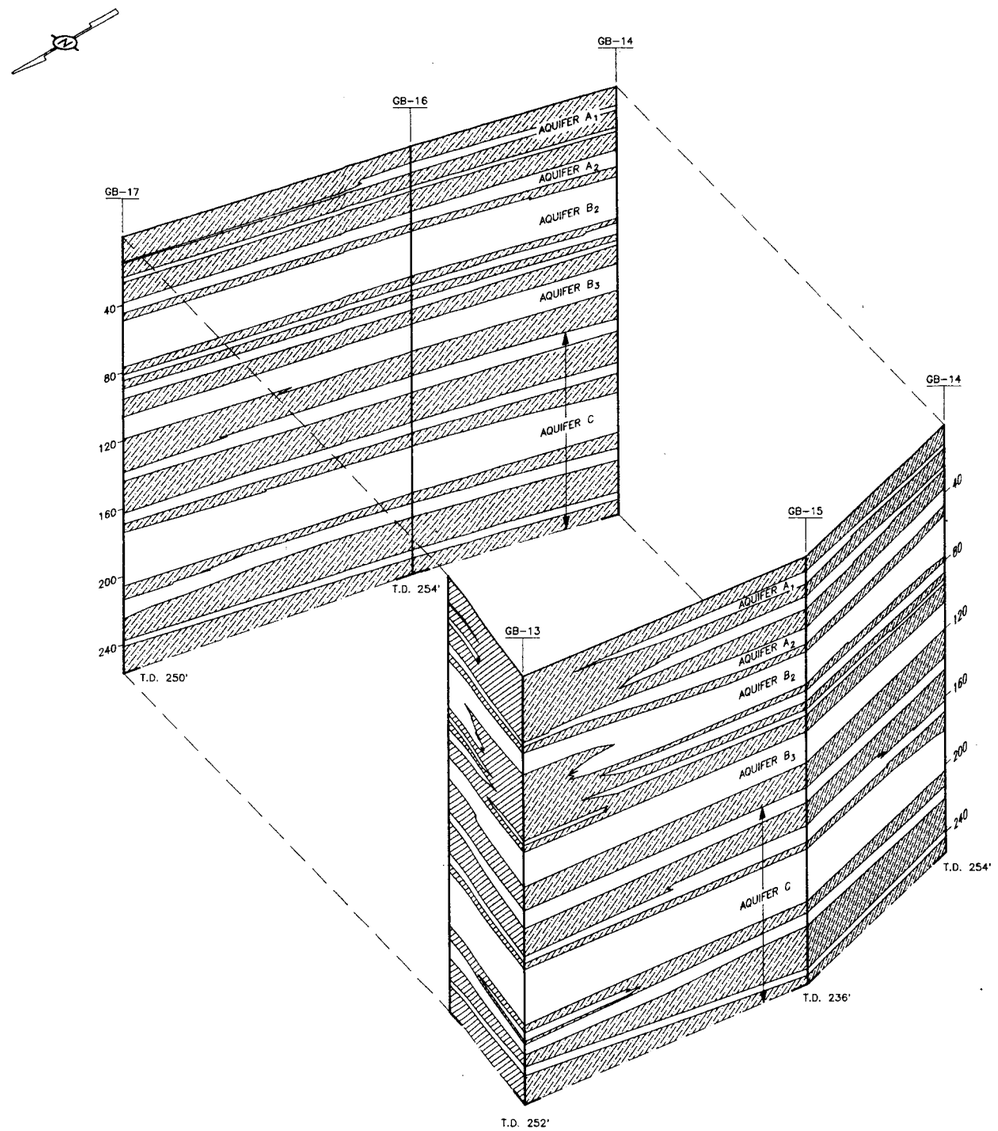
NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

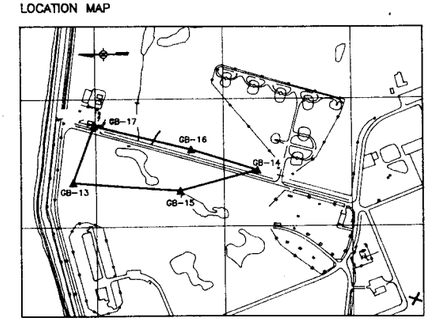
DRAWING NO. 409700-B-C70			
PROJ. NO.: 409700			
INITIATOR: J. WILLE			
PROJ. MGR.: K. BRADLEY			
DRAFT. CHCK. BY:			
ENGR. CHCK BY:			
DATE LAST REV.:			
DRAWN BY:			
STARTING DATE: 3/23/90			
DRAWN BY: D. HIGGS			

\DRAWINGS\40970043

STARTING DATE: 5/15/90	DATE LAST REV.: 7/25/90	INITIATOR: P. SMITH	DRAWING NO.:409700-D-68
DRAWN BY: D. HIGGS	DRAWN BY: D. HIGGS	PROJ. MGR: K. BRADLEY	PROJ. NO: 409700



LOCATION MAP



HORIZONTAL SCALE:
0 200 400 FEET

VERTICAL SCALE:
0 40 80 FEET

VERTICAL EXAGGERATION: 5X

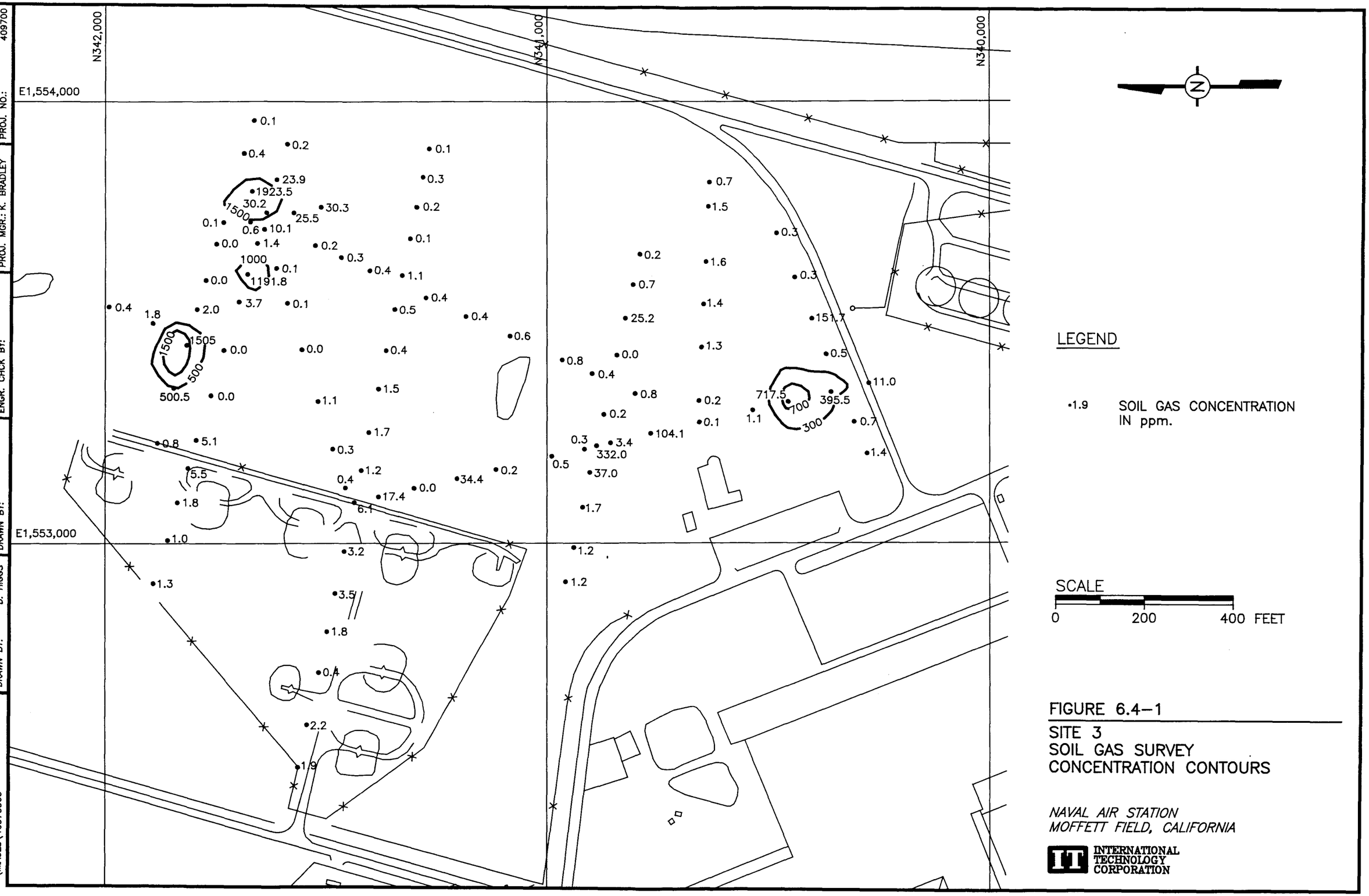
FIGURE 6.3-1

SITE 3
FENCE DIAGRAM

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

\IMAGES\FENCE320


N342,000
N341,000
N340,000
E1,554,000
E1,553,000
1500
1000
500
300
700
LEGEND
•1.9 SOIL GAS CONCENTRATION IN ppm.
SCALE
0 200 400 FEET
FIGURE 6.4-1
SITE 3
SOIL GAS SURVEY
CONCENTRATION CONTOURS
NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA
INTERNATIONAL TECHNOLOGY CORPORATION
DRAWING NO.: 409700-B-C69
PROJ. NO.: 409700
INITIATOR: J. WILLE
PROJ. MGR.: K. BRADLEY
DRAFT. CHCK. BY:
ENGR. CHCK BY:
DATE LAST REV.:
DRAWN BY:
STARTING DATE: 3/23/90
DRAWN BY: D. HIGGS
\IMAGES\40970066

N00296.000910
MOFFETT FIELD
SSIC NO. 5090.3

SECTION 7.0

PHASE I CHARACTERIZATION REPORT

DATED 01 AUGUST 1990

Table 7.4-1
Summary of Detected Chemicals
Site 4 Soil Samples
1 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Acetone	ug/kg	1	28.0	0.0	28.0	28.0-28.0
Chloroethane	ug/kg	1	13.0	0.0	13.0	13.0-13.0
Methylene chloride	ug/kg	3	18.3	3.5	18.0	15.0-22.0
Aluminum	mg/kg	4	21550	2384	21400	18900-24500
Antimony	mg/kg	1	57.2	0.0	57.2	57.2-57.2
Arsenic	mg/kg	1	3.2	0.0	3.2	3.2-3.2
Barium	mg/kg	4	236	2.3	236	234-238
Beryllium	mg/kg	3	1.6	0.3	1.6	1.3-1.8
Calcium	mg/kg	4	15968	8785	13100	9270-28400
Chromium	mg/kg	4	67.3	5.1	68.6	60.4-71.4
Cobalt	mg/kg	4	15.8	0.7	16.0	14.9-16.5
Copper	mg/kg	4	50.3	10.6	49.8	41.1-60.5
Iron	mg/kg	4	28575	1563	28450	26800-30600
Lead	mg/kg	4	12.3	4.1	11.6	8.2-18.0
Magnesium	mg/kg	4	17525	1497	17000	16400-19700
Manganese	mg/kg	4	628	81.8	625	538-725
Nickel	mg/kg	4	75.1	1.8	74.9	73.3-77.1
Potassium	mg/kg	1	1440	0.0	1440	1440-1440
Vanadium	mg/kg	4	60.7	4.1	61.3	55.2-64.8
Zinc	mg/kg	4	70.0	11.4	68.3	57.9-85.2

Note: "1 Foot Depth" is comprised of Samples
from 0.0 to 2.0 feet below land surface.

This table does not include duplicate sample results or detections estimated below sample quantitation limits.
This table does include all original sample data and data from split samples.

Table 7.4-2
Summary of Detected Chemicals
Site 4 Soil Samples
3 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Methylene chloride	ug/kg	4	15.0	4.9	16.0	9.0-19.0
Aluminum	mg/kg	4	22150	4695	20650	18600-28700
Antimony	mg/kg	2	38.8	33.6	38.8	22.0-55.6
Arsenic	mg/kg	3	2.7	0.6	3.0	2.1-3.1
Barium	mg/kg	4	206	26.9	208	176-233
Beryllium	mg/kg	3	1.7	0.6	1.7	1.2-2.3
Calcium	mg/kg	4	21000	6892	21400	13300-27900
Chromium	mg/kg	4	68.6	10.0	66.3	60.4-81.7
Cobalt	mg/kg	4	16.7	2.3	16.3	14.6-19.5
Copper	mg/kg	4	42.7	9.5	40.9	33.4-55.5
Iron	mg/kg	4	30250	4042	30450	25200-34900
Lead	mg/kg	4	11.6	2.3	10.6	10.2-15.0
Magnesium	mg/kg	4	16775	2545	17000	14100-19000
Manganese	mg/kg	4	525	110	475	461-690
Nickel	mg/kg	4	73.8	6.7	73.7	67.2-80.6
Potassium	mg/kg	3	1513	329	1600	1150-1790
Silver	mg/kg	1	4.8	0.0	4.8	4.8-4.8
Vanadium	mg/kg	4	62.4	8.0	65.5	50.8-67.8
Zinc	mg/kg	4	71.6	12.3	70.6	57.9-87.2

Note: "3 Foot Depth" is comprised of Samples
from 2.1 to 4.0 feet below land surface.

This table does not include duplicate sample results or detections estimated below sample quantitation limits.
This table does include all original sample data and data from split samples.

Table 7.4-3
Summary of Detected Chemicals
Site 4 Soil Samples
5 foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Acetone	ug/kg	1	37.0	0.0	37.0	37.0-37.0
Methylene chloride	ug/kg	4	28.5	18.6	21.5	15.0-56.0
Toluene	ug/kg	1	13.0	0.0	13.0	13.0-13.0
Aluminum	mg/kg	4	18800	2758	19450	14900-21400
Arsenic	mg/kg	2	3.0	0.2	3.0	2.9-3.1
Barium	mg/kg	4	160	29.2	159	127-195
Beryllium	mg/kg	2	1.7	1.0	1.7	1.2-2.2
Calcium	mg/kg	4	29325	15196	28650	12200-47800
Chromium	mg/kg	4	61.8	3.4	63.3	56.8-63.8
Cobalt	mg/kg	4	16.8	3.2	16.8	13.4-20.1
Copper	mg/kg	4	44.0	10.9	42.7	32.3-58.3
Iron	mg/kg	4	95750	134923	30150	24700-298000
Lead	mg/kg	4	10.1	1.9	9.4	8.7-12.9
Magnesium	mg/kg	4	15225	2965	14100	13100-19600
Manganese	mg/kg	4	478	120	458	354-640
Nickel	mg/kg	4	69.8	7.2	66.7	65.5-80.5
Potassium	mg/kg	3	1507	434	1610	1030-1880
Vanadium	mg/kg	4	60.7	9.3	59.4	51.9-72.2
Zinc	mg/kg	4	74.0	18.3	73.8	55.4-92.8

Note: "5 Foot Depth" is comprised of Samples
from 4.1 to 5.5 feet below land surface.

This table does not include duplicate sample results or detections estimated below sample quantitation limits.
This table does include all original sample data and data from split samples.

Table 7.4-4
Summary of detected Chemicals
Site 4 Soil Samples
> 5 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Acetone	ug/kg	1	23.0	0.0	23.0	23.0-23.0
Methylene chloride	ug/kg	1	30.0	0.0	30.0	30.0-30.0
Aluminum	mg/kg	1	18300	0.0	18300	18300-18300
Barium	mg/kg	1	212	0.0	212	212-212
Beryllium	mg/kg	1	1.7	0.0	1.7	1.7-1.7
Calcium	mg/kg	1	9650	0.0	9650	9650-9650
Chromium	mg/kg	1	59.9	0.0	59.9	59.9-59.9
Cobalt	mg/kg	1	12.7	0.0	12.7	12.7-12.7
Copper	mg/kg	1	32.9	0.0	32.9	32.9-32.9
Iron	mg/kg	1	25500	0.0	25500	25500-25500
Lead	mg/kg	1	12.5	0.0	12.5	12.5-12.5
Magnesium	mg/kg	1	15000	0.0	15000	15000-15000
Manganese	mg/kg	1	440	0.0	440	440-440
Mercury	mg/kg	1	0.2	0.0	0.2	0.2-0.2
Nickel	mg/kg	1	65.2	0.0	65.2	65.2-65.2
Vanadium	mg/kg	1	44.8	0.0	44.8	44.8-44.8
Zinc	mg/kg	1	67.7	0.0	67.7	67.7-67.7

Note: "> 5 Foot Depth" is comprised of Samples
from 5.6 feet deep and below.

This table does not include duplicate sample results or detections estimated below sample quantitation limits.
This table does include all original sample data and data from split samples.

Table 7.4-5
Summary of Detected Chemicals
Site 4 Water Samples
Aquifer A Monitor Wells

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
1,1-Dichloroethane	ug/L	4	11.8	10.2	7.5	5.0-27.0
1,2-Dichloroethenes(Total)	ug/L	8	107	162	42.5	14.0-490
Acetone	ug/L	2	35.0	44.0	35.0	13.0-57.0
Carbon tetrachloride	ug/L	2	19.5	29.0	19.5	5.0-34.0
Chloroform	ug/L	1	29.0	0.0	29.0	29.0-29.0
Methylene chloride	ug/L	10	12.8	13.0	8.0	5.0-48.0
Tetrachloroethene	ug/L	2	6.0	2.0	6.0	5.0-7.0
Trichloroethene	ug/L	11	26.3	15.7	19.0	12.0-51.0
Bicarbonate	mg/L	8	458	153	510	91.0-570
Chloride	ug/L	8	35.3	13.6	39.5	4.1-49.0
Nitrate	ug/L	5	1.8	1.7	1.3	0.1-3.6
Sulfate	ug/L	8	143	71.5	150	10.0-230
TDS	ug/L	8	948	749	785	110-2680

Note: "Aquifer A Monitor Wells" combine A1 & A2 subaquifers

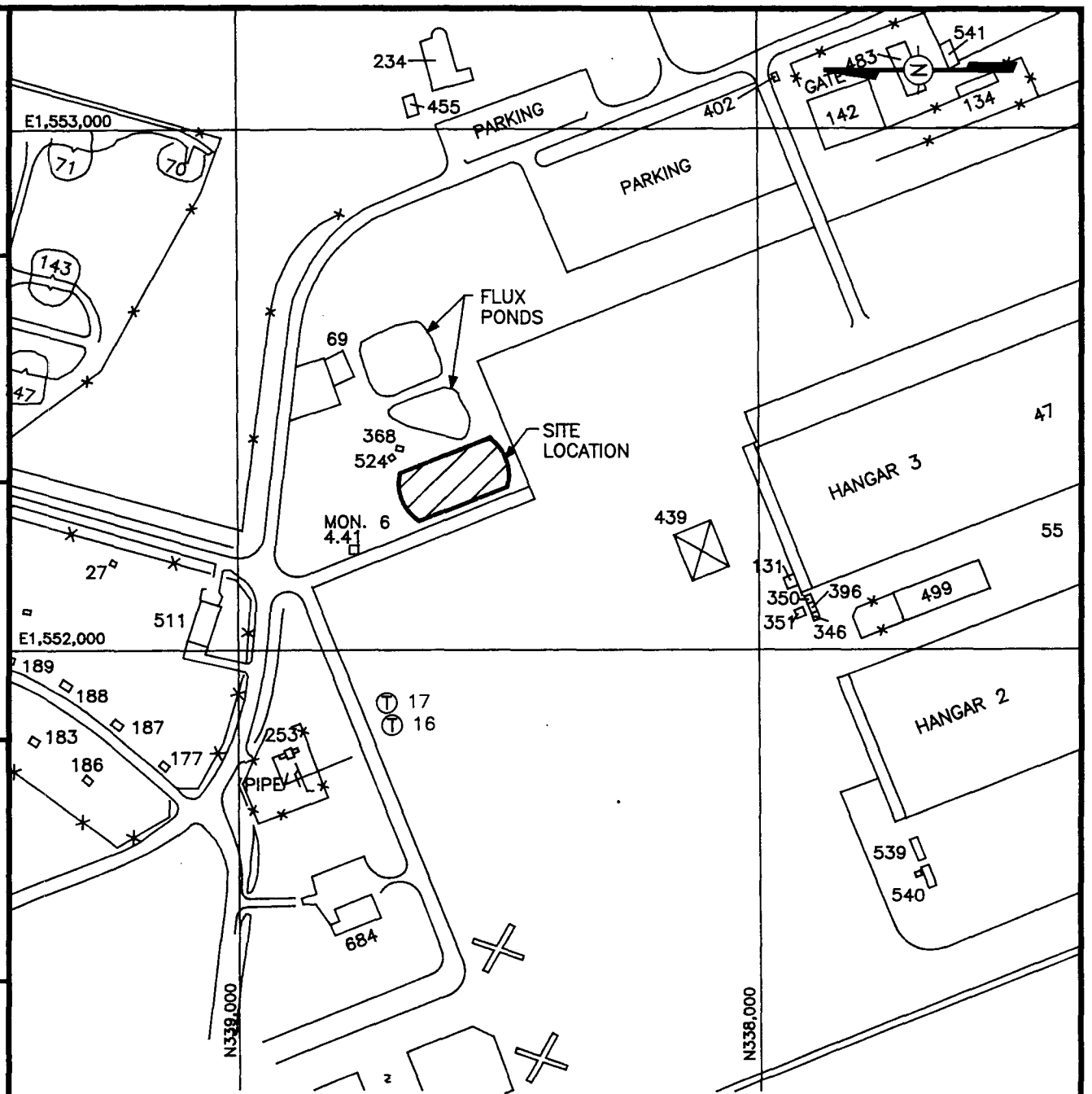
This table does not include duplicate sample results or detections estimated below sample quantitation limits.
This table does include all original sample data and data from split samples.

Table 7.4-6
Summary of Detected Chemicals
Site 4 Water Samples
Aquifer B Monitor Wells

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Methylene chloride	ug/L	8	9.8	3.2	9.0	5.0-15.0
Arsenic	ug/L	2	10.3	0.2	10.3	10.2-10.4
Calcium	ug/L	11	29436	5116	30700	22600-35700
Magnesium	ug/L	11	11678	1451	11300	9260-13600
Manganese	ug/L	11	50.3	13.6	44.0	36.4-70.5
Mercury	ug/L	2	0.3	0.1	0.3	0.2-0.3
Sodium	ug/L	12	68350	6622	68950	59700-76000
Bicarbonate	mg/L	8	196	13.0	190	180-220
Carbonate	mg/L	3	13.0	19.9	2.0	1.0-36.0
Chloride	ug/L	8	28.6	3.1	27.5	26.0-34.0
Nitrate	ug/L	1	0.1	0.0	0.1	0.1-0.1
Sulfate	ug/L	8	23.5	5.4	22.0	18.0-32.0
TDS	ug/L	8	311	14.7	309	290-330

Note: "Aquifer B Monitor Wells" combine
all applicable B subaquifers.

This table does not include duplicate sample results or detections estimated below sample quantitation limits.
This table does include all original sample data and data from split samples.



SCALE

0 300 600 FEET

FIGURE 7.1-1

SITE 4
FORMER WASTEWATER
SURFACE IMPOUNDMENT

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL
TECHNOLOGY
CORPORATION

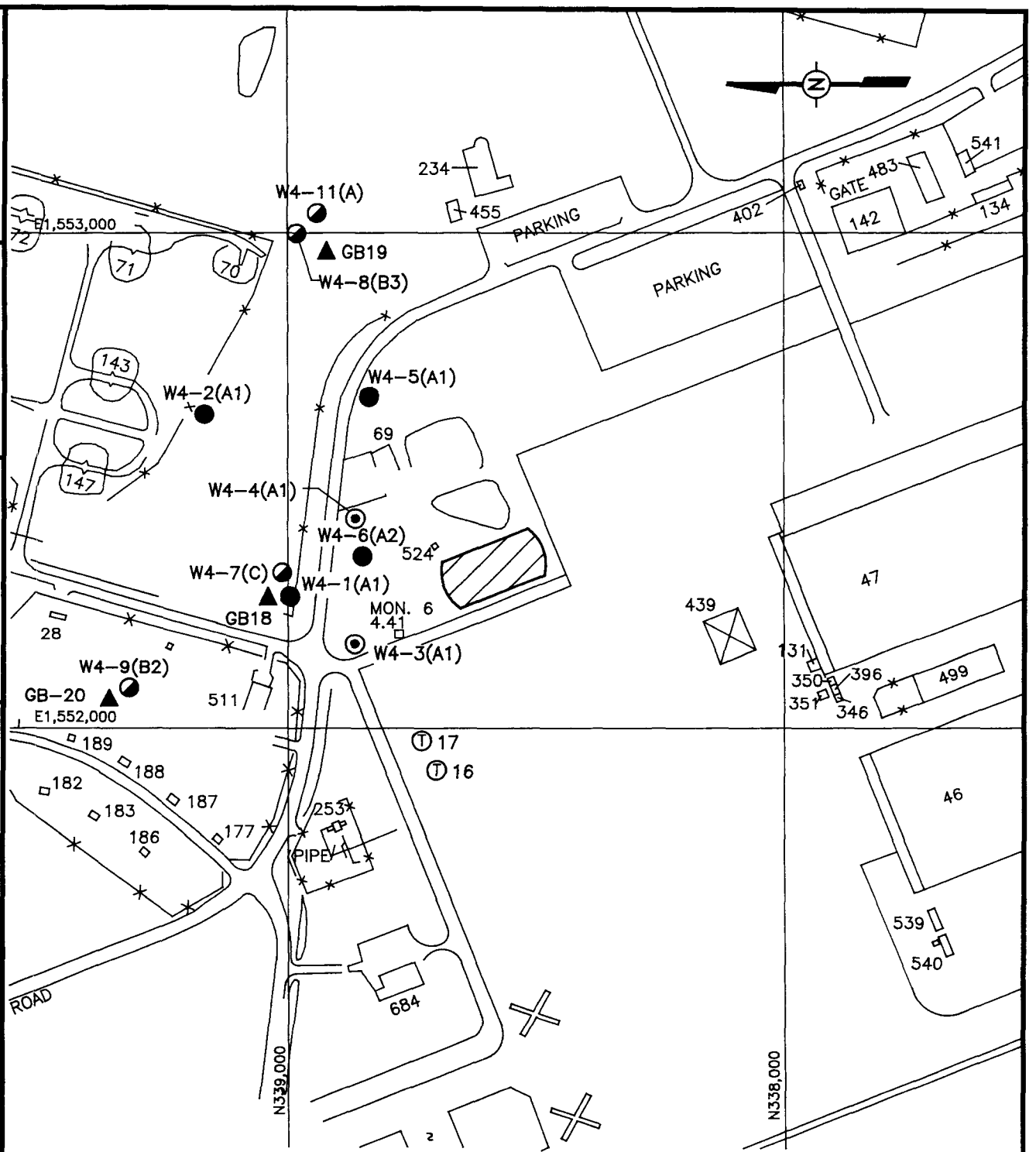
LEGEND

APPROXIMATE AREA OF FORMER POND

SOURCE: AERO-GEODETIC CORP.
JOB NO. 811822 3/16/81

STARTING DATE: 3/23/90	DATE LAST REV.:	DRAFT. CHCK. BY:	INITIATOR: J. WILLE	DWG. NO.: 409700-A-G23	
DRAWN BY: D.HIGGS	DRAWN BY:	ENGR. CHCK BY:	PROJ. MGR.: K. BRADLEY	PROJ. NO.: 409700	

\DRAWINGS\40970050



SCALE

0 300 600 FEET

LEGEND

- ▲ IT GEOPHYSICAL BORING
- ● ESA WELL
- ◪ IT WELL
- ⊙ EMCON WELL
- Ⓣ TANKS
- ▨ SITE 4

SOURCE: AERO-GEODETIC COPR.
JOB NO. 811822 3/16/81

FIGURE 7.2-1

SITE 4
MONITORING WELL
AND BORING LOCATIONS

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

DWG. NO.: 409700-A-G31	INITIATOR: K. BRADLEY	DRAFT. CHCK. BY:	DATE LAST REV.: 7/27/90	STARTING DATE: 3/12/90	\DRAWINGS\40970047
PROJ. NO.: 409700	PROJ. MGR.: K. BRADLEY	ENGR. CHCK BY:	DRAWN BY: D.HIGGS	DRAWN BY: D.HIGGS	

N00296.000910
MOFFETT FIELD
SSIC NO. 5090.3

SECTION 8.0

PHASE I CHARACTERIZATION REPORT

DATED 01 AUGUST 1990

TABLE 8.2-1.
GC AND TIP RESULTS FOR SITE 5 SOIL GAS SURVEY
NAS MOFFETT FIELD

SAMPLE LOCATION	TIP[a] READING (ppm)	GC RESULTS (ppb)										UNKNOWNS[b] (sec)	DATE (1988)
		1,1-DCE	1,1-DCA	cis-DCE	1,1,1-TCA	BENZENE	TCE	1,1,2-TCA	TOLUENE	m- and p-XYLENE	O-XYLENE		
TL-10 AS1	94.4			16,700		20,800	47,000		20,400			596	09-28
TL-10 AS2	388.0								260,000			1000	09-28
TL-10 AS3	377.5		1222		1753	317	2287			60,400	78,760	346-1068	12-08
TL-10 AS5													12-09
TL-10 AS8	8.8		1290						375	53	288	134 587-1250	09-28
TL-11 AS1							94						10-04
TL-12 AS3												1183	12-14
TL-13 AS3	3.1		365						49			1423	12-02
TL-13 AS4	48.5						114						10-04
TL-16 AS1	1433.6									204,000	156,000	367-1128	10-17
TL-16 AS3	185.6												10-17
TL-16 AS5													12-07
TL-43 AS2		26		115			2580						12-08
TL-43 AS3	4.5											1199	12-14

Blank indicates none detected.
GC - Gas chromatograph
ppm - Parts per million
ppb - Parts per billion
[a]Total ionizables present in ppm with respect to 100 ppm isobutylene.
[b]Peak of unknown compound eluted at time reported in seconds. Ranges (347-1151) indicate numerous peaks were present in this time interval.
NOTE: TIP readings taken at time samples were collected for GC analysis may not match initial TIP readings.

Table 8.4-1
Summary of Detected Chemicals
Site 5 Soil Samples
1 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Acetone	ug/kg	5	26.6	11.5	24.0	14.0-40.0
Methylene chloride	ug/kg	13	24.2	12.1	22.0	10.0-49.0
Bis(2-Ethylhexyl)phthalate	ug/kg	1	1600	0.0	1600	1600-1600
Aluminum	mg/kg	13	25438	6249	26300	15200-35300
Antimony	mg/kg	4	50.1	40.8	48.1	13.0-91.2
Arsenic	mg/kg	2	10.0	12.0	10.0	4.0-16.0
Barium	mg/kg	13	228	61.0	248	48.0-284
Beryllium	mg/kg	11	3.0	1.5	2.7	1.3-5.8
Calcium	mg/kg	13	18149	12506	12000	8890-49500
Chromium	mg/kg	13	83.7	36.4	75.7	52.7-197
Cobalt	mg/kg	13	18.5	5.0	17.9	13.1-33.8
Copper	mg/kg	13	51.8	15.2	47.2	33.7-77.5
Iron	mg/kg	13	36123	4344	36500	27400-42800
Lead	mg/kg	12	15.9	7.7	12.3	8.0-28.8
Magnesium	mg/kg	13	15992	3984	16400	10200-25000
Manganese	mg/kg	13	663	151	642	469-1070
Mercury	mg/kg	1	0.2	0.0	0.2	0.2-0.2
Nickel	mg/kg	13	81.9	14.1	81.1	55.9-106
Potassium	mg/kg	12	1617	620	1490	864-3040
Sodium	mg/kg	2	638	965	638	155-1120
Thallium	mg/kg	1	0.6	0.0	0.6	0.6-0.6
Vanadium	mg/kg	13	76.0	17.3	73.5	49.0-115
Zinc	mg/kg	13	83.3	36.9	75.8	50.1-188

Note: "1 Foot Depth" is comprised of Samples
from 0.0 to 2.0 feet below land surface.

This table does not include duplicate sample results or detections estimated below sample quantitation limits.
This table does include all original sample data and data from split samples.

Table 8.4-2
Summary of Detected Chemicals
Site 5 Soil Samples
3 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Acetone	ug/kg	8	27.0	15.0	23.0	13.0-56.0
Methylene chloride	ug/kg	13	21.4	8.5	22.0	9.0-38.0
Aluminum	mg/kg	13	21831	5235	21500	10400-32200
Antimony	mg/kg	2	72.1	20.5	72.1	61.8-82.3
Arsenic	mg/kg	2	4.0	0.0	4.0	4.0-4.0
Barium	mg/kg	13	210	63.1	215	36.8-304
Beryllium	mg/kg	10	2.8	1.4	2.6	1.0-4.9
Cadmium	mg/kg	3	1.3	0.2	1.3	1.2-1.5
Calcium	mg/kg	13	36023	22869	28600	10600-81000
Chromium	mg/kg	13	70.5	11.5	67.7	55.0-96.8
Cobalt	mg/kg	13	16.0	2.3	16.8	11.3-18.9
Copper	mg/kg	13	40.3	8.5	41.5	28.6-57.3
Iron	mg/kg	13	31431	7100	32700	13600-40000
Lead	mg/kg	13	27.6	59.2	10.6	5.9-224
Magnesium	mg/kg	13	17136	4259	18200	7770-24000
Manganese	mg/kg	13	516	105	492	289-637
Nickel	mg/kg	13	72.5	13.5	71.9	40.7-92.1
Potassium	mg/kg	10	1672	412	1615	1070-2440
Sodium	mg/kg	1	183	0.0	183	183-183
Thallium	mg/kg	1	0.5	0.0	0.5	0.5-0.5
Vanadium	mg/kg	13	67.4	14.0	68.0	28.4-87.6
Zinc	mg/kg	13	71.9	18.0	69.8	45.6-113

Note: "3 Foot Depth" is comprised of Samples
from 2.1 to 4.0 feet below land surface.

This table does not include duplicate sample results or detections estimated below sample quantitation limits.
This table does include all original sample data and data from split samples.

Table 8.4-3
Summary of Detected Chemicals
Site 5 Soil Samples
5 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Acetone	ug/kg	8	23.1	13.5	18.5	12.0-54.0
Methylene chloride	ug/kg	12	24.8	18.8	18.0	10.0-75.0
Bis(2-Ethylhexyl)phthalate	ug/kg	2	1015	970	1015	530-1500
Aluminum	mg/kg	12	20383	5429	18450	14600-33100
Antimony	mg/kg	1	81.6	0.0	81.6	81.6-81.6
Arsenic	mg/kg	4	5.3	2.1	5.0	3.0-8.0
Barium	mg/kg	12	193	52.2	180	120-284
Beryllium	mg/kg	10	2.9	1.4	2.5	1.2-5.7
Cadmium	mg/kg	2	1.1	0.0	1.1	1.1-1.1
Calcium	mg/kg	12	26850	15584	23050	11900-62500
Chromium	mg/kg	12	65.7	13.0	61.9	40.2-86.8
Cobalt	mg/kg	12	16.0	2.0	15.9	13.0-19.2
Copper	mg/kg	12	40.8	11.3	38.4	30.5-71.1
Iron	mg/kg	12	31458	4690	31150	24400-38100
Lead	mg/kg	12	11.1	4.8	10.4	4.4-22.9
Magnesium	mg/kg	12	15548	3248	15100	9070-22500
Manganese	mg/kg	12	548	139	520	354-811
Mercury	mg/kg	1	0.2	0.0	0.2	0.2-0.2
Nickel	mg/kg	12	74.9	12.1	76.0	49.6-93.2
Potassium	mg/kg	10	1450	527	1285	884-2630
Sodium	mg/kg	1	214	0.0	214	214-214
Thallium	mg/kg	1	0.4	0.0	0.4	0.4-0.4
Vanadium	mg/kg	12	66.3	11.2	62.9	51.0-87.6
Zinc	mg/kg	12	66.6	8.3	65.8	54.8-78.8
TPHC	mg/kg	1	1000	0.0	1000	1000-1000

Note: "5 Foot Depth" is comprised of Samples
from 4.1 to 5.5 feet below land surface.

This table does not include duplicate sample results or detections estimated below sample quantitation limits.
This table does include all original sample data and data from split samples.

Table 8.4-4
Summary of Detected Chemicals
Site 5 Soil Samples
> 5 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Acetone	ug/kg	4	34.3	29.3	21.0	17.0-78.0
Methylene chloride	ug/kg	4	28.8	17.6	23.0	15.0-54.0
Aluminum	mg/kg	4	22750	7056	20250	17400-33100
Antimony	mg/kg	1	81.6	0.0	81.6	81.6-81.6
Arsenic	mg/kg	2	5.5	5.0	5.5	3.0-8.0
Barium	mg/kg	4	180	45.4	162	151-247
Beryllium	mg/kg	2	2.4	2.4	2.4	1.2-3.6
Calcium	mg/kg	4	38225	17569	41000	14800-56100
Chromium	mg/kg	4	71.1	11.0	69.1	60.1-86.2
Cobalt	mg/kg	4	16.7	1.7	17.2	14.3-18.3
Copper	mg/kg	4	40.4	3.3	39.7	37.6-44.8
Iron	mg/kg	4	33800	3575	34600	28800-37200
Lead	mg/kg	4	9.0	1.2	9.1	7.8-10.2
Magnesium	mg/kg	4	16375	2525	16600	13100-19200
Manganese	mg/kg	4	611	141	573	486-810
Nickel	mg/kg	4	79.8	7.3	81.8	69.5-86.3
Potassium	mg/kg	4	1499	770	1190	985-2630
Vanadium	mg/kg	4	72.5	11.3	70.0	62.6-87.6
Zinc	mg/kg	4	77.7	8.9	76.8	68.2-89.1
TPHC	mg/kg	1	290	0.0	290	290-290

Note: "> 5 Foot Depth" is comprised of Samples
from 5.6 feet deep and below.

This table does not include duplicate sample results or detections estimated below sample quantitation limits.
This table does include all original sample data and data from split samples.

Table 8.4-5
Summary of detected Chemicals
Site 5 Water Samples
Aquifer A Monitor Wells

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
4-Methyl-2-pentanone	ug/L	4	19.3	11.5	15.5	10.0-36.0
Acetone	ug/L	13	19.8	7.2	19.0	10.0-31.0
Methylene chloride	ug/L	37	9.7	5.9	8.0	5.0-36.0
Bis(2-Ethylhexyl)phthalate	ug/L	3	95.7	103	65.0	12.0-210
Chrysene	ug/L	1	12.0	0.0	12.0	12.0-12.0
Antimony	ug/L	34	88.6	19.1	87.4	60.0-166
Barium	ug/L	1	48.8	0.0	48.8	48.8-48.8
Cadmium	ug/L	2	6.0	0.0	6.0	6.0-6.0
Calcium	ug/L	72	87314	26258	89550	29800-135000
Iron	ug/L	58	583	488	321	104-1630
Magnesium	ug/L	72	54333	12147	56550	20900-71600
Manganese	ug/L	72	424	349	282	33.9-1080
Mercury	ug/L	9	0.6	0.4	0.4	0.2-1.2
Nickel	ug/L	1	8.0	0.0	8.0	8.0-8.0
Selenium	ug/L	4	14.6	2.0	14.5	12.5-17.0
Sodium	ug/L	72	70515	8706	71700	49400-89200
Bicarbonate	mg/L	48	415	59.6	420	260-530
Chloride	mg/L	48	42.5	20.1	42.0	15.0-160
Nitrate	mg/L	40	3.0	1.9	2.9	0.4-7.6
Sulfate	mg/L	48	116	64.0	110	5.5-260
TDS	mg/L	48	644	144	660	310-920
TPHC	mg/L	2	150	300	150	0.3-300

Note: "Aquifer A Monitor Wells" combine A1 & A2 subaquifers

This table does not include duplicate sample results or detections estimated below sample quantitation limits.
This table does include all original sample data and data from split samples.

Table 8.4-6
Summary of detected Chemicals
Site 5 Water Samples
Aquifer B Monitor Wells

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
1,1,1-Trichloroethane	ug/L	1	3.0	0.0	3.0	3.0-3.0
Acetone	ug/L	1	24.0	0.0	24.0	24.0-24.0
Methylene chloride	ug/L	3	8.7	4.6	6.0	6.0-14.0
Toluene	ug/L	1	10.0	0.0	10.0	10.0-10.0
Calcium	ug/L	6	29167	1025	29350	28000-30400
Iron	ug/L	2	108	4.0	108	106-110
Lead	ug/L	1	7.5	0.0	7.5	7.5-7.5
Magnesium	ug/L	6	11933	1093	11700	10800-13200
Manganese	ug/L	6	115	22.4	123	71.0-132
Potassium	ug/L	1	5080	0.0	5080	5080-5080
Sodium	ug/L	6	64017	3099	63700	60400-68500
Zinc	ug/L	1	38.6	0.0	38.6	38.6-38.6
Bicarbonate	mg/L	4	205	10.0	200	200-220
Chloride	mg/L	4	21.0	1.6	21.0	19.0-23.0
Sulfate	mg/L	4	22.8	1.0	22.5	22.0-24.0
TDS	mg/L	4	315	23.8	305	300-350

Note: "Aquifer B Monitor Wells" combine
all applicable B subaquifers.

This table does not include duplicate sample results or detections estimated below sample quantitation limits.
This table does include all original sample data and data from split samples.

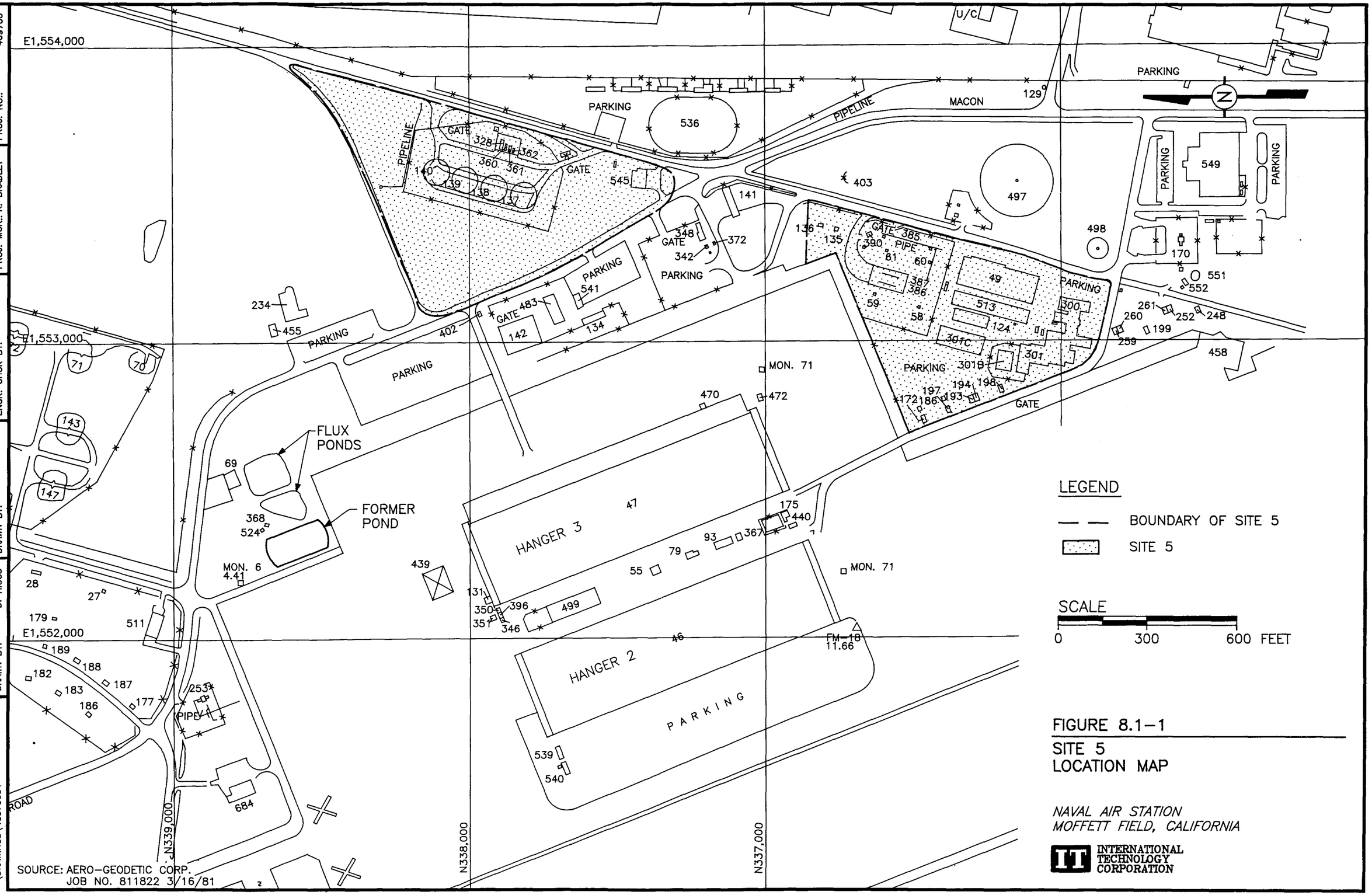


FIGURE 8.1-1

SITE 5
LOCATION MAP

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

DRAWING NO.409700-B-CXX			
PROJ. NO.: 409700	INITIATOR: J. WILLE	DRAFT. CHCK. BY:	STARTING DATE: 3/23/90
PROJ. MGR.: K. BRADLEY	ENGR. CHCK BY:	DATE LAST REV.:	DRAWN BY: D. HIGGS
DRAWN BY:			

\DRAWINGS\409700051

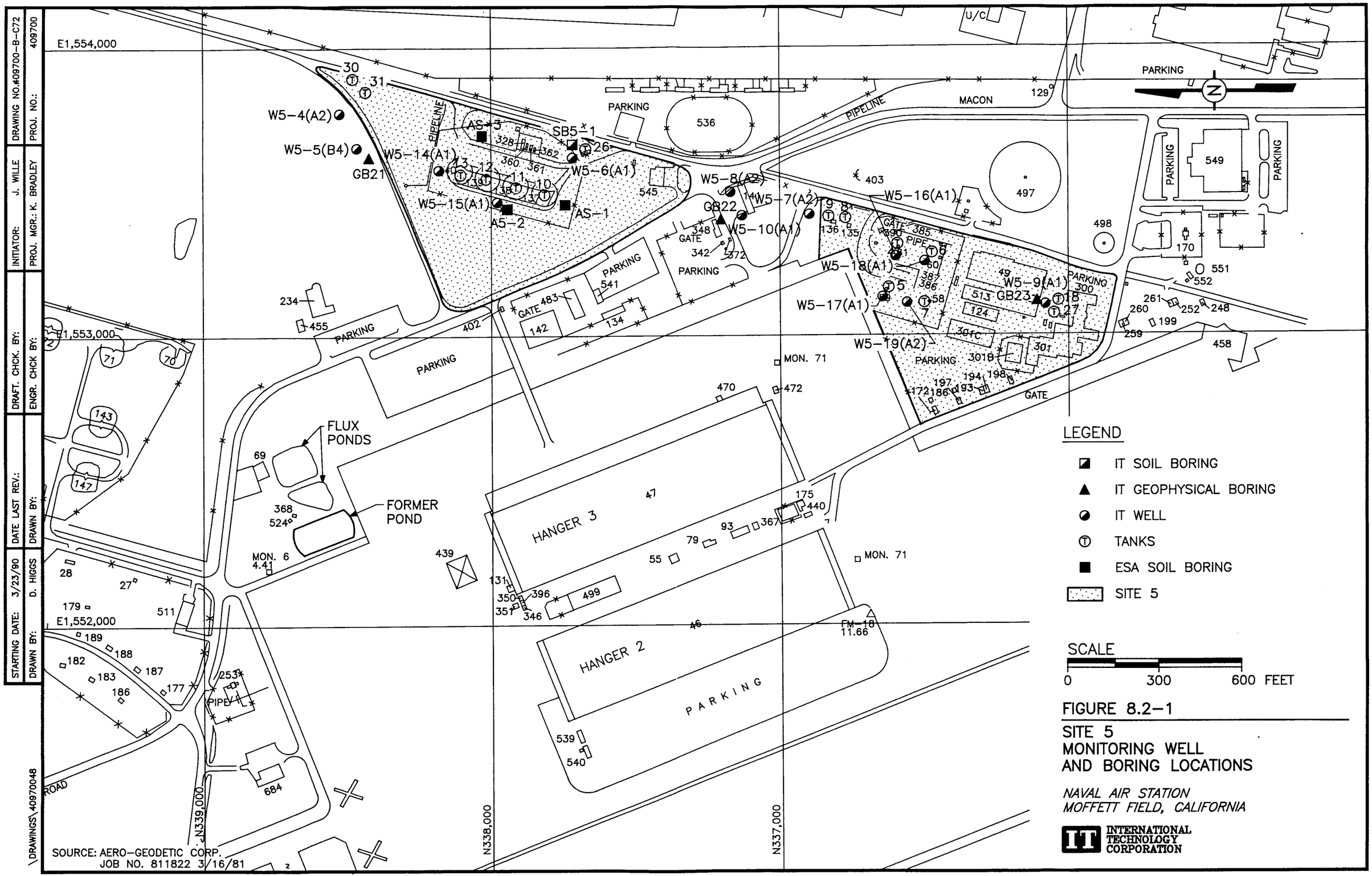


FIGURE 8.2-1

SITE 5
MONITORING WELL
AND BORING LOCATIONS

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

DRAWING NO. #09700-B-C72	PROJ. NO.: 409700		
INITIATOR: J. WILLE	PROJ. MGR.: K. BRADLEY		
DRAFT. CHCK. BY:	ENGR. CHCK BY:		
DATE LAST REV.:			
STARTING DATE: 3/23/90	DRAWN BY: D. HIGGS		
DRAWN BY:			

\DRAWINGS\40970048

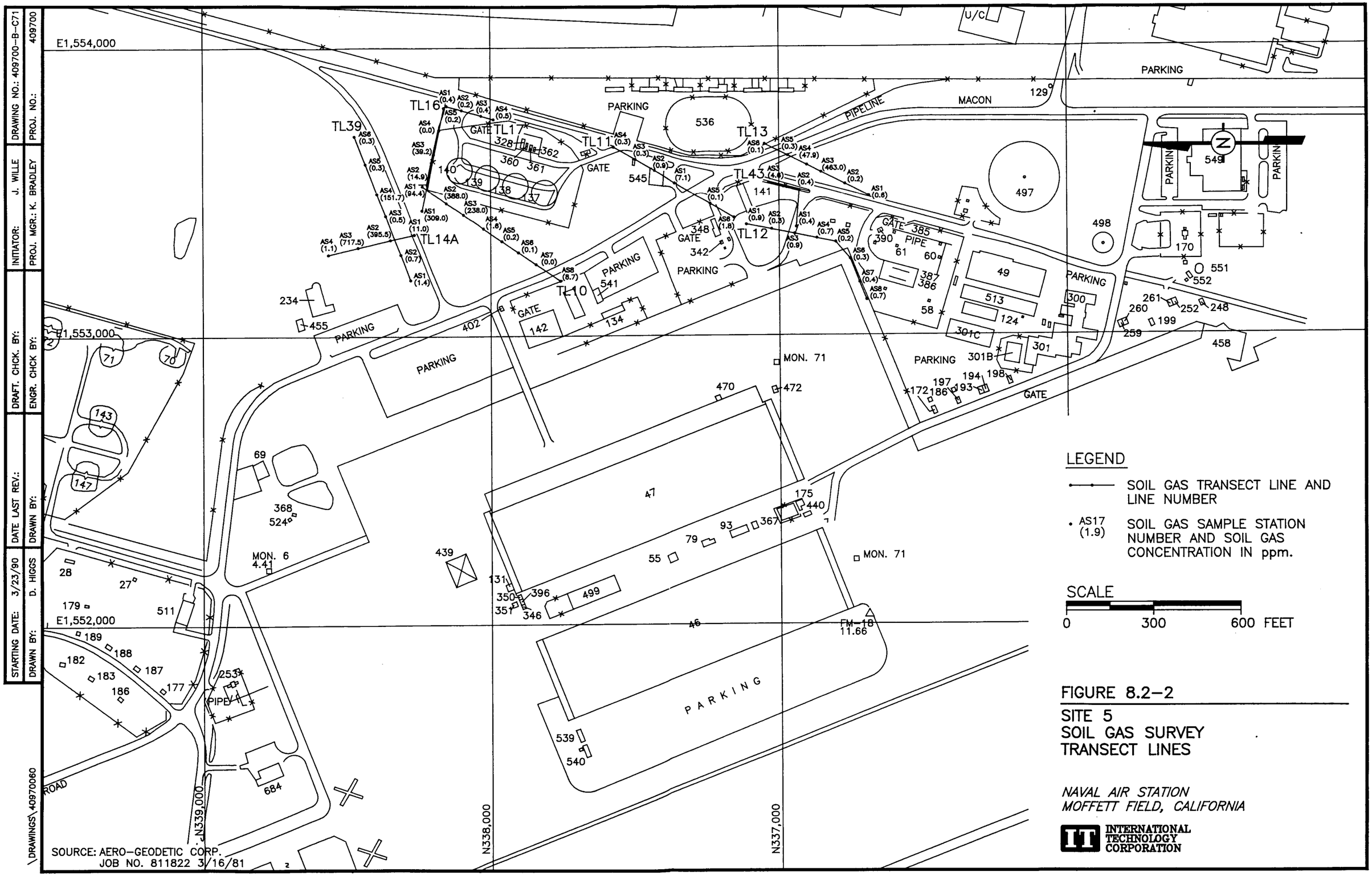


FIGURE 8.2-2

SITE 5
SOIL GAS SURVEY
TRANSECT LINES

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

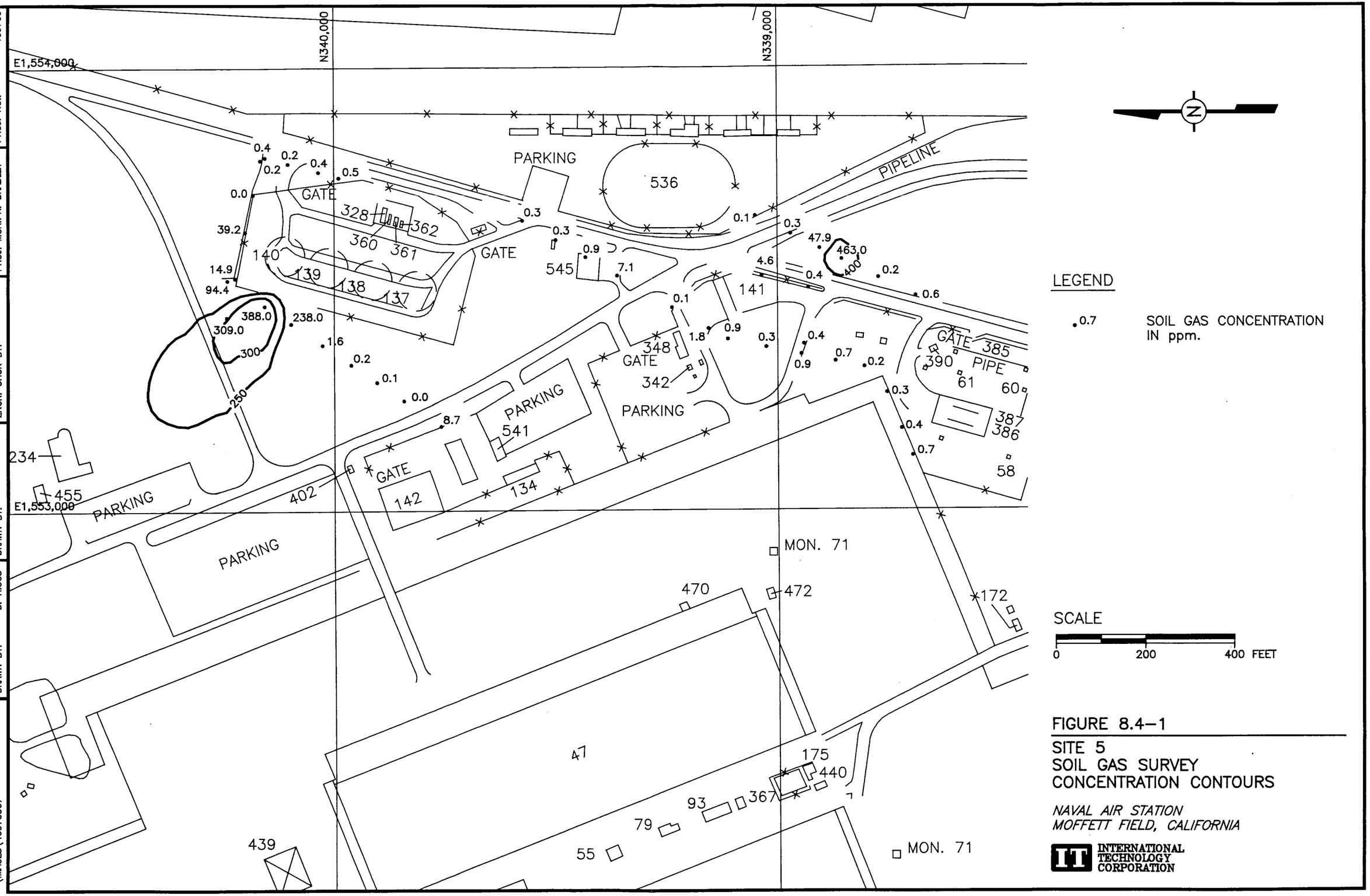


FIGURE 8.4–1

SITE 5
SOIL GAS SURVEY
CONCENTRATION CONTOURS

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

DRAWING NO.: 409700–B–C73	PROJ. NO.: 409700		
INITIATOR: J. WILLE	PROJ. MGR.: K. BRADLEY		
DRAFT. CHCK. BY:	ENGR. CHCK BY:	DATE LAST REV.:	DRAWN BY:
STARTING DATE: 5/29/90	DRAWN BY: D. HIGGS		

\IMAGES\ 40970067

N00296.000910
MOFFETT FIELD
SSIC NO. 5090.3

SECTION 9.0

PHASE I CHARACTERIZATION REPORT

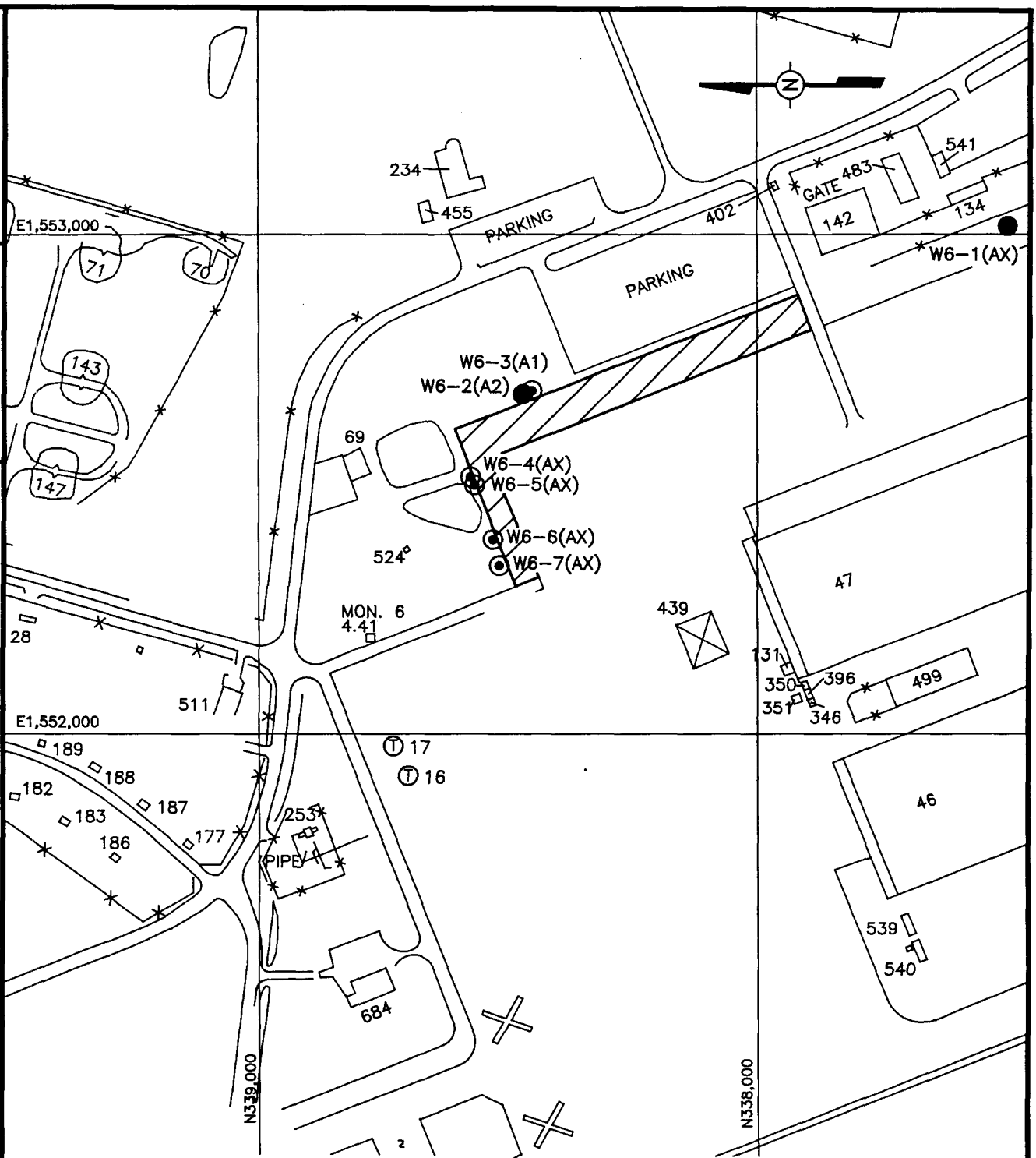
DATED 01 AUGUST 1990

Table 9.4-1
Summary of Detected Chemicals
Site 6 Water Samples
Aquifer A Monitor Wells

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
1,1-Dichloroethane	ug/L	3	5.3	0.6	5.0	5.0-6.0
Acetone	ug/L	1	39.0	0.0	39.0	39.0-39.0
Methylene chloride	ug/L	6	11.5	7.0	9.5	5.0-23.0
Trichloroethene	ug/L	1	5.0	0.0	5.0	5.0-5.0
Bicarbonate	mg/L	4	370	171	435	120-490
Carbonate	mg/L	1	4.4	0.0	4.4	4.4-4.4
Chloride	mg/L	4	55.5	10.1	55.0	44.0-68.0
Nitrate	mg/L	4	1.9	0.8	1.7	1.1-3.0
Sulfate	mg/L	4	188	68.0	205	91.0-250
TDS	mg/L	4	580	357	615	200-890

Note: "Aquifer A Monitor Wells" combine A1 & A2 subaquifers

This table does not include duplicate sample results or detections estimated below sample quantitation limits.
This table does include all original sample data and data from split samples.



SCALE

0 300 600 FEET

LEGEND

- ESA WELL
- EMCON WELL
- TANKS
- SITE 6

SOURCE: AERO-GEODETIC COPR.
JOB NO. 811822 3/16/81

FIGURE 9.1-1

SITE 6
MONITORING WELL
AND BORING LOCATIONS

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

DWG. NO.: 409700-A-G67	PROJ. NO.: 409700
INITIATOR: K. BRADLEY	PROJ. MGR.: K. BRADLEY
DRAFT. CHCK. BY:	ENGR. CHCK BY:
DATE LAST REV.:	DRAWN BY:
STARTING DATE: 6/20/90	DRAWN BY: D.HIGGS

\IMAGES\40970088

N00296.000910
MOFFETT FIELD
SSIC NO. 5090.3

SECTION 10.0

PHASE I CHARACTERIZATION REPORT

DATED 01 AUGUST 1990

Table 10.4-1
Summary of Detected Chemicals
Site 7 Soil Samples
1 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Acetone	ug/kg	3	51.0	19.3	47.0	34.0-72.0
Methylene chloride	ug/kg	7	24.3	13.6	17.0	13.0-44.0
Total xylenes	ug/kg	1	16.0	0.0	16.0	16.0-16.0
Aluminum	mg/kg	7	14680	5836	15200	8130-23700
Antimony	mg/kg	2	19.0	10.0	19.0	14.0-24.0
Arsenic	mg/kg	3	2.8	0.6	2.8	2.2-3.4
Barium	mg/kg	7	159	50.3	149	87.9-227
Beryllium	mg/kg	4	1.9	0.9	1.8	1.0-3.0
Calcium	mg/kg	7	36456	35332	19000	7990-87800
Chromium	mg/kg	7	46.7	14.7	52.4	28.6-62.2
Cobalt	mg/kg	4	13.6	1.8	13.7	11.5-15.3
Copper	mg/kg	7	2967	7731	43.5	21.9-20500
Iron	mg/kg	7	23686	5526	26000	15500-29000
Lead	mg/kg	6	9.7	2.8	10.2	5.1-12.5
Magnesium	mg/kg	7	11883	5358	11300	6490-22500
Manganese	mg/kg	7	595	201	493	447-1010
Mercury	mg/kg	1	0.2	0.0	0.2	0.2-0.2
Nickel	mg/kg	7	57.2	16.4	61.2	34.4-80.2
Potassium	mg/kg	1	1420	0.0	1420	1420-1420
Silver	mg/kg	2	3.1	2.0	3.1	2.1-4.1
Vanadium	mg/kg	7	45.6	9.2	48.6	30.8-56.4
Zinc	mg/kg	7	1291	3250	62.9	44.1-8660
TPHC	mg/kg	1	160	0.0	160	160-160

Note: "1 Foot Depth" is comprised of Samples
from 0.0 to 2.0 feet below land surface.

This table does not include duplicate sample results or detections estimated below sample quantitation limits.
This table does include all original sample data and data from split samples.

Table 10.4-2
Summary of Detected Chemicals
Site 7 Soil Samples
3 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Acetone	ug/kg	3	33.0	14.9	27.0	22.0-50.0
Methylene chloride	ug/kg	5	19.2	13.6	15.0	10.0-43.0
Bis(2-Ethylhexyl)phthalate	ug/kg	2	875	230	875	760-990
Aluminum	mg/kg	6	15917	2308	15750	12200-18400
Arsenic	mg/kg	3	2.6	0.4	2.5	2.2-3.0
Barium	mg/kg	6	197	62.3	188	129-278
Beryllium	mg/kg	2	2.6	1.5	2.6	1.8-3.3
Calcium	mg/kg	6	59552	48786	46300	9310-146000
Chromium	mg/kg	6	51.3	7.2	51.5	40.9-60.9
Cobalt	mg/kg	4	14.8	1.1	15.0	13.4-15.9
Copper	mg/kg	6	39.4	18.4	35.4	19.8-72.6
Iron	mg/kg	6	24633	4595	26300	17600-29300
Lead	mg/kg	6	7.0	1.7	6.7	4.8-10.0
Magnesium	mg/kg	6	17600	6731	14250	12200-27900
Manganese	mg/kg	6	418	96.4	456	250-497
Nickel	mg/kg	6	59.0	11.1	62.1	41.9-69.9
Silver	mg/kg	3	4.7	3.9	2.9	2.1-9.2
Vanadium	mg/kg	6	52.2	9.2	56.1	40.6-62.1
Zinc	mg/kg	6	57.9	9.0	58.9	47.0-72.2
TPHC	mg/kg	1	110	0.0	110	110-110

Note: "3 Foot Depth" is comprised of Samples
from 2.1 to 4.0 feet below land surface.

This table does not include duplicate sample results or detections estimated below sample quantitation limits.
This table does include all original sample data and data from split samples.

Table 10.4-3
Summary of Detected Chemicals
Site 7 Soil Samples
5 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Acetone	ug/kg	3	28.7	18.5	19.0	17.0-50.0
Methylene chloride	ug/kg	9	19.1	6.9	15.0	11.0-30.0
Total xylenes	ug/kg	1	12.0	0.0	12.0	12.0-12.0
Bis(2-Ethylhexyl)phthalate	ug/kg	1	2000	0.0	2000	2000-2000
Aluminum	mg/kg	9	15778	2716	16300	12300-21400
Arsenic	mg/kg	6	3.5	1.0	3.4	2.4-4.7
Barium	mg/kg	9	148	18.5	141	119-173
Beryllium	mg/kg	4	2.3	0.8	2.1	1.7-3.4
Calcium	mg/kg	9	37708	22389	35400	9270-74700
Chromium	mg/kg	9	55.6	10.3	52.1	44.2-73.9
Cobalt	mg/kg	9	13.2	2.8	11.6	10.4-17.8
Copper	mg/kg	9	36.9	5.7	36.2	28.0-44.0
Iron	mg/kg	9	27011	6218	24100	21500-39300
Lead	mg/kg	9	7.2	2.0	7.1	4.7-11.7
Magnesium	mg/kg	9	14811	2845	14100	10800-19200
Manganese	mg/kg	9	411	108	368	290-587
Nickel	mg/kg	9	59.8	10.9	57.8	49.4-84.3
Potassium	mg/kg	2	1620	400	1620	1420-1820
Silver	mg/kg	4	6.6	4.6	5.8	2.2-12.4
Vanadium	mg/kg	9	54.3	13.4	51.4	40.6-78.2
Zinc	mg/kg	9	55.8	7.4	53.8	49.5-74.1

Note: "5 Foot Depth" is comprised of Samples
from 4.1 to 5.5 feet below land surface.

This table does not include duplicate sample results or detections estimated below sample quantitation limits.
This table does include all original sample data and data from split samples.

Table 10.4-4
Summary of Detected Chemicals
Site 7 Soil Samples
> 5 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Acetone	ug/kg	3	28.3	15.0	24.0	16.0-45.0
Methylene chloride	ug/kg	3	16.7	3.2	18.0	13.0-19.0
Bis(2-Ethylhexyl)phthalate	ug/kg	1	1900	0.0	1900	1900-1900
Aluminum	mg/kg	3	17733	3612	15800	15500-21900
Barium	mg/kg	3	151	37.4	145	117-191
Beryllium	mg/kg	3	1.9	0.1	2.0	1.8-2.0
Calcium	mg/kg	3	37733	24415	34000	15400-63800
Chromium	mg/kg	3	57.3	5.6	55.4	52.8-63.6
Cobalt	mg/kg	3	14.0	0.9	14.1	13.0-14.8
Copper	mg/kg	3	37.1	11.6	32.6	28.5-50.3
Iron	mg/kg	3	28300	2784	28800	25300-30800
Lead	mg/kg	3	8.1	1.9	8.8	5.9-9.5
Magnesium	mg/kg	3	14900	964	15300	13800-15600
Manganese	mg/kg	3	470	59.9	497	401-511
Nickel	mg/kg	3	63.3	3.1	63.2	60.3-66.4
Potassium	mg/kg	2	1440	500	1440	1190-1690
Vanadium	mg/kg	3	56.9	11.4	51.4	49.3-70.0
Zinc	mg/kg	3	61.6	8.9	66.7	51.4-66.8

Note: "> 5 Foot Depth" is comprised of Samples
from 5.6 feet deep and below.

This table does not include duplicate sample results or detections estimated below sample quantitation limits.
This table does include all original sample data and data from split samples.

Table 10.4-5
Summary of Detected Chemicals
Site 7 Water Samples
Aquifer A Monitor Wells

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
1,1,1-Trichloroethane	ug/L	4	6.8	1.3	7.0	5.0-8.0
1,1-Dichloroethane	ug/L	2	5.0	0.0	5.0	5.0-5.0
1,2-Dichloroethenes(Total)	ug/L	4	20.5	4.7	21.5	14.0-25.0
Acetone	ug/L	9	13.6	1.3	14.0	12.0-15.0
Carbon tetrachloride	ug/L	3	35.3	48.2	8.0	7.0-91.0
Chloroform	ug/L	4	7.3	1.7	7.5	5.0-9.0
Methylene chloride	ug/L	26	9.7	4.4	8.0	5.0-19.0
Tetrachloroethene	ug/L	4	144	46.8	160	75.0-180
Trichloroethene	ug/L	4	42.5	11.9	47.5	25.0-50.0
Di-n-octyl phthalate	ug/L	1	63.0	0.0	63.0	63.0-63.0
Aluminum	ug/L	2	108	205	108	5.0-210
Antimony	ug/L	1	101	0.0	101	101-101
Calcium	ug/L	25	129684	19701	126000	88100-159000
Iron	ug/L	24	861	479	786	105-2060
Lead	ug/L	1	25.0	0.0	25.0	25.0-25.0
Magnesium	ug/L	25	81148	25902	84800	49900-139000
Manganese	ug/L	25	271	252	146	20.9-759
Mercury	ug/L	1	0.7	0.0	0.7	0.7-0.7
Potassium	ug/L	2	7480	600	7480	7180-7780
Selenium	ug/L	4	6.5	1.2	6.7	5.0-7.8
Sodium	ug/L	25	93116	140494	64300	55200-766000
Zinc	ug/L	1	28.8	0.0	28.8	28.8-28.8
Bicarbonate	mg/L	26	366	66.5	390	210-440
Carbonate	mg/L	1	2.4	0.0	2.4	2.4-2.4
Chloride	mg/L	26	41.0	11.0	45.0	18.0-56.0
Nitrate	mg/L	19	2.4	1.3	2.3	0.1-6.0
Sulfate	mg/L	26	244	135	235	19.0-470
TDS	mg/L	26	779	311	800	66.0-1210

Note: "Aquifer A Monitor Wells" combine A1 & A2 subaquifers

This table does not include duplicate sample results or detections estimated below sample quantitation limits.
This table does include all original sample data and data from split samples.

Table 10.4-6
Summary of Detected Chemicals
Site 7 Water Samples
Aquifer B Monitor Wells

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Acetone	ug/L	1	14.0	0.0	14.0	14.0-14.0
Methylene chloride	ug/L	1	10.0	0.0	10.0	10.0-10.0
Arsenic	ug/L	1	10.0	0.0	10.0	10.0-10.0
Calcium	ug/L	6	30483	668	30650	29400-31100
Magnesium	ug/L	6	10090	741	10195	9100-10800
Manganese	ug/L	6	62.4	2.0	63.3	58.9-63.9
Mercury	ug/L	1	0.2	0.0	0.2	0.2-0.2
Sodium	ug/L	6	61600	2423	60900	59500-66200
Bicarbonate	mg/L	4	198	5.0	200	190-200
Chloride	mg/L	4	21.8	4.5	20.5	18.0-28.0
Sulfate	mg/L	4	58.3	81.2	18.0	17.0-180
TDS	mg/L	4	285	12.9	285	270-300

Note: "Aquifer B Monitor Wells" combine
all applicable B subaquifers.

This table does not include duplicate sample results or detections estimated below sample quantitation limits.
This table does include all original sample data and data from split samples.

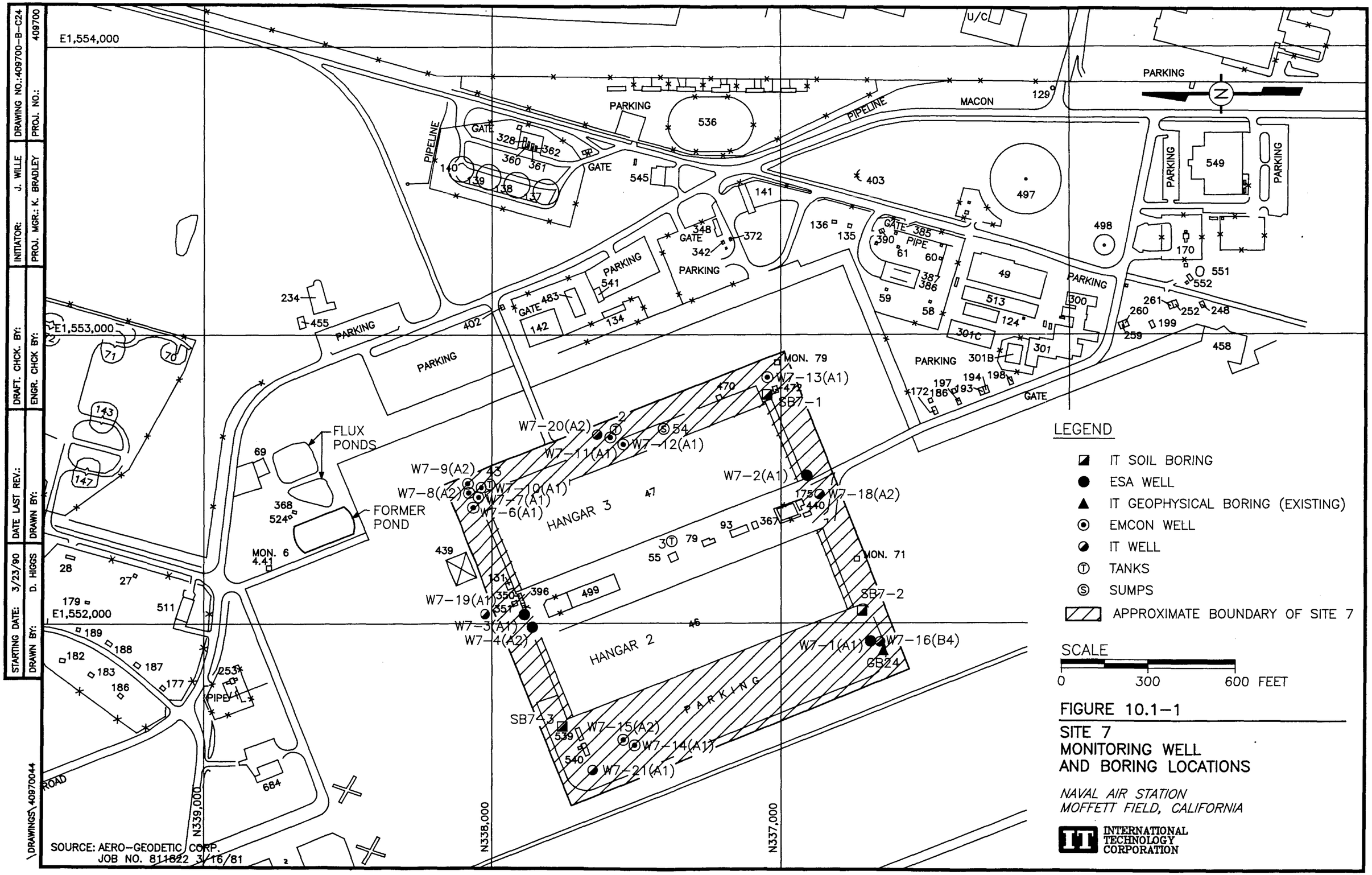


FIGURE 10.1-1

SITE 7
MONITORING WELL
AND BORING LOCATIONS

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

DRAWING NO.: 409700-B-C24	INITIATOR: J. WILLE	DRAFT. CHCK. BY:	STARTING DATE: 3/23/90
PROJ. NO.: 409700	PROJ. MGR.: K. BRADLEY	ENGR. CHCK BY:	DRAWN BY: D. HIGGS
		DATE LAST REV.:	DRAWN BY:

\DRAWINGS\ 40970044

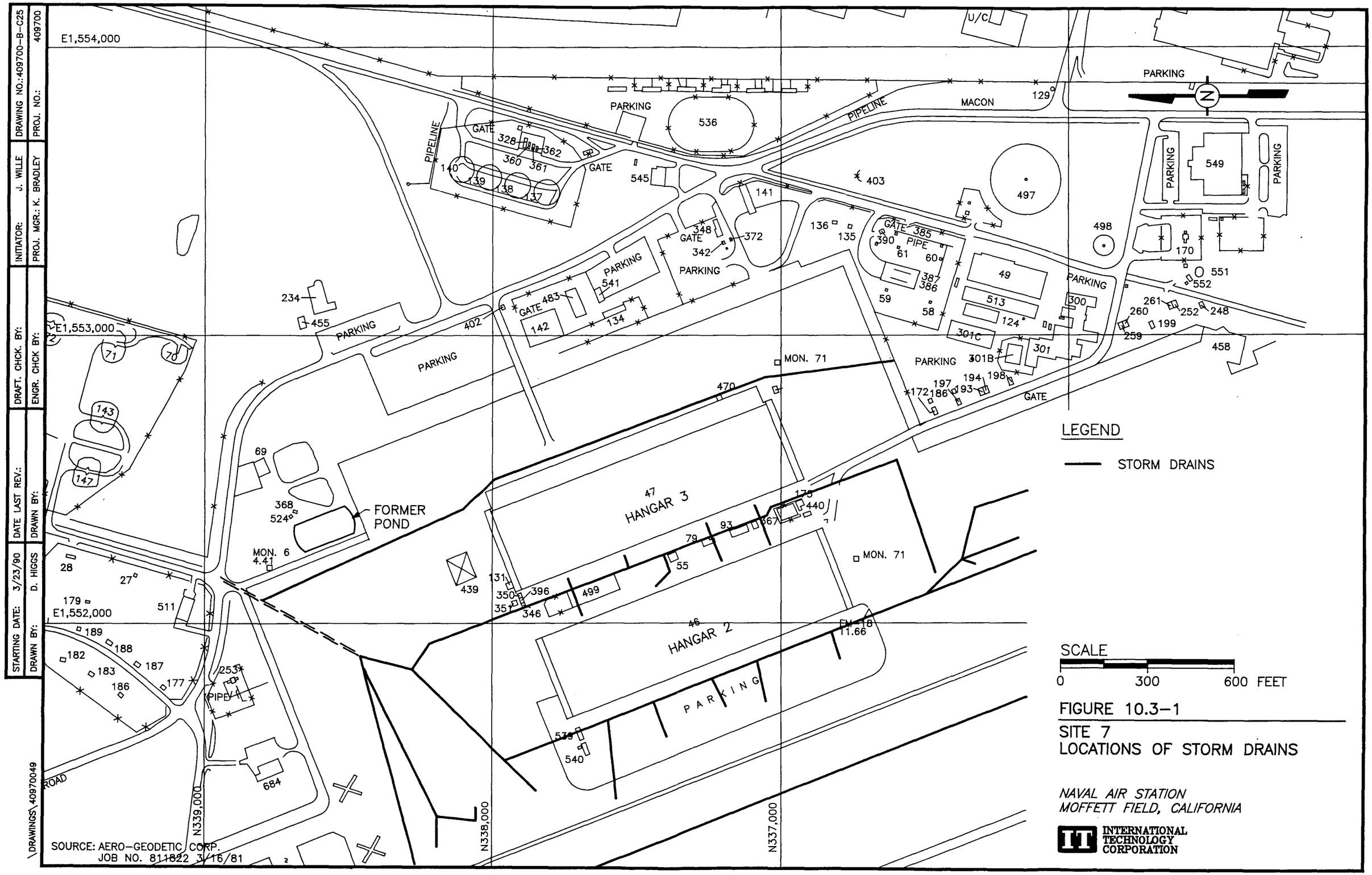


FIGURE 10.3-1

SITE 7
LOCATIONS OF STORM DRAINS

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

N00296.000910
MOFFETT FIELD
SSIC NO. 5090.3

SECTION 11.0

PHASE I CHARACTERIZATION REPORT

DATED 01 AUGUST 1990

Table 11.4-1
Summary of Detected Chemicals
Site 8 Soil Samples
1 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
2-Butanone	ug/kg	7	16.6	3.8	16.0	12.0-23.0
Acetone	ug/kg	14	65.0	36.5	65.5	18.0-120
Methylene chloride	ug/kg	17	20.0	6.7	18.0	11.0-30.0
Bis(2-Ethylhexyl)phthalate	ug/kg	2	665	470	665	430-900
Aluminum	mg/kg	17	17906	4522	16300	12300-28800
Antimony	mg/kg	2	18.0	12.0	18.0	12.0-24.0
Arsenic	mg/kg	9	3.5	1.5	3.0	2.1-6.8
Barium	mg/kg	17	183	61.9	183	90.0-305
Beryllium	mg/kg	4	3.1	0.5	3.2	2.4-3.6
Cadmium	mg/kg	2	1.1	0.0	1.1	1.1-1.1
Calcium	mg/kg	17	40085	25651	31900	9950-92500
Chromium	mg/kg	17	55.6	14.2	50.7	37.0-82.6
Cobalt	mg/kg	15	15.3	3.2	14.5	11.1-21.2
Copper	mg/kg	17	1314	5228	45.8	23.0-21600
Iron	mg/kg	17	28106	6644	27300	18500-39800
Lead	mg/kg	17	8.6	4.5	7.3	4.3-23.6
Magnesium	mg/kg	17	15094	4368	13700	9690-24100
Manganese	mg/kg	17	468	117	445	320-728
Nickel	mg/kg	17	62.5	19.6	57.6	40.2-111
Potassium	mg/kg	4	1375	214	1380	1110-1630
Silver	mg/kg	6	2.3	0.8	2.6	0.7-3.1
Sodium	mg/kg	1	23300	0.0	23300	23300-23300
Vanadium	mg/kg	17	58.8	14.6	62.8	34.7-85.0
Zinc	mg/kg	17	572	2097	59.2	44.6-8710
TPHC	mg/kg	2	219	322	219	58.0-380

Note: "1 Foot Depth" is comprised of Samples
from 0.0 to 2.0 feet below land surface.

This table does not include duplicate sample results or detections estimated below sample quantitation limits.
This table does include all original sample data and data from split samples.

Table 11.4-2
Summary of Detected Chemicals
Site 8 Soil Samples
3 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
2-Butanone	ug/kg	11	21.1	5.6	20.0	13.0-31.0
Acetone	ug/kg	17	105	43.2	110	18.0-170
Methylene chloride	ug/kg	17	24.0	13.2	18.0	10.0-52.0
Toluene	ug/kg	1	8.0	0.0	8.0	8.0-8.0
Benzoic acid	ug/kg	1	2000	0.0	2000	2000-2000
Aluminum	mg/kg	17	24100	4491	25100	13400-31600
Antimony	mg/kg	1	16.0	0.0	16.0	16.0-16.0
Arsenic	mg/kg	10	4.1	1.3	4.2	2.7-6.5
Barium	mg/kg	17	244	54.0	258	134-303
Beryllium	mg/kg	4	4.1	0.6	3.9	3.6-4.8
Cadmium	mg/kg	2	1.2	0.0	1.2	1.2-1.2
Calcium	mg/kg	17	48882	28837	39000	21000-150000
Chromium	mg/kg	17	68.0	12.0	72.2	41.9-82.4
Cobalt	mg/kg	17	17.4	3.1	18.5	10.1-23.5
Copper	mg/kg	17	637	2413	50.4	32.8-10000
Iron	mg/kg	17	34506	5948	36900	20700-42600
Lead	mg/kg	17	12.3	12.8	9.3	4.8-61.6
Magnesium	mg/kg	17	19794	3245	20400	14000-24700
Manganese	mg/kg	17	551	87.0	586	385-666
Nickel	mg/kg	17	74.1	14.3	80.6	50.9-89.0
Potassium	mg/kg	8	1279	587	1300	53.4-2030
Selenium	mg/kg	1	0.7	0.0	0.7	0.7-0.7
Silver	mg/kg	3	3.7	1.2	3.3	2.8-5.0
Vanadium	mg/kg	17	66.8	16.3	65.6	35.3-103
Zinc	mg/kg	17	318	980	79.1	58.9-4120

Note: "3 Foot Depth" is comprised of Samples
from 2.1 to 4.0 feet below land surface.

This table does not include duplicate sample results or detections estimated below sample quantitation limits.
This table does include all original sample data and data from split samples.

Table 11.4-3
Summary of Detected Chemicals
Site 8 Soil Samples
5 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Acetone	ug/kg	4	46.8	55.5	20.0	17.0-130
Methylene chloride	ug/kg	4	30.8	23.8	23.0	12.0-65.0
Aluminum	mg/kg	4	24175	3960	23250	20600-29600
Arsenic	mg/kg	1	3.9	0.0	3.9	3.9-3.9
Barium	mg/kg	4	251	20.7	251	231-271
Beryllium	mg/kg	4	3.7	0.2	3.8	3.4-3.9
Cadmium	mg/kg	1	1.2	0.0	1.2	1.2-1.2
Calcium	mg/kg	4	60375	24046	56550	36200-92200
Chromium	mg/kg	4	75.5	8.0	75.0	68.1-84.1
Cobalt	mg/kg	4	17.0	2.0	17.0	15.1-19.0
Copper	mg/kg	4	43.2	4.3	43.1	38.2-48.5
Iron	mg/kg	4	34250	3615	34950	29300-37800
Lead	mg/kg	4	9.6	1.9	9.4	7.6-12.1
Magnesium	mg/kg	4	24125	6541	22350	18300-33500
Manganese	mg/kg	4	592	72.7	608	497-654
Nickel	mg/kg	4	81.3	9.0	81.3	73.2-89.5
Potassium	mg/kg	2	1665	330	1665	1500-1830
Vanadium	mg/kg	4	74.5	9.6	75.6	62.6-84.3
Zinc	mg/kg	4	75.7	8.8	76.7	64.5-85.1

Note: "5 Foot Depth" is comprised of Samples
from 4.1 to 5.5 feet below land surface.

This table does not include duplicate sample results or detections estimated below sample quantitation limits.
This table does include all original sample data and data from split samples.

Table 11.4-4
Summary of Detected Chemicals
Site 8 Water Samples
Aquifer A Monitor Wells

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
1,1,1-Trichloroethane	ug/L	15	31.1	18.8	27.0	6.0-70.0
1,1-Dichloroethane	ug/L	11	10.5	1.6	10.0	8.0-14.0
1,1-Dichloroethylene	ug/L	12	21.6	12.1	21.0	7.0-43.0
Acetone	ug/L	2	11.5	1.0	11.5	11.0-12.0
Methylene chloride	ug/L	9	9.8	3.4	10.0	5.0-17.0
Trichloroethene	ug/L	7	6.4	1.7	6.0	5.0-10.0
Aluminum	ug/L	1	204	0.0	204	204-204
Antimony	ug/L	4	89.9	30.2	80.0	65.6-134
Calcium	ug/L	23	87357	20636	95100	48400-106000
Iron	ug/L	22	476	438	340	125-1830
Magnesium	ug/L	23	73387	29590	86700	21300-106000
Manganese	ug/L	23	138	72.6	189	15.3-207
Mercury	ug/L	1	0.3	0.0	0.3	0.3-0.3
Selenium	ug/L	1	11.5	0.0	11.5	11.5-11.5
Sodium	ug/L	23	80261	15468	86100	53700-99600
Zinc	ug/L	2	80.7	21.1	80.7	70.1-91.2
Bicarbonate	mg/L	18	417	98.1	450	240-520
Chloride	mg/L	18	38.7	5.4	40.0	26.0-45.0
Nitrate	mg/L	16	3.1	1.4	3.0	0.1-4.9
Sulfate	mg/L	18	213	76.0	255	77.0-280
TDS	mg/L	18	792	215	870	400-980

Note: "Aquifer A Monitor Wells" combine A1 & A2 subaquifers

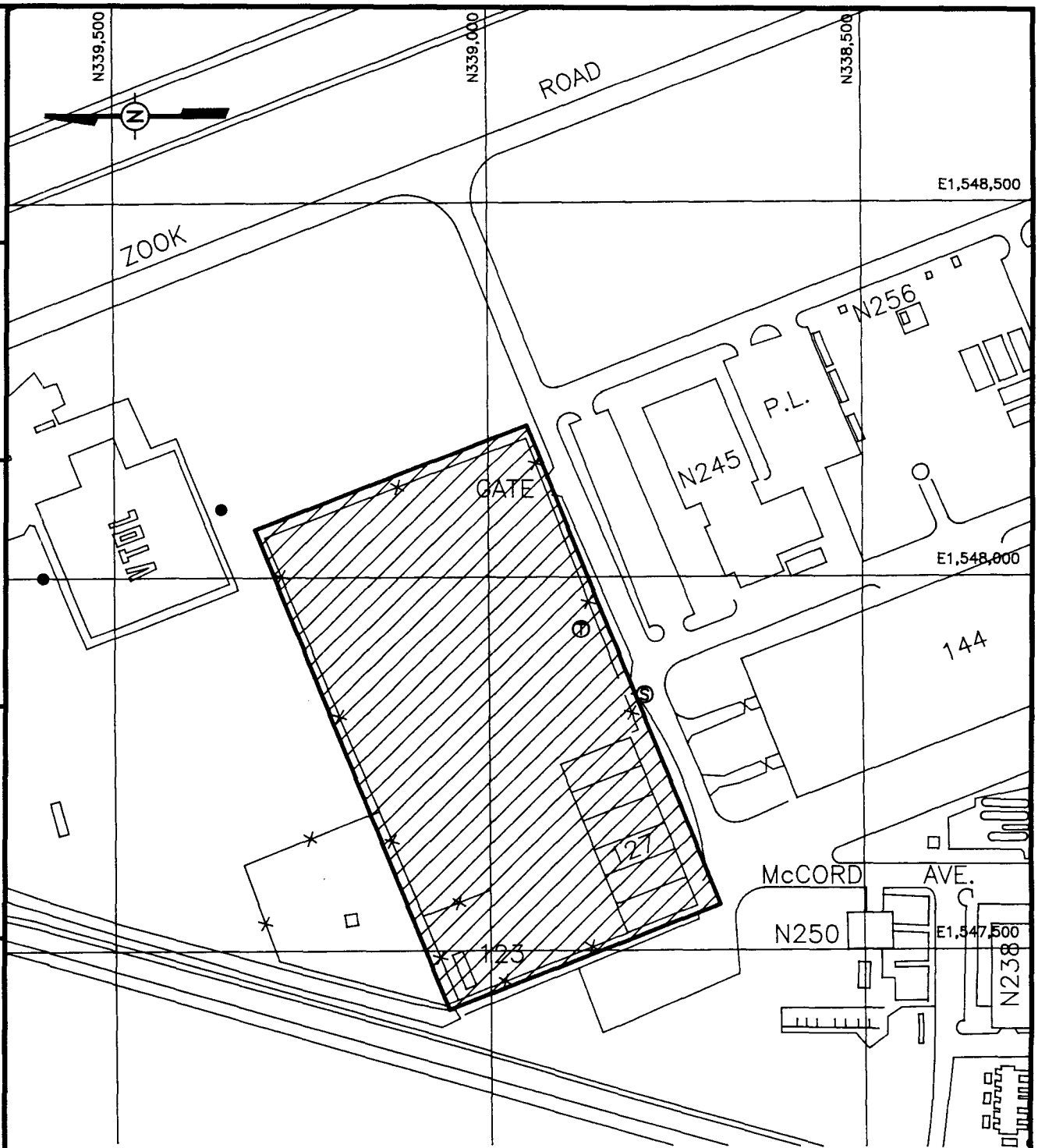
This table does not include duplicate sample results or detections estimated below sample quantitation limits.
This table does include all original sample data and data from split samples.

Table 11.4-5
Summary of Detected Chemicals
Site 8 Water Samples
Aquifer B Monitor Wells

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Acetone	ug/L	2	15.0	8.0	15.0	11.0-19.0
Methylene chloride	ug/L	6	9.8	6.3	7.5	5.0-22.0
Trichloroethene	ug/L	1	11.0	0.0	11.0	11.0-11.0
Aluminum	ug/L	1	245	0.0	245	245-245
Antimony	ug/L	1	60.0	0.0	60.0	60.0-60.0
Arsenic	ug/L	3	12.7	1.6	11.8	11.8-14.6
Calcium	ug/L	6	27000	1358	27100	24900-28400
Iron	ug/L	3	116	15.0	117	101-131
Magnesium	ug/L	6	12617	1165	12650	11300-14600
Manganese	ug/L	6	81.8	9.2	79.5	73.2-99.6
Potassium	ug/L	1	6300	0.0	6300	6300-6300
Sodium	ug/L	6	60267	7832	58500	53800-75400
Bicarbonate	mg/L	6	212	18.3	200	200-240
Chloride	mg/L	6	20.0	9.8	16.5	15.0-40.0
Sulfate	mg/L	6	16.8	2.3	17.0	13.0-20.0
TDS	mg/L	6	307	54.7	295	250-410

Note: "Aquifer B Monitor Wells" combine
all applicable B subaquifers.

This table does not include duplicate sample results or detections estimated below sample quantitation limits.
This table does include all original sample data and data from split samples.



STARTING DATE: 3/12/90	DATE LAST REV.: 7/27/90	DRAFT. CHCK. BY:	INITIATOR: K. BRADLEY
DRAWN BY: D.HIGGS	DRAWN BY: D.HIGGS	ENGR. CHCK BY:	PROJ. MGR.: K. BRADLEY
			DWG. NO.: 409700-A-G33
			PROJ. NO.: 409700

LEGEND

SITE 8– WASTE OIL TRANSFER BOUNDARY

Ⓢ SUMP (REMOVED)

Ⓣ TANK (REMOVED)

0 200 400 FEET

FIGURE 11.1–1

SITE 8
WASTE OIL TRANSFER AREA

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

SOURCE: AERO–GEODETIC CORP.
JOB NO. 811822 3/6/81

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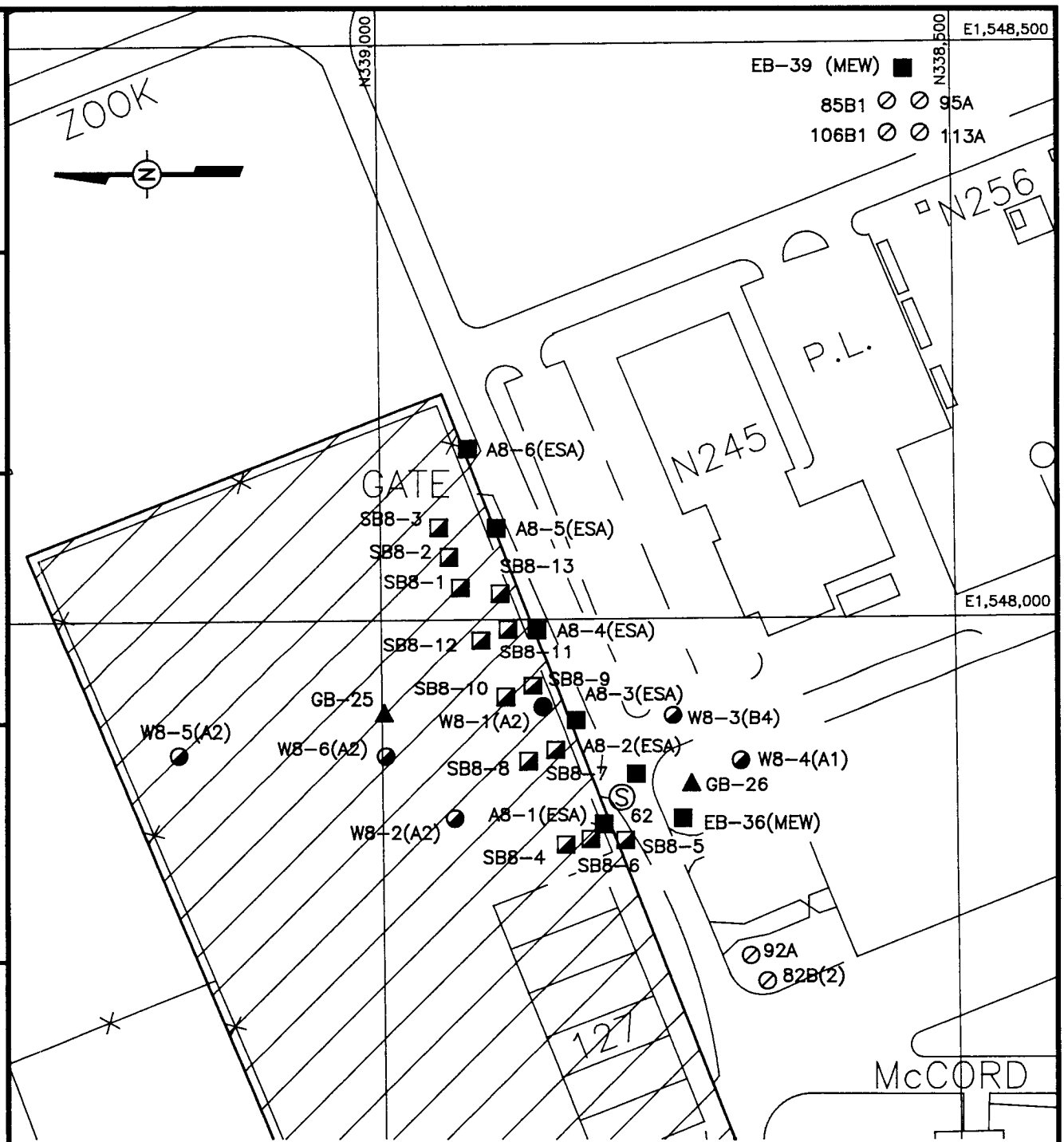


STARTING DATE: 3/12/90	DATE LAST REV.:	DRAFT. CHCK. BY:	INITIATOR: K. BRADLEY	DWG. NO.: 409700-A-G66
DRAWN BY: D.HIGGS	DRAWN BY:	ENGR. CHCK BY:	PROJ. MGR.: K. BRADLEY	PROJ. NO.: 409700

LEGEND

- IT WELL
- ESA WELL
- MEW WELL PRE 7/87
- IT GEOPHYSICAL BORING
- IT SOIL BORING
- ESA SOIL BORING
- MEW BORING
- SUMP (ABANDONED)
- SITE 8– WASTE OIL TRANSFER

SOURCE: AERO-GEODETIC CORP.
JOB NO. 811822 3/16/81

0 150 300 FEET

FIGURE 11.2-1

SITE 8
WASTE OIL TRANSFER AREA
MONITORING WELL AND BORING LOCATIONS

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

\DRAWINGS\409700-Q

N00296.000910
MOFFETT FIELD
SSIC NO. 5090.3

SECTION 12.0

PHASE I CHARACTERIZATION REPORT

DATED 01 AUGUST 1990

Table 12.4-1
Summary of Detected Chemicals
Site 9 Soil Samples
1 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
2-Butanone	ug/kg	1	23.0	0.0	23.0	23.0-23.0
Acetone	ug/kg	6	74.7	47.6	69.0	20.0-140
Carbon disulfide	ug/kg	1	7.0	0.0	7.0	7.0-7.0
Ethyl benzene	ug/kg	1	9.0	0.0	9.0	9.0-9.0
Methylene chloride	ug/kg	9	32.0	37.4	25.0	9.0-130
Toluene	ug/kg	1	37.0	0.0	37.0	37.0-37.0
Total xylenes	ug/kg	2	14.5	19.0	14.5	5.0-24.0
Trichloroethene	ug/kg	1	9.0	0.0	9.0	9.0-9.0
1,1,2,2-Tetrachloroethane	ug/kg	1	420	0.0	420	420-420
Di-n-butylphthalate	ug/kg	1	70.0	0.0	70.0	70.0-70.0
Unknown @8.55	ug/kg	1	1400	0.0	1400	1400-1400
Aluminum	mg/kg	9	20704	8439	21200	8640-33700
Arsenic	mg/kg	1	3.7	0.0	3.7	3.7-3.7
Barium	mg/kg	9	278	116	299	75.4-478
Beryllium	mg/kg	1	1.2	0.0	1.2	1.2-1.2
Cadmium	mg/kg	1	9.4	0.0	9.4	9.4-9.4
Calcium	mg/kg	9	118078	82074	123000	11800-228000
Chromium	mg/kg	9	54.1	21.4	53.9	16.2-87.1
Cobalt	mg/kg	8	14.7	4.3	12.9	10.1-23.5
Copper	mg/kg	9	42.2	11.6	42.6	24.1-57.4
Iron	mg/kg	9	25289	9921	23900	11100-37800
Lead	mg/kg	8	16.4	18.6	8.0	4.7-60.2
Magnesium	mg/kg	9	16767	5682	18500	4900-22100
Manganese	mg/kg	9	414	179	493	177-680
Mercury	mg/kg	6	0.3	0.1	0.3	0.2-0.3
Nickel	mg/kg	9	56.3	20.5	54.6	17.3-88.1
Potassium	mg/kg	2	1920	1480	1920	1180-2660
Silver	mg/kg	3	3.0	1.4	2.2	2.2-4.7
Vanadium	mg/kg	9	54.2	25.0	47.5	27.6-106
Zinc	mg/kg	9	67.0	19.8	65.8	45.6-109
pH		9	8.5	0.6	8.4	7.8-9.3

Note: "1 Foot Depth" is comprised of Samples
from 0.0 to 2.0 feet below land surface.

This table does not include duplicate sample results or detections estimated below sample quantitation limits. This table does include all original sample data and data from split samples.

Table 12.4-2
Summary of Detected Chemicals
Site 9 Soil Samples
3 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
1,2-Dichloroethenes(Total)	ug/kg	1	6.0	0.0	6.0	6.0-6.0
2-Butanone	ug/kg	1	20.0	0.0	20.0	20.0-20.0
Acetone	ug/kg	7	46.9	32.8	38.0	10.0-100
Methylene chloride	ug/kg	9	20.1	12.8	14.0	8.0-48.0
Trichloroethene	ug/kg	2	18.0	26.0	18.0	5.0-31.0
1,1,2,2-Tetrachloroethane	ug/kg	1	220	0.0	220	220-220
Di-n-butylphthalate	ug/kg	1	47.0	0.0	47.0	47.0-47.0
Unknown @37.96	ug/kg	1	1300	0.0	1300	1300-1300
Aluminum	mg/kg	9	23444	4886	25100	13100-30400
Arsenic	mg/kg	3	5.7	2.7	6.2	2.8-8.2
Barium	mg/kg	9	330	180	270	181-795
Calcium	mg/kg	9	97267	45477	77900	59200-201000
Chromium	mg/kg	9	58.6	11.0	56.0	38.9-72.6
Cobalt	mg/kg	8	14.6	2.3	14.5	11.6-17.8
Copper	mg/kg	9	37.4	7.3	33.3	29.5-50.2
Iron	mg/kg	9	28089	5203	28500	17000-34000
Lead	mg/kg	8	12.9	14.2	7.7	6.8-48.0
Magnesium	mg/kg	9	17800	4221	20200	11600-22400
Manganese	mg/kg	9	889	1043	510	257-3560
Mercury	mg/kg	7	0.2	0.1	0.2	0.2-0.3
Nickel	mg/kg	9	64.4	13.7	65.7	41.8-91.1
Potassium	mg/kg	4	1335	310	1185	1170-1800
Silver	mg/kg	3	2.5	0.4	2.3	2.3-3.0
Sodium	mg/kg	2	2460	2560	2460	1180-3740
Vanadium	mg/kg	9	55.9	12.8	56.8	27.0-73.5
Zinc	mg/kg	9	70.0	18.5	62.1	56.1-115
pH		9	8.6	1.1	8.9	6.1-9.8

Note: "3 Foot Depth" is comprised of Samples
from 2.1 to 4.0 feet below land surface.

This table does not include duplicate sample results or detections estimated below sample quantitation limits. This table does include all original sample data and data from split samples.

Table 12.4-3
Summary of Detected Chemicals
Site 9 Soil Samples
5 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Acetone	ug/kg	7	18.3	5.5	16.0	13.0-25.0
Methylene chloride	ug/kg	9	17.9	6.9	17.0	9.0-29.0
Trichloroethene	ug/kg	2	27.0	32.0	27.0	11.0-43.0
1,1,2,2-Tetrachloroethane	ug/kg	1	390	0.0	390	390-390
Bis(2-Ethylhexyl)phthalate	ug/kg	1	400	0.0	400	400-400
Aluminum	mg/kg	9	17900	2886	17900	12600-22600
Arsenic	mg/kg	1	6.3	0.0	6.3	6.3-6.3
Barium	mg/kg	9	242	121	222	150-549
Calcium	mg/kg	9	82400	58029	70000	8600-176000
Chromium	mg/kg	9	52.1	8.3	53.6	40.7-67.7
Cobalt	mg/kg	9	12.4	2.5	12.9	10.0-17.4
Copper	mg/kg	9	58.3	86.0	29.5	23.1-287
Iron	mg/kg	9	25733	5999	26200	17200-39100
Lead	mg/kg	8	6.4	0.6	6.6	5.5-7.1
Magnesium	mg/kg	9	14176	4046	14500	9390-19900
Manganese	mg/kg	9	476	360	357	237-1410
Mercury	mg/kg	7	0.2	0.0	0.2	0.2-0.2
Nickel	mg/kg	9	59.5	9.4	59.3	48.8-72.3
Potassium	mg/kg	1	1210	0.0	1210	1210-1210
Silver	mg/kg	2	2.6	0.0	2.6	2.6-2.6
Vanadium	mg/kg	9	53.8	11.4	49.2	43.9-75.6
Zinc	mg/kg	9	68.7	38.3	52.6	45.8-160
pH		9	8.7	0.7	8.2	7.9-9.8

Note: "5 Foot Depth" is comprised of Samples
from 4.1 to 5.5 feet below land surface.

This table does not include duplicate sample results or detections estimated below sample quantitation limits. This table does include all original sample data and data from split samples.

Table 12.4-4
Summary of Detected Chemicals
Site 9 Soil Samples
> 5 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Acetone	ug/kg	1	25.0	0.0	25.0	25.0-25.0
Methylene chloride	ug/kg	1	20.0	0.0	20.0	20.0-20.0
Aluminum	mg/kg	1	23300	0.0	23300	23300-23300
Barium	mg/kg	1	268	0.0	268	268-268
Calcium	mg/kg	1	66200	0.0	66200	66200-66200
Chromium	mg/kg	1	67.7	0.0	67.7	67.7-67.7
Cobalt	mg/kg	1	14.9	0.0	14.9	14.9-14.9
Copper	mg/kg	1	37.3	0.0	37.3	37.3-37.3
Iron	mg/kg	1	31400	0.0	31400	31400-31400
Lead	mg/kg	1	9.8	0.0	9.8	9.8-9.8
Magnesium	mg/kg	1	19400	0.0	19400	19400-19400
Manganese	mg/kg	1	490	0.0	490	490-490
Mercury	mg/kg	1	0.3	0.0	0.3	0.3-0.3
Nickel	mg/kg	1	66.6	0.0	66.6	66.6-66.6
Vanadium	mg/kg	1	57.6	0.0	57.6	57.6-57.6
Zinc	mg/kg	1	58.0	0.0	58.0	58.0-58.0
pH		1	8.6	0.0	8.6	8.6-8.6

Note: "> 5 Foot Depth" is comprised of Samples
from 5.6 feet deep and below.

This table does not include duplicate sample results or detections estimated below sample quantitation limits. This table does include all original sample data and data from split samples.

Table 12.4-5. GC and Tip Results for Site 9 Soil-Gas Survey
NAS Moffett Field

SAMPLE LOCATION	TIP[a] READING (ppm)	GC RESULTS (ppb)										UNKNOWNS[(b)] (sec)	DATE (1988)
		1,1-DCE	1,1-DCA	cis-DCE	1,1,1-TCA	BENZENE	TCE	1,1,2-TCA	TOLUENE	m- and p-XYLENE	o-XYLENE		
TL-2 AS2	25.0	1290		11,280			32,880					408	09-27
TL-2 AS4	24.4			136			259		100			404	09-27
TL-2 AS5	12.5						36		126			406	09-27
TL-2 AS6	10.8						102		18			443	10-20
TL-2 AS10				784			7160						11-29
TL-3 AS2	0.8			137			566					416.5	12-08
TL-3 AS7	0.2						297		346				12-05
TL-3 AS8	0.2											359.35	12-08
TL-3 AS9													12-09
TL-3 AS4	28.6			2080			34,000					406 1254	12-02
TL-4 AS1	10.0								174	96			09-27
TL-4 AS2	13.5		1936	353		85	636	3390	578			40- 343	09-27
TL-4 AS3	158.4	56,700	230,000	34,700		14,300	64,200		14,100			31- 350	09-27
TL-20 AS2	2.6	51.5		148			2680						10-20
TL-20 AS7	3.0	16		336			3220		28			39	11-18
TL-20 AS11	1.0		3811	1524	8088	17							12-18
TL-20 AS10	2.8	12,800	20,100	86,300	16,500	936	2130						11-07
TL-20 AS9	17.2			179			3170						10-28
TL-21 AS1	66.9	1200		24,000			17,500					445	10-21

Table 12.4-5. (Continued)

SAMPLE LOCATION	TIP[a] READING (ppm)	GC RESULTS (ppb)										UNKNOWNS[(b)] (sec)	DATE (1988)
		1,1-DCE	1,1-DCA	cis-DCE	1,1,1-TCA	BENZENE	TCE	1,1,2-TCA	TOLUENE	m- and p-XYLENE	o-XYLENE		
TL-22 AS1	6.7			546			308		25				10-20
TL-23 AS1	3.4	268		604			2990						10-25
TL-23 AS4	216.3	12,900		97,300			941,000					400 570	10-27
TL-23 AS5	84.4	1340		12,400			31,100					394	11-07
TL-23 AS3	46	1940		24,400			261,000					440	10-27
TL-24 AS1	5.8			115			29		132	33	26		10-21
TL-25 AS3	1.1			123			150						12-08
TL-25 AS4	10.6				388	22	63						11-29
TL-30 AS3	2.9	31		242			7440						11-29
TL-26 AS3	2.7	129.1		1040		18			28			39	11-18
TL-26 AS6	20.3	13,000		7080	1580		73,200						11-07
TL-26 AS10	156.3	523	76,600		84,640	1470	32,400	586,000				37.6 209.3 225.3 358.7	11-29
TL-29 AS1	10.6			201			871					408	11-07
TL-29 AS3				495			5060						11-30
TL-31 AS2	22.4						1220						11-07

Table 12.4-5. (Continued)

SAMPLE LOCATION	TIP[a] READING (ppm)	GC RESULTS (ppb)										UNKNOWNS[(b)] (sec)	DATE (1988)
		1,1-DCE	1,1-DCA	cis-DCE	1,1,1-TCA	BENZENE	TCE	1,1,2-TCA	TOLUENE	m- and p-XYLENE	o-XYLENE		
TL-31 AS6	20.2	1214		6360			134,000					356.9	11-29
TL-31 AS7		97		700			19,400					365	11-30
TL-33 AS4	4.4	367		1580			25,700						11-10
TL-34 AS1	12.7	9130	17,900	18,000	12,500		145,000						11-10
TL-35 AS3			1487			20	25		22				12-02
TL-35 AS2													12-07
TL-37 AS4	18.9	1400	39,900		38,200	1200	31,100	580,000	2680			37-582	11-29
TL-37 AS6	6.0			236			477					376	11-30
TL-45 AS2		109		293			16,312		28		28.5	408.3	12-09

Blank indicates none detected.
GC - Gas chromatograph
ppm - Parts per million
ppb - Parts per billion
[a]Total ionizables present in ppm with respect to 100 ppm isobutylene. TIP readings taken at time samples were collected for GC analysis may not match initial TIP readings plotted in Figure 12.4-1.
[b]Peak of unknown compound eluted at time reported in seconds. Ranges (347 to 1151) indicate numerous peaks were present in this time interval.
DCE - Dichloroethene
DCA - Dichloroethane
TCE - Trichloroethene
TCA - Trichloroethane

Table 12.4-6
Summary of Detected Chemicals
Site 9 Water Samples
Aquifer A Monitor Wells

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
1,1,1-Trichloroethane	ug/L	4	57.5	22.8	54.0	34.0-88.0
1,1-Dichloroethane	ug/L	9	43.4	22.4	52.0	5.0-66.0
1,1-Dichloroethylene	ug/L	8	34.9	28.8	31.5	5.0-87.0
1,2-Dichloroethane	ug/L	3	5.5	0.5	5.4	5.0-6.0
1,2-Dichloroethenes(Total)	ug/L	22	167	243	52.5	6.0-900
Acetone	ug/L	10	606	1218	23.0	10.0-3200
Chloroform	ug/L	1	290	0.0	290	290-290
Methylene chloride	ug/L	46	359	1097	24.5	5.0-6800
Toluene	ug/L	1	26.0	0.0	26.0	26.0-26.0
Trichloroethene	ug/L	38	4487	9239	425	30.0-36000
4-Nitrophenol	ug/L	1	60.0	0.0	60.0	60.0-60.0
Bis(2-Ethylhexyl)phthalate	ug/L	1	27.0	0.0	27.0	27.0-27.0
Aluminum	ug/L	3	363	138	427	205-458
Antimony	ug/L	3	90.0	34.3	76.1	64.8-129
Calcium	ug/L	31	135629	26087	146000	76300-160000
Iron	ug/L	17	885	844	692	106-2240
Magnesium	ug/L	31	49665	13373	48600	31800-90000
Manganese	ug/L	28	195	196	81.4	16.2-762
Potassium	ug/L	6	8983	4529	6750	5110-15400
Selenium	ug/L	9	10.0	3.6	10.9	5.0-14.1
Sodium	ug/L	31	43861	12875	38300	31300-77000
Vanadium	ug/L	1	51.1	0.0	51.1	51.1-51.1
Bicarbonate	mg/L	25	336	79.3	300	260-590
Chloride	mg/L	25	44.0	11.7	44.0	29.0-78.0
Fluoride	mg/L	1	2.8	0.0	2.8	2.8-2.8
Nitrate	mg/L	13	2.6	1.8	2.1	0.1-7.0
Nitrate (as N)	mg/L	8	1.5	0.7	1.7	0.2-2.3
Sulfate	mg/L	25	292	176	280	90.0-1020
TDS	mg/L	25	868	279	830	520-1960

Note: "Aquifer A Monitor Wells" combine A1 & A2 subaquifers

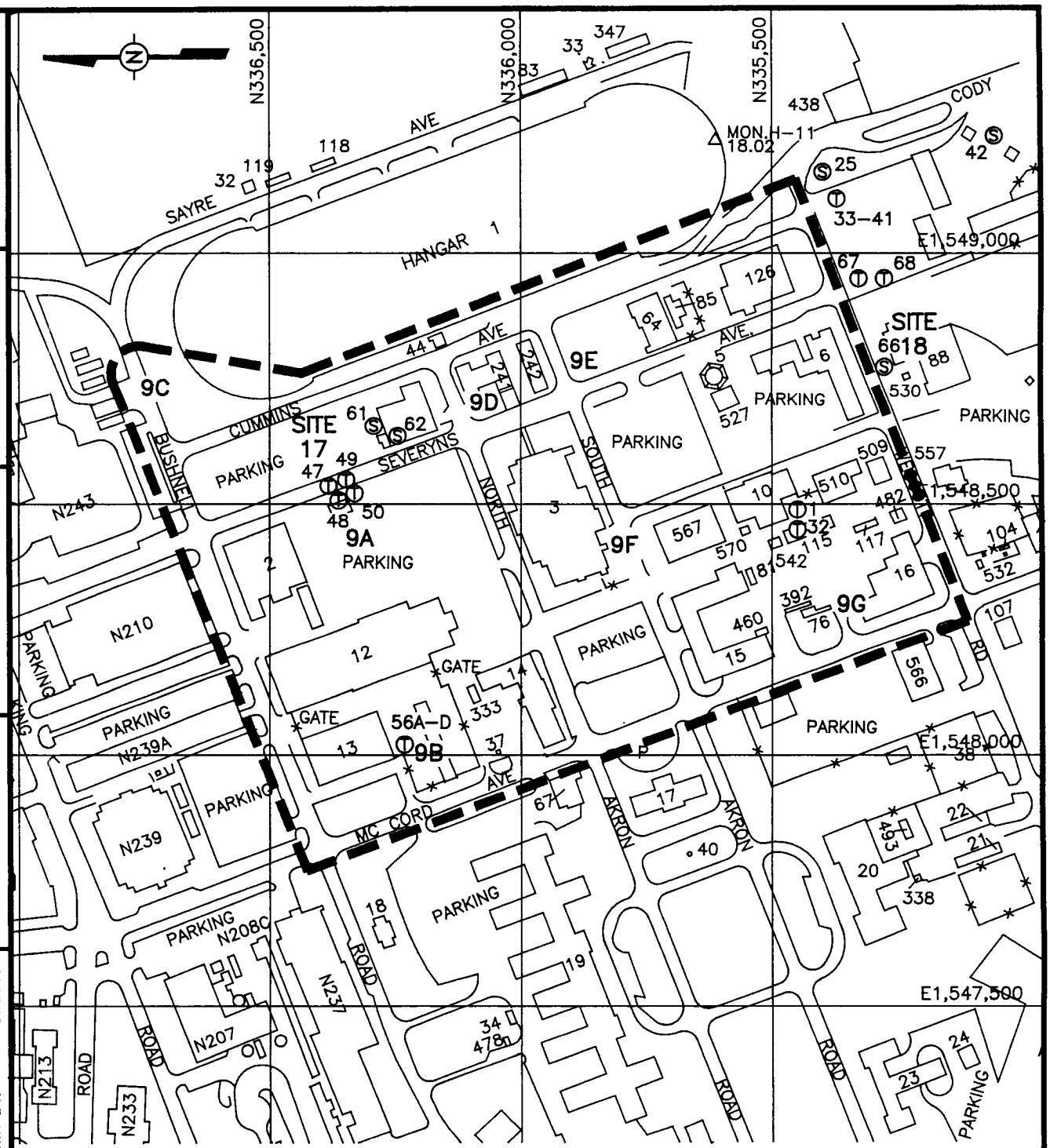
This table does not include duplicate sample results or detections estimated below sample quantitation limits. This table does include all original sample data and data from split samples.

Table 12.4-7
Summary of Detected Chemicals
Site 9 Water Samples
Aquifer B Monitor Wells

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Acetone	ug/L	5	22.6	6.6	21.0	16.0-30.0
Chloroform	ug/L	1	34.0	0.0	34.0	34.0-34.0
Methylene chloride	ug/L	22	12.3	6.2	12.0	6.0-30.0
Trichloroethene	ug/L	2	21.8	28.4	21.8	7.6-36.0
Bis(2-Ethylhexyl)phthalate	ug/L	3	33.0	13.5	37.0	18.0-44.0
Aluminum	ug/L	2	581	519	581	321-840
Arsenic	ug/L	6	13.0	1.6	12.9	10.6-15.3
Calcium	ug/L	24	39333	6044	38400	31500-49400
Iron	ug/L	7	350	265	316	100-893
Magnesium	ug/L	24	16392	2532	16850	11600-20900
Manganese	ug/L	24	108	29.5	115	59.8-156
Potassium	ug/L	1	10400	0.0	10400	10400-10400
Sodium	ug/L	24	47721	5965	48850	38700-60900
Bicarbonate	mg/L	18	242	72.6	230	210-530
Carbonate	mg/L	1	14.0	0.0	14.0	14.0-14.0
Chloride	mg/L	18	18.1	5.1	18.0	2.0-27.0
Fluoride	mg/L	3	6.5	10.0	0.7	0.7-18.0
Sulfate	mg/L	18	24.2	12.4	21.0	13.0-58.0
TDS	mg/L	18	297	40.7	300	200-390

Note: "Aquifer B Monitor Wells" combine
all applicable B subaquifers.

This table does not include duplicate sample results or detections estimated below sample quantitation limits. This table does include all original sample data and data from split samples.



0 300 600 FEET

LEGEND

- SITE 9 BOUNDARY
- Ⓢ SUMP
- Ⓣ TANK
- 9A SUSPECTED OR KNOWN SOURCE AREA

SOURCE: AERO-GEODETIC CORP.
JOB NO. 811822 3/6/81

FIGURE 12.1–1

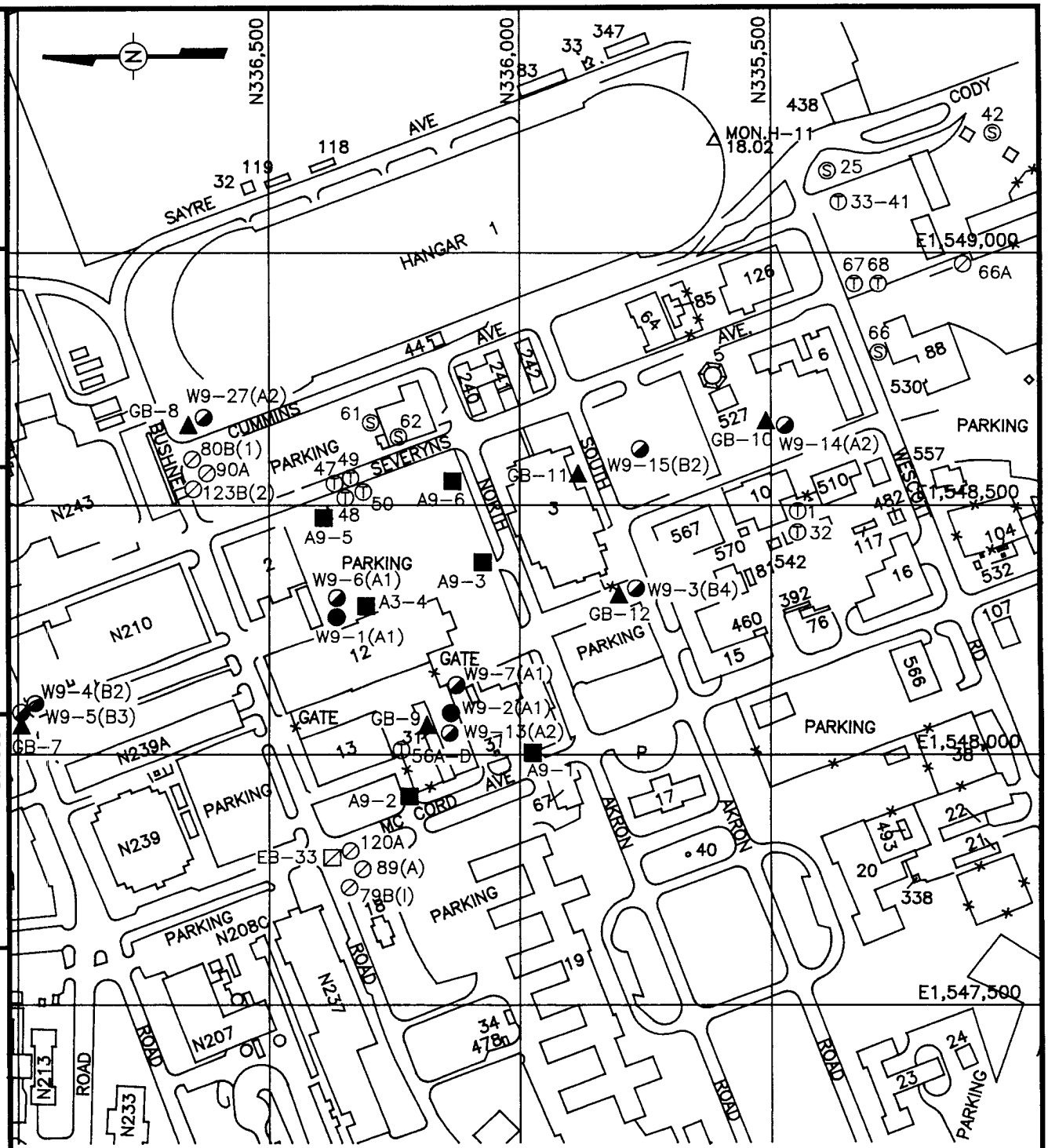
SITE 9
OLD FUEL FARM

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

STARTING DATE: 3/12/90	DATE LAST REV.:	DRAFT. CHCK. BY:	INITIATOR: K. BRADLEY
DRAWN BY: D.HIGGS	DRAWN BY:	ENGR. CHCK BY:	PROJ. MGR.: K. BRADLEY
			DWG. NO.: 409700–A–G26
			PROJ. NO.: 409700

\DRAWINGS\409700–R



LEGEND

- IT WELL
- ESA WELL
- MEW WELL PRE 7/87
- IT GEOPHYSICAL BORING
- ESA SOIL BORING
- MEW BORING PRE 7/87
- SUMP
- TANK

0 300 600 FEET

FIGURE 12.2-1

SITE 9
MONITORING WELL AND
BORING LOCATIONS

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

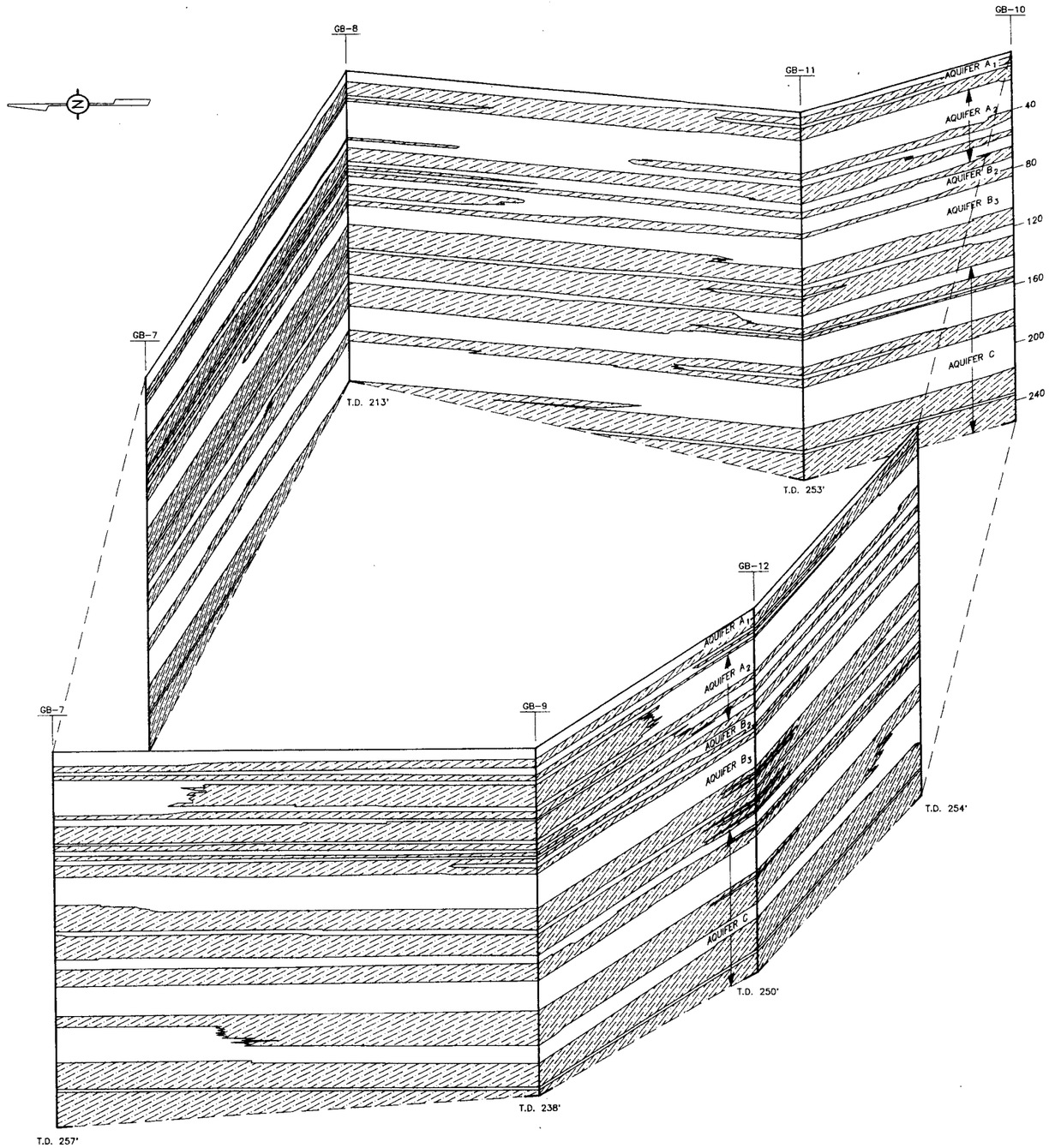
INTERNATIONAL TECHNOLOGY CORPORATION

SOURCE: AERO-GEODETIC CORP.
JOB NO. 811822 3/16/81

STARTING DATE: 3/12/90	DATE LAST REV.: 7/26/90	DRAFT. CHCK. BY:	INITIATOR: K. BRADLEY	DWG. NO.: 409700-A-G65	
DRAWN BY: D.HIGGS	DRAWN BY: D.HIGGS	ENGR. CHCK BY:	PROJ. MGR.: K. BRADLEY	PROJ. NO.: 409700	

\DRAWINGS\409700-S

STARTING DATE: 5/15/90	DATE LAST REV.: 7/25/90	INITIATOR: P. SMITH	DRAWING NO.:409700-D-74
DRAWN BY: D. HIGGS	DRAWN BY: D. HIGGS	PROJ. MGR: K. BRADLEY	PROJ. NO: 409700



HORIZONTAL SCALE:
0 100 200 FEET

VERTICAL SCALE:
0 40 80 FEET

VERTICAL EXAGGERATION: 2.5X

LOCATION MAP

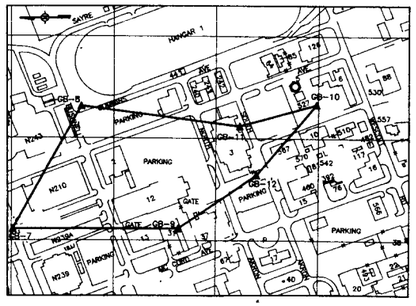


FIGURE 12.3-1

SITE 9
FENCE DIAGRAM

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

\IMAGES\FENCE22D

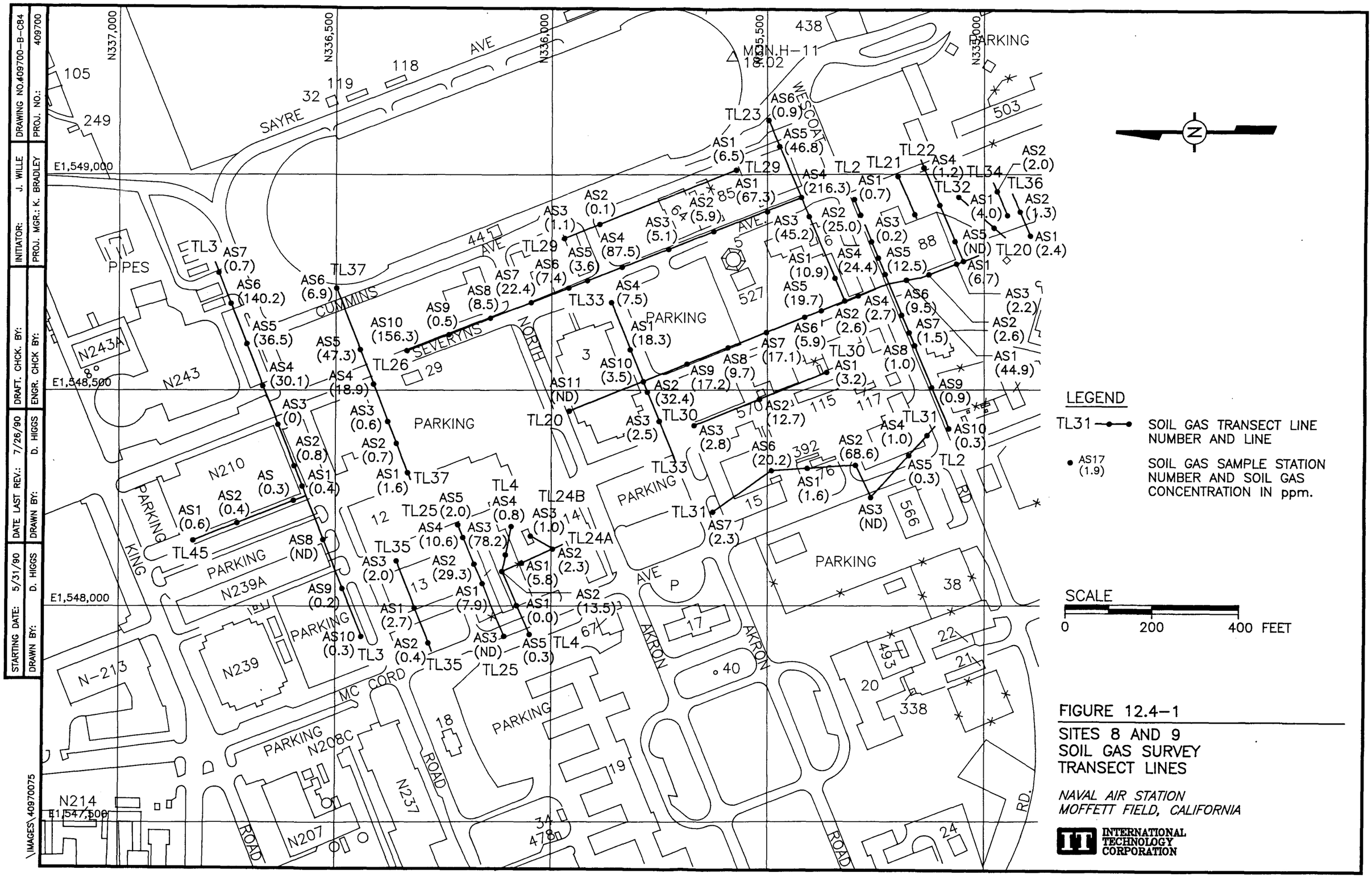


FIGURE 12.4–1

SITES 8 AND 9
SOIL GAS SURVEY
TRANSECT LINES

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

STARTING DATE: 5/31/90	DATE LAST REV.: 7/26/90	DRAFT. CHCK. BY:	DRAWING NO.409700-B-C84
DRAWN BY: D. HIGGS	DRAWN BY: D. HIGGS	ENGR. CHCK BY:	PROJ. NO.: 409700
		PROJ. MGR.: K. BRADLEY	INITIATOR: J. WILLE

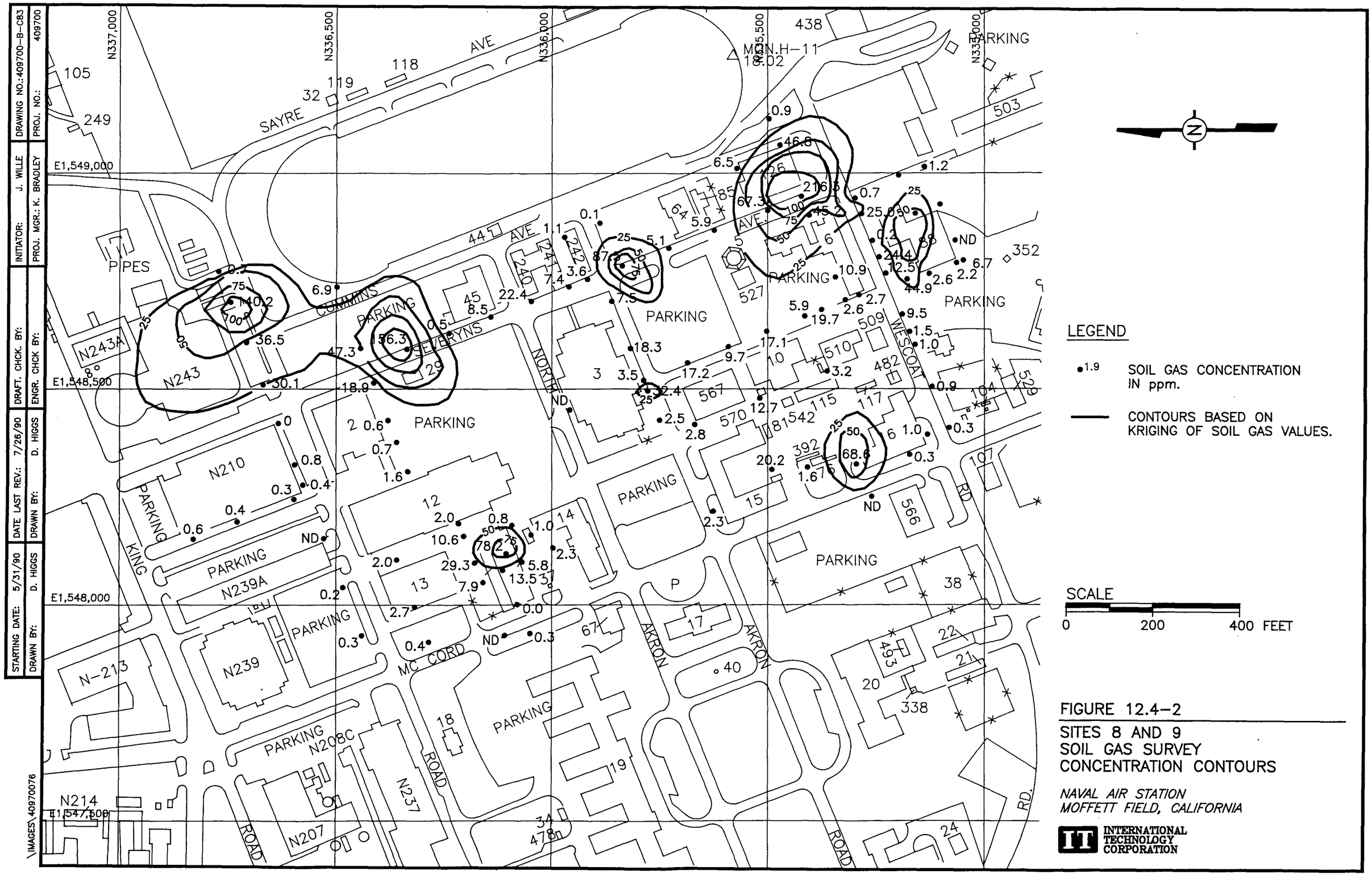


FIGURE 12.4-2

SITES 8 AND 9
SOIL GAS SURVEY
CONCENTRATION CONTOURS

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

STARTING DATE: 5/31/90	DRAFT. CHCK. BY:	INITIATOR: J. WILLE	DRAWING NO.:409700-B-C83
DRAWN BY: D. HIGGS	ENGR. CHCK BY:	PROJ. MGR.: K. BRADLEY	PROJ. NO.: 409700
DATE LAST REV.: 7/26/90	DRAWN BY: D. HIGGS		

\IMAGES\40970076

N00296.000910
MOFFETT FIELD
SSIC NO. 5090.3

SECTION 13.0

PHASE I CHARACTERIZATION REPORT

DATED 01 AUGUST 1990

Table 13.4-1
Summary of Detected Chemicals
Site 10 Soil Samples
1 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Acetone	ug/kg	1	16.0	0.0	16.0	16.0-16.0
Methylene chloride	ug/kg	1	12.0	0.0	12.0	12.0-12.0
Aluminum	mg/kg	1	24500	0.0	24500	24500-24500
Barium	mg/kg	1	255	0.0	255	255-255
Calcium	mg/kg	1	138000	0.0	138000	138000-138000
Chromium	mg/kg	1	58.0	0.0	58.0	58.0-58.0
Cobalt	mg/kg	1	11.8	0.0	11.8	11.8-11.8
Copper	mg/kg	1	54.2	0.0	54.2	54.2-54.2
Iron	mg/kg	1	25400	0.0	25400	25400-25400
Lead	mg/kg	1	7.8	0.0	7.8	7.8-7.8
Magnesium	mg/kg	1	17800	0.0	17800	17800-17800
Manganese	mg/kg	1	434	0.0	434	434-434
Nickel	mg/kg	1	57.7	0.0	57.7	57.7-57.7
Potassium	mg/kg	1	1030	0.0	1030	1030-1030
Vanadium	mg/kg	1	49.0	0.0	49.0	49.0-49.0
Zinc	mg/kg	1	78.1	0.0	78.1	78.1-78.1

Note: "1 Foot Depth" is comprised of Samples
from 0.0 to 2.0 feet below land surface.

This table does not include duplicate sample results or detections estimated below sample quantitation limits. This table does include all original sample data and data from split samples.

Table 13.4-2
Summary of Detected Chemicals
Site 10 Soil Samples
3 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Methylene chloride	ug/kg	2	15.0	10.0	15.0	10.0-20.0
Aluminum	mg/kg	2	25250	8100	25250	21200-29300
Barium	mg/kg	2	173	83.0	173	131-214
Beryllium	mg/kg	1	1.2	0.0	1.2	1.2-1.2
Calcium	mg/kg	2	66650	56900	66650	38200-95100
Chromium	mg/kg	2	55.5	34.1	55.5	38.4-72.5
Cobalt	mg/kg	2	12.9	0.7	12.9	12.5-13.2
Copper	mg/kg	2	48.1	27.3	48.1	34.4-61.7
Iron	mg/kg	2	27500	4400	27500	25300-29700
Lead	mg/kg	2	9.3	1.6	9.3	8.5-10.1
Magnesium	mg/kg	2	18550	16300	18550	10400-26700
Manganese	mg/kg	2	349	100	349	299-399
Nickel	mg/kg	2	52.9	22.8	52.9	41.5-64.3
Potassium	mg/kg	1	2110	0.0	2110	2110-2110
Sodium	mg/kg	1	1520	0.0	1520	1520-1520
Vanadium	mg/kg	2	73.3	6.5	73.3	70.1-76.6
Zinc	mg/kg	2	65.2	4.7	65.2	62.8-67.5
TPHC	mg/kg	1	170	0.0	170	170-170

Note: "3 Foot Depth" is comprised of Samples
from 2.1 to 4.0 feet below land surface.

This table does not include duplicate sample results or detections estimated below sample quantitation limits. This table does include all original sample data and data from split samples.

Table 13.4-3
Summary of Detected Chemicals
Site 10 Soil Samples
5 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Acetone	ug/kg	1	13.0	0.0	13.0	13.0-13.0
Methylene chloride	ug/kg	1	22.0	0.0	22.0	22.0-22.0
Aluminum	mg/kg	1	25400	0.0	25400	25400-25400
Barium	mg/kg	1	197	0.0	197	197-197
Beryllium	mg/kg	1	1.6	0.0	1.6	1.6-1.6
Calcium	mg/kg	1	54500	0.0	54500	54500-54500
Chromium	mg/kg	1	50.3	0.0	50.3	50.3-50.3
Cobalt	mg/kg	1	15.2	0.0	15.2	15.2-15.2
Copper	mg/kg	1	67.0	0.0	67.0	67.0-67.0
Iron	mg/kg	1	30400	0.0	30400	30400-30400
Lead	mg/kg	1	8.7	0.0	8.7	8.7-8.7
Magnesium	mg/kg	1	15300	0.0	15300	15300-15300
Manganese	mg/kg	1	474	0.0	474	474-474
Nickel	mg/kg	1	52.0	0.0	52.0	52.0-52.0
Sodium	mg/kg	1	2130	0.0	2130	2130-2130
Vanadium	mg/kg	1	75.9	0.0	75.9	75.9-75.9
Zinc	mg/kg	1	77.5	0.0	77.5	77.5-77.5

Note: "5 Foot Depth" is comprised of Samples
from 4.1 to 5.5 feet below land surface.

This table does not include duplicate sample results or detections estimated below sample quantitation limits. This table does include all original sample data and data from split samples.

Table 13.4-4
Summary of Detected Chemicals
Site 10 Soil Samples
> 5 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Acetone	ug/kg	2	35.5	43.0	35.5	14.0-57.0
Methylene chloride	ug/kg	3	19.7	5.5	17.0	16.0-26.0
Bis(2-Ethylhexyl)phthalate	ug/kg	1	730	0.0	730	730-730
Aluminum	mg/kg	3	11633	1415	12400	10000-12500
Arsenic	mg/kg	2	2.6	0.0	2.6	2.6-2.6
Barium	mg/kg	3	330	367	137	99.9-754
Beryllium	mg/kg	2	1.2	0.0	1.2	1.2-1.2
Calcium	mg/kg	3	39967	46928	15000	10800-94100
Chromium	mg/kg	3	36.6	5.4	38.6	30.5-40.7
Cobalt	mg/kg	2	11.8	3.4	11.8	10.1-13.5
Copper	mg/kg	3	27.0	0.6	26.9	26.5-27.6
Iron	mg/kg	3	21700	2651	21100	19400-24600
Lead	mg/kg	3	5.4	1.0	5.8	4.3-6.2
Magnesium	mg/kg	3	11367	3963	11000	7600-15500
Manganese	mg/kg	3	471	141	546	309-559
Mercury	mg/kg	1	0.8	0.0	0.8	0.8-0.8
Nickel	mg/kg	3	47.2	9.1	44.5	39.7-57.3
Vanadium	mg/kg	3	49.5	4.6	47.3	46.3-54.8
Zinc	mg/kg	3	44.5	4.4	44.3	40.2-49.0

Note: "> 5 Foot Depth" is comprised of Samples
from 5.6 feet deep and below.

This table does not include duplicate sample results or detections estimated below sample quantitation limits. This table does include all original sample data and data from split samples.

Table 13.4-5
Summary of Detected Chemicals
Site 10 Water Samples
Aquifer A Monitor Wells

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Acetone	ug/L	2	11.0	0.0	11.0	11.0-11.0
Methylene chloride	ug/L	6	9.2	3.0	9.5	6.0-14.0
Bis(2-Ethylhexyl)phthalate	ug/L	1	11.0	0.0	11.0	11.0-11.0
Antimony	ug/L	3	197	14.0	197	183-211
Calcium	ug/L	6	209500	24197	218000	170000-234000
Iron	ug/L	5	805	793	463	246-2190
Magnesium	ug/L	6	145833	15092	143000	124000-165000
Manganese	ug/L	6	174	39.8	173	131-245
Silver	ug/L	1	33.1	0.0	33.1	33.1-33.1
Sodium	ug/L	6	65183	2472	65650	61300-68500
Bicarbonate	mg/L	8	373	60.4	390	250-430
Chloride	mg/L	8	47.5	21.8	49.0	17.0-80.0
Nitrate	mg/L	5	0.9	1.0	0.2	0.2-2.1
Sulfate	mg/L	8	566	361	665	21.0-940
TDS	mg/L	8	1259	594	1460	340-1800

Note: "Aquifer A Monitor Wells" combine A1 & A2 subaquifers

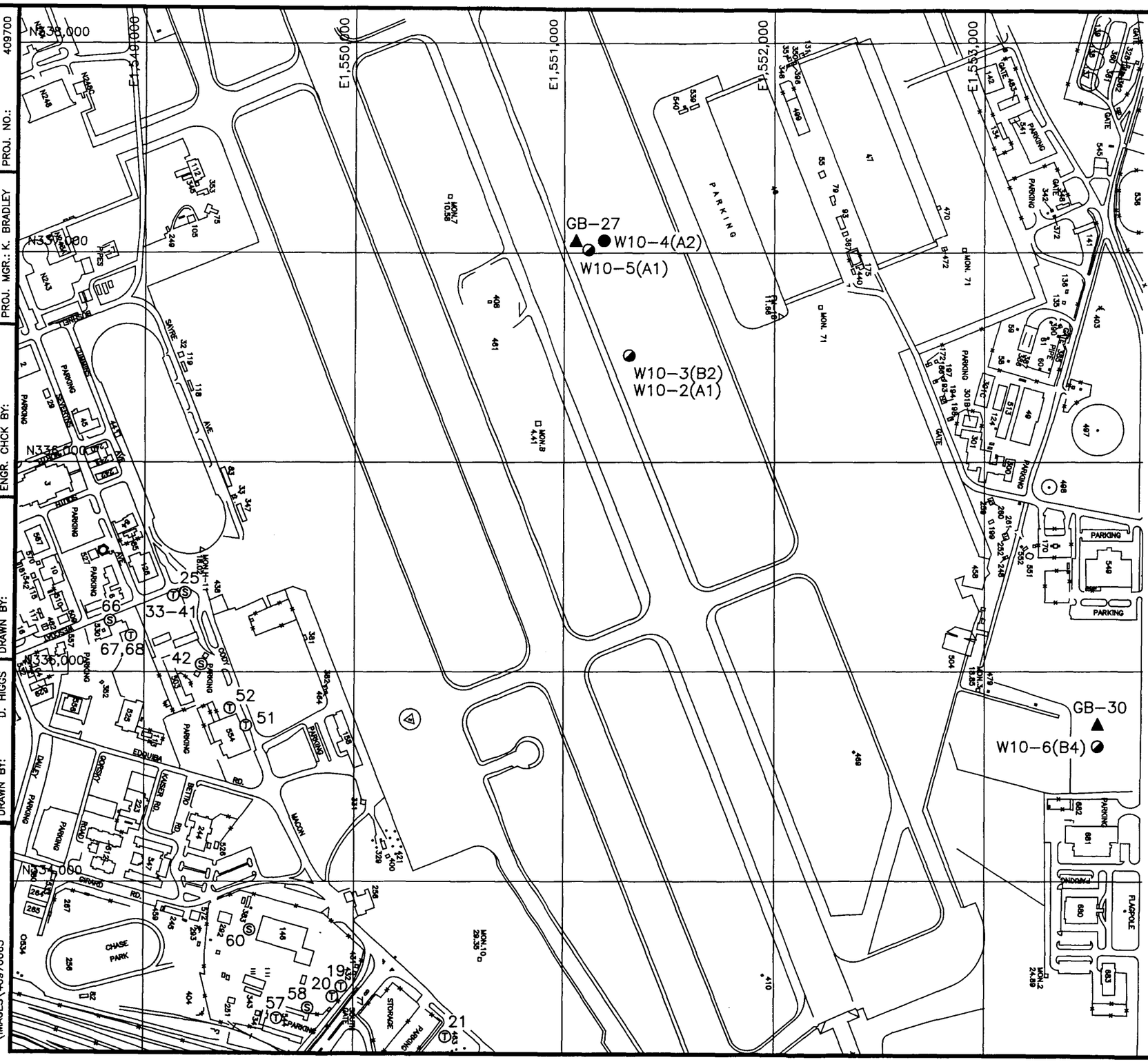
This table does not include duplicate sample results or detections estimated below sample quantitation limits. This table does include all original sample data and data from split samples.

Table 13.4-6
Summary of Detected Chemicals
Site 10 Water Samples
Aquifer B Monitor Wells

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Acetone	ug/L	3	12.0	3.5	10.0	10.0-16.0
Methylene chloride	ug/L	5	10.6	5.5	9.0	6.0-20.0
Calcium	ug/L	6	27517	668	27550	26500-28500
Magnesium	ug/L	6	10867	647	10650	10300-11900
Manganese	ug/L	6	58.3	4.6	57.4	53.0-66.1
Mercury	ug/L	1	1.4	0.0	1.4	1.4-1.4
Nickel	ug/L	1	13.2	0.0	13.2	13.2-13.2
Sodium	ug/L	6	57717	1470	57450	56400-60400
Bicarbonate	mg/L	6	208	23.2	200	190-250
Chloride	mg/L	6	15.8	3.6	16.5	10.0-20.0
Nitrate	mg/L	1	1.9	0.0	1.9	1.9-1.9
Sulfate	mg/L	6	18.7	2.4	19.0	16.0-22.0
TDS	mg/L	6	263	57.9	285	150-310
TPHC	mg/L	1	372	0.0	372	372-372

Note: "Aquifer B Monitor Wells" combine
all applicable B subaquifers.

This table does not include duplicate sample results or detections estimated below sample quantitation limits. This table does include all original sample data and data from split samples.



STARTING DATE: 3/23/90	DATE LAST REV.:	DRAFT. CHCK. BY:	INITIATOR: J. WILLE
DRAWN BY: D. HIGGS	DRAWN BY:	ENGR. CHCK BY:	PROJ. MGR.: K. BRADLEY
			DRAWING NO.#09700-B-C64
			PROJ. NO.: 409700

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N

LEGEND

- IT WELL
- ESA WELL
- IT GEOPHYSICAL BORING
- TANK
- SUMP

SCALE

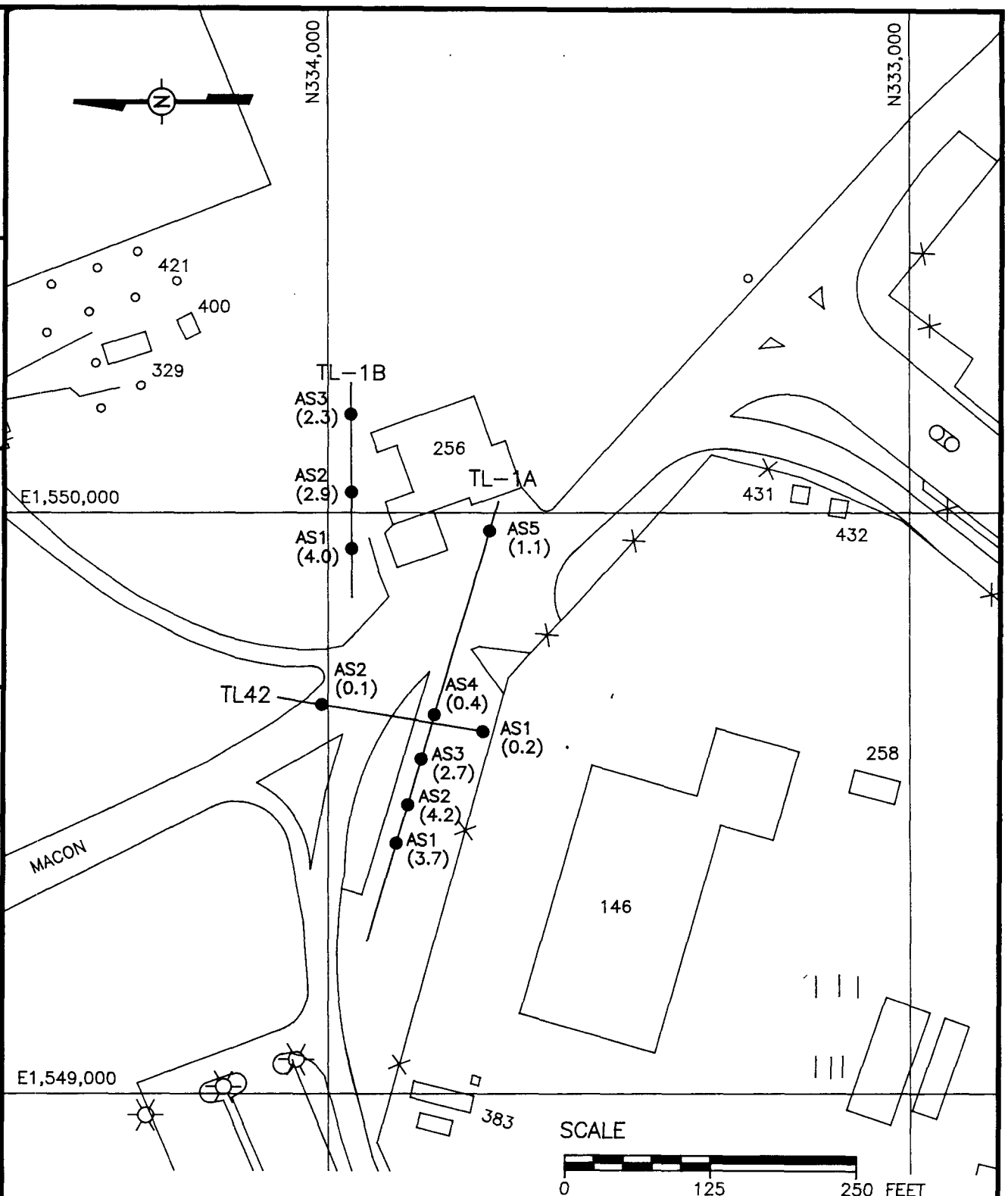
0 500 1000 FEET

FIGURE 13.1-1

SITE 10
MONITORING WELL AND BORING LOCATIONS

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION



LEGEND

SOIL GAS TRANSECT LINE AND LINE NUMBER

AS1 (3.7) — SOIL GAS SAMPLE STATION NUMBER AND SOIL GAS CONCENTRATION IN ppm.

SOURCE: AERO-GEODETIC CORP.
JOB NO. 811822 3/16/81

FIGURE 13.2-1

SITE 10
SOIL-GAS SURVEY TRANSECT LINES

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

DWG. NO.: 409700-A-G39	
PROJ. NO.: 409700	
INITIATOR: K. BRADLEY	
PROJ. MGR.: K. BRADLEY	
DRAFT. CHCK. BY:	
ENGR. CHCK BY:	
DATE LAST REV.:	
DRAWN BY:	
STARTING DATE: 5/23/90	
DRAWN BY: D.HIGGS	

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N00296.000910
MOFFETT FIELD
SSIC NO. 5090.3

SECTION 14.0

PHASE I CHARACTERIZATION REPORT

DATED 01 AUGUST 1990

Table 14.4-1
Summary of Detected Chemicals
Site 11 Soil Samples
1 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Benzo(a)anthracene	ug/kg	1	800	0.0	800	800-800
Benzo(a)pyrene	ug/kg	1	640	0.0	640	640-640
Benzo(b)fluoranthene	ug/kg	1	1100	0.0	1100	1100-1100
Bis(2-Ethylhexyl)phthalate	ug/kg	2	715	470	715	480-950
Chrysene	ug/kg	1	860	0.0	860	860-860
Fluoranthene	ug/kg	1	1900	0.0	1900	1900-1900
Phenanthrene	ug/kg	1	1800	0.0	1800	1800-1800
Pyrene	ug/kg	1	1600	0.0	1600	1600-1600
Aluminum	mg/kg	29	19097	4037	20100	9270-28400
Antimony	mg/kg	8	15.0	2.9	14.5	11.0-21.0
Arsenic	mg/kg	23	6.5	4.7	5.4	2.8-25.2
Barium	mg/kg	29	237	253	174	48.7-1470
Beryllium	mg/kg	6	2.5	1.6	1.6	1.4-4.8
Cadmium	mg/kg	8	1.8	0.5	1.8	1.1-2.8
Calcium	mg/kg	29	33720	27583	25100	9570-154000
Chromium	mg/kg	29	66.1	13.7	65.2	32.8-89.3
Cobalt	mg/kg	28	16.4	4.9	15.3	9.4-36.0
Copper	mg/kg	29	48.8	18.8	44.5	26.8-109
Iron	mg/kg	29	31497	9247	29000	15000-59300
Lead	mg/kg	29	29.0	19.9	22.6	2.4-79.5
Magnesium	mg/kg	29	15535	4910	14200	7240-29100
Manganese	mg/kg	29	540	115	558	315-812
Mercury	mg/kg	15	0.3	0.3	0.2	0.2-1.4
Nickel	mg/kg	29	68.3	11.6	66.4	36.3-90.6
Potassium	mg/kg	26	2127	689	1890	1340-3640
Silver	mg/kg	2	2.9	0.7	2.9	2.5-3.2
Sodium	mg/kg	12	1701	953	1635	368-4020
Vanadium	mg/kg	29	66.6	21.7	64.5	31.3-152
Zinc	mg/kg	29	85.3	21.2	81.1	56.6-159
Oil and Grease	mg/kg	25	757	2065	48.0	2.0-9600
TPHC	mg/kg	1	130	0.0	130	130-130
pH		29	7.7	0.8	7.6	6.0-9.4

Note: "1 Foot Depth" is comprised of Samples
from 0.0 to 2.0 feet below land surface.

This table does not include duplicate sample results or detections estimated below sample quantitation limits. This table does include all original sample data and data from split samples.

Table 14.4-2
Summary of Detected Chemicals
Site 11 Soil Samples
3 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Methylene chloride	ug/kg	2	10.0	2.0	10.0	9.0-11.0
Aluminum	mg/kg	2	19050	1900	19050	18100-20000
Arsenic	mg/kg	1	2.2	0.0	2.2	2.2-2.2
Barium	mg/kg	2	143	48.0	143	119-167
Beryllium	mg/kg	1	1.3	0.0	1.3	1.3-1.3
Calcium	mg/kg	2	17050	7500	17050	13300-20800
Chromium	mg/kg	2	61.3	5.2	61.3	58.7-63.9
Cobalt	mg/kg	2	16.0	6.0	16.0	13.0-19.0
Copper	mg/kg	2	36.6	13.3	36.6	29.9-43.2
Iron	mg/kg	2	29700	6400	29700	26500-32900
Lead	mg/kg	2	11.6	2.5	11.6	10.3-12.8
Magnesium	mg/kg	2	14650	300	14650	14500-14800
Manganese	mg/kg	2	499	172	499	413-585
Nickel	mg/kg	2	57.8	6.8	57.8	54.4-61.2
Potassium	mg/kg	2	1340	500	1340	1090-1590
Vanadium	mg/kg	2	63.6	29.5	63.6	48.8-78.3
Zinc	mg/kg	2	59.7	3.4	59.7	58.0-61.4
pH		2	5.4	0.3	5.4	5.2-5.5

Note: "3 Foot Depth" is comprised of Samples
from 2.1 to 4.0 feet below land surface.

This table does not include duplicate sample results or detections estimated below sample quantitation limits. This table does include all original sample data and data from split samples.

Table 14.4-3
Summary of Detected Chemicals
Site 11 Soil Samples
5 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
1,1,1-Trichloroethane	ug/kg	1	16.0	0.0	16.0	16.0-16.0
2-Butanone	ug/kg	1	15.0	0.0	15.0	15.0-15.0
Acetone	ug/kg	13	69.6	59.0	55.0	12.0-200
Methylene chloride	ug/kg	17	39.7	18.2	38.0	17.0-80.0
Bis(2-Ethylhexyl)phthalate	ug/kg	2	2560	3880	2560	620-4500
Aluminum	mg/kg	19	18942	3320	19600	11600-24000
Arsenic	mg/kg	17	6.8	2.7	6.5	2.9-12.2
Barium	mg/kg	19	167	48.9	161	99.5-297
Beryllium	mg/kg	4	3.3	2.2	3.3	1.3-5.5
Cadmium	mg/kg	5	2.5	1.6	1.7	1.3-5.1
Calcium	mg/kg	19	33026	15868	29900	4700-67400
Chromium	mg/kg	19	67.2	15.9	67.5	38.1-102
Cobalt	mg/kg	17	16.6	2.6	16.1	10.4-20.5
Copper	mg/kg	19	46.8	11.8	46.6	31.3-82.1
Iron	mg/kg	19	30916	5092	31600	19300-37700
Lead	mg/kg	19	29.2	26.1	21.8	8.0-126
Magnesium	mg/kg	19	15916	3341	15300	10100-23200
Manganese	mg/kg	20	552	146	540	321-957
Mercury	mg/kg	9	0.4	0.3	0.4	0.2-1.1
Nickel	mg/kg	19	68.4	14.8	67.8	43.9-90.9
Potassium	mg/kg	17	2141	683	2050	1050-3640
Sodium	mg/kg	10	3447	2461	2705	490-8780
Vanadium	mg/kg	19	64.7	12.8	63.2	38.8-84.6
Zinc	mg/kg	19	87.6	24.8	86.0	52.8-148
Oil and Grease	mg/kg	14	84.8	156	21.5	2.0-530
TPHC	mg/kg	1	300	0.0	300	300-300
pH		19	7.8	0.5	7.8	7.0-8.9

Note: "5 Foot Depth" is comprised of Samples
from 4.1 to 5.5 feet below land surface.

This table does not include duplicate sample results or detections estimated below sample quantitation limits. This table does include all original sample data and data from split samples.

Table 14.4-4
Summary of Detected Chemicals
Site 11 Soil Samples
> 5 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Aluminum	mg/kg	1	16800	0.0	16800	16800-16800
Arsenic	mg/kg	1	2.3	0.0	2.3	2.3-2.3
Barium	mg/kg	1	99.9	0.0	99.9	99.9-99.9
Beryllium	mg/kg	1	1.3	0.0	1.3	1.3-1.3
Calcium	mg/kg	1	11900	0.0	11900	11900-11900
Chromium	mg/kg	1	59.6	0.0	59.6	59.6-59.6
Cobalt	mg/kg	1	12.2	0.0	12.2	12.2-12.2
Copper	mg/kg	1	39.7	0.0	39.7	39.7-39.7
Iron	mg/kg	1	26200	0.0	26200	26200-26200
Lead	mg/kg	1	6.1	0.0	6.1	6.1-6.1
Magnesium	mg/kg	1	11100	0.0	11100	11100-11100
Manganese	mg/kg	1	375	0.0	375	375-375
Nickel	mg/kg	1	65.2	0.0	65.2	65.2-65.2
Potassium	mg/kg	1	2400	0.0	2400	2400-2400
Sodium	mg/kg	1	3580	0.0	3580	3580-3580
Vanadium	mg/kg	1	51.7	0.0	51.7	51.7-51.7
Zinc	mg/kg	1	85.0	0.0	85.0	85.0-85.0
Oil and Grease	mg/kg	1	30.0	0.0	30.0	30.0-30.0
pH		1	7.0	0.0	7.0	7.0-7.0

Note: "> 5 Foot Depth" is comprised of Samples
from 5.6 feet deep and below.

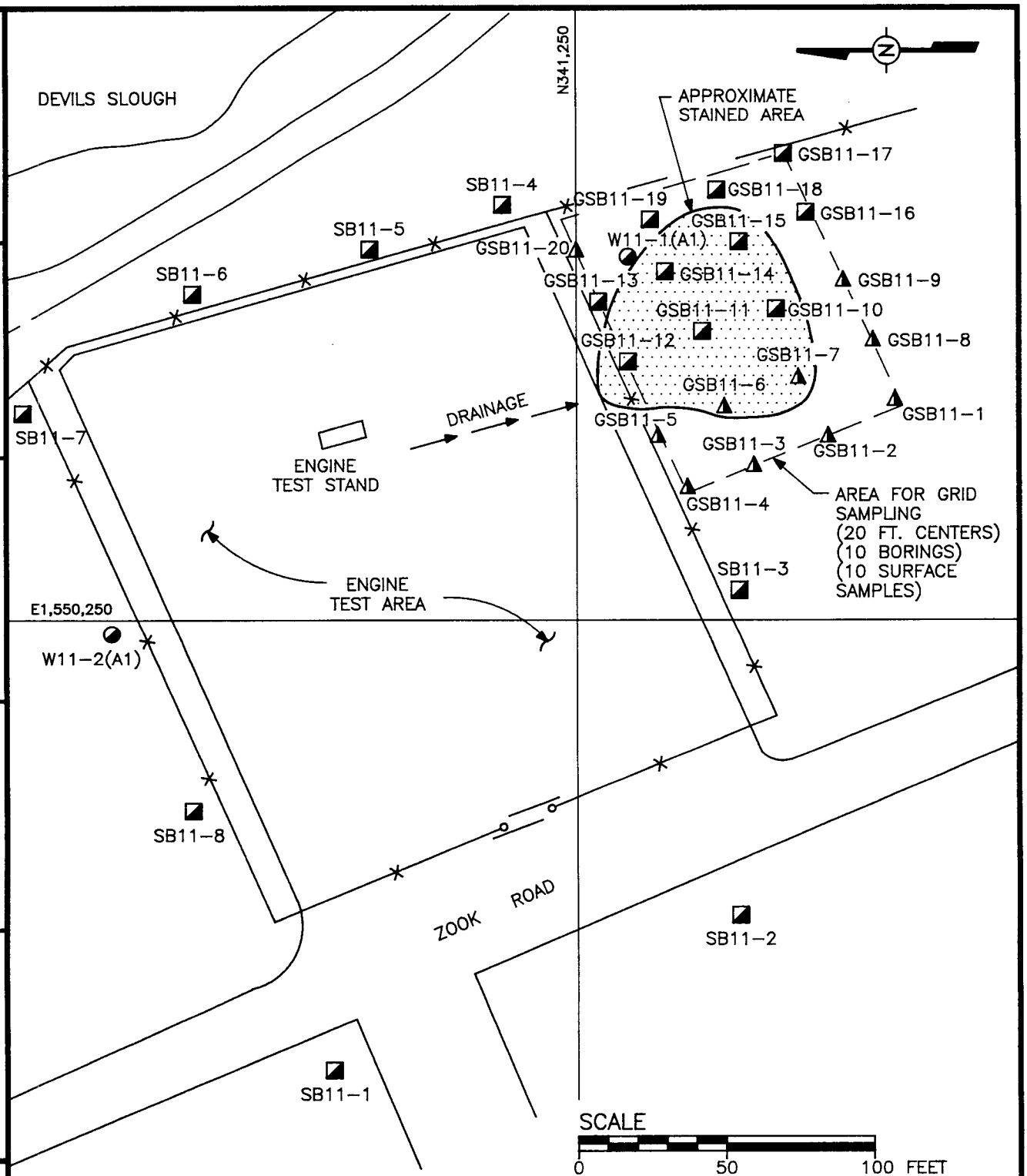
This table does not include duplicate sample results or detections estimated below sample quantitation limits. This table does include all original sample data and data from split samples.

Table 14.4-5
Summary of Detected Chemicals
Site 11 Water Samples
Aquifer A Monitor Wells

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Methylene chloride	ug/L	6	19.5	22.8	10.0	6.0-65.0
Aluminum	ug/L	4	716	698	464	205-1730
Antimony	ug/L	1	1340	0.0	1340	1340-1340
Barium	ug/L	4	352	30.8	340	330-397
Cadmium	ug/L	5	136	119	108	23.2-288
Calcium	ug/L	11	665727	47498	679000	600000-742000
Chromium	ug/L	2	18.0	1.8	18.0	17.1-18.9
Copper	ug/L	3	93.4	101	40.1	30.1-210
Iron	ug/L	10	10132	7304	9990	1770-24700
Lead	ug/L	1	26.0	0.0	26.0	26.0-26.0
Magnesium	ug/L	12	1678333	112317	1670000	1420000-1890000
Manganese	ug/L	12	7992	1034	7835	6720-10100
Mercury	ug/L	3	0.4	0.2	0.3	0.2-0.6
Nickel	ug/L	1	454	0.0	454	454-454
Potassium	ug/L	11	287091	79094	283000	199000-479000
Silver	ug/L	4	215	334	58.3	28.1-714
Sodium	ug/L	12	12358333	768065	12450000	10700000-13500000
Thallium	ug/L	1	60.0	0.0	60.0	60.0-60.0
Vanadium	ug/L	1	390	0.0	390	390-390
Zinc	ug/L	4	300	182	345	40.8-469
Bicarbonate	mg/L	8	886	122	890	760-1000
Chloride	mg/L	8	32463	23758	26000	9800-89000
Nitrate	mg/L	1	15.0	0.0	15.0	15.0-15.0
Sulfate	mg/L	8	2484	188	2500	2140-2700

Note: "Aquifer A Monitor Wells" combine A1 & A2 subaquifers

This table does not include duplicate sample results or detections estimated below sample quantitation limits. This table does include all original sample data and data from split samples.



LEGEND

- IT WELL
- IT SOIL BORING
- IT SHALLOW SOIL SAMPLE
- STAINED AREA

SOURCE: AERO-GEODETIC CORP.
JOB NO. 871822 3/16/87

FIGURE 14.1-1

SITE 11
ENGINE TEST AREA
MONITORING WELL AND
BORING LOCATIONS

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

STARTING DATE: 3/12/90	DATE LAST REV.:	DRAFT. CHCK. BY:	INITIATOR: K. BRADLEY	DWG. NO.: 409700-A-G27	
DRAWN BY: D.HIGGS	DRAWN BY:	ENGR. CHCK BY:	PROJ. MGR.: K. BRADLEY	PROJ. NO.: 409700	

\DRAWINGS\40970052

N00296.000910
MOFFETT FIELD
SSIC NO. 5090.3

SECTION 15.0

PHASE I CHARACTERIZATION REPORT

DATED 01 AUGUST 1990

Table 15.4-1
Summary of Detected Chemicals
Site 12 Soil Samples
1 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
2-Butanone	ug/kg	3	20.3	4.0	18.0	18.0-25.0
Acetone	ug/kg	7	35.4	33.8	16.0	11.0-91.0
Methylene chloride	ug/kg	15	16.5	5.6	16.0	10.0-29.0
Toluene	ug/kg	1	17.0	0.0	17.0	17.0-17.0
Total xylenes	ug/kg	2	19.5	21.0	19.5	9.0-30.0
Benzo(a)anthracene	ug/kg	1	3300	0.0	3300	3300-3300
Benzo(a)pyrene	ug/kg	1	2400	0.0	2400	2400-2400
Benzo(b)fluoranthene	ug/kg	1	2700	0.0	2700	2700-2700
Benzo(g,h,i)perylene	ug/kg	1	700	0.0	700	700-700
Benzo(k)fluoranthene	ug/kg	1	3700	0.0	3700	3700-3700
Butyl benzyl phthalate	ug/kg	1	1700	0.0	1700	1700-1700
Chrysene	ug/kg	1	3400	0.0	3400	3400-3400
Dibenz(a,h)anthracene	ug/kg	1	640	0.0	640	640-640
Fluoranthene	ug/kg	1	2500	0.0	2500	2500-2500
Indeno(1,2,3-c,d)pyrene	ug/kg	1	2300	0.0	2300	2300-2300
Phenanthrene	ug/kg	1	540	0.0	540	540-540
Pyrene	ug/kg	1	3200	0.0	3200	3200-3200
Aluminum	mg/kg	15	22513	5512	23400	12200-31900
Antimony	mg/kg	1	14.0	0.0	14.0	14.0-14.0
Arsenic	mg/kg	8	3.3	1.0	3.3	2.0-5.1
Barium	mg/kg	15	220	68.2	238	99.6-300
Beryllium	mg/kg	3	2.4	0.6	2.6	1.7-2.9
Cadmium	mg/kg	1	1.5	0.0	1.5	1.5-1.5
Calcium	mg/kg	15	22821	15571	20700	7920-69300
Chromium	mg/kg	15	68.6	12.6	71.9	44.5-84.3
Cobalt	mg/kg	15	17.2	2.9	17.6	12.0-23.3
Copper	mg/kg	15	56.4	15.0	51.7	37.8-88.4
Iron	mg/kg	15	32840	4625	34200	21800-37600
Lead	mg/kg	15	12.7	9.9	11.0	5.0-47.1
Magnesium	mg/kg	15	18505	5261	18600	9570-26500
Manganese	mg/kg	15	572	161	522	334-921
Mercury	mg/kg	3	0.3	0.1	0.2	0.2-0.4
Nickel	mg/kg	15	72.2	16.2	78.6	44.6-89.6
Potassium	mg/kg	10	1501	378	1545	962-2330
Vanadium	mg/kg	15	68.6	10.9	69.5	49.3-91.8
Zinc	mg/kg	15	74.2	16.1	73.1	43.7-115
Oil and Grease	mg/kg	2	342	677	342	3.0-680
TPHC	mg/kg	1	610	0.0	610	610-610
pH		15	7.6	0.8	7.4	6.1-8.4

Note: "1 Foot Depth" is comprised of Samples
from 0.0 to 2.0 feet below land surface.

This table does not include duplicate sample results or detections estimated below sample quantitation limits. This table does include all original sample data and data from split samples.

Table 15.4-2
Summary of Detected Chemicals
Site 12 Soil Samples
3 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
2-Butanone	ug/kg	1	18.0	0.0	18.0	18.0-18.0
Acetone	ug/kg	11	66.2	66.2	19.0	14.0-200
Methylene chloride	ug/kg	14	18.2	14.5	11.5	8.0-62.0
Toluene	ug/kg	1	12.0	0.0	12.0	12.0-12.0
Total xylenes	ug/kg	1	15.0	0.0	15.0	15.0-15.0
Bis(2-Ethylhexyl)phthalate	ug/kg	1	680	0.0	680	680-680
Di-n-butylphthalate	ug/kg	1	590	0.0	590	590-590
Aluminum	mg/kg	14	30264	39220	20000	14800-166000
Antimony	mg/kg	2	28.8	25.5	28.8	16.0-41.5
Arsenic	mg/kg	10	3.5	0.9	3.9	2.1-4.8
Barium	mg/kg	14	226	47.3	229	155-351
Beryllium	mg/kg	3	2.0	0.6	2.0	1.4-2.5
Cadmium	mg/kg	3	1.4	0.1	1.4	1.3-1.5
Calcium	mg/kg	14	61986	39040	52100	18900-128000
Chromium	mg/kg	14	65.0	9.7	64.3	52.5-78.3
Cobalt	mg/kg	14	15.6	2.7	15.0	11.9-19.7
Copper	mg/kg	14	473	1594	49.1	26.9-6010
Iron	mg/kg	14	29893	5368	31450	21600-36900
Lead	mg/kg	14	9.1	3.1	8.2	5.5-16.9
Magnesium	mg/kg	14	20650	5557	20300	10100-33700
Manganese	mg/kg	14	519	91.7	548	348-638
Nickel	mg/kg	14	70.1	11.4	72.8	50.8-89.0
Potassium	mg/kg	9	1328	241	1260	1040-1850
Silver	mg/kg	2	61.5	113	61.5	4.9-118
Thallium	mg/kg	1	0.3	0.0	0.3	0.3-0.3
Vanadium	mg/kg	14	59.9	8.8	60.9	45.6-72.1
Zinc	mg/kg	14	249	674	68.1	46.9-2590
Oil and Grease	mg/kg	2	8002	15997	8002	3.0-16000
pH		13	8.0	0.6	8.0	6.6-8.8

Note: "3 Foot Depth" is comprised of Samples
from 2.1 to 4.0 feet below land surface.

This table does not include duplicate sample results or detections estimated below sample quantitation limits. This table does include all original sample data and data from split samples.

Table 15.4-3
Summary of Detected Chemicals
Site 12 Soil Samples
5 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
2-Butanone	ug/kg	1	14.0	0.0	14.0	14.0-14.0
Acetone	ug/kg	10	31.8	29.2	20.0	13.0-110
Methylene chloride	ug/kg	15	18.7	20.4	14.0	7.0-91.0
Bis(2-Ethylhexyl)phthalate	ug/kg	2	465	130	465	400-530
Di-n-butylphthalate	ug/kg	1	1400	0.0	1400	1400-1400
Aluminum	mg/kg	15	16400	2888	16500	11800-22000
Antimony	mg/kg	2	16.0	2.0	16.0	15.0-17.0
Arsenic	mg/kg	12	3.9	1.1	4.0	2.5-6.0
Barium	mg/kg	15	187	54.2	169	86.3-321
Beryllium	mg/kg	3	2.0	0.7	2.1	1.3-2.6
Cadmium	mg/kg	2	1.1	0.1	1.1	1.0-1.1
Calcium	mg/kg	15	59513	36072	53600	12500-150000
Chromium	mg/kg	15	53.1	11.7	57.4	30.2-68.5
Cobalt	mg/kg	13	14.2	2.4	13.5	10.8-19.0
Copper	mg/kg	15	825	3036	42.1	30.7-11800
Iron	mg/kg	15	26827	5125	25800	18900-34800
Lead	mg/kg	15	8.6	2.9	7.6	4.2-15.6
Magnesium	mg/kg	15	16069	4287	16200	8880-24300
Manganese	mg/kg	15	459	75.9	440	342-573
Mercury	mg/kg	1	0.2	0.0	0.2	0.2-0.2
Nickel	mg/kg	15	63.4	13.3	64.3	41.6-86.3
Potassium	mg/kg	2	1365	110	1365	1310-1420
Vanadium	mg/kg	15	49.6	9.8	50.7	33.1-69.7
Zinc	mg/kg	15	382	1244	60.7	44.3-4880
Oil and Grease	mg/kg	1	570	0.0	570	570-570
TPHC	mg/kg	2	965	870	965	530-1400
pH		15	8.2	0.6	8.4	6.9-9.0

Note: "5 Foot Depth" is comprised of Samples
from 4.1 to 5.5 feet below land surface.

This table does not include duplicate sample results or detections estimated below sample quantitation limits. This table does include all original sample data and data from split samples.

TABLE 15.4-4.
GC AND TIP RESULTS FOR SITE 12 SOIL GAS SURVEY
NAS MOFFETT FIELD

SAMPLE LOCATION	TIP[a] READING (ppm)	GC RESULTS (ppb)										UNKNOWNS[(b)] (sec)	DATE (1988)
		1,1-DCE	1,1-DCA	cis-DCE	1,1,1-TCA	BENZENE	TCE	1,1,2-TCA	TOLUENE	m- and p-XYLENE	O-XYLENE		
TL-5 AS1	32.6		1150		14,900	159	16,000		5240	1350	386	Many	10-26
TL-5 AS3	3.5								135	135	117		10-26
TL-6 AS1	73.0												10-27
TL-6 AS2	7.9		2240			655	6600	47,800	335	238	436	Many	10-26
TL-40 AS1	26.9						217	1309					12-09
TL-40 AS2													12-07
TL-41 AS3													12-07
TL-40 AS3	3.4											1230	12-14

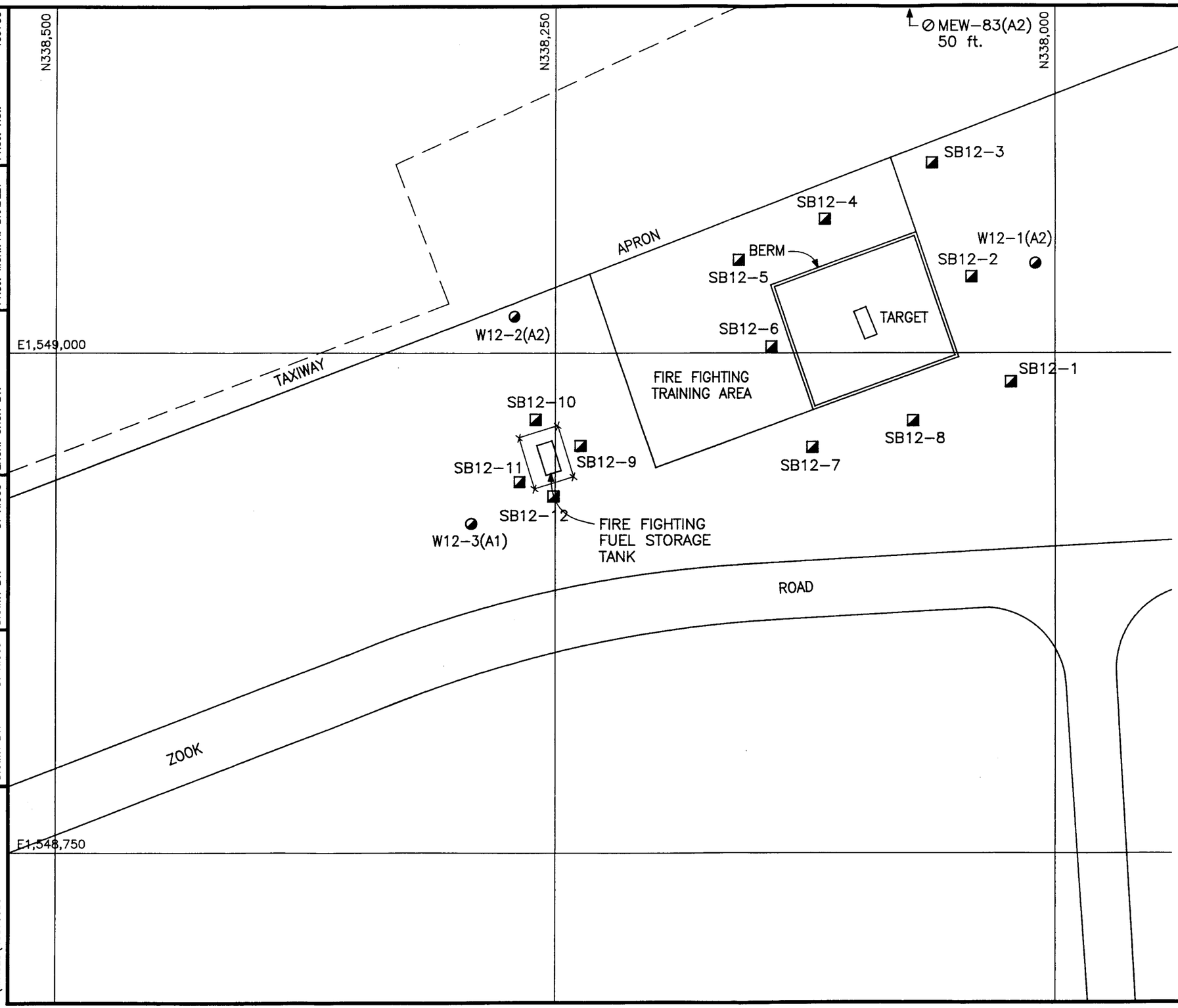
Blank indicates none detected.
GC - Gas chromatograph
ppm - Parts per million
ppb - Parts per billion
[a]Total ionizables present in ppm with respect to 100 ppm isobutylene.
[b]Peak of unknown compound eluted at time reported in seconds. Ranges (347-1151) indicate numerous peaks were present in this time interval.
TIP readings taken at time samples were collected for GC analysis may not match initial TIP readings plotted on Figures 15.4-1 amd 15.4-2.

Table 15.4-5
Summary of Detected Chemicals
Site 12 Water Samples
Aquifer A Monitor Wells

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Methylene chloride	ug/L	12	9.2	2.9	10.0	6.0-14.0
Antimony	ug/L	1	67.3	0.0	67.3	67.3-67.3
Calcium	ug/L	17	86212	5002	84200	78300-96000
Iron	ug/L	17	777	602	654	236-2890
Magnesium	ug/L	17	74112	9500	76000	58000-86900
Manganese	ug/L	17	162	68.5	165	57.4-291
Mercury	ug/L	1	1.9	0.0	1.9	1.9-1.9
Sodium	ug/L	17	74129	6935	73600	59500-88300
Zinc	ug/L	1	54.9	0.0	54.9	54.9-54.9
Bicarbonate	mg/L	11	595	56.8	620	520-650
Chloride	mg/L	11	30.7	3.4	30.0	26.0-37.0
Nitrate	mg/L	1	0.2	0.0	0.2	0.2-0.2
Sulfate	mg/L	11	35.0	8.9	35.0	24.0-50.0
TDS	mg/L	11	691	50.3	720	610-740

Note: "Aquifer A Monitor Wells" combine A1 & A2 subaquifers

This table does not include duplicate sample results or detections estimated below sample quantitation limits. This table does include all original sample data and data from split samples.



LEGEND

- IT SOIL BORING
- IT WELL
- MEW WELL PRE 7/87

SCALE

0 50 100 FEET

FIGURE 15.1-1

SITE 12
FIRE FIGHTING TRAINING AREA

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

STARTING DATE: 5/20/90	DATE LAST REV.: 7/26/90	DRAFT. CHCK. BY:	INITIATOR: J. WILLE	DRAWING NO.: 409700-B-G35
DRAWN BY: D. HIGGS	DRAWN BY: D. HIGGS	ENGR. CHCK BY:	PROJ. MGR.: K. BRADLEY	PROJ. NO.: 409700

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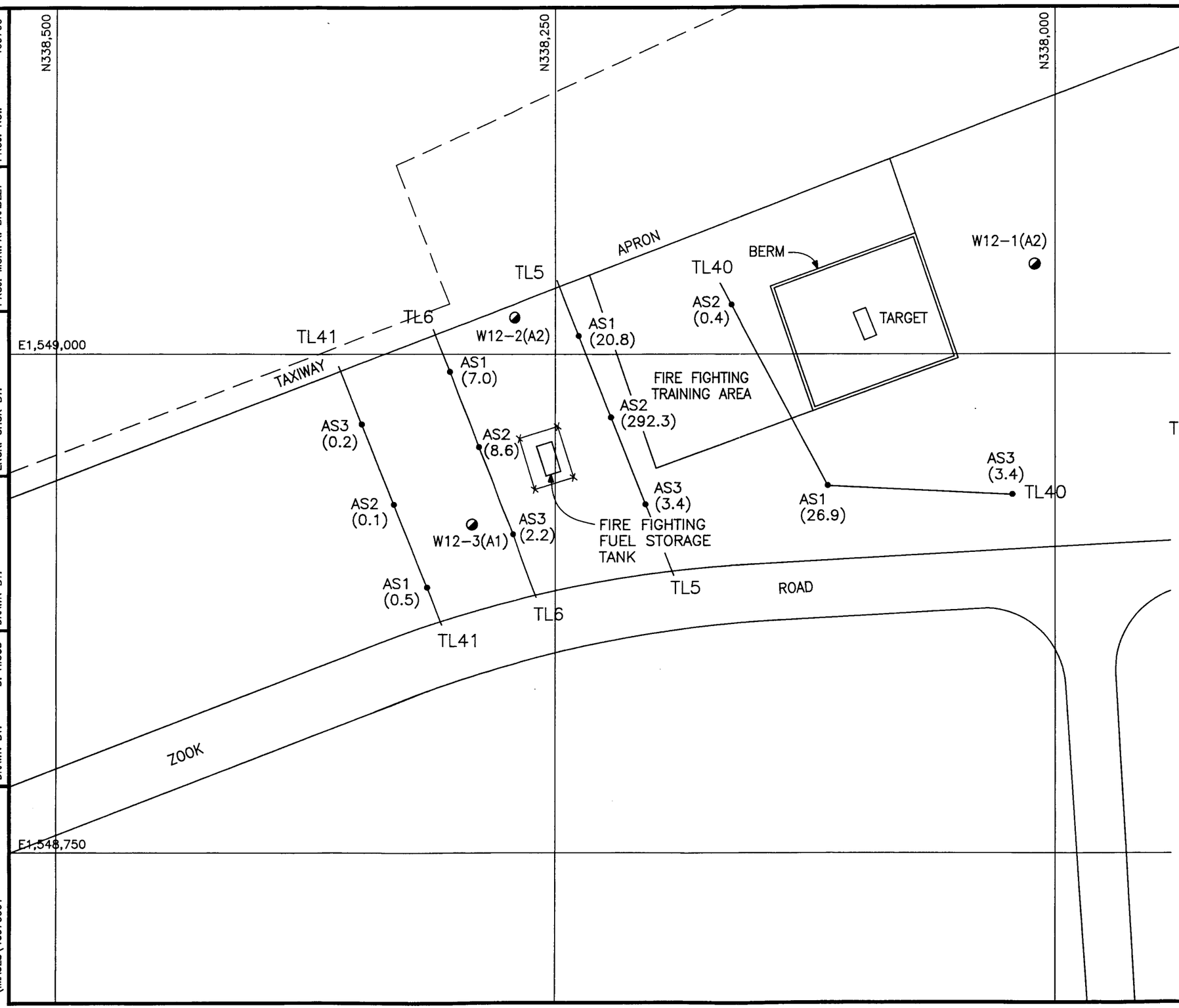


LEGEND

TL5 — SOIL GAS TRANSECT LINE NUMBER AND LINE

AS3 (3.4) • SOIL GAS SAMPLE STATION NUMBER AND SOIL GAS CONCENTRATION IN ppm.

IT WELL

SCALE

0 50 100 FEET

FIGURE 15.4-1

SITE 12
SOIL GAS SURVEY TRANSECT MAP

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

STARTING DATE: 5/20/90	DATE LAST REV.:	DRAFT. CHCK. BY:	INITIATOR: J. WILLE
DRAWN BY: D. HIGGS	DRAWN BY:	ENGR. CHCK BY:	PROJ. MGR.: K. BRADLEY
			DRAWING NO.409700-B-G34
			PROJ. NO.: 409700

\IMAGES\ 40970061

N00296.000910
MOFFETT FIELD
SSIC NO. 5090.3

SECTION 16.0

PHASE I CHARACTERIZATION REPORT

DATED 01 AUGUST 1990

Table 16.4-1
Summary of Detected Chemicals
Site 13 Soil Samples
1 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Acetone	ug/kg	1	14.0	0.0	14.0	14.0-14.0
Methylene chloride	ug/kg	4	25.0	9.5	24.5	14.0-37.0
Aluminum	mg/kg	4	25025	2214	24850	22500-27900
Arsenic	mg/kg	4	3.3	0.2	3.3	3.1-3.5
Barium	mg/kg	4	244	31.6	232	220-290
Cadmium	mg/kg	2	6.6	0.5	6.6	6.3-6.8
Calcium	mg/kg	4	11683	2649	11255	9220-15000
Chromium	mg/kg	4	87.7	19.2	80.6	73.8-116
Cobalt	mg/kg	4	17.1	2.8	17.0	14.3-20.3
Copper	mg/kg	4	47.1	7.6	47.6	37.3-55.8
Iron	mg/kg	4	38075	4080	36750	35000-43800
Lead	mg/kg	4	192	220	147	11.0-462
Magnesium	mg/kg	4	14575	2002	14550	12700-16500
Manganese	mg/kg	4	625	61.5	615	569-700
Mercury	mg/kg	2	0.3	0.1	0.3	0.2-0.3
Nickel	mg/kg	4	82.3	8.6	81.4	74.1-92.2
Potassium	mg/kg	4	2250	492	2220	1700-2860
Vanadium	mg/kg	4	76.0	8.9	76.2	64.9-86.7
Zinc	mg/kg	4	121	60.5	109	67.0-198
Oil and Grease	mg/kg	4	156	169	142	8.0-330
pH		4	7.3	0.5	7.5	6.6-7.6

Note: "1 Foot Depth" is comprised of Samples
from 0.0 to 2.0 feet below land surface.

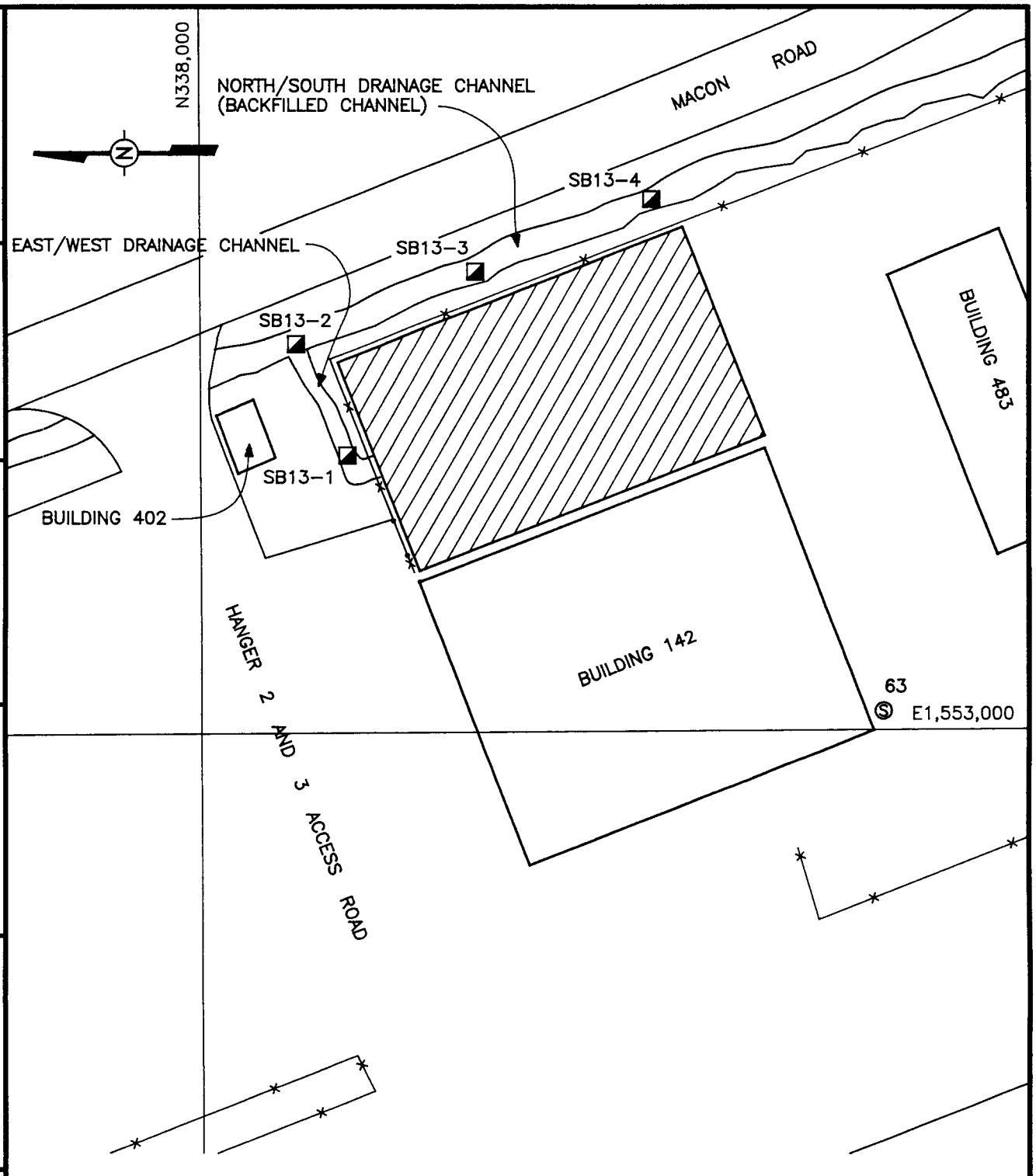
This table does not include duplicate sample results or detections estimated below sample quantitation limits. This table does include all original sample data and data from split samples.

Table 16.4-2
Summary of Detected Chemicals
Site 13 Soil Samples
5 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Acetone	ug/kg	2	17.5	11.0	17.5	12.0-23.0
Methylene chloride	ug/kg	4	30.0	14.1	26.0	18.0-50.0
Bis(2-Ethylhexyl)phthalate	ug/kg	1	650	0.0	650	650-650
Aluminum	mg/kg	4	20050	2554	19300	17900-23700
Arsenic	mg/kg	4	4.4	3.8	2.7	2.3-10.2
Barium	mg/kg	4	254	131	198	172-447
Cadmium	mg/kg	3	2.7	1.7	2.6	1.1-4.4
Calcium	mg/kg	4	23025	3634	23500	19000-26100
Chromium	mg/kg	4	78.6	9.2	79.2	66.9-89.2
Cobalt	mg/kg	4	15.6	0.9	15.8	14.5-16.4
Copper	mg/kg	4	37.9	3.8	38.3	33.0-42.0
Iron	mg/kg	4	31775	2666	31550	29400-34600
Lead	mg/kg	4	55.1	49.5	46.2	12.8-115
Magnesium	mg/kg	4	14650	1038	14800	13400-15600
Manganese	mg/kg	4	530	101	536	416-630
Nickel	mg/kg	4	75.4	3.2	76.5	70.7-77.9
Potassium	mg/kg	4	1528	429	1330	1280-2170
Vanadium	mg/kg	4	68.6	5.5	68.5	62.4-74.8
Zinc	mg/kg	4	93.0	31.6	95.7	57.6-123
Oil and Grease	mg/kg	4	379	521	180	6.0-1150
TPHC	mg/kg	1	110	0.0	110	110-110
pH		4	7.8	0.1	7.9	7.7-7.9

Note: "5 Foot Depth" is comprised of Samples
from 4.1 to 5.5 feet below land surface.

This table does not include duplicate sample results or detections estimated below sample quantitation limits. This table does include all original sample data and data from split samples.



LEGEND

SITE 13– EQUIPMENT PARKING AREA

IT SOIL BORING

SUMP

SOURCE: WALKER AND ASSOCIATES INC.
11–3–87

0 50 100 FEET

FIGURE 16.1–1

SITE 13
EQUIPMENT PARKING AREA

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

STARTING DATE: 3/12/90	DATE LAST REV.: 7/27/90	DRAFT. CHCK. BY:	INITIATOR: K. BRADLEY	DWG. NO.: 409700-A-G78	
DRAWN BY: D.HIGGS	DRAWN BY: D.HIGGS	ENGR. CHCK BY:	PROJ. MGR.: K. BRADLEY	PROJ. NO.: 409700	

\DRAWINGS\40970031

N00296.000910
MOFFETT FIELD
SSIC NO. 5090.3

SECTION 17.0

PHASE I CHARACTERIZATION REPORT

DATED 01 AUGUST 1990

Table 17.4-1
Summary of Detected Chemicals
Site 14 Soil Samples
1 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
2-Butanone	ug/kg	1	16.0	0.0	16.0	16.0-16.0
Acetone	ug/kg	5	40.0	36.1	23.0	14.0-99.0
Methylene chloride	ug/kg	8	14.8	5.3	13.5	9.0-25.0
Aluminum	mg/kg	8	22738	7074	20600	15100-33700
Barium	mg/kg	5	126	59.2	129	60.2-194
Beryllium	mg/kg	3	4.6	0.9	4.3	4.0-5.6
Calcium	mg/kg	8	57838	62511	36150	18400-201000
Chromium	mg/kg	8	57.1	17.7	50.1	39.1-92.5
Cobalt	mg/kg	7	28.8	13.0	31.9	10.7-46.0
Copper	mg/kg	8	71.2	36.1	70.4	17.9-133
Iron	mg/kg	8	47288	22295	49950	16600-79400
Lead	mg/kg	8	3.9	2.6	2.9	1.0-8.8
Magnesium	mg/kg	8	19938	8292	20600	10900-32300
Manganese	mg/kg	8	696	280	651	286-1100
Mercury	mg/kg	4	0.2	0.0	0.2	0.2-0.3
Nickel	mg/kg	8	52.5	12.4	56.2	37.2-73.1
Potassium	mg/kg	2	1265	170	1265	1180-1350
Selenium	mg/kg	1	1.7	0.0	1.7	1.7-1.7
Silver	mg/kg	4	4.5	2.2	4.1	2.6-7.1
Thallium	mg/kg	1	0.4	0.0	0.4	0.4-0.4
Vanadium	mg/kg	8	111	61.6	114	27.8-198
Zinc	mg/kg	8	82.2	24.1	85.8	45.6-109

Note: "1 Foot Depth" is comprised of Samples
from 0.0 to 2.0 feet below land surface.

This table does not include duplicate sample results or detections estimated below sample quantitation limits. This table does include all original sample data and data from split samples.

Table 17.4-2
Summary of Detected Chemicals
Site 14 Soil Samples
3 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
1,1,1-Trichloroethane	ug/kg	1	8.0	0.0	8.0	8.0-8.0
Acetone	ug/kg	6	18.3	6.7	15.0	14.0-31.0
Methylene chloride	ug/kg	9	25.0	12.4	20.0	14.0-52.0
Toluene	ug/kg	1	7.0	0.0	7.0	7.0-7.0
Aluminum	mg/kg	9	20167	3351	19200	16200-24500
Arsenic	mg/kg	2	255	28.0	255	241-269
Barium	mg/kg	9	176	68.7	181	48.7-299
Beryllium	mg/kg	4	3.6	1.3	3.0	2.8-5.5
Cadmium	mg/kg	2	3.3	3.4	3.3	1.6-5.0
Calcium	mg/kg	9	126156	50233	122000	32100-192000
Chromium	mg/kg	9	54.3	9.2	52.9	40.6-64.9
Cobalt	mg/kg	7	21.4	6.5	21.7	14.0-33.0
Copper	mg/kg	9	42.9	17.9	34.6	25.0-80.1
Iron	mg/kg	9	33911	11180	33400	21200-57000
Lead	mg/kg	9	7.9	4.9	6.1	3.3-19.6
Magnesium	mg/kg	9	15178	4564	14600	10200-25300
Manganese	mg/kg	9	655	374	510	305-1580
Mercury	mg/kg	2	0.2	0.0	0.2	0.2-0.2
Nickel	mg/kg	9	63.6	21.1	58.1	43.8-111
Potassium	mg/kg	1	1140	0.0	1140	1140-1140
Silver	mg/kg	2	3.2	0.3	3.2	3.0-3.3
Vanadium	mg/kg	9	70.1	34.6	68.9	36.0-140
Zinc	mg/kg	9	72.3	21.8	67.5	41.3-121

Note: "3 Foot Depth" is comprised of Samples
from 2.1 to 4.0 feet below land surface.

This table does not include duplicate sample results or detections estimated below sample quantitation limits. This table does include all original sample data and data from split samples.

Table 17.4-3
Summary of Detected Chemicals
Site 14 Soil Samples
5 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Acetone	ug/kg	7	26.6	14.9	19.0	13.0-53.0
Methylene chloride	ug/kg	9	24.2	6.9	24.0	15.0-36.0
Toluene	ug/kg	1	9.0	0.0	9.0	9.0-9.0
Bis(2-Ethylhexyl)phthalate	ug/kg	1	530	0.0	530	530-530
Aluminum	mg/kg	9	20678	3664	21900	12200-25300
Arsenic	mg/kg	5	51.2	79.8	13.0	4.1-191
Barium	mg/kg	9	353	158	301	194-646
Beryllium	mg/kg	4	3.5	1.0	3.2	2.6-4.8
Cadmium	mg/kg	2	1.9	0.2	1.9	1.8-2.0
Calcium	mg/kg	9	90256	33193	89700	45500-149000
Chromium	mg/kg	9	63.8	8.6	64.7	44.3-74.3
Cobalt	mg/kg	9	18.4	5.1	15.8	14.4-28.5
Copper	mg/kg	9	50.9	22.5	44.7	31.0-103
Iron	mg/kg	9	36178	7110	37600	23000-47700
Lead	mg/kg	9	9.6	2.5	9.2	5.9-15.3
Magnesium	mg/kg	9	14044	2296	13500	10900-17600
Manganese	mg/kg	9	1090	713	1020	358-2360
Mercury	mg/kg	4	0.3	0.1	0.3	0.2-0.4
Nickel	mg/kg	9	78.1	17.0	73.6	63.2-117
Potassium	mg/kg	2	1055	90.0	1055	1010-1100
Selenium	mg/kg	2	4.4	5.7	4.4	1.5-7.2
Vanadium	mg/kg	9	73.7	22.9	74.3	34.8-111
Zinc	mg/kg	9	78.8	31.8	68.0	49.2-160

Note: "5 Foot Depth" is comprised of Samples
from 4.1 to 5.5 feet below land surface.

This table does not include duplicate sample results or detections estimated below sample quantitation limits. This table does include all original sample data and data from split samples.

Table 17.4-4
Summary of Detected Chemicals
Site 14 Soil Samples
> 5 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Acetone	ug/kg	2	17.0	8.0	17.0	13.0-21.0
Methylene chloride	ug/kg	4	26.0	13.6	20.5	17.0-46.0
Aluminum	mg/kg	4	21075	1193	20800	20000-22700
Antimony	mg/kg	1	48.2	0.0	48.2	48.2-48.2
Arsenic	mg/kg	1	28.5	0.0	28.5	28.5-28.5
Barium	mg/kg	4	400	221	389	196-627
Beryllium	mg/kg	1	2.0	0.0	2.0	2.0-2.0
Calcium	mg/kg	4	95125	34738	88450	60600-143000
Chromium	mg/kg	4	66.7	6.5	66.8	58.7-74.3
Cobalt	mg/kg	3	20.4	7.8	19.7	12.9-28.5
Copper	mg/kg	4	57.0	31.0	43.3	38.3-103
Iron	mg/kg	4	35500	9360	36050	23900-46000
Lead	mg/kg	4	11.2	2.7	10.4	8.9-15.1
Magnesium	mg/kg	4	13725	1607	13600	12300-15400
Manganese	mg/kg	4	1324	1106	1285	367-2360
Mercury	mg/kg	3	0.2	0.1	0.2	0.2-0.3
Nickel	mg/kg	4	84.5	25.1	82.3	56.6-117
Potassium	mg/kg	1	6440	0.0	6440	6440-6440
Vanadium	mg/kg	4	71.2	6.7	70.8	63.8-79.2
Zinc	mg/kg	4	68.6	7.5	69.6	58.6-76.6

Note: "> 5 Foot Depth" is comprised of Samples
from 5.6 feet deep and below.

This table does not include duplicate sample results or detections estimated below sample quantitation limits. This table does include all original sample data and data from split samples.

Table 17.4-5. GC and Tip Results for Site 14 Soil Gas Survey
NAS Moffett Field

SAMPLE LOCATION	TIP[a] READING (ppm)	GC RESULTS (ppb)										UNKNOWNS[(b)] (sec)	DATE (1988)
		1,1-DCE	1,1-DCA	cis-DCE	1,1,1-TCA	BENZENE	TCE	1,1,2-TCA	TOLUENE	m- and p-XYLENE	O-XYLENE		
TL-1A AS1	9.0								32				10-25
TL-1A AS3	3.7		154										10-25
TL-1A AS5			155										12-05
TL-1A AS6													12-09
TL-1B AS2													12-06
TL-42 AS1			130						24				12-05

Blank indicates none detected.
GC - Gas chromatograph
ppm - Parts per million
ppb - Parts per billion
[a]Total ionizables present in ppm with respect to 100 ppm isobutylene.
[b]Peak of unknown compound eluted at time reported in seconds. Ranges (347-1151) indicate numerous peaks were present in this time interval.
NOTE: TIP readings taken at time samples were collected for GC analysis may not match initial TIP readings plotted on Figure 17.4-1.

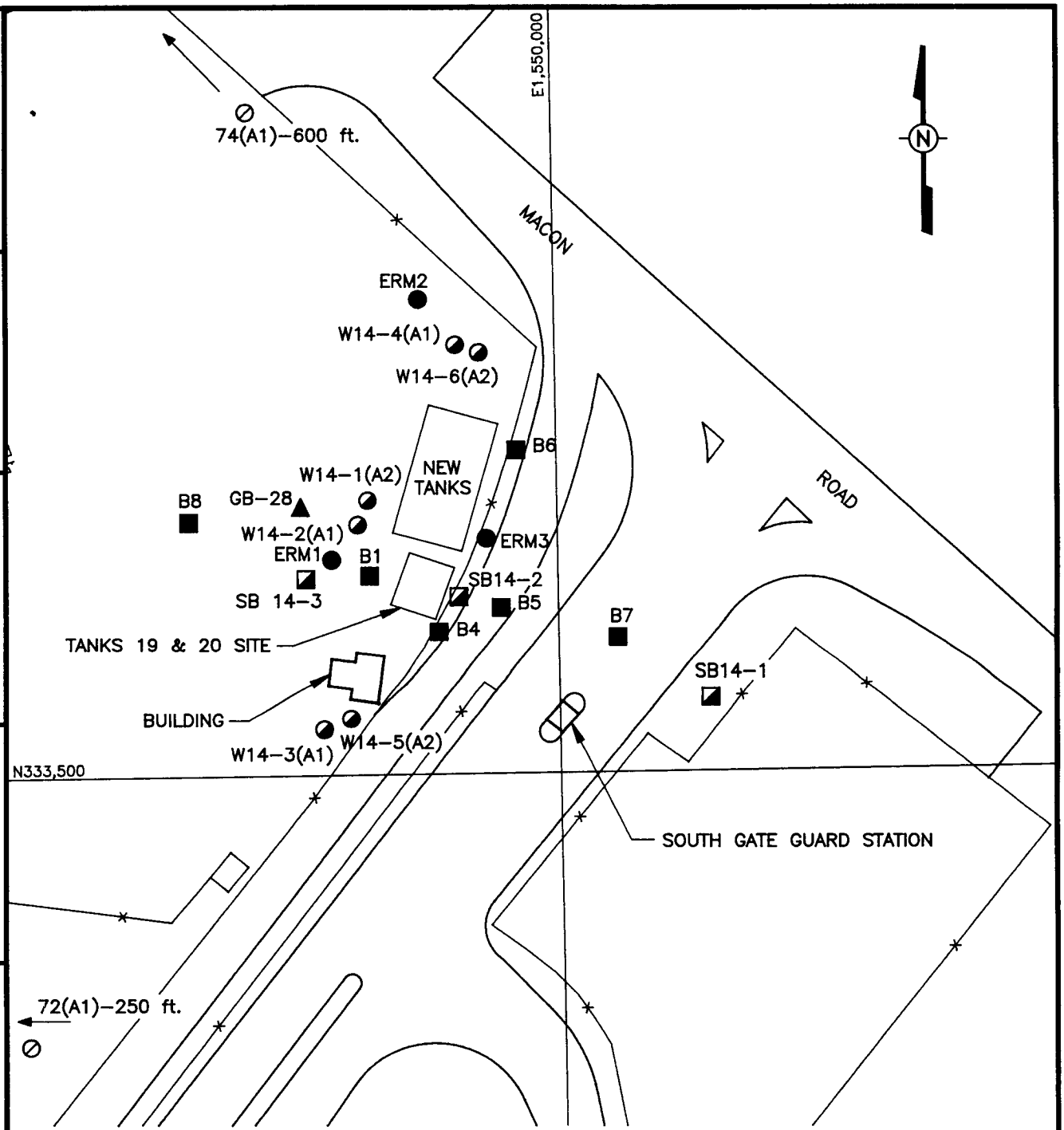
a

Table 17.4-6
Summary of Detected Chemicals
Site 14 Water Samples
Aquifer A Monitor Wells

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
1,1,1-Trichloroethane	ug/L	15	11.4	5.9	11.0	5.0-22.0
1,1-Dichloroethane	ug/L	13	7.2	2.4	7.0	2.0-11.0
1,1-Dichloroethylene	ug/L	8	14.9	3.3	15.5	8.0-18.0
1,2-Dichloroethane	ug/L	1	160	0.0	160	160-160
1,2-Dichloroethenes(Total)	ug/L	9	23.2	2.4	24.0	19.0-26.0
Acetone	ug/L	8	777	1577	18.0	14.0-4400
Benzene	ug/L	5	2680	110	2600	2600-2800
Ethyl benzene	ug/L	5	378	40.9	370	330-440
Methylene chloride	ug/L	29	94.1	244	8.0	5.0-920
Tetrachloroethene	ug/L	4	10.5	1.7	11.0	8.0-12.0
Toluene	ug/L	5	744	147	750	520-910
Total xylenes	ug/L	5	834	282	970	410-1100
Trichloroethene	ug/L	14	93.5	60.6	98.0	10.0-170
2-Methylnaphthalene	ug/L	5	18.6	6.3	21.0	10.0-25.0
4-Methylphenol	ug/L	2	22.0	4.0	22.0	20.0-24.0
Naphthalene	ug/L	6	69.3	27.5	67.5	41.0-110
Aluminum	ug/L	3	372	70.7	407	291-419
Antimony	ug/L	14	125	56.6	101	65.9-256
Arsenic	ug/L	6	30.3	7.2	28.6	23.0-43.0
Barium	ug/L	4	352	159	293	235-587
Beryllium	ug/L	1	3.0	0.0	3.0	3.0-3.0
Calcium	ug/L	35	243000	109416	181000	122000-445000
Iron	ug/L	29	2511	3601	564	138-13400
Magnesium	ug/L	35	78609	44119	53800	34200-171000
Manganese	ug/L	32	945	797	809	23.7-2240
Mercury	ug/L	2	0.2	0.0	0.2	0.2-0.2
Potassium	ug/L	6	8603	3727	7350	5050-13200
Selenium	ug/L	8	6.2	0.8	6.3	5.2-7.5
Silver	ug/L	1	14.8	0.0	14.8	14.8-14.8
Sodium	ug/L	35	41157	10833	37800	30700-70500
Zinc	ug/L	2	29.5	0.5	29.5	29.2-29.7
Bicarbonate	mg/L	27	387	173	300	240-810
Chloride	ug/L	27	36.5	11.2	40.0	16.0-54.0
Fluoride	ug/L	1	1.9	0.0	1.9	1.9-1.9
Nitrate	ug/L	15	2.6	1.7	1.7	0.8-5.2
Sulfate	ug/L	27	618	330	430	250-1210
TDS	ug/L	27	1371	584	1010	640-2330
TPHC	mg/L	5	10.74	6.50	14	3.8-18

Note: "Aquifer A Monitor Wells" combine A1 & A2 subaquifers

This table does not include duplicate sample results or detections estimated below sample quantitation limits. This table does include all original sample data and data from split samples.



SCALE

0 100 200 FEET

LEGEND

- ▲ IT GEOPHYSICAL BORING
- ◐ IT WELL
- ● ERM WELL
- ⊘ MEW WELL PRE 7/87
- ◪ IT SOIL BORING
- ■ ERM SOIL BORING

SOURCE: AERO–GEODETIC CORP.
JOB NO. 811822 3–16–81

FIGURE 17.1–1

SITE 14
ABANDONED TANKS 19 & 20
MONITORING WELL AND BORING
LOCATIONS

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

STARTING DATE: 3/12/90	DATE LAST REV.:	DRAFT. CHCK. BY:	INITIATOR: K. BRADLEY	DWG. NO.: 409700–A–G28	
DRAWN BY: D.HIGGS	DRAWN BY:	ENGR. CHCK BY:	PROJ. MGR.: K. BRADLEY	PROJ. NO.: 409700	

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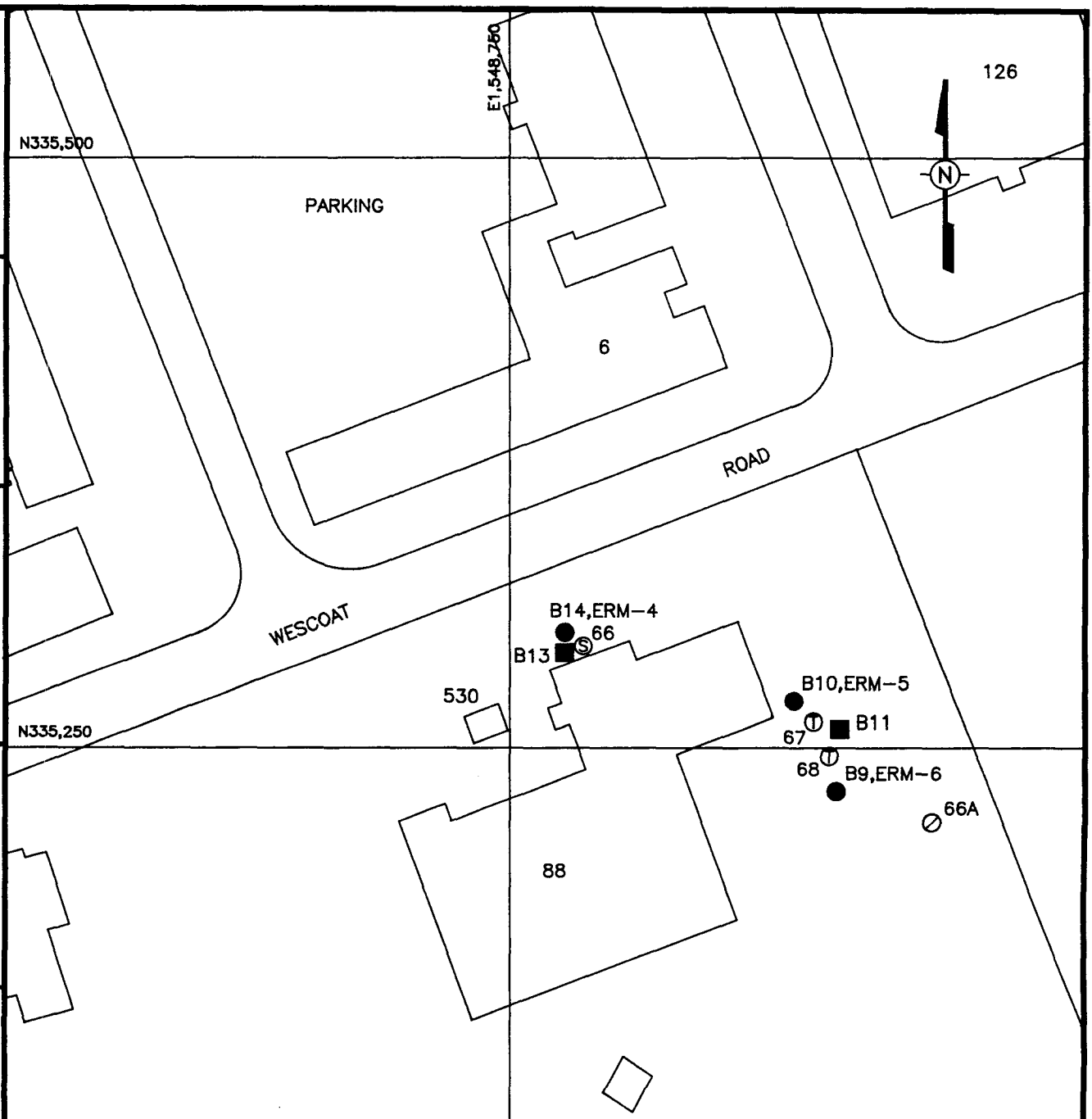

SCALE

0 75 150 FEET

LEGEND

- ERM-WEST WELL
- ESA SOIL BORING
- MEW WELL PRE 7/87
- SUMP
- TANK

FIGURE 17.1-2

SITE 14
TANKS 67 AND 68
MONITORING WELL AND BORING LOCATIONS

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

SOURCE: WALKER AND ASSOC., INC.
11/3/87

DWG. NO.: 409700-A-G85	
PROJ. NO.: 409700	
INITIATOR: D. WILLEN	
PROJ. MGR.: K. BRADLEY	
DRAFT. CHCK. BY:	
ENGR. CHCK BY:	
DATE LAST REV.:	
DRAWN BY:	
STARTING DATE: 5/30/90	
DRAWN BY: D.HIGGS	

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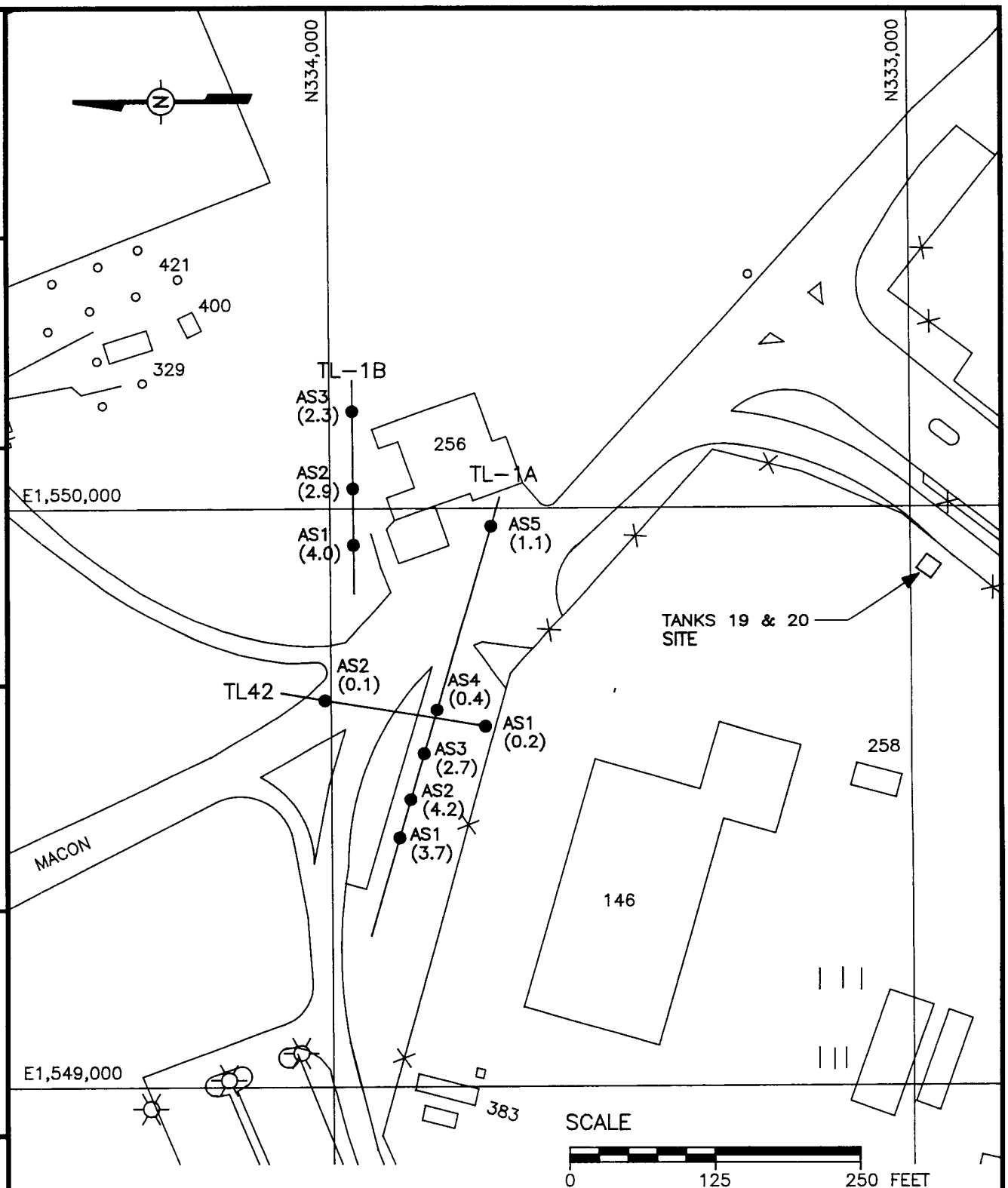

LEGEND

SOIL GAS TRANSECT LINE AND LINE NUMBER

AS1 (3.7) — SOIL GAS SAMPLE STATION NUMBER AND SOIL GAS CONCENTRATION IN ppm.

SOURCE: AERO-GEODETIC CORP.
JOB NO. 811822 3/16/81

FIGURE 17.4-1

SITE 14
SOIL-GAS SURVEY TRANSECT LINES

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

STARTING DATE: 5/23/90	DATE LAST REV.:	DRAFT. CHCK. BY:	INITIATOR: K. BRADLEY	DWG. NO.: 409700-A-G86	
DRAWN BY: D.HIGGS	DRAWN BY:	ENGR. CHCK BY:	PROJ. MGR.: K. BRADLEY	PROJ. NO.: 409700	

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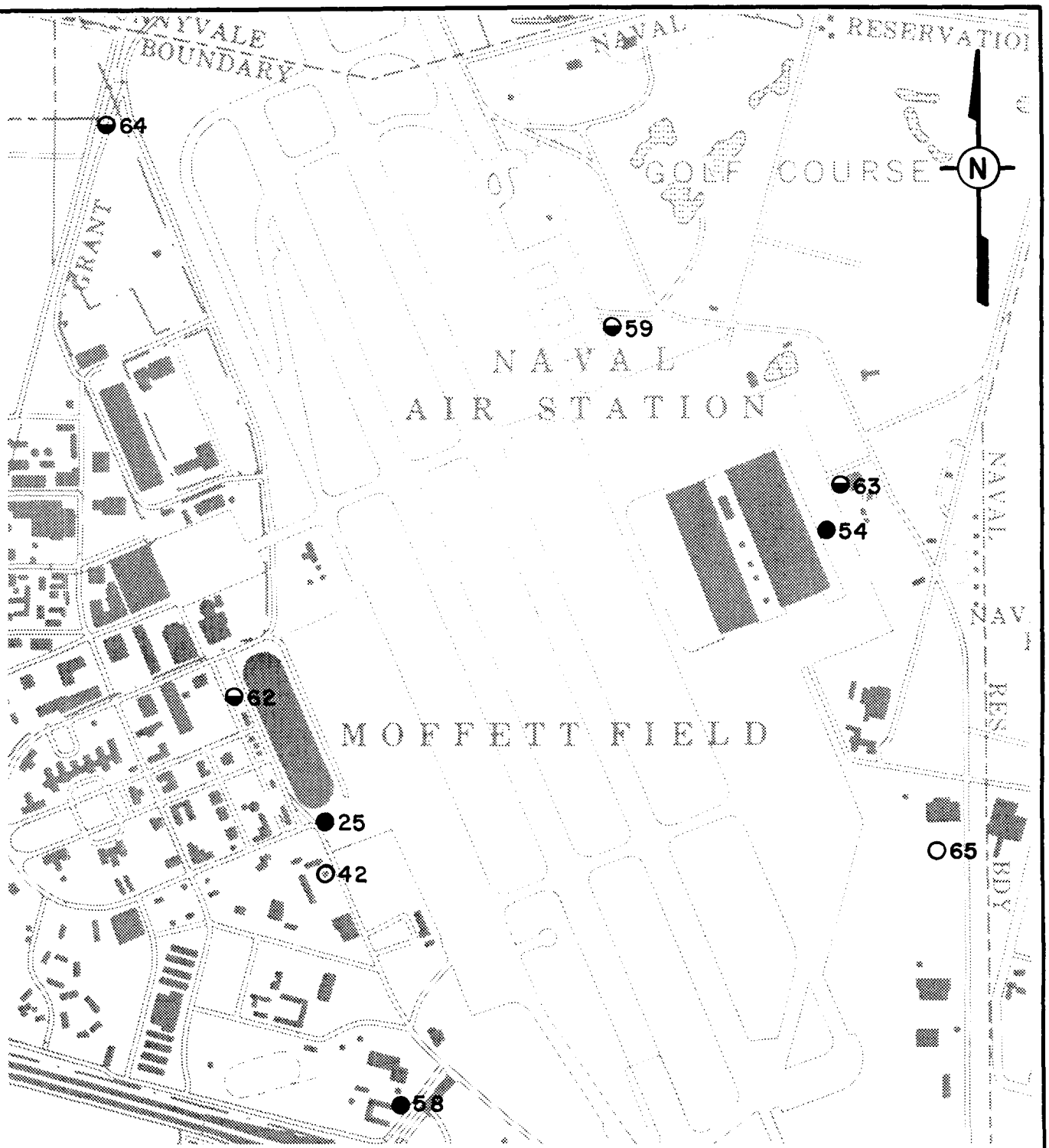
N00296.000910
MOFFETT FIELD
SSIC NO. 5090.3

SECTION 18.0

PHASE I CHARACTERIZATION REPORT

DATED 01 AUGUST 1990

THERE ARE NO STATISTICAL TABLES FOR SITE 15



LEGEND

- ● OIL/WATER SEPARATOR
- ◒ SEPARATOR & SUMP
- ○ SUMP

SCALE

1000 0 1000 FEET

FIGURE 18.1-1

SITE 15
SUMPS AND OIL/WATER SEPARATORS

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

STARTING DATE: 8-15-89	DATE LAST REV.:	INITIATOR: T. WEDEKIND	DRAWING NO.: 409616-A-C06
DRAWN BY: C. HINSHAW	DRAWN BY:	PROJ. MGR. K. BRADLEY	PROJECT NO.: 409616

BRUNING 72425

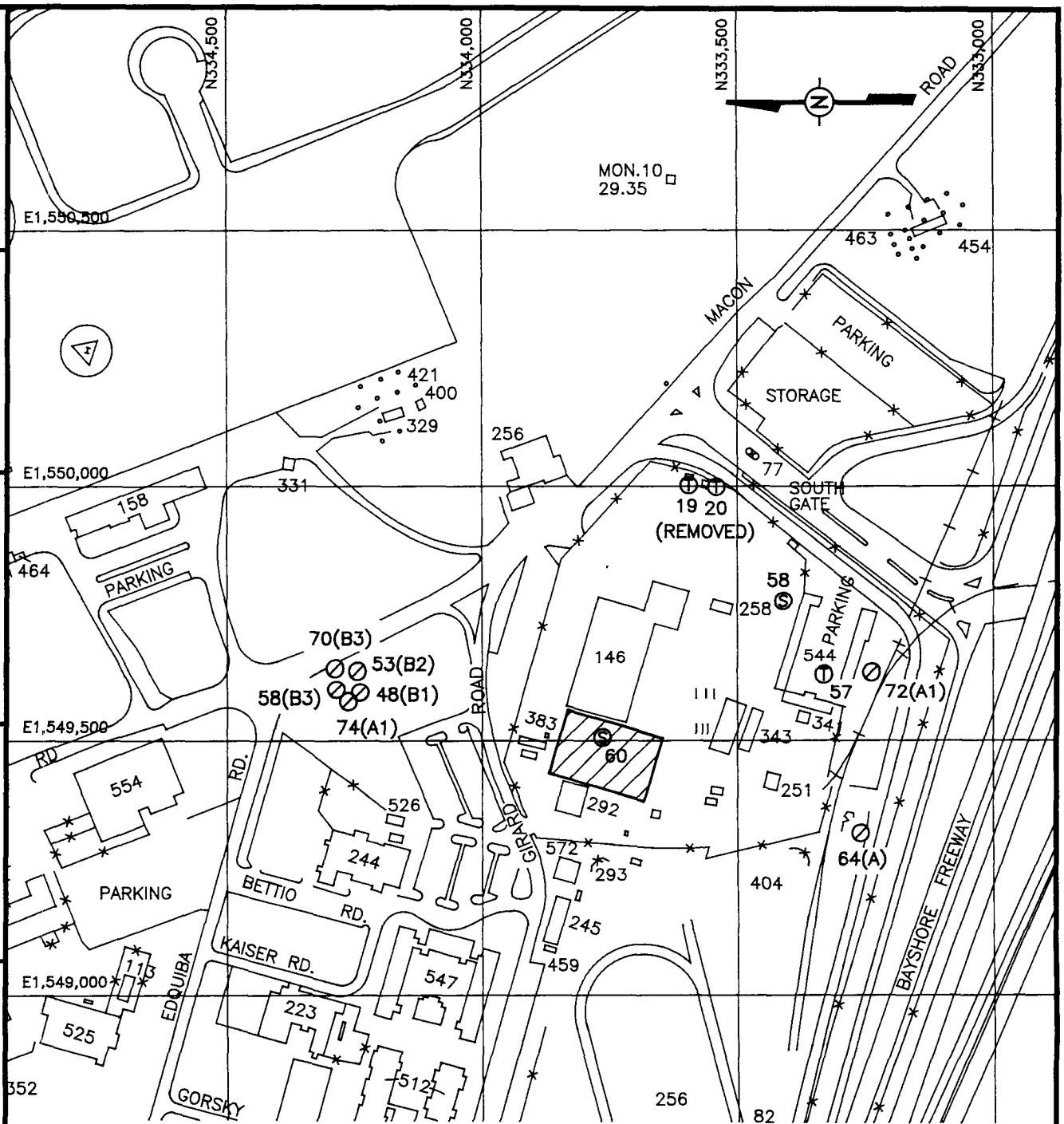
N00296.000910
MOFFETT FIELD
SSIC NO. 5090.3

SECTION 19.0

PHASE I CHARACTERIZATION REPORT

DATED 01 AUGUST 1990

THERE ARE NO STATISTICAL TABLES FOR SITE 16



SCALE

0 300 600 feet

LEGEND

- MEW WELL PRE 7/87
- SUMP
- TANK
- SITE LOCATION

FIGURE 19.1-1

SITE 16
PUBLIC WORKS STEAM CLEANING RACK, SUMP NO. 60
MONITORING WELL AND BORING LOCATIONS

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

SOURCE: AERO-GEODETIC CORP.
JOB NO. 811822 3/16/81

STARTING DATE: 5/30/90	DATE LAST REV.: 7/26/90	DRAFT. CHCK. BY:	INITIATOR: D. WILLEN	DWG. NO.: 409700-A-G75	
DRAWN BY: D.HIGGS	DRAWN BY: D.HIGGS	ENGR. CHCK BY:	PROJ. MGR.: K. BRADLEY	PROJ. NO.: 409700	

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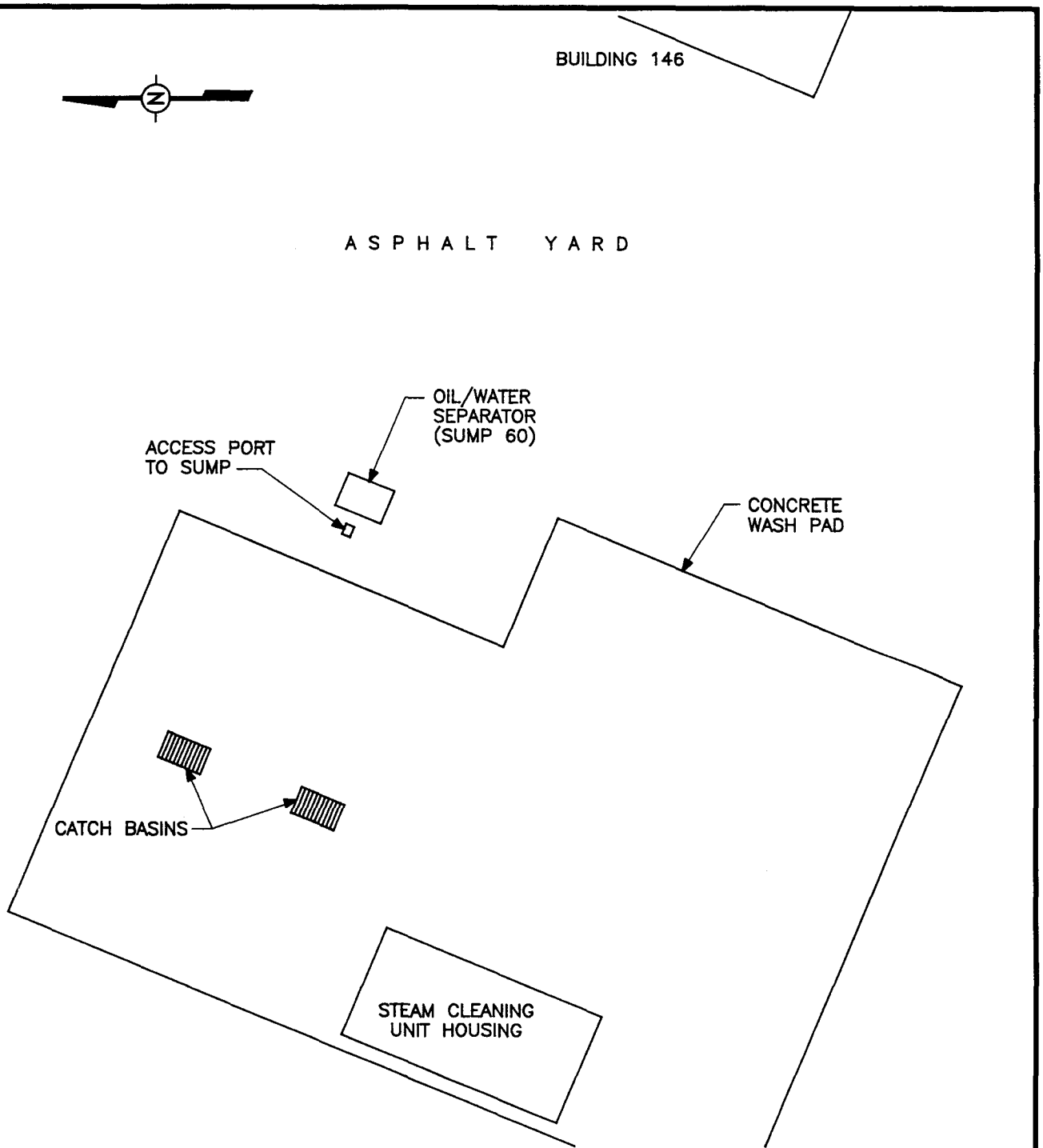

FIGURE 19.1-2

SITE 16
PUBLIC WORKS
STEAM CLEANING RACK, SUMP NO. 60

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

SOURCE: KENNEDY/JENKS/CHILTON
JOB NO. K/J/C 866078.17

STARTING DATE: 6/28/90	DATE LAST REV.: 7/26/90	DRAFT. CHCK. BY:	INITIATOR: D. WILLEN	DWG. NO.: 409700-A-G76	
DRAWN BY: D.HIGGS	DRAWN BY: D.HIGGS	ENGR. CHCK BY:	PROJ. MGR.: K. BRADLEY	PROJ. NO.: 409700	

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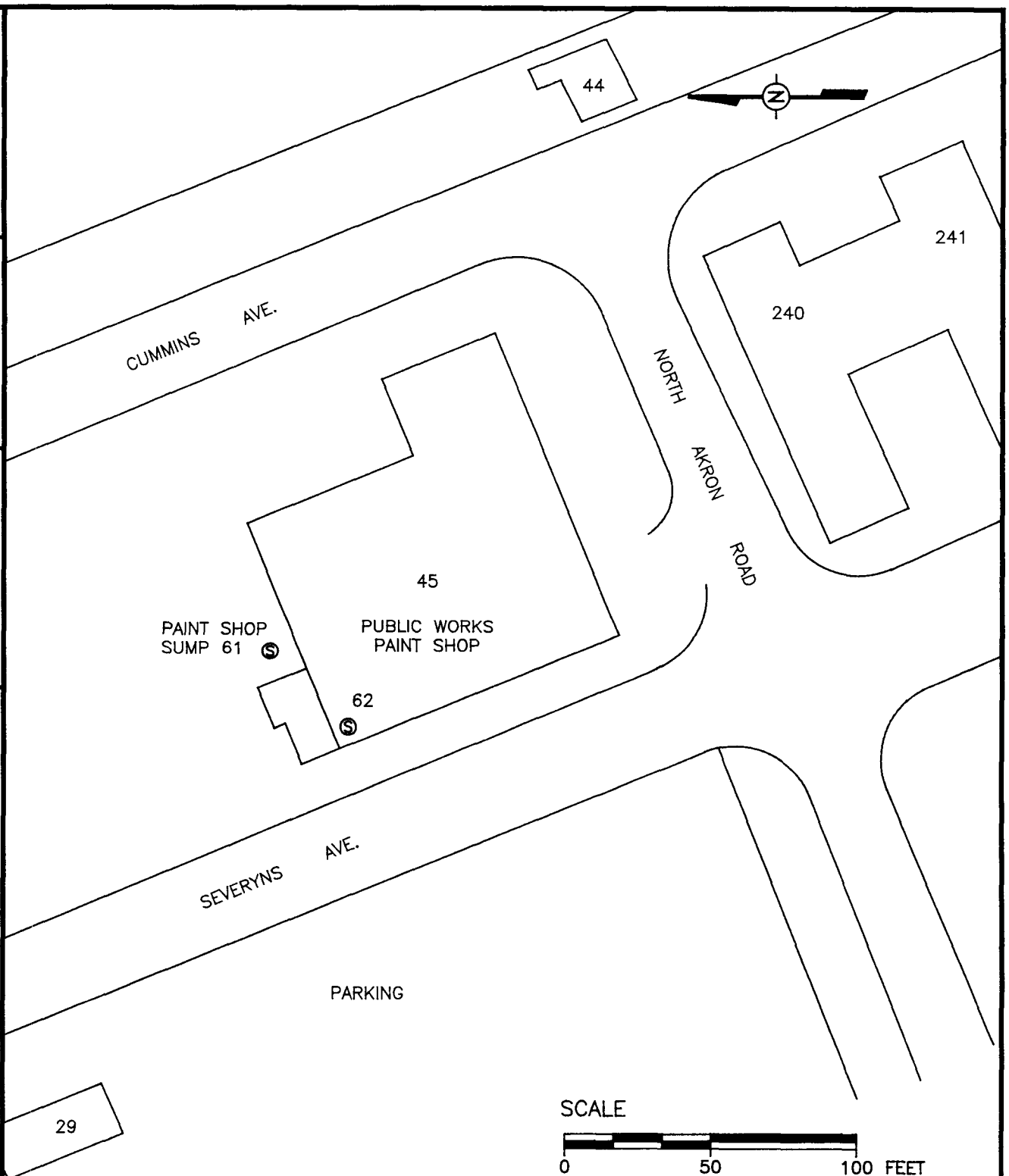
N00296.000910
MOFFETT FIELD
SSIC NO. 5090.3

SECTION 20.0

PHASE I CHARACTERIZATION REPORT

DATED 01 AUGUST 1990

THERE ARE NO STATISTICAL TABLES FOR SITE 17



SCALE

0 50 100 FEET

LEGEND

SUMP

FIGURE 20.1-1

SITE 17
PUBLIC WORKS
PAINT SHOP SUMP NO. 61

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

SOURCE:AERO-GEODETIC CORP.
JOB NO. 811822 3/16/81

STARTING DATE: 6/28/90	DATE LAST REV.: 7/26/90	DRAFT. CHCK. BY:	INITIATOR: D. WILLEN	DWG. NO.: 409700-A-G77
DRAWN BY: D.HIGGS	DRAWN BY: D.HIGGS	ENGR. CHCK BY:	PROJ. MGR.: K. BRADLEY	PROJ. NO.: 409700

\IMAGES\40970090

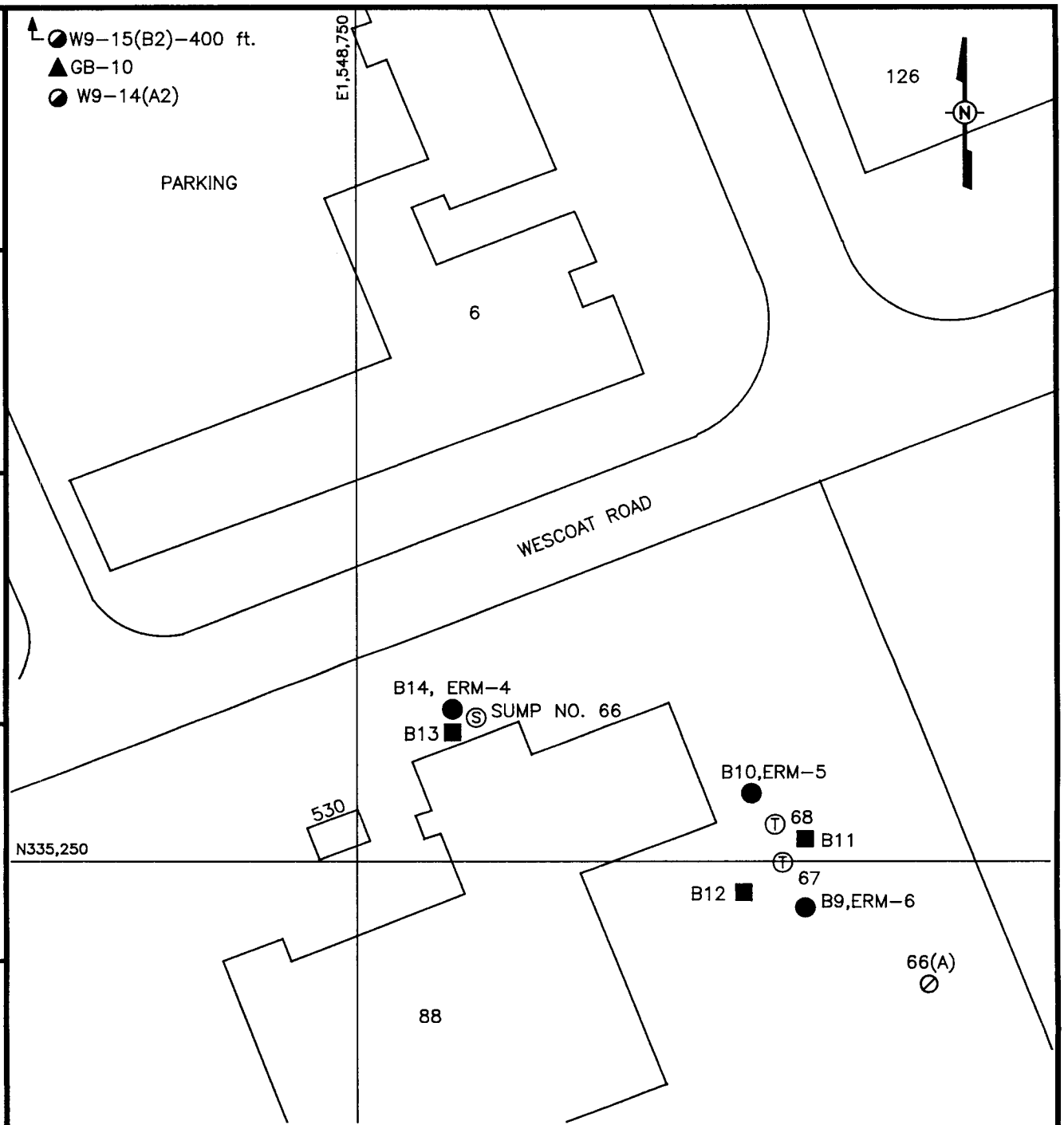
N00296.000910
MOFFETT FIELD
SSIC NO. 5090.3

SECTION 21.0

PHASE I CHARACTERIZATION REPORT

DATED 01 AUGUST 1990

THERE ARE NO STATISTICAL TABLES FOR SITE 18



SCALE

0 50 100 FEET

LEGEND

- IT WELL
- ERM-WEST WELL
- MEW WELL PRE 7/87
- IT GEOPHYSICAL BORING
- ERM-WEST SOIL BORING
- SUMP
- TANK

SOURCE: AERO-GEODETIC CORP.
JOB NO. 811822 3/6/81

81(A1)-50 ft.

FIGURE 21.1-1

SITE 18
LOCATION MAP
DRY CLEANER'S SUMP NO. 66

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

DWG. NO.: 409700-A-G29	INITIATOR: K. BRADLEY	DRAFT. CHCK. BY:	DATE LAST REV.:
PROJ. NO.: 409700	PROJ. MGR.: K. BRADLEY	ENGR. CHCK BY:	DRAWN BY:
STARTING DATE: 3/12/90	DRAWN BY: D.HIGGS		

\DRAWINGS\40970045

N00296.000910
MOFFETT FIELD
SSIC NO. 5090.3

SECTION 22.0

PHASE I CHARACTERIZATION REPORT

DATED 01 AUGUST 1990

Table 22.4-1
Summary of Detected Chemicals
Site 19 Soil Samples
1 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Acetone	ug/kg	2	14.5	7.0	14.5	11.0-18.0
Methylene chloride	ug/kg	9	20.4	11.2	17.0	10.0-46.0
Trichloroethene	ug/kg	1	58.0	0.0	58.0	58.0-58.0
Bis(2-Ethylhexyl)phthalate	ug/kg	1	630	0.0	630	630-630
Aluminum	mg/kg	9	16570	8519	17800	2980-30100
Arsenic	mg/kg	2	2.8	0.0	2.8	2.8-2.8
Barium	mg/kg	9	171	40.7	160	125-252
Beryllium	mg/kg	6	2.2	0.6	2.1	1.7-3.5
Cadmium	mg/kg	3	4.5	4.3	2.9	1.2-9.4
Calcium	mg/kg	9	72767	98309	25800	11700-266000
Chromium	mg/kg	9	56.3	16.9	57.4	30.9-88.2
Cobalt	mg/kg	9	15.4	3.2	14.0	13.1-21.6
Copper	mg/kg	9	43.0	16.1	35.5	27.8-79.8
Iron	mg/kg	9	24701	11457	27600	6000-41700
Lead	mg/kg	9	10.0	6.3	9.4	2.5-22.4
Magnesium	mg/kg	9	11434	5713	11700	3058-21400
Manganese	mg/kg	9	414	176	425	147-728
Mercury	mg/kg	3	0.3	0.2	0.3	0.2-0.5
Nickel	mg/kg	9	75.1	50.5	59.0	33.3-203
Potassium	mg/kg	7	1631	680	1410	1270-3160
Silver	mg/kg	1	7.7	0.0	7.7	7.7-7.7
Vanadium	mg/kg	9	83.6	39.2	63.3	56.0-169
Zinc	mg/kg	9	75.1	23.0	65.7	55.2-122
pH		9	8.3	0.7	8.1	7.6-9.6

Note: "1 Foot Depth" is comprised of Samples
from 0.0 to 2.0 feet below land surface.

This table does not include duplicate sample results or detections estimated below sample quantitation limits. This table does include all original sample data and data from split samples.

Table 22.4-2
Summary of Detected Chemicals
Site 19 Soil Samples
3 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Acetone	ug/kg	4	70.5	74.7	42.5	17.0-180
Methylene chloride	ug/kg	8	28.0	14.8	21.5	15.0-55.0
Trichloroethene	ug/kg	2	59.0	102	59.0	8.0-110
Aluminum	mg/kg	8	19413	6384	18450	10500-33000
Antimony	mg/kg	1	50.6	0.0	50.6	50.6-50.6
Arsenic	mg/kg	5	3.7	2.4	2.8	1.9-7.8
Barium	mg/kg	8	172	46.3	153	137-276
Beryllium	mg/kg	6	2.4	0.7	2.5	1.2-3.0
Cadmium	mg/kg	1	4.8	0.0	4.8	4.8-4.8
Calcium	mg/kg	8	26680	24523	19050	8640-83300
Chromium	mg/kg	8	64.4	16.7	65.6	31.5-87.6
Cobalt	mg/kg	7	15.9	2.5	16.1	12.6-20.1
Copper	mg/kg	8	46.0	17.1	44.3	28.9-82.9
Iron	mg/kg	8	37025	13267	33200	26800-67600
Lead	mg/kg	8	17.0	23.8	8.9	5.2-75.8
Magnesium	mg/kg	8	12993	5051	13900	2540-20400
Manganese	mg/kg	8	517	96.4	503	389-678
Mercury	mg/kg	2	0.2	0.0	0.2	0.2-0.2
Nickel	mg/kg	8	70.9	11.9	72.6	55.2-87.2
Potassium	mg/kg	8	1608	477	1540	1070-2600
Silver	mg/kg	1	4.3	0.0	4.3	4.3-4.3
Vanadium	mg/kg	8	65.8	12.0	64.0	54.2-92.1
Zinc	mg/kg	8	72.8	21.2	67.8	50.7-122
pH		8	8.4	0.5	8.3	7.9-9.3

Note: "3 Foot Depth" is comprised of Samples
from 2.1 to 4.0 feet below land surface.

This table does not include duplicate sample results or detections estimated below sample quantitation limits. This table does include all original sample data and data from split samples.

Table 22.4-3
Summary of Detected Chemicals
Site 19 Soil Samples
5 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Acetone	ug/kg	4	36.0	14.4	34.5	20.0-55.0
Methylene chloride	ug/kg	8	24.3	6.1	25.0	15.0-33.0
Tetrachloroethene	ug/kg	1	7.0	0.0	7.0	7.0-7.0
Trichloroethene	ug/kg	2	25.5	25.0	25.5	13.0-38.0
Bis(2-Ethylhexyl)phthalate	ug/kg	2	995	410	995	790-1200
Aluminum	mg/kg	8	21920	6095	21750	9660-29400
Antimony	mg/kg	1	27.7	0.0	27.7	27.7-27.7
Arsenic	mg/kg	2	3.5	0.7	3.5	3.1-3.8
Barium	mg/kg	8	211	39.9	202	168-270
Beryllium	mg/kg	6	2.5	0.7	2.6	1.4-3.2
Cadmium	mg/kg	1	1.9	0.0	1.9	1.9-1.9
Calcium	mg/kg	8	37850	43575	21650	14900-144000
Chromium	mg/kg	8	69.9	13.1	71.5	41.6-82.3
Cobalt	mg/kg	8	15.8	2.0	15.5	12.7-18.2
Copper	mg/kg	8	58.2	22.8	53.7	37.7-98.9
Iron	mg/kg	8	32663	8507	33300	15400-45500
Lead	mg/kg	8	16.3	21.7	8.7	6.0-70.0
Magnesium	mg/kg	8	16055	4505	15300	7540-22600
Manganese	mg/kg	8	680	482	534	407-1860
Mercury	mg/kg	2	0.3	0.1	0.3	0.2-0.3
Nickel	mg/kg	8	73.0	12.8	73.3	47.6-87.3
Potassium	mg/kg	7	1646	267	1690	1240-2050
Vanadium	mg/kg	8	75.0	9.9	74.3	65.4-96.9
Zinc	mg/kg	8	77.6	13.6	77.9	60.3-99.7
pH		8	8.3	0.4	8.4	7.6-8.9

Note: "5 Foot Depth" is comprised of Samples
from 4.1 to 5.5 feet below land surface.

This table does not include duplicate sample results or detections estimated below sample quantitation limits. This table does include all original sample data and data from split samples.

Table 22.4-4
Summary of Detected Chemicals
Site 19 Soil Samples
> 5 Foot Depth

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
Acetone	ug/kg	1	67.0	0.0	67.0	67.0-67.0
Methylene chloride	ug/kg	1	23.0	0.0	23.0	23.0-23.0
Aluminum	mg/kg	1	13600	0.0	13600	13600-13600
Arsenic	mg/kg	1	2.9	0.0	2.9	2.9-2.9
Barium	mg/kg	1	205	0.0	205	205-205
Cadmium	mg/kg	1	1.1	0.0	1.1	1.1-1.1
Calcium	mg/kg	1	167000	0.0	167000	167000-167000
Chromium	mg/kg	1	48.7	0.0	48.7	48.7-48.7
Cobalt	mg/kg	1	10.8	0.0	10.8	10.8-10.8
Copper	mg/kg	1	29.7	0.0	29.7	29.7-29.7
Iron	mg/kg	1	21700	0.0	21700	21700-21700
Lead	mg/kg	1	5.6	0.0	5.6	5.6-5.6
Magnesium	mg/kg	1	13100	0.0	13100	13100-13100
Manganese	mg/kg	1	425	0.0	425	425-425
Nickel	mg/kg	1	50.6	0.0	50.6	50.6-50.6
Silver	mg/kg	1	3.9	0.0	3.9	3.9-3.9
Vanadium	mg/kg	1	83.8	0.0	83.8	83.8-83.8
Zinc	mg/kg	1	63.0	0.0	63.0	63.0-63.0
pH		1	9.2	0.0	9.2	9.2-9.2

Note: "> 5 Foot Depth" is comprised of Samples
from 5.6 feet deep and below.

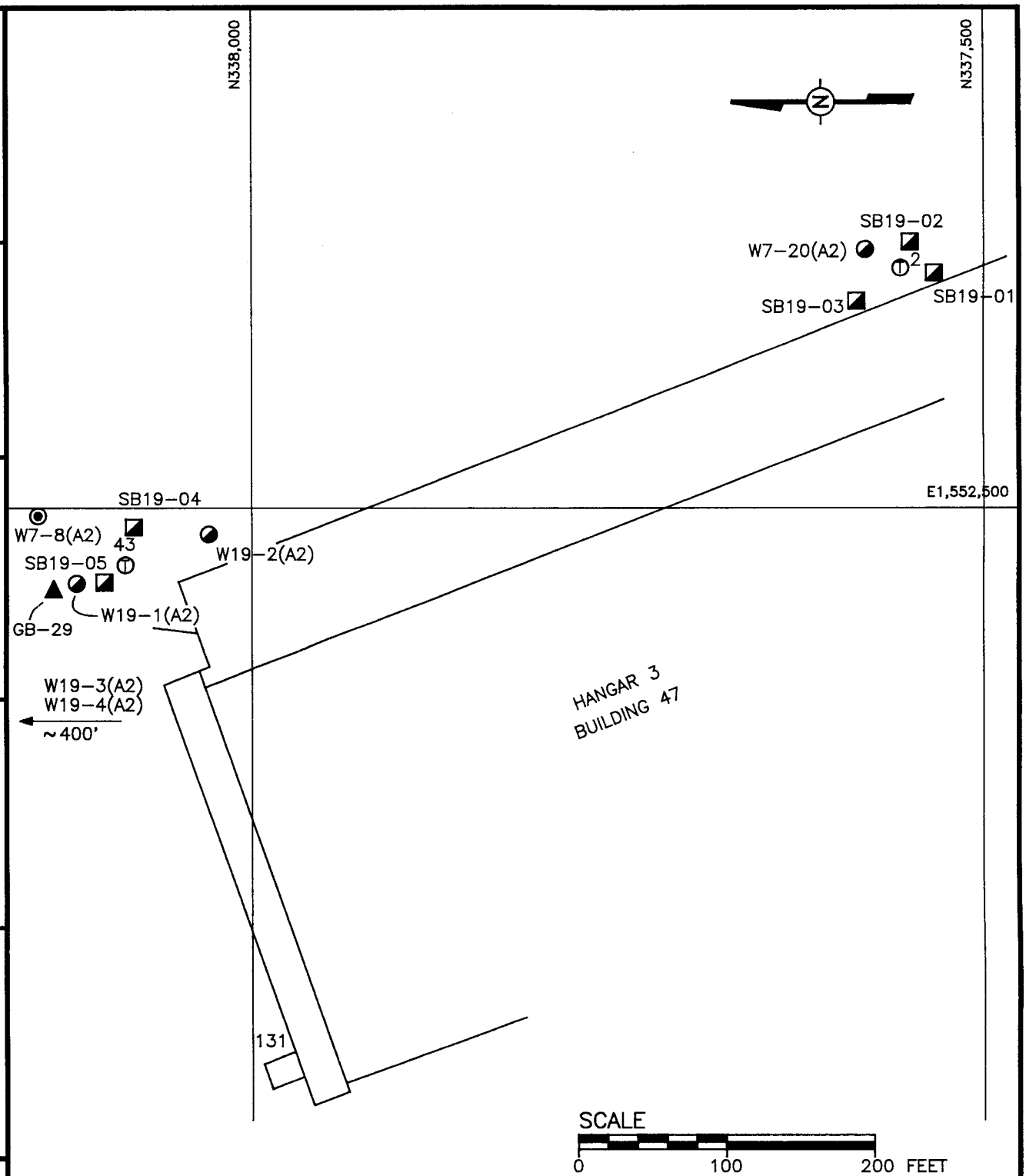
This table does not include duplicate sample results or detections estimated below sample quantitation limits. This table does include all original sample data and data from split samples.

Table 22.4-5
Summary of Detected Chemicals
Site 19 Water Samples
Aquifer A Monitor Wells

Compounds	Units	Detected	Mean	Std. Dev.	Median	Range
1,1,1-Trichloroethane	ug/L	7	6.9	1.7	7.0	5.0-9.0
1,1-Dichloroethane	ug/L	9	6.6	1.3	6.0	5.0-9.0
1,1-Dichloroethylene	ug/L	5	6.0	1.0	6.0	5.0-7.0
1,2-Dichloroethenes(Total)	ug/L	5	13.8	3.1	15.0	10.0-17.0
Acetone	ug/L	2	14.0	6.0	14.0	11.0-17.0
Benzene	ug/L	1	38.0	0.0	38.0	38.0-38.0
Carbon tetrachloride	ug/L	5	9.8	4.2	9.0	6.0-17.0
Chloroform	ug/L	6	7.2	1.5	7.0	6.0-10.0
Methylene chloride	ug/L	16	12.1	5.5	10.0	5.0-20.0
Tetrachloroethene	ug/L	6	58.2	26.4	65.0	9.0-85.0
Toluene	ug/L	4	11.5	5.7	9.0	8.0-20.0
Trichloroethene	ug/L	5	21.2	3.6	20.0	17.0-25.0
Cadmium	ug/L	1	13.5	0.0	13.5	13.5-13.5
Calcium	ug/L	23	71057	36445	85700	29500-121000
Iron	ug/L	13	207	75.1	174	108-330
Magnesium	ug/L	23	45226	23311	60900	18200-74500
Manganese	ug/L	22	241	191	168	24.4-657
Mercury	ug/L	2	0.2	0.0	0.2	0.2-0.2
Sodium	ug/L	23	70022	2946	69400	64200-76500
Zinc	ug/L	1	71.7	0.0	71.7	71.7-71.7
Bicarbonate	mg/L	16	335	81.2	330	240-430
Chloride	mg/L	16	33.8	11.5	34.5	20.0-65.0
Nitrate	mg/L	4	2.3	0.2	2.3	2.1-2.4
Sulfate	mg/L	16	114	88.6	97.5	22.0-240
TDS	mg/L	16	585	220	570	320-920

Note: "Aquifer A Monitor Wells" combine A1 & A2 subaquifers

This table does not include duplicate sample results or detections estimated below sample quantitation limits. This table does include all original sample data and data from split samples.



LEGEND

- IT WELL
- IT SOIL BORING
- IT GEOPHYSICAL BORING
- TANK
- EMCON WELL

SOURCE: AERO-GEODETIC CORP.
JOB NO. 811822 3/16/81

FIGURE 22.1-1

SITE 19
LOCATION MAP
TANK NOS. 2 AND 43

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

STARTING DATE: 3/12/90	DATE LAST REV.: 7/26/90	DRAFT. CHCK. BY:	INITIATOR: K. BRADLEY	DWG. NO.: 409700-A-G81	
DRAWN BY: D.HIGGS	DRAWN BY: D.HIGGS	ENGR. CHCK BY:	PROJ. MGR.: K. BRADLEY	PROJ. NO.: 409700	

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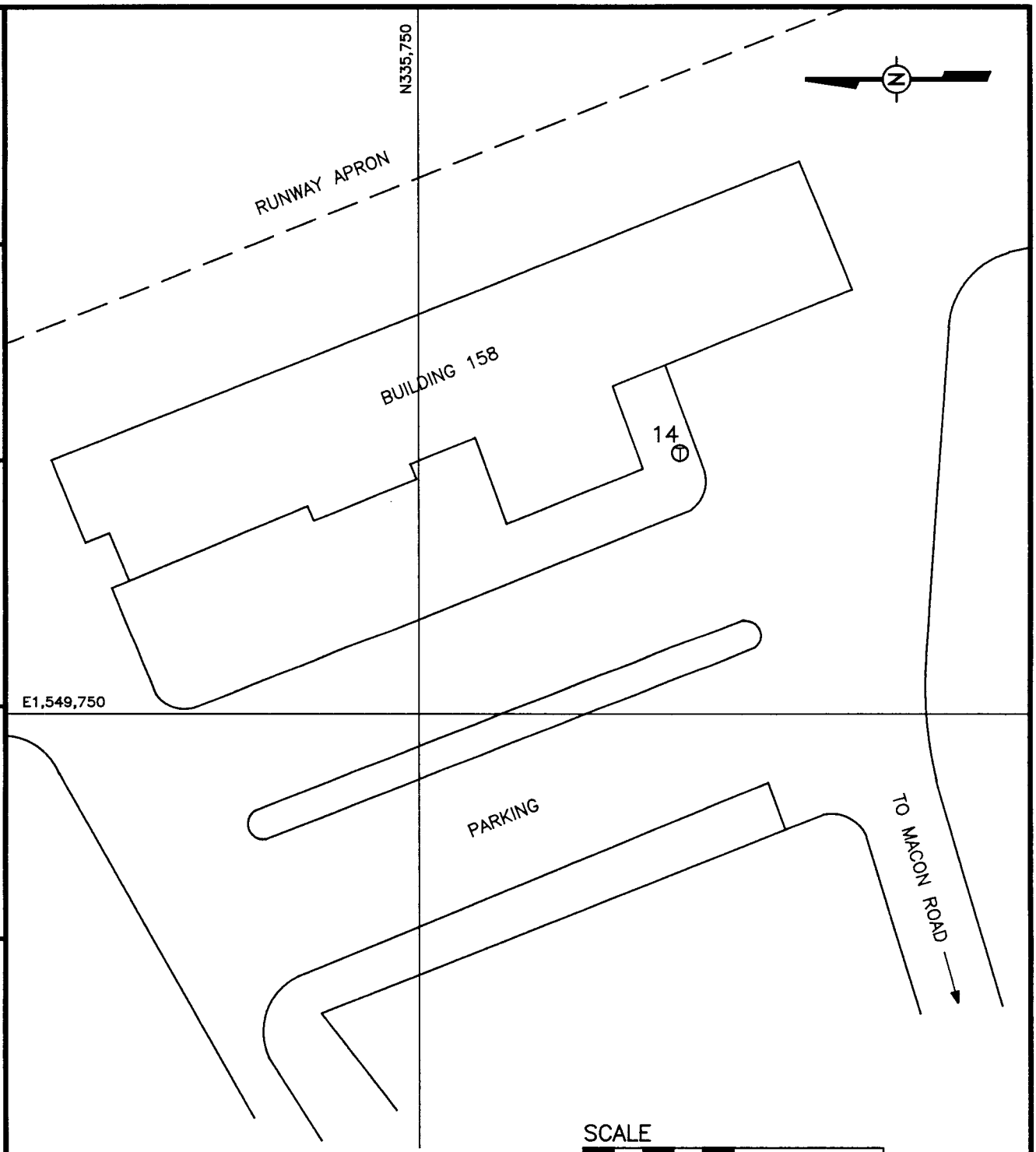


STARTING DATE: 3/12/90	DATE LAST REV.:	DRAFT. CHCK. BY:	INITIATOR: K. BRADLEY
DRAWN BY: D.HIGGS	DRAWN BY:	ENGR. CHCK BY:	PROJ. MGR.: K. BRADLEY
			DWG. NO.: 409700-A-G79
			PROJ. NO.: 409700

FIGURE 22.1-2

SITE 19
LOCATION MAP
LEAKING TANK NO. 14

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

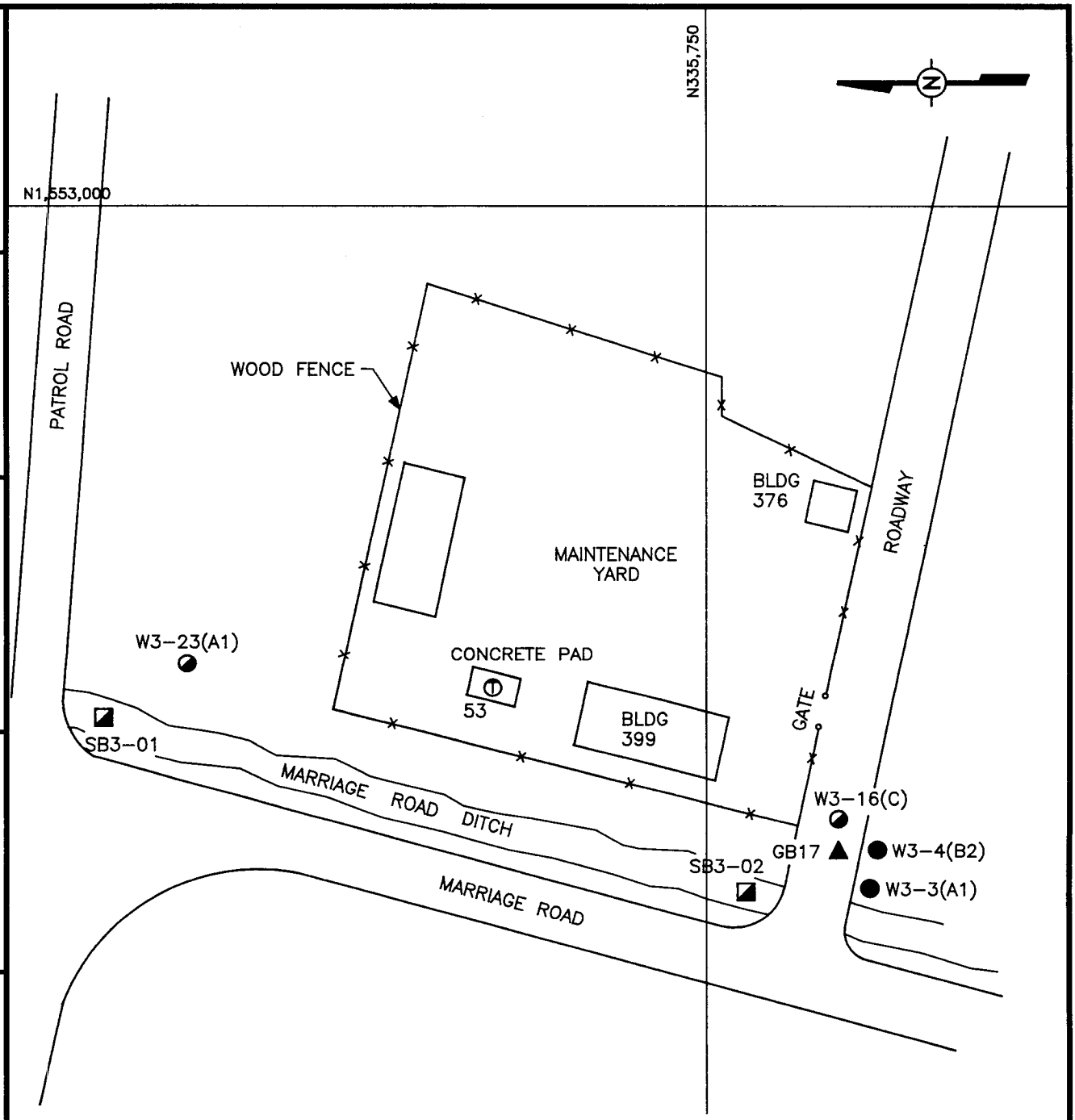
INTERNATIONAL TECHNOLOGY CORPORATION

LEGEND

TANK

SOURCE: AERO-GEODETIC CORP.
JOB NO. 811822 3/16/81

\DRAWINGS\40970055



SCALE

0 50 100 FEET

LEGEND

- IT WELL
- ESA WELL
- IT GEOPHYSICAL BORING
- IT SOIL BORING
- TANK

FIGURE 22.1-3

SITE 19
LOCATION MAP
LEAKING TANK NO. 53

NAVAL AIR STATION
MOFFETT FIELD, CALIFORNIA

INTERNATIONAL TECHNOLOGY CORPORATION

SOURCE: AERO-GEODETIC CORP.
JOB NO. 811822 3/16/81

STARTING DATE: 3/12/90	DATE LAST REV.:	DRAFT. CHCK. BY:	INITIATOR: K. BRADLEY	DWG. NO.: 409700-A-G80	
DRAWN BY: D.HIGGS	DRAWN BY:	ENGR. CHCK BY:	PROJ. MGR.: K. BRADLEY	PROJ. NO.: 409700	

\DRAWINGS\40970057

N00296.000910
MOFFETT FIELD
SSIC NO. 5090.3

SECTION 23.0

PHASE I CHARACTERIZATION REPORT

DATED 01 AUGUST 1990

Table 23.1-1. Physical and Chemical Characteristics of Organic Chemicals Detected in Ground Water NAS Moffett Field

Compound	Molecular Weight	Solubility (mg/l H_2O)	Log octanol/ water part. coeff.	Vapor Pressure (mm Hg)	Density g/cm^3
Acetone	58.1	Miscible	-0.24	270	0.791
Benzene	78.1	1,780	2.13	95.2	0.879
bis-2-Ethylhexyl Phthalate	390.5	0.285	5.3, 8.73	2×10^{-7}	0.99
Carbon Disulfide	76.1	2,300	1.84	260	1.26
Carbon Tetrachloride	153.8	785	2.64	90	1.59
Chlorobenzene	112.56	500	2.84	8.8, 11.8	1.107
Chloroform	119.4	8,200	1.97	150.5	1.489
Chloromethane	50.6	7,250	0.91	3,765	0.99
di-N-Butyl Phthalate	278.3	13	5.2	0.1 (115C)	1.047
di-N-Octyl Phthalate	391.0	3	9.2	0.2 (150C)	no data
Diphenylnitrosamine	198.2	no data	2.57	no data	no data
Ethylbenzene	106.2	152	3.15	7	0.867
Methylene Chloride	84.9	20,000	1.25	349	1.336
Naphthalene	128.2	30	3.01	1	1.145
Toluene	92.1	515	2.69	22	0.867
Trichloroethene	131.5	1,100	2.29	60	1.46
Vinyl Chloride	62.5	1.1	0.60	2660	0.912
Xylene	106.2	186	2.77	5	0.880
1,1,1-Trichloroethane	133.4	4,400	2.17	100	1.35
1,1-Dichloroethane	99.0	5,500	1.79	180	1.176
1,2-Dichlorobenzene	147.0	145	3.38	1.5	1.305
1,2-Dichloroethane	99.0	8,690	1.48	61	1.25
1,2-trans-Dichloroethene	96.9	600	1.48	200	1.255
2-Butanone (MEK)	72.1	353,000 (10C)	0.26	77.5	0.805
4-Methyl-2-pentanone (MIBK)	100.2	19,000	no data	6	0.802

Sources: Verschueren, 1983
USEPA, 1979
Dean, 1973

CEE279823A1
07/29/90 F1 NE

THERE ARE NO FIGURES FOR SECTION 23

N00296.000910
MOFFETT FIELD
SSIC NO. 5090.3

SECTION 24.0

PHASE I CHARACTERIZATION REPORT

DATED 01 AUGUST 1990

Table 24.2-1. Baseline Mineral Content of Soils in the NAS Moffett Area

Metal	USGS Range[a] (ppm)	Hetch-Hetchy[b] (ppm)	Well 18[b] (ppm)	Moffett Range[c] (ppm)
Aluminum	70,000	NA	NA	2,980 - 37,200
Antimony	<1 - >10	NA	NA	5 - 148
Arsenic	6.5 - 10	5.6 - 6.3	5.9 - 11	1.0 - 11.1
Barium	500 - 5,000	NA	NA	34 - 795
Beryllium	<1	0.7 - 0.8	0.9 - 1.2	0.2 - 5.8
Cadmium	1 - 10	4	<1 - 3	0.92 - 5.1
Calcium	18,000 - 28,000	NA	NA	3,390 - 201,000
Chromium	100 - 2,000	56 - 60	62 - 72	16.2 - 102
Cobalt	15 - 70	NA	NA	1.4 - 36
Copper	30 - 700	44 - 47	39 - 44	21.7 - 98.9
Iron	30,000 - >100,000	NA	NA	9,160 - 67,600
Lead	30 - 700	45 - 48	49 - 54	0.95 - 47.1
Magnesium	15,000 - >100,000	NA	NA	2,710 - 33,700
Manganese	500 - 7,000	NA	NA	186 - 1,070
Mercury	0.2 - 5.1	0.1	0.15 - 1.3	0.19 - 1.2
Nickel	30 - 700	41 - 47	52 - 58	17.3 - 118
Potassium	11,000 - 16,000	NA	NA	53.4 - 5,640
Selenium	<0.1 - 0.5	ND (0.3)	ND (0.3)	NA
Silver	0.7 - 5	0.3 - 0.8	<0.2 - 0.4	0.82 - 2.4
Sodium	7,000 - 100,000	NA	NA	36.3 - 19,200
Thallium	NA	ND (0.2)	ND (0.2)	0.21 - 2.2
Vanadium	150 - 500	NA	NA	0.085 - 115
Zinc	120 - 3,500	100 - 110	100 - 110	8.1 - 188

[a]Taken from USGS Professional Paper 1270, 1984.
[b]Range from two samples, taken from Harding Lawson Associates, 1987.
[c]On-site ranges obtained as described in Section 3.5.

NA - Range not available.
ND - All samples nondetect, reported value is the method detection limit.

Table 24.2-2. Background Mineral Content of Ground Water In The NAS Moffett Area

Chemical	California DWR Range (a) [µg/l (b)]	Well W10-6(C)(c) [µg/l (b)]
Aluminum	<10 - 110	6.8 - 73
Antimony	<10 - 10	40.8 - 47.2
Arsenic	< 10	6.0 - 8.3
Barium	80 - 710	55.1 - 97.5
Beryllium	<1	0.93 - 1.5
Bicarbonate (mg/l)	NA	190 - 250
Cadmium	<1 - 5	ND < 5
Calcium (mg/l)	0.5 - 94	26.5 - 28.5
Carbonate (mg/l)	NA	ND < 1
Chloride (mg/l)	0.14 - 120	14 - 20
Chromium	<1 - 4	ND < 10
Cobalt	NA	ND < 50
Copper	<10 - 50	ND < 25
Iron	<10 - 2700	29.2 - 78.3
Lead	<10 - 30	ND < 5
Magnesium (mg/l)	0.16 - 81	10.3 - 11.9
Manganese	<10-410	52.1 - 66.1
Mercury	NA	1.4
Nickel	<10 - 10	13.2
Nitrate (mg/l)	<.01 - 78	ND < 0.1
Potassium (mg/l)	0.01 - 4.9	2.36 - 4.45
Selenium	<10 - 140	ND < 5
Silver	< 1	3.6 - 6.9
Sodium (mg/l)	0.13 - 207	55.9 - 60.4
Sulfate (mg/l)	0.06 - 138	18 - 22
Total Dissolved Solids (mg/l)	40 - 751	150 - 290
Thallium	NA	ND < 10
Vanadium	<100	2.9 - 9.4
Zinc	<10 - 100	3.4

NA - No data available.
ND - None detected

(a) Data for the Coyote Creek Hydrologic Area in the Santa Clara Hydrologic unit from the State of California, Department of Water Resources Hydrologic Data 1985, Vol III, 1988.

(b) All values are µg/l unless otherwise noted.

(c) Data from Well W10-6(C) at NAS Moffett Field. All concentrations except calcium, magnesium, manganese, and sodium are estimated below quantitation limits.

Table 24.2-3. Mineral Content of Ground Water East of Runways

Chemical	Aquifer A		Aquifer F[a]		Aquifer B		Aquifer C	
	Range of Detected Concentrations (µg/l)[b]	Frequency of Detection	Range of Detected Concentrations (µg/l)[b]	Frequency of Detection	Range of Detected Concentrations (µg/l)[b]	Frequency of Detection	Range of Detected Concentrations (µg/l)[b]	Frequency of Detection
Aluminum	5 - 13,300	114/187	34.8 - 2,150	18/25	9.9 - 74.1	4/12	11.4 - 91.6	14/24
Antimony	60 - 166	86/187	84.2 - 1,950	13/25	60	1/12	--	0/24
Arsenic	1.4 - 22	34/187	5 - 29.2	13/25	6.3 - 10.4	9/12	1.9 - 10	18/24
Barium	8 - 1,170	171/187	39.5 - 5,370	25/25	6.9 - 30.9	11/12	57.1 - 134	24/24
Beryllium	0.6 - 8.8	20/187	3.1 - 7.8	2/25	0.75 - 1.6	2/12	0.5 - 1.2	6/24
Bicarbonate (mg/l)	91 - 2,100	149/150	220 - 2,500	15/17	180 - 240	10/10	190 - 220	16/16
Cadmium	4.8 - 288	13/187	6.7 - 157	6/25	--	0/12	4.4 - 4.6	2/24
Calcium (mg/l)	0.2 - 3,070	187/187	12 - 561	25/25	22.6 - 25.2	12/12	28 - 35.7	24/24
Carbonate (mg/l)	1.1 - 2,000	7/107	--	0/17	1 - 36	3/10	--	0/12
Chloride (mg/l)	4.1 - 89,000	153/153	3,100 - 53,000	17/17	24 - 34	10/10	16 - 34	16/16
Chromium	10 - 173	7/187	10.3 - 61	4/25	--	0/12	--	0/24
Cobalt	5.5 - 80.2	17/187	18 - 207	5/25	--	0/12	--	0/24
Copper	5.5 - 916	32/187	19 - 204	4/25	--	0/12	3.6	1/24
Iron	3.5 - 340,000	182/187	8.3 - 108,000	24/25	6.8 - 259	12/12	6.2 - 110	22/24
Lead	0.9 - 139	26/187	1.6 - 91	5/25	1.5	1/12	3.3 - 7.5	2/24
Magnesium (mg/l)	5.18 - 3,130	186/187	27.8 - 1,790	25/25	11.6 - 13.6	12/12	8.8 - 13.2	24/24
Manganese	0.8 - 10,100	183/187	8.9 - 3,600	25/25	59.1 - 104	12/12	35.6 - 132	24/24
Mercury	0.05 - 1.2	34/187	0.1 - 0.2	4/25	0.1 - 0.3	3/12	0.1 - 0.2	3/24
Nickel	1.1 - 1,730	23/187	18 - 190	4/25	9.3	1/12	7 - 10.5	2/24
Nitrate (mg/l)	0.13 - 15	72/155	0.5 - 20	6/17	0.1	1/10	--	0/16
Potassium (mg/l)	0.53 - 20,400	118/187	0.21 - 812	25/25	1.16 - 2,790	10/12	0.84 - 2,400	23/24
Selenium	2.2 - 163	24/187	16 - 19	2/25	--	0/12	--	0/24
Silver	3.2 - 744	71/187	3 - 161	12/25	3.9	1/12	4.1 - 6.7	6/24
Sodium (mg/l)	49.4 - 87,500	187/187	153 - 23,600	25/25	73 - 105	12/12	53.6 - 68.5	24/24
Sulfate (mg/l)	5.5 - 14,000	153/153	28 - 780	15/17	18 - 30	10/10	17 - 180	15/16
TDS[c] (mg/L)	66 - >20,000	153/153	5,050 - 20,000	17/17	300 - 460	10/10	270 -350	15/16
Thallium	1 - 90	25/187	3 - 140	3/25	--	0/12	1.2 - 2.9	7/24
Vanadium	2.3 - 2,120	75/187	21 - 615	13/25	2 - 9.7	2/12	3.9 - 18.8	10/24
Zinc	2 - 548	74/187	3.2 - 375	13/25	2.5 - 62	4/12	2 - 38.6	10/24

[a]The F aquifer represents fill material leachate monitored by leachage monitoring wells at Sites 1 and 2.

[b]Concentrations are given in µg/l unless otherwise noted.

[c]TDS - total dissolved solids.

Table 24.2-4. Mineral Content of Ground Water West of Runways

Chemical	Aquifer A Range of Detected Concentrations (µg/l/[a]	Aquifer A Frequency of Detection	Aquifer B Range of Detected Concentrations (µg/l)[a]	Aquifer B Frequency of Detection	Aquifer C Range of Detected Concentrations (µg/l)[a]	Aquifer C Frequency of Detection
Aluminum	6.9 - 427	52/98	9.2 - 840	12/18	11.2 - 245	9/12
Antimony	--	--	--	--	--	--
Arsenic	1.4 - 43	25/98	2.9 - 15.3	14/18	3.5 - 14.6	7/12
Barium	16.6 - 587	97/98	52.5 - 146	18/18	23.9 - 109	12/12
Beryllium	0.6 - 3	26/98	0.79 - 0.79	1/18	0.9 - 1.8	3/12
Bicarbonate (mg/l)	230 - 810	72/78	216 - 240	16/17	200 - 530	8/8
Cadmium	3.7 - 4.8	4/98	4.3	1/18	--	0/12
Calcium (mg/l)	48.4 - 445	98/98	31.5 - 49.4	18/18	24.9 - 36	12/12
Carbonate (mg/l)	--	0/53	14	1/14	--	0/4
Chloride (mg/l)	16 - 55	69/78	15 - 27	16/17	2 - 40	8/8
Chromium	4.5	1/98	--	0/18	--	0/12
Cobalt	--	0/98	--	0/18	--	0/12
Copper	3.7 - 8.7	4/98	--	0/18	--	0/12
Iron	12.3 - 13,400	96/98	34.9 - 893	18/18	3.1 - 131	9/12
Lead	1 - 1.9	5/98	1 - 1.1	2/18	--	0/12
Magnesium (mg/l)	21.3 - 171	98/98	13.7 - 20.9	18/18	11.3 - 14.6	12/12
Manganese	3.4 - 2,240	95/98	81.5 - 156	18/18	59.8 - 99.6	12/12
Mercury	0.1 - 1.9	5/98	0.09 - 0.09	1/18	0.2 - 0.2	1/12
Nickel	8.1 - 15.2	9/98	--	0/18	--	0/12
Nitrate (mg/l)	0.1 - 7	43/100	--	0/25	--	0/9
Potassium (mg/l)	0.59 - 15.4	64/98	0.58 - 10.4	17/18	1.06 - 6.3	12/12
Selenium	1.5 - 14.1	23/98	--	0/18	1.1 - 1.1	1/12
Silver	3.3 - 14.8	29/98	3.7 - 9.4	6/18	3.4 - 9.2	7/12
Sodium (mg/l)	30.7 - 99.6	98/98	38.7 - 60.9	18/18	49.3 - 75.4	12/12
Sulfate (mg/l)	24 - 1,210	69/78	13 - 31	16/17	13 - 29	8/8
TDS[b] (mg/l)	370 - 2,330	73/78	200 - 410	16/17	250 - 310	8/8
Thallium	1.1 - 4.1	13/98	1.7 - 2.8	5/18	1.4	1/12
Vanadium	3.3 - 51.1	40/98	3.1 - 42	5/18	3.5 - 33.2	6/12
Zinc	2 - 91.2	49/98	2 - 8	11/18	2.4 - 8.2	7/12

[a]Concentrations are given in µg/l unless otherwise noted.
[b]TDS - total dissolved solids.

Table 24.2-5. Chemicals of Potential Concern Present in Ground Water East of the Runways[a]

Chemical	Range of Detected Concentrations (μg/l)	Aquifer[b]
1,1,1-Trichloroethane	1 - 7	A1
1,1-Dichloroethane	1 - 27	A1
1,2-Dichlorobenzene	2 - 3	A1
1,2-Dichloroethane	2 - 20	A1
1,2-Dichloroethene	2 - 490	F, A1
1,4-Dichlorobenzene	7 - 33	F
2-Butanone	1 - 49,000	F
2-Methylnapthalene	2 - 36	F, A1
2-Methylphenol	13 - 37	F
2,4-Dimethylphenol	13 - 370	F
4-Methyl-2-pentanone	16 - 8,300	F
4-Methylphenol	23 - 7,900	F
Acetone	2 - 3,200	F
Benzene	2 - 38	F
Benzoic acid	20 - 11,000	F
Bis (2-Ethylhexyl)phthalate	1 - 250	F, A1, A2
Napthalene	1 - 50	F, A1
Dichloroethene	2 - 4	A1
Carbon Tetrachloride	1 - 91	A1
Chlorobenzene	2 to 5	F
Chloroethane	4 - 7	F
Chloroform	1 - 29	A1
Ethylbenzene	1 - 150	F
Phenol	17 - 98	F
Tetrachloroethene	1 - 180	F, A1
Toluene	2 - 660	F
Total petroleum hydrocarbons	0.3 - 300	A1
Trichloroethene	1 - 50	F, A1
Vinyl chloride	1 - 42	F, A1
Xylenes	3 - 350	F

[a]Sites 1, 2, 3, 4, 5, 6, 7, and 11; site descriptions are given in Sections 4.0 to 22.0.

[b]The A1 and A2 aquifers are subdivisions of the water table (A) aquifer at NAS Moffett. "F" represents fill material leachate monitored by leachate monitoring wells at Sites 1 and 2. The complete aquifer classification system is described in Section 3.3.

Table 24.2-6. Chemicals of Potential Concern Present in Soil East of the Runways[a]

Chemical	Range of Detected Concentrations (µg/kg)
1,1,1-Trichloroethane	1 - 16
1,2,4-TCB	66
1,3-Dichlorobenzene	55 - 1,100
2-Butanone	2 - 87
2-Methylphenol	280
4-Chloro-3-methyl phenol	180
4-Methylphenol	61 - 14,000
4-Nitrophenol	850
Acenaphthene	90 - 290
AROCLOR 1242	220 - 680
AROCLOR 1254	150 - 28,000
AROCLOR 1260	100 - 18,000
AROCLOR	210 - 630
Arsenic	1.2 - 39.6
Benzo(a)anthracene	140 - 800
Benzo(a)pyrene	100 - 640
Benzo(b)fluoranthene	100 - 1,100
Benzo(g,h,i)perylene	120 - 530
Beryllium	0.14 - 6.5
Bis(2-ethylhexyl)phthalate	6 - 41,000
Butylbenzylphthalate	46 - 980
Cadmium	1.1 - 218
Carbon disulfide	1 - 36
Chrysene	61 - 860
Di-n-butyl Phthalate	2 - 740
Di-n-octyl Phthalate	9,700
Ethyl benzene	2 - 68
Fluoranthene	42 - 2,500
Indeno(1,2,3-c,d)pyrene	79 - 380
Naphthalene	50 - 360
Oil and grease	2 - 9,600
Pentachlonphenol	410
Phenanthrene	68 - 1,800
Phenol	1,000 - 2,500
Pyrene	56 - 1,600
Silver	0.63 - 12
Tetrachloroethane	1 - 4
Toluene	1 - 89
Total petroleum hydrocarbons	91 - 1,000
Xylenes	4 - 220

[a]Sites 1, 2, 3, 4, 5, 7, and 11; site descriptions are given in Sections 4.0 - 22.0.

Table 24.2-7. Chemicals of Potential Concern Present in Ground Water West of the Runways[a]

Chemical	Range of Detected Concentrations (µg/l)	Aquifer[b]
1,1,1-Trichloroethane	1 - 110	A1, A2
1,1-Dichloroethane	1 - 78	A1, A2
1,1-Dichloroethene	1 - 300	A1, A2
1,2-Dichloroethane	5 - 6	A1
1,2-Dichloroethene	1 - 900	A1, A2
Acetone	130 - 3,200	A1
Chloroform	1 - 34	A1
Methylene chloride	5 - 6,800	A1, A2
Trichloroethene	1 - 36,000	A1, A2

[a]Sites 8, 9, 12, 14, and 19; site descriptions are given in Sections 4.0 to 22.0.
[b]The A1 and A2 aquifers are subdivisions of the water table (A) aquifer at NAS Moffett. The complete aquifer classification system is described in Section 3.3.

Table 24.2-8. Chemicals of Potential Concern Present in Soil West of the Runways[a]

Chemical	Range of Detected Concentrations (μg/kg)
1,1,2,2-Tetrachloroethane	220 - 420
1,2-Dichloroethene	1 - 6
2-Butanone	2 - 31
Anthracene[b]	220
Benzo(a)anthracene[b]	130 - 3,300
Benzo(a)pyrene[b]	110 - 2,400
Benzo(a)fluoranthene[b]	84 - 2,700
Benzo(k)fluoronthene[b]	120 - 3,700
Benzo(g,h,i)perylene	99 - 700
Benzoic acid	38 - 360
Beryllium	1.3 - 2.6
Bis(2-ethylhexyl)phthalate	41 - 2,100
Butyl benzyl phthalate[b]	1,700
Carbon disulfide	1 - 7
Chrysene	110 - 3,400
DiBenzo(a,h)anthracene[b]	640
Di-n-butylphthalate	44 - 1,400
Ethyl benzene	1 - 9
Fluoranthene	120 - 2,500
Indeno(1,2,3-c,d)pyrene[b]	2,300
Naphthalene	520
Oil and grease	3 - 16,000
Phenanthrene	110 - 540
Pyrene	110 - 3,200
Tetrachloroethene	2 - 4
Toluene	1 - 37
Total petroleum hydrocarbons	58 - 1,400
Trichloroethene	1 - 43
Xylenes	4 - 30

[a]Sites 8, 9, 12, 14, and 19; site descriptions are given in Sections 4.0 to 22.0.
[b]Compounds found only in the top 1 meter of samples; all other compounds were found throughout the soil column.

Table 24.2-9. Summary of Chemicals of Potential Concern at NAS Moffett Field

Ground Water	
Chemical	Concentration (µg/L)
1,1,1-Trichlorothane	1 - 110
1,1-Dichloroethane	1 - 78
1,1-Dichloroethene	1 - 300
1,2-Dichlorobenzene	2 - 3
1,2-Dichloroethane	5 - 20
1,2-Dichloroethene	1 - 900
1,4-Dichlorobenzene	7 - 33
2,4-Dimethylphenol	13 - 370
2-Butanone	46 - 49,000
Acetone	130 - 3,200
Benzene	2 - 38
Benzoic acid	20 - 11,000
Bis(2-ethylhexyl)phthalate	1 - 210
Carbon tetrachloride	1 - 91
Chlorobenzene	3 - 5
Chloroethane	4 - 7
Chloroform	1 - 9
Ethylbenzene	1 - 150
Methylene chloride	14 - 6,800
2-Methylnaphthalene	3 - 15
2-Methylphenol	13 - 37
4-Methylphenol	23 - 7,900
4-Methyl-2-pentanone	16 - 8,300
Naphthalene	1 - 50
Phenol	17 - 98
Tetrachloroethene	1 - 180
Total petroleum hydrocarbons	0.3 - 300
Toluene	2 - 660
Trichloroethene	1 - 36,000
Vinyl chloride	1 - 42
Xylenes	3 - 350

Table 24.2-9. (Continued)

Chemical	Soil Concentration (µg/L)
1,1,1-Trichlorothane	1 - 16
1,1,2,2-Tetrachloroethane	220 - 420
1,2-Dichloroethene	1 - 6
1,2,4-Trichlorobenzene	66
1,3-Dichlorobenzene	810 - 1,100
2-Butanone	2 - 87
2-Methylphenol	280
4-Chloro-3-methylphenol	180
4-Methylphenol	61 - 14,000
4-Nitrophenol	850
Acenaphthene	90
Anthracene	220
Aroclor 1242	220 - 680
Aroclor 1254	150 - 28,000
Aroclor 1260	100 - 18,000
Benzene	210 - 630
Benzo(a)anthracene	130 - 3,300
Benzo(a)pyrene	100 - 2,400
Benzo(b)fluoranthene	84 - 2,700
Benzoic acid	38 - 360
Benzo(g,h,i)perylene	99 - 700
Benzo(k)fluoranthene	120 - 3,700
Bis(2-ethylhexyl)phthalate	6 - 41,000
Butyl benzyl phthalate	110 - 1,700
Carbon Disulfide	2 - 36
Chrysene	61 - 3,400
Dibenzo(a,h)anthracene	640
Di-n-butylphthalate	2 - 1,400
Di-n-octylphthalate	9,700
Ethylbenzene	2 - 68
Fluoranthene	63 - 2,500
Indeno(1,2,3-c,d)pyrene	37 - 2,300
Naphthalene	2 - 360
Oil and grease	2 - 16,000
Pentachlorophenol	410
Phenanthrene	110 - 5,400
Phenol	1,000 - 2,500
Pyrene	56 - 3,200
Tetrachloroethane	2 - 3
Tetrachloroethene	2 - 3
Total petroleum hydrocarbon	91 - 1,400
Toluene	1 - 89
Trichloroethene	1 - 43
Xylenes	4 - 220

Table 24.4-1. Clean Water Act Ambient Water Quality Criteria for Consumption of Fish

Chemical Name	Fish Consumption Criterion (mg/l)
Acrolein	7.8×10^{-1}
Acrylonitrile	6.5×10^{-2}(a)
Aldrin	7.9×10^{-8}(a)
Antimony	4.5×10^{1}
Arsenic	1.8×10^{-5}(a)
Arsenic (III) and Compounds	$6.9 \times 10^{-2}/3.6 \times 10^{-2}$
Benzene	4.0×10^{-2}(a)
Benzidine	5.3×10^{-7}(a)
Beryllium	1.2×10^{-4}(a)
Bis 2-Chloroethyl Ether	1.4×10^{-3}(a)
Bis 2-Chloroisopropyl Ether	4.4
Cadmium and Compounds	$4.3 \times 10^{-2}/9.3 \times 10^{-2}$
Carbon Tetrachloride	6.9×10^{-3}(a)
Chlordane	4.8×10^{-7}(a)
Chloroform	1.6×10^{-2}(a)
Chromium III and Compounds	3.4
DDT	2.4×10^{-8}(a)
Dibutyl Phthalate	1.5×10^{2}
Dichlorobenzenes	2.6
Dichlorobenzidine	2.0×10^{-5}(a)
1,2-Dichloroethane (EDC)	2.4×10^{-1}(a)
Dichloroethylenes	1.9×10^{-3}(a)
1,3-Dichloropropene	1.4×10
Dieldrin	7.6×10^{-8}(a)
Diethyl Phthalate	1.8×10^{3}
Dimethyl Phthalate	2.9×10
Dinitrotoluene	1.4×10^{1}
2,4-Dinitro-o-cresol	7.7×10^{-1}
2,4-Dinitrotoluene	9.1×10^{-3}(a)
Diphenylhydrazine	5.6×10^{-4}(a)
Di(2-ethylhexyl)Phthalate	5.0×10^{1}

Table 24.4-1 (Continued)

Chemical Name	Fish Consumption Criterion (mg/l)
Endosulfan	1.6×10^{-1}
Ethylbenzene	3.3
Fluoranthene	5.4×10^{-2}
Halomethanes	1.6×10^{-2}(a)
Heptachlor	2.9×10^{-7}
Hexacalorobutadiene	5.0×10^{-2}
Hexachlorobenzene	7.4×10^{-7}(a)
Hexachlorocyclohexane - alpha	3.1×10^{-5}(a)
Hexachlorocyclohexane - beta	5.5×10^{-5}(a)
Hexachlorocyclohexane - gamma	8.3×10^{-5}(a)
Hexachlorocyclohexane - technical	4.1×10^{-5}(a)
Hexachloroethane	8.7×10^{-3}
Isophorone	5.2×10^{2}
Manganese	1.0×10^{-1}
Mercury and Compounds	1.5×10^{-4}
N-Nitrosodibutylamine	5.9×10^{-4}(a)
N-Nitrosodiethylamine	1.2×10^{-3}(a)
N-Nitrosodimethylamine	1.6×10^{-2}(a)
N-Nitrosodiphenylamine	1.6×10^{-2}(a)
N-Nitrosopyrrolidine	9.2×10^{-2}(a)
Nickel and Compounds	1.0×10^{-1}
Pentachlorobenzene	8.5×10^{-2}
Polychlorinated Biphenyls (PCBs)	7.9×10^{-8}(a)
Polynuclear Aromatic Hydrocarbons	3.1×10^{-5}(a)
2,3,7,8-TCDD	1.4×10^{-11}(a)
1,2,4,5-Tetrachlorobenzene	4.8×10^{-5}(a)
1,1,2,2-Tetrachloroethane	1.1×10^{-2}(a)
1,1,2-Trichloroethane	4.2×10^{-2}(a)
2,4,6-Trichlorophenol	3.6×10^{-3}(a)
Tetrachloroethylene	8.9×10^{-3}(a)
Thallium and Compounds	4.8×10^{-2}(a)

Table 24.4-1 (Continued)

Chemical Name	Fish Consumption Criterion (mg/l)
Toluene	4.2×10^{2}
Toxaphene	7.3×10^{-7}[a]
1,1,1-Trichloroethane	1.0×10^{3}
Trichloroethylene	8.1×10^{-2}
Vinyl Chloride	5.3×10^{-1}[a]

[a]Chemical carcinogen - value presented in the 10^{-6} risk level.

Table 24.6-1. Source Listing for Preliminary ARARs
Naval Air Station Moffett Field

Preliminary ARAR Type	Source
Ambient Water Quality Criteria for Protection of Aquatic Life: Marine Acute/Chronic	Clean Water Act (§304) and Quality Criteria for Water (EPA, 1986)
Ambient Water Quality Criteria for the Consumption of Fish	Clean Water Act (§304) and Quality Criteria for Water (EPA, 1986)

Table 24.6-2. Clean Water Act Ambient Water Quality Criteria for Protection of Aquatic Life

Chemical Name	Marine Acute/Chronic Criterion (mg/l)
Aldrin	1.3×10^{-3}
Arsenic (V) and Compounds	$2.3/1.3 \times 10^{-2}$
Arsenic (III) and Compounds	$6.9 \times 10^{-2}/3.6 \times 10^{-2}$
Cadmium and Compounds	$4.3 \times 10^{-2}/9.3 \times 10^{-2}$
Carbon Tetrachloride	5.0×10^{1}
Chlordane	$9.0 \times 10^{-5}/4.0 \times 10^{-6}$
Chromium III and Compounds	1.0×10^{1}
Chromium VI and Compounds	$1.1/5.0 \times 10^{-2}$
Copper and Compounds	$2.9 \times 10^{-3}/2.9 \times 10^{-3}$
Cyanides	$1.0 \times 10^{-3}/1.0 \times 10^{-3}$
DDT	$1.3 \times 10^{-4}/1.0 \times 10^{-6}$
1,1-Dichloroethylene	2.2×10^{2}
Dieldrin	$0.7 \times 10^{-3}/1.9 \times 10^{-6}$
Endosulfan	$3.4 \times 10^{-5}/8.7 \times 10^{-6}$
Endrin	$3.7 \times 10^{-5}/2.3 \times 10^{-6}$
Heptachlor	$5.3 \times 10^{-5}/3.6 \times 10^{-6}$
Lead and Compounds (Inorganic)	$0.1/5.6 \times 10^{-3}$
Mercury and Compounds (Alkyl)	$2.14 \times 10^{-3}/2.5 \times 10^{-5}$
Mercury and Compounds (Inorganic)	$2.1 \times 10^{-3}/2.5 \times 10^{-5}$
Nickel and Compounds	$7.5 \times 10^{-2}/8.3 \times 10^{-3}$
Nitrobenzene	6.6
Pentachlorophenol	$1.3 \times 10^{-2}/7.9 \times 10^{-3}$
Phenol	5.8
Polychlorinated Biphenyls (PCBs)	$1.0 \times 10^{-2}/3.0 \times 10^{-5}$
Selenium and Compounds	$4.1 \times 10^{-1}/5.4 \times 10^{-2}$
Silver and Compounds	2.3×10^{-3}
2,3,4,6-Tetrachlorophenol	4.4×10^{-1}
Toxaphene	$2.1 \times 10^{-4}/2 \times 10^{-7}$
Zinc and Compounds	$9.6 \times 10^{-2}/8.6 \times 10^{-2}$

THERE ARE NO FIGURES FOR SECTION 24

N00296.000910
MOFFETT FIELD
SSIC NO. 5090.3

PHASE I CHARACTERIZATION REPORT

DATED 01 AUGUST 1990

THIS RECORD CONTAINS MULTIPLE VOLUMES
WHICH HAVE BEEN ENTERED SEPARATELY

VOLUME 3 OF 5 IS FILED AS ADMINISTRATIVE
RECORD NO. **N00296.000911**

VOLUME 4 OF 5 IS FILED AS ADMINISTRATIVE
RECORD NO. **N00296.000912**

VOLUME 5 OF 5 IS FILED AS ADMINISTRATIVE
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