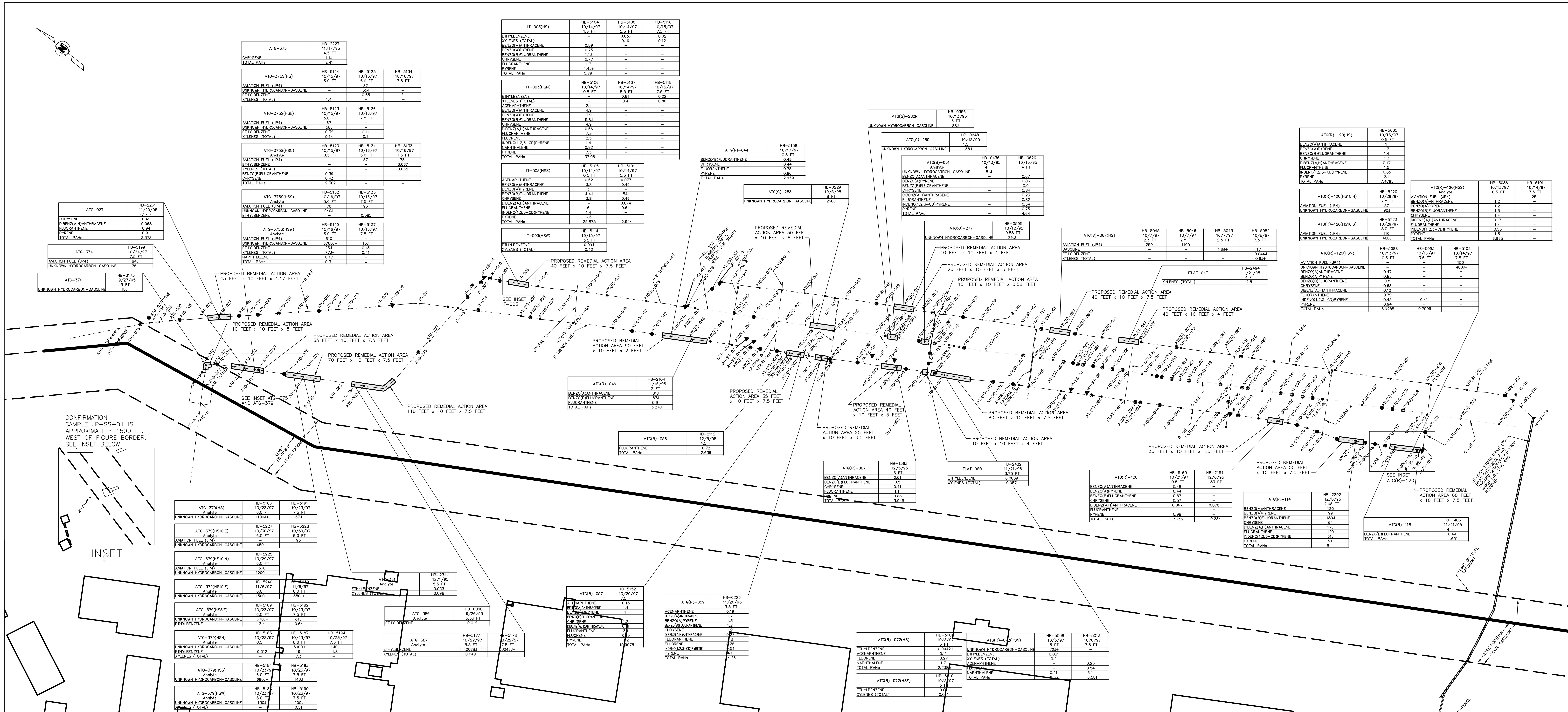


ATG-375	HB-2227 11/17/95 4.5 FT
CHRYSENE	1.1J
TOTAL PAHs	2.41

ATG-375S(HS)	HB-5124 10/15/97 5.0 FT	HB-5125 10/15/97 5.0 FT	HB-5134 10/16/97 7.5 FT
AVIATION FUEL (JP4)	–	82	–
UNKNOWN HYDROCARBON-GASOLINE	–	35J	–
ETHYLBENZENE	–	0.65	1.2J–
XYLENES (TOTAL)	1.4	–	–

ATG-375S(HSE)	HB-5123 10/15/97 5.0 FT	HB-5136 10/16/97 7.5 FT
AVIATION FUEL (JP4)	67	–
UNKNOWN HYDROCARBON-GASOLINE	58J	–
ETHYLBENZENE	0.32	0.11
XYLENES (TOTAL)	0.14	0.1

ATG-375S(HSN) Analyte	HB-5120 10/15/97 0.5 FT	HB-5131 10/16/97 5.0 FT	HB-5133 10/16/97 7.5 FT
AVIATION FUEL (JP4)	–	57	75
ETHYLBENZENE	–	–	0.067
XYLENES (TOTAL)	–	–	0.065
BENZO(B)FLUORANTHENE	0.39	–	–
CHRYSENE	0.43	–	–
TOTAL PAHs	2.302	–	–

ATG-375S(HSS) Analyte	HB-5132 10/16/97 5.0 FT	HB-5135 10/16/97 7.5 FT
AVIATION FUEL (JP4)	78	96
UNKNOWN HYDROCARBON-GASOLINE	940J–	–
ETHYLBENZENE	–	0.085

ATG-375S(HSW) Analyte	HB-5129 10/16/97 5.0 FT	HB-5137 10/16/97 7.5 FT
AVIATION FUEL (JP4)	610	–
UNKNOWN HYDROCARBON-GASOLINE	3700J–	15J
ETHYLBENZENE	23J–	0.18
XYLENES (TOTAL)	77J–	0.41
NAPHTHALENE	0.17	–
TOTAL PAHs	0.31	–

ATG-027	HB-2231 11/20/95 4.17 FT
CHRYSENE	0.42
DIBENZ(A,H)ANTHRACENE	0.068
FLUORANTHENE	0.94
PYRENE	0.91
TOTAL PAHs	3.373

ATG-374	HB-5199 10/24/97 7.5 FT
AVIATION FUEL (JP4)	94J
UNKNOWN HYDROCARBON-GASOLINE	36J

ATG-370	HB-0173 9/27/95 5 FT
UNKNOWN HYDROCARBON-GASOLINE	18J

IT-003(HS)	HB-5104 10/14/97 1.5 FT	HB-5108 10/14/97 5.5 FT	HB-5116 10/15/97 7.5 FT
ETHYLBENZENE	–	0.053	0.02
XYLENES (TOTAL)	–	0.19	0.12
BENZO(A)ANTHRACENE	0.89	–	–
BENZO(A)PYRENE	0.75	–	–
BENZO(B)FLUORANTHENE	1.1J	–	–
CHRYSENE	0.77	–	–
FLUORANTHENE	1.3	–	–
PYRENE	1.4J+	–	–
TOTAL PAHs	5.79	–	–

IT-003(HSN)	HB-5106 10/14/97 0.5 FT	HB-5107 10/14/97 5.5 FT	HB-5118 10/15/97 7.5 FT
ETHYLBENZENE	–	0.81	0.22
XYLENES (TOTAL)	–	0.4	0.86
ACENAPHTHENE	2.1	–	–
BENZO(A)ANTHRACENE	4.9	–	–
BENZO(A)PYRENE	3.9	–	–
BENZO(B)FLUORANTHENE	5.8J	–	–
CHRYSENE	4.9	–	–
DIBENZ(A,H)ANTHRACENE	0.66	–	–
FLUORANTHENE	7.3	–	–
FLUORENE	2.5	–	–
INDENO(1,2,3-CD)PYRENE	1.4	–	–
NAPHTHALENE	0.92	–	–
PYRENE	7.5	–	–
TOTAL PAHs	37.08	–	–

IT-003(HSS)	HB-5105 10/14/97 0.5 FT	HB-5109 10/14/97 5.5 FT
ACENAPHTHENE	0.62	0.077
BENZO(A)ANTHRACENE	3.8	0.49
BENZO(A)PYRENE	3	–
BENZO(B)FLUORANTHENE	4.4J	.54J
CHRYSENE	3.8	0.46
DIBENZ(A,H)ANTHRACENE	–	0.074
FLUORANTHENE	6	0.64
INDENO(1,2,3-CD)PYRENE	1.4	–
PYRENE	6.5	–
TOTAL PAHs	25.875	2.944

IT-003(HSW)	HB-5114 10/15/97 5.5 FT
ETHYLBENZENE	0.094
XYLENES (TOTAL)	0.42

ATG(R)-044	HB-5138 10/17/97 0.5 FT
BENZO(B)FLUORANTHENE	0.49
CHRYSENE	0.44
FLUORANTHENE	0.75
PYRENE	0.86
TOTAL PAHs	2.939

ATG(G)-288	HB-0229 10/5/95 8 FT
UNKNOWN HYDROCARBON-GASOLINE	260J

ATG(G)-280N	HB-0356 10/13/95 3 FT
UNKNOWN HYDROCARBON-GASOLINE	88J

ATG(G)-280	HB-0248 10/13/95 1.5 FT
UNKNOWN HYDROCARBON-GASOLINE	38J

ATG(B)-051 Analyte	HB-0436 10/13/95 4 FT	HB-0620 10/13/95 4 FT
UNKNOWN HYDROCARBON-GASOLINE	51J	–
BENZO(A)ANTHRACENE	–	0.67
BENZO(A)PYRENE	–	0.86
BENZO(B)FLUORANTHENE	–	0.9
CHRYSENE	–	0.84
DIBENZ(A,H)ANTHRACENE	–	0.23
FLUORANTHENE	–	0.82
INDENO(1,2,3-CD)PYRENE	–	0.54
PYRENE	–	0.75
TOTAL PAHs	–	4.64

ATG(G)-277	HB-0595 10/12/95 0.58 FT
UNKNOWN HYDROCARBON-GASOLINE	29.J

ATG(B)-067(HS)	HB-5045 10/7/97 2.5 FT	HB-5046 10/7/97 2.5 FT	HB-5043 10/7/97 2.5 FT	HB-5052 10/8/97 7.5 FT
AVIATION FUEL (JP4)	250	1100	–	–
GASOLINE	–	–	1.8J+	17
ETHYLBENZENE	–	–	–	0.044J
XYLENES (TOTAL)	–	–	–	0.9J+

ITLAT-04F	HB-2494 11/21/95 4 FT
XYLENES (TOTAL)	2.5

ATG(R)-120(HS)	HB-5085 10/13/97 0.5 FT
BENZO(A)ANTHRACENE	1
BENZO(A)PYRENE	1.3
BENZO(B)FLUORANTHENE	1.4
CHRYSENE	1.3
DIBENZ(A,H)ANTHRACENE	0.17
FLUORANTHENE	1.5
INDENO(1,2,3-CD)PYRENE	0.65
PYRENE	2.1
TOTAL PAHs	7.4795

ATG(R)-120(HS10'N)	HB-5220 10/29/97 7.5 FT
AVIATION FUEL (JP4)	57
UNKNOWN HYDROCARBON-GASOLINE	90J

ATG(R)-120(HS10'S)	HB-5223 10/29/97 5.0 FT
AVIATION FUEL (JP4)	110
UNKNOWN HYDROCARBON-GASOLINE	400J

ATG(R)-120(HSS) Analyte	HB-5086 10/13/97 0.5 FT	HB-5101 10/14/97 7.5 FT
AVIATION FUEL (JP4)	–	25
BENZO(A)ANTHRACENE	1.2	–
BENZO(A)PYRENE	1.2	–
BENZO(B)FLUORANTHENE	1.5	–
CHRYSENE	1.4	–
DIBENZ(A,H)ANTHRACENE	0.17	–
FLUORANTHENE	1.4	–
INDENO(1,2,3-CD)PYRENE	0.53	–
PYRENE	1.5	–
TOTAL PAHs	6.995	–

ATG(R)-120(HSN)	HB-5088 10/13/97 0.5 FT	HB-5093 10/13/97 3.5 FT	HB-5102 10/14/97 7.5 FT
AVIATION FUEL (JP4)	–	–	150
UNKNOWN HYDROCARBON-GASOLINE	–	–	480J–
BENZO(A)ANTHRACENE	0.47	–	–
BENZO(A)PYRENE	0.83	–	–
BENZO(B)FLUORANTHENE	0.8	–	–
CHRYSENE	0.63	–	–
DIBENZ(A,H)ANTHRACENE	0.12	–	–
FLUORANTHENE	0.79	–	–
INDENO(1,2,3-CD)PYRENE	0.45	0.41	–
PYRENE	0.94	–	–
TOTAL PAHs	3.9285	0.7505	–

ATG(R)-046	HB-2104 11/16/95 2 FT
BENZO(A)ANTHRACENE	.81J
BENZO(B)FLUORANTHENE	.87J
FLUORANTHENE	0.9
TOTAL PAHs	3.278

ATG(R)-056	HB-2112 12/5/95 4.5 FT
FLUORANTHENE	0.72
TOTAL PAHs	2.636

ATG(R)-067	HB-1563 12/5/95 3 FT
BENZO(A)ANTHRACENE	0.61
BENZO(B)FLUORANTHENE	0.5
CHRYSENE	0.41
FLUORANTHENE	1.1
PYRENE	0.86
TOTAL PAHs	3.945

ITLAT-06B	HB-2482 11/21/95 3.75 FT
ETHYLBENZENE	0.0089
XYLENES (TOTAL)	0.057

ATG(R)-106	HB-5160 10/21/97 0.5 FT	HB-2154 12/6/95 1.33 FT
BENZO(A)ANTHRACENE	0.48	–
BENZO(A)PYRENE	0.44	–
BENZO(B)FLUORANTHENE	0.57	–
CHRYSENE	0.57	–
DIBENZ(A,H)ANTHRACENE	0.067	0.078
FLUORANTHENE	1.1	–
PYRENE	0.98	–
TOTAL PAHs	3.752	0.234

ATG(R)-114	HB-2202 12/8/95 2.08 FT
BENZO(A)ANTHRACENE	120
BENZO(A)PYRENE	99
BENZO(B)FLUORANTHENE	180J
CHRYSENE	64
DIBENZ(A,H)ANTHRACENE	17J
FLUORANTHENE	120
INDENO(1,2,3-CD)PYRENE	51J
PYRENE	91
TOTAL PAHs	511

ATG(R)-118	HB-1406 11/21/95 4 FT
BENZO(B)FLUORANTHENE	0.4J
TOTAL PAHs	1.601

ATG-379(HS) Analyte	HB-5186 10/23/97 6.0 FT	HB-5191 10/23/97 7.5 FT
UNKNOWN HYDROCARBON-GASOLINE	1100J+	57J

ATG-379(HS10'E) Analyte	HB-5227 10/30/97 6.0 FT	HB-5228 10/30/97 6.0 FT
AVIATION FUEL (JP4)	–	93
UNKNOWN HYDROCARBON-GASOLINE	450J+	–

ATG-379(HS10'N) Analyte	HB-5225 10/29/97 6.0 FT
AVIATION FUEL (JP4)	530
UNKNOWN HYDROCARBON-GASOLINE	1200J+

ATG-379(HS15'E) Analyte	HB-5240 11/6/97 6.0 FT	HB-5239 11/6/97 6.0 FT
UNKNOWN HYDROCARBON-GASOLINE	1500J+	350J+

ATG-379(HS5'E) Analyte	HB-5189 10/23/97 6.0 FT	HB-5192 10/23/97 7.5 FT
UNKNOWN HYDROCARBON-GASOLINE	370J+	61J
ETHYLBENZENE	3.4	0.64

ATG-379(HSN) Analyte	HB-5183 10/23/97 0.5 FT	HB-5187 10/23/97 6.0 FT	HB-5194 10/23/97 7.5 FT
UNKNOWN HYDROCARBON-GASOLINE	–	3000J	140J
ETHYLBENZENE	0.012	19	1.8
XYLENES (TOTAL)	–	7.3	–

ATG-379(HSS) Analyte	HB-5184 10/23/97 6.0 FT	HB-5193 10/23/97 7.5 FT
UNKNOWN HYDROCARBON-GASOLINE	690J+	140J

ATG-379(HSW) Analyte	HB-5188 10/23/97 6.0 FT	HB-5190 10/23/97 7.5 FT
UNKNOWN HYDROCARBON-GASOLINE	130J	200J
XYLENES (TOTAL)	–	0.51

ATG-381 Analyte	HB-2311 12/1/95 5.5 FT
ETHYLBENZENE	0.033
XYLENES (TOTAL)	0.098

ATG-386 Analyte	HB-0090 9/26/95 5.33 FT
ETHYLBENZENE	0.012

ATG-387 Analyte	HB-5177 10/22/97 5.5 FT	HB-5178 10/22/97 7.5 FT
ETHYLBENZENE	.0078J	.0047J+
XYLENES (TOTAL)	0.049	–

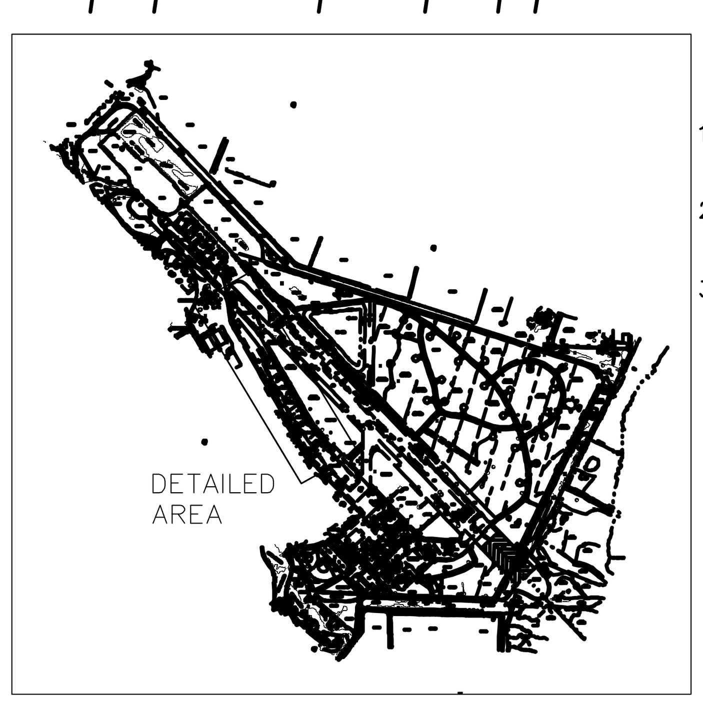
ATG(R)-057	HB-5152 10/20/97 7.5 FT
ACENAPHTHENE	0.16
BENZO(A)ANTHRACENE	1.4
BENZO(A)PYRENE	1
BENZO(B)FLUORANTHENE	1.1
CHRYSENE	1.2
DIBENZ(A,H)ANTHRACENE	[illegible]
FLUORANTHENE	3.1
FLUORENE	0.19
PYRENE	[illegible]
TOTAL PAHs	10.9975

ATG(R)-059	HB-0223 11/20/95 3.5 FT
ACENAPHTHENE	0.19
BENZO(A)ANTHRACENE	1.7
BENZO(A)PYRENE	1.3
BENZO(B)FLUORANTHENE	1.2
CHRYSENE	1.9
DIBENZ(A,H)ANTHRACENE	0.27
FLUORANTHENE	[illegible]
FLUORENE	0.26
INDENO(1,2,3-CD)PYRENE	0.54
PYRENE	4.1
TOTAL PAHs	[illegible]

ATG(R)-072(HS)	HB-5004 10/3/97 5 FT
ETHYLBENZENE	0.0042J
ACENAPHTHENE	0.11
FLUORENE	0.27
NAPHTHALENE	1.7
TOTAL PAHs	2.2385

ATG(R)-072(HSE)	HB-5010 10/3/97 5 FT
ETHYLBENZENE	[illegible]
XYLENES (TOTAL)	[illegible]

ATG(R)-072(HSN)	HB-5008 10/3/97 5 FT	HB-5013 10/6/97 7.5 FT
UNKNOWN HYDROCARBON-GASOLINE	72J+	–
ETHYLBENZENE	0.031	–
XYLENES (TOTAL)	0.2	–
ACENAPHTHENE	–	0.23
FLUORENE	–	0.54
NAPHTHALENE	0.21	5.1
TOTAL PAHs	0.33	6.581



KEY MAP

NOTES:

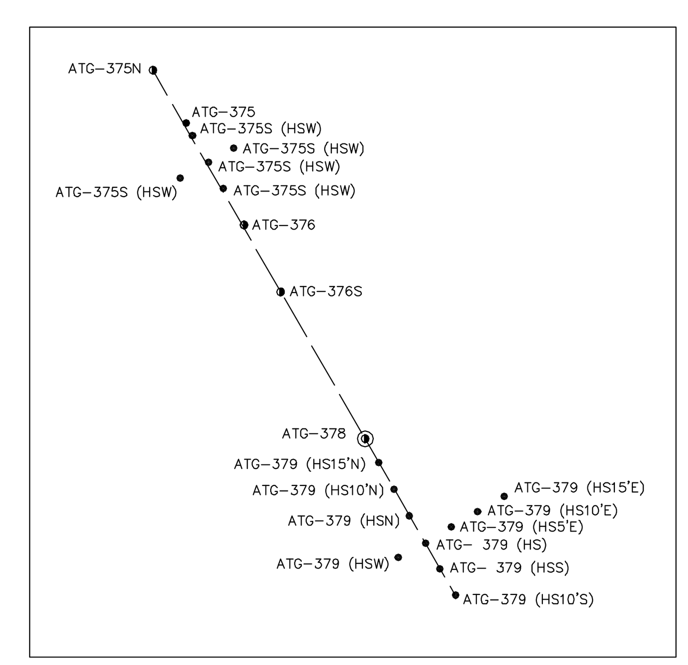
1. RESULTS ARE PRESENTED IN UNITS OF MILLIGRAMS PER KILOGRAM (MG/KG).
2. J QUALIFIER DENOTES THE ESTIMATED CONCENTRATIONS. +/– SYMBOLS INDICATES HIGH OR LOW ESTIMATES.
3. CONCENTRATIONS OF CHEMICALS OF CONCERN ABOVE COMPARATOR VALUES ARE PLOTTED.

LEGEND:

SAMPLE LOCATIONS:
- CONFIRMATION SAMPLE (IT, 1999a)
- FIELD SCREEN SAMPLE WITH PNA CONFIRMATION SAMPLE
- SOIL SAMPLE LOCATIONS
- LIMIT OF REMEDIAL EXCAVATION IN LEVEE EASEMENT
- BOUNDARY BETWEEN LEVEE FOOTPRINT AND EASEMENT
- LEVEE EASEMENT
- PROPOSED REMEDIAL ACTON AREA

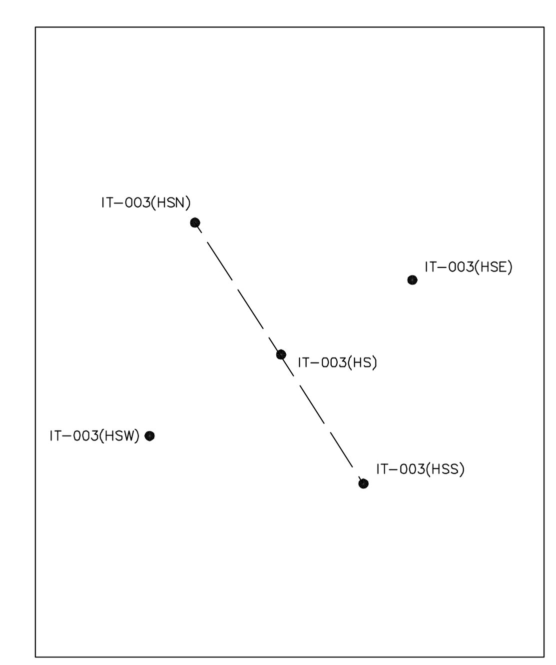
ACRONYM:

PAH POLYNUCLEAR AROMATIC HYDROCARBONS



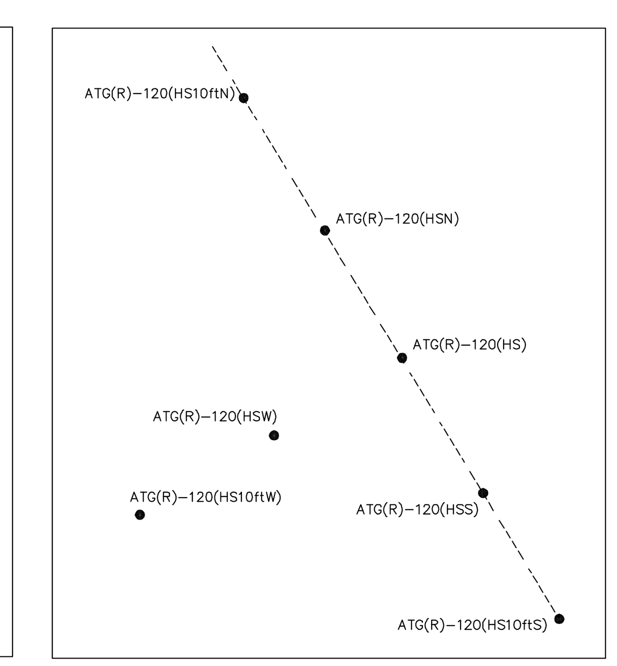
INSET
ATG-375
AND ATG-379

APPROXIMATE SCALE
0 25 FEET



INSET
IT-003

APPROXIMATE SCALE
0 50 FEET



INSET
ATG(R)-120

APPROXIMATE SCALE
0 50 FEET

FIGURE B-13

ONSHORE FUEL LINE HANGAR AREA SAMPLE LOCATIONS AND PROPOSED REMEDIAL ACTION AREAS INBOARD AREA SITES

BRAC PROPERTY
HAMILTON ARMY AIRFIELD

PREPARED FOR

USACE SACRAMENTO

CH2MHILL

REFERENCE: IT CORPORATION (IT), FIGURE B-13, ONSHORE FUEL LINE HANGAR AREA SAMPLE LOCATIONS AND PROPOSED EXCAVATION BOUNDARIES. (DWG. NO. 762538-D109.DWG)