



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 377TH AIR BASE WING (AFMC)
CERTIFIED MAIL: Z 106 120 483
RETURN RECEIPT REQUESTED

ENTRAGED

1 June 1995

377 ABW/EMR
2000 Wyoming Blvd SE
Kirtland AFB NM 87117-5659

Ms. Nancy Morlock, Environmental Engineer
RCRA Permits Branch
U.S. EPA Region 6
1445 Ross Ave, Ste 1200
Dallas TX 75202-7233

SS

Dear Ms. Morlock

As agreed to in our 7 March 1995 letter, enclosed is the SWMU Assessment Report for Building 980.

We have reviewed the analytical data for this building and believe it does *not* quality as a SWMU. If you do not concur with this conclusion, we will add it to our RCRA Part B Permit as SS-74, Dry Well 980.

Please contact Mr. Jerry Sillerud, (505) 846-2773/0053, if you have any questions.

Sincerely

CHRISTOPHER B. DeWITT, R.P.G
Chief, Restoration Branch
Environmental Management Division

Attachment:
SWMU Assess Rpt

cc:
NMED-HRMB (Mr. Pullen)
377 CES/CEF (Chief Serrano)

KAFB1631



FORMER FIRE STATION DRY WELL BUILDING 980

A. LOCATION

The unit in question is a dry well associated with Building 980, located at the intersection of Doris Avenue and Randolph Avenue on KAFB's west side (Attachment 1). Building 980 was originally constructed as a fire station and served that function until 1993; it was then turned over to the Civil Engineer Flight and now serves as the west side field office for Civil Engineer operations and administrative offices.

B. FUNCTION OF THE UNIT

Based on record drawings for Building 980, the dry well was connected to an oil/water separator located in the very southwest corner of the building. According to the building's as-built drawings, a 2" draw-off line from the oil/water separator extends 10 feet out of the building to the dry well. The oil water separator is connected to an outside vehicle wash rack and a floor drain located inside the building. This area of the building had served as an open service bay for the fire department; vehicles underwent service inside the building and were washed and cleaned outside. Sometime prior to 1965, the building was enclosed with cinder block and the area converted to storage and administrative space. The outside wash rack and the inside floor drain no longer serve as vehicle service areas.

C. DESCRIPTION OF THE UNIT

The dry well has not been observed by personnel familiar with the operations of Building 980 so its presence has not been verified. Staff from underground utilities dug down to the 2" draw-off line, impressed current on the line, and attempted to trace it out to ascertain its discharge point. The line was traced 4 feet out from the building; however, re-bar from the sidewalk that now is in place caused too much interference for the line to be traced to its full length. The KAFB fire chief, who first worked in the building in 1965, has indicated the service bay was enclosed with cinder block and there was no dry well in operation at that time. Based on the as-built drawings, the dry well was located 10 feet out from the building, was earthen, had a volume of 6 cubic feet, and contained 1.5 to 3 inches of rock.

D. PERIOD OF OPERATION

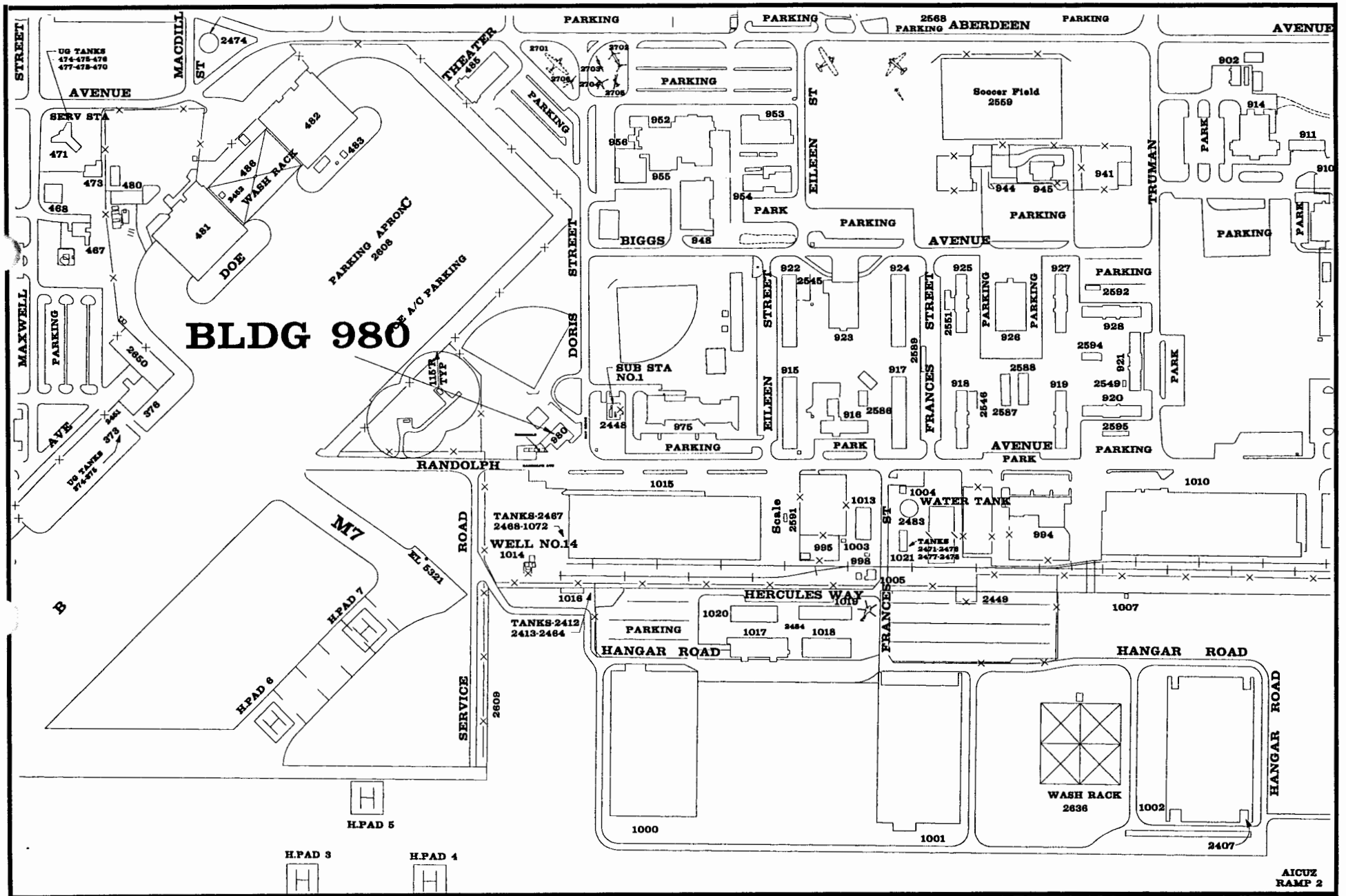
Building 980, which included an outdoor vehicle wash rack and a vehicle service bay with oil/water separator at the west end of the building, was constructed around 1953. It is believed the dry well would have been installed at that time as well. Sometime prior to 1965, the service bay was totally enclosed and the floor space converted for storage and administrative functions.

E. WASTES

The oil/water separator served an area of the building that had been used for vehicle washing and for maintenance. It is believed wastes associated with vehicle maintenance such as petroleum, oil, and lubricant wastes were drained into the oil/water separator and diverted in turn to the dry well.

F. SAMPLING AND ANALYSIS

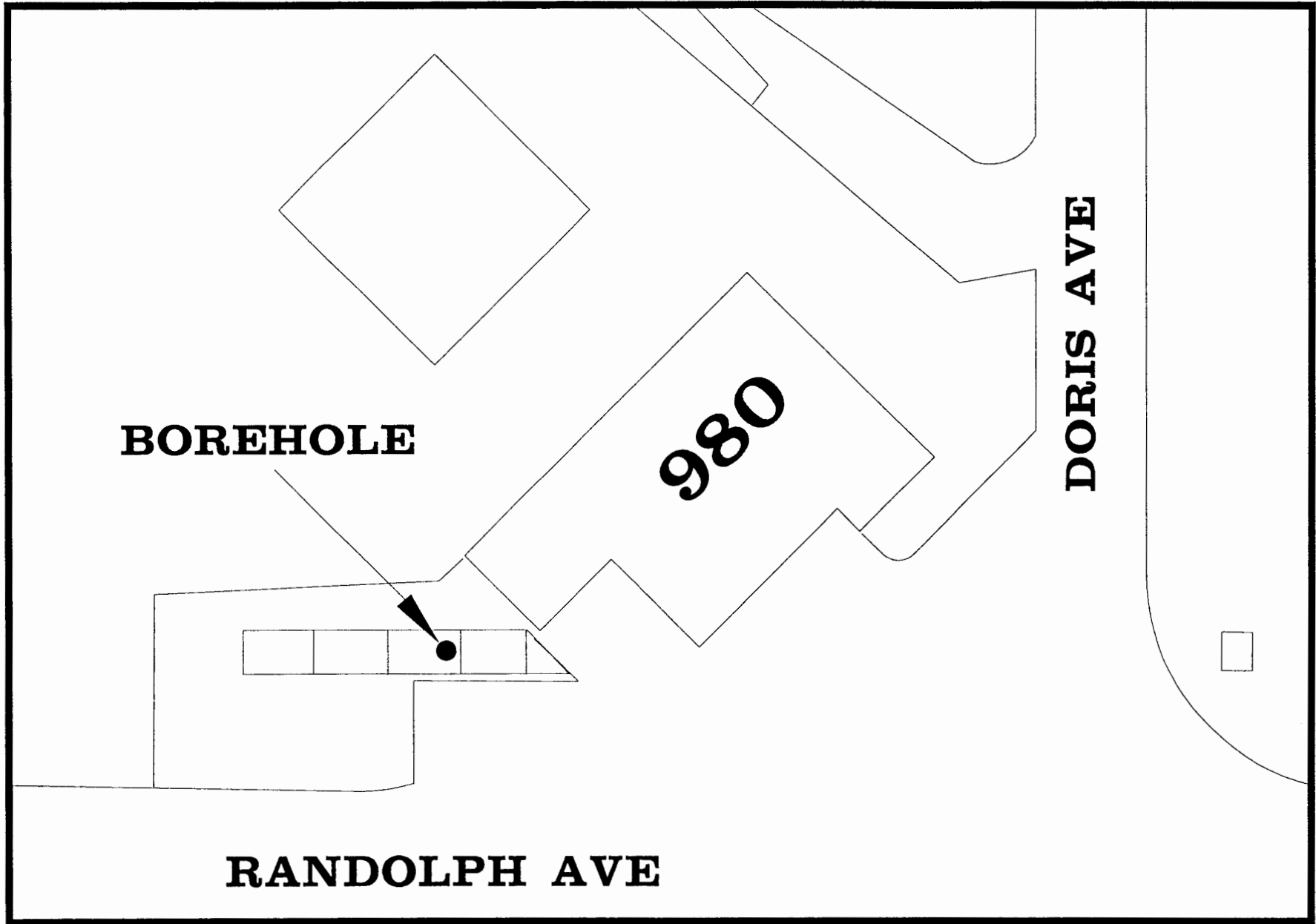
A single borehole was augured using a portable unit with a 2" augur flight (Attachment 2). Based on a 10-ft distance from the oil/water separator to the dry well, the purported site is situated under a sidewalk that is now in place over the area. The borehole was angled under the sidewalk in order to pass through the subsurface soils that potentially would have been impacted by contaminants disposed into the dry well. Two samples were collected: one from the 6-ft to 7-ft interval and a second sample from the 11.5-ft to 12.5 ft interval. Both samples were analyzed for metals (ICP Scan Method 6010), VOCs (Method 8240), SVOCs (Method 8270), and TPH (Method 418.1). The test results are presented on Attachment 3.



ATTACHMENT 1

BLDG 980 SWMU ASSESSMENT REPORT

AICUZ
RAMP 2



ATTACHMENT 2

BLDG 980
SWMU ASSESSMENT REPORT

ATTACHMENT 3

TEST RESULTS

SAMPLE ID 9505051050 (SOIL) - ANALYTICAL RESULTS EXCEEDING DETECTION LIMITS

PARAMETER	DETECTION LIMIT mg/kg	RESULT mg/kg
Di-n-butylphthalate	0.03	1.9B
Total Petroleum HCs	5.0	9.2
Calcium	1.0	71800
Aluminum	25.0	6190
Arsenic	5.0	5.8
Boron	1.5	5.3
Barium	0.5	135
Beryllium	0.02	0.24
Cobalt	0.5	2.7
Chromium	1.0	6.3
Copper	0.5	3.0
Iron	10.0	6940
Potassium	5.0	850
Magnesium	5.0	2310
Manganese	0.1	94.5
Nickel	0.5	5.2
Lead	1.0	3.7
Vanadium	0.15	18.7
Zinc	5.0	14.8
Sodium	1.0	108

TEST RESULTS (cont'd)

**SAMPLE ID 9505051150 (SOIL) - ANALYTICAL RESULTS EXCEEDING
DETECTION LIMITS**

PARAMETER	DETECTION LIMIT	RESULT
	mg/kg	mg/kg
Di-n-butylphthalate	0.03	2.0B
Calcium	1.0	40800
Aluminum	25.0	9970
Arsenic	5.0	7.8
Boron	1.5	6.5
Barium	0.5	58.0
Beryllium	0.02	0.39
Cobalt	0.5	2.9
Chromium	1.0	7.4
Copper	0.5	3.3
Iron	10.0	8940
Potassium	5.0	1420
Magnesium	5.0	3060
Manganese	0.1	107
Nickel	0.5	6.6
Lead	1.0	5.3
Vanadium	0.15	21.4
Zinc	5.0	19.9
Sodium	1.0	99.0



ASSAIGAI ANALYTICAL LABORATORIES

7300 Jefferson, N.E. • Albuquerque, New Mexico 87109 • (505) 345-8964 • FAX (505) 345-7259

3332 Wedgewood, E-5 • El Paso, Texas 79925 • (915) 593-6000 • FAX (915) 593-7820

Report Generated:
May 25, 1995 15:38

CERTIFICATE OF ANALYSIS RESULTS BY SAMPLE

SENT PHILLIPS LABORATORY/EMD WORKORDER # : 9505088
TO: 3651 LOWERY AVE. SE WORK ID : BLDG. 980
ALBUQUERQUE, NM 87117-5777 CLIENT CODE : PHI08
DATE RECEIVED : 05/05/95

ATTN: JERRY SILLERUD

Page: 1

Lab ID: 9505088-01A
Sample ID: 9505051050

Collected: 05/05/95 10:50:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
VOLATILES/SW846 8240B						
Dichlorodifluoromethane	ND	mg/Kg	0.010	5.0	05/10/95	SMSVOA287
Chloromethane	ND	mg/Kg	0.0050	5.0	05/10/95	SMSVOA287
Iodomethane	ND	mg/Kg	0.0050	5.0	05/10/95	SMSVOA287
Acetone	ND	mg/Kg	0.0050	5.0	05/10/95	SMSVOA287
Bromomethane	ND	mg/Kg	0.0050	5.0	05/10/95	SMSVOA287
Vinyl Chloride	ND	mg/Kg	0.0050	5.0	05/10/95	SMSVOA287
Chloroethane	ND	mg/Kg	0.0050	5.0	05/10/95	SMSVOA287
Trichlorofluoromethane	ND	mg/Kg	0.0050	5.0	05/10/95	SMSVOA287
Freon 113	ND	mg/Kg	0.0050	5.0	05/10/95	SMSVOA287
Carbon Disulfide	ND	mg/Kg	0.0050	5.0	05/10/95	SMSVOA287
Acrolein	ND	mg/Kg	0.020	5.0	05/10/95	SMSVOA287
Methylene Chloride	ND	mg/Kg	0.010	5.0	05/10/95	SMSVOA287
1,1-Dichloroethene	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
1,1-Dichloroethane	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
Acrylonitrile	ND	mg/Kg	0.020	5.0	05/10/95	SMSVOA287
trans-1,2-Dichloroethene	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
Chloroform	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
1,2-Dichloroethane	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
Vinyl Acetate	ND	mg/Kg	0.0050	5.0	05/10/95	SMSVOA287
cis-1,2-Dichloroethene	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
2-Butanone (MEK)	ND	mg/Kg	0.0050	5.0	05/10/95	SMSVOA287
1,1,1-Trichloroethane	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
Carbon Tetrachloride	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
Bromodichloromethane	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
1,2-Dichloropropane	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
Dibromomethane	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
trans-1,3-Dichloropropene	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
Trichloroethene	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
Chlorodibromomethane	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
Ethyl Methacrylate	ND	mg/Kg	0.0050	5.0	05/10/95	SMSVOA287
2-Chloroethylvinyl Ether	ND	mg/Kg	0.0050	5.0	05/10/95	SMSVOA287
1,1,2-Trichloroethane	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
Benzene	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
cis-1,3-Dichloropropene	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
Bromoform	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
4-Methyl-2-Pentanone (MIBK)	ND	mg/Kg	0.0050	5.0	05/10/95	SMSVOA287
Tetrachloroethene	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
1,1,2,2-Tetrachloroethane	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
1,2-Dibromoethane	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
2-Hexanone (MBK)	ND	mg/Kg	0.0050	5.0	05/10/95	SMSVOA287
1,1,1,2-Tetrachloroethane	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
Toluene	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
Chlorobenzene	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
Ethylbenzene	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287



Lab ID: 9505088-01A
Sample ID: 9505051050

Collected: 05/05/95 10:50:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
VOLATILES/SW846 8240B						
1,4-Dichloro-2-Butene	ND	mg/Kg	0.010	5.0	05/10/95	SMSVOA287
Styrene	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
P/M Xylene	ND	mg/Kg	0.0020	5.0	05/10/95	SMSVOA287
O-Xylene	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
1,2,3-Trichloropropane	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
Methyl-tert Butyl Ether	ND	mg/Kg	0.010	5.0	05/10/95	SMSVOA287
1,2-Dichlorobenzene	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
1,3-Dichlorobenzene	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
1,4-Dichlorobenzene	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287

Lab ID: 9505088-01B
Sample ID: 9505051050

Collected: 05/05/95 10:50:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
SEMI-VOA/SW846 8270B						
n-Nitrosodimethylamine	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
Pyridine	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
Aniline	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
bis(2-Chloroethyl) Ether	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
2-Chlorophenol	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
1,3-Dichlorobenzene	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
1,4-Dichlorobenzene	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
Phenol	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
1,2-Dichlorobenzene	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
Benzyl Alcohol	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
bis(2-Chloroisopropyl) Ether	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
2-Methylphenol / O-Cresol	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
Hexachloroethane	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
n-Nitroso-di-n-propylamine	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
Nitrobenzene	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
3/4 Methylphenol / M/P-Cresol	ND	mg/Kg	0.060	2.1	05/17/95	SMSSVOA080
Isophorone	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
2-Nitrophenol	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
bis(2-Chloroethoxy) Methane	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
2,4-Dimethylphenol	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
1,2,4-Trichlorobenzene	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
Naphthalene	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
Benzoic Acid	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
2,4-Dichlorophenol	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
4-Chloroaniline	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
Hexachlorobutadiene	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
2-Methylnaphthalene	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
4-Chloro-3-methylphenol	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
Hexachlorocyclopentadiene	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
2,4,6-Trichlorophenol	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
2,4,5-Trichlorophenol	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
2-Chloronaphthalene	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
2-Nitroaniline	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
Acenaphthylene	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
Dimethylphthalate	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
2,6-Dinitrotoluene	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
Acenaphthene	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
3-Nitroaniline	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
Dibenzofuran	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
2,4-Dinitrotoluene	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
Fluorene	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
4-Chlorophenyl-phenylether	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080

Lab ID: 9505088-01B
Sample ID: 9505051050

Collected: 05/05/95 10:50:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
SEMI-VOA/SW846 8270B						
Diethylphthalate	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
4-Nitrophenol	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
4,6-Dinitro-2-methylphenol	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
n-Nitrosodiphenylamine	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
4-Nitroaniline	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
4-Bromophenyl-phenylether	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
Hexachlorobenzene	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
Pentachlorophenol	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
2,4-Dinitrophenol	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
Benzidine	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
Phenanthrene	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
Anthracene	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
Di-n-butylphthalate	1.9B	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
Fluoranthene	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
Pyrene	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
Butylbenzylphthalate	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
Benzo(a)anthracene	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
Chrysene	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
3,3'-Dichlorobenzidine	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
bis(2-Ethylhexyl)phthalate	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
Di-n-octyl phthalate	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
Benzo(b)fluoranthene	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
Benzo(k)fluoranthene	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
Benzo(a)pyrene	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
Indeno(1,2,3-cd)pyrene	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
Benzo(g,h,i)perylene	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
2,3,4,6-Tetrachlorophenol	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
Azobenzene	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
Dibenz(a,h)anthracene	ND	mg/Kg	0.030	2.1	05/17/95	SMSSVOA080
SVOA XT/SW846 3520	05/11/95	N/A				

Lab ID: 9505088-01C
Sample ID: 9505051050

Collected: 05/05/95 10:50:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
TRPH/EPA 418.1						
Total Petroleum HCs	9.2	mg/Kg	5.0	1.0	05/11/95	STRPH255

Lab ID: 9505088-01D
Sample ID: 9505051050

Collected: 05/05/95 10:50:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
CALCIUM(FAA)/SW846 7140						
Calcium, Ca	71800	mg/Kg	1.0	200	05/25/95	SFSICP24
ICP DIG/SW 846 3050	05/10/95	N/A				
METALS by ICP/SW-846 6010						
Silver, Ag	NT	mg/Kg	1.0	1.0	05/21/95	SICP24
Aluminum, Al	6190	mg/Kg	25	1.0	05/21/95	SICP24
Arsenic, As	5.8	mg/Kg	5.0	1.0	05/21/95	SICP24
Boron, B	5.3	mg/Kg	1.5	1.0	05/21/95	SICP24
Barium, Ba	135	mg/Kg	0.50	1.0	05/21/95	SICP24

Lab ID: 9505088-01D
Sample ID: 9505051050

Collected: 05/05/95 10:50:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
METALS by ICP/SW-846 6010						
Beryllium, Be	0.24	mg/Kg	0.020	1.0	05/21/95	SICP24
Calcium, Ca	NT	mg/Kg	5.0	1.0	05/21/95	SICP24
Cadmium, Cd	ND	mg/Kg	0.15	1.0	05/21/95	SICP24
Cobalt, Co	2.7	mg/Kg	0.50	1.0	05/21/95	SICP24
Chromium, Cr	6.3	mg/Kg	1.0	1.0	05/21/95	SICP24
Copper, Cu	3.0	mg/Kg	0.50	1.0	05/21/95	SICP24
Iron, Fe	6940	mg/Kg	10	1.0	05/21/95	SICP24
Potassium, K	850	mg/Kg	5.0	1.0	05/21/95	SICP24
Magnesium, Mg	2310	mg/Kg	5.0	1.0	05/21/95	SICP24
Manganese, Mn	94.5	mg/Kg	0.10	1.0	05/21/95	SICP24
Sodium, Na	NT	mg/Kg	10	1.0	05/21/95	SICP24
Nickel, Ni	5.2	mg/Kg	0.50	1.0	05/21/95	SICP24
Lead, Pb	3.7	mg/Kg	1.0	1.0	05/21/95	SICP24
Antimony, Sb	ND	mg/Kg	1.5	1.0	05/21/95	SICP24
Selenium, Se	ND	mg/Kg	2.5	1.0	05/21/95	SICP24
Thallium, Tl	NT	mg/Kg	10	1.0	05/21/95	SICP24
Vanadium, V	18.7	mg/Kg	0.15	1.0	05/21/95	SICP24
Zinc, Zn	14.8	mg/Kg	5.0	1.0	05/21/95	SICP24
SILVER (FAA)/SW846 7760						
Silver, Ag	ND	mg/Kg	0.010	1.0	05/24/95	SFSICP24
SODIUM (FAA)/SW846 7770						
Sodium, Na	108	mg/Kg	1.0	1.0	05/23/95	SFSICP24
THALLIUM (FAA)/SW846 7840						
Thallium, Tl	ND	mg/Kg	0.10	1.0	05/23/95	SFSICP24

Lab ID: 9505088-02A
Sample ID: 9505051150

Collected: 05/05/95 11:50:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
VOLATILES/SW846 8240B						
Dichlorodifluoromethane	ND	mg/Kg	0.010	5.0	05/10/95	SMSVOA287
Chloromethane	ND	mg/Kg	0.0050	5.0	05/10/95	SMSVOA287
Iodomethane	ND	mg/Kg	0.0050	5.0	05/10/95	SMSVOA287
Acetone	ND	mg/Kg	0.0050	5.0	05/10/95	SMSVOA287
Bromomethane	ND	mg/Kg	0.0050	5.0	05/10/95	SMSVOA287
Vinyl Chloride	ND	mg/Kg	0.0050	5.0	05/10/95	SMSVOA287
Chloroethane	ND	mg/Kg	0.0050	5.0	05/10/95	SMSVOA287
Trichlorofluoromethane	ND	mg/Kg	0.0050	5.0	05/10/95	SMSVOA287
Freon 113	ND	mg/Kg	0.0050	5.0	05/10/95	SMSVOA287
Carbon Disulfide	ND	mg/Kg	0.0050	5.0	05/10/95	SMSVOA287
Acrolein	ND	mg/Kg	0.020	5.0	05/10/95	SMSVOA287
Methylene Chloride	ND	mg/Kg	0.010	5.0	05/10/95	SMSVOA287
1,1-Dichloroethene	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
1,1-Dichloroethane	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
Acrylonitrile	ND	mg/Kg	0.020	5.0	05/10/95	SMSVOA287
trans-1,2-Dichloroethene	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
Chloroform	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
1,2-Dichloroethane	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
Vinyl Acetate	ND	mg/Kg	0.0050	5.0	05/10/95	SMSVOA287
cis-1,2-Dichloroethene	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
2-Butanone (MEK)	ND	mg/Kg	0.0050	5.0	05/10/95	SMSVOA287
1,1,1-Trichloroethane	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
Carbon Tetrachloride	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
Bromodichloromethane	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
1,2-Dichloropropane	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
Dibromomethane	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
trans-1,3-Dichloropropene	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287

Lab ID: 9505088-02A
Sample ID: 9505051150

Collected: 05/05/95 11:50:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
VOLATILES/SW846 8240B						
Trichloroethene	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
Chlorodibromomethane	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
Ethyl Methacrylate	ND	mg/Kg	0.0050	5.0	05/10/95	SMSVOA287
2-Chloroethylvinyl Ether	ND	mg/Kg	0.0050	5.0	05/10/95	SMSVOA287
1,1,2-Trichloroethane	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
Benzene	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
cis-1,3-Dichloropropene	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
Bromoform	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
4-Methyl-2-Pentanone (MIBK)	ND	mg/Kg	0.0050	5.0	05/10/95	SMSVOA287
Tetrachloroethene	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
1,1,2,2-Tetrachloroethane	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
1,2-Dibromoethane	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
2-Hexanone (MBK)	ND	mg/Kg	0.0050	5.0	05/10/95	SMSVOA287
1,1,1,2-Tetrachloroethane	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
Toluene	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
Chlorobenzene	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
Ethylbenzene	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
1,4-Dichloro-2-Butene	ND	mg/Kg	0.010	5.0	05/10/95	SMSVOA287
Styrene	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
P/M Xylene	ND	mg/Kg	0.0020	5.0	05/10/95	SMSVOA287
O-Xylene	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
1,2,3-Trichloropropane	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
Methyl-tert Butyl Ether	ND	mg/Kg	0.010	5.0	05/10/95	SMSVOA287
1,2-Dichlorobenzene	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
1,3-Dichlorobenzene	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287
1,4-Dichlorobenzene	ND	mg/Kg	0.0010	5.0	05/10/95	SMSVOA287

Lab ID: 9505088-02B
Sample ID: 9505051150

Collected: 05/05/95 11:50:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
SEMI-VOA/SW846 8270B						
n-Nitrosodimethylamine	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
Pyridine	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
Aniline	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
bis(2-Chloroethyl) Ether	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
2-Chlorophenol	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
1,3-Dichlorobenzene	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
1,4-Dichlorobenzene	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
Phenol	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
1,2-Dichlorobenzene	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
Benzyl Alcohol	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
bis(2-Chloroisopropyl) Ether	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
2-Methylphenol / O-Cresol	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
Hexachloroethane	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
n-Nitroso-di-n-propylamine	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
Nitrobenzene	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
3/4 Methylphenol / M/P-Cresol	ND	mg/Kg	0.060	2.0	05/17/95	SMSSVOA080
Isophorone	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
2-Nitrophenol	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
bis(2-Chloroethoxy) Methane	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
2,4-Dimethylphenol	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
1,2,4-Trichlorobenzene	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
Naphthalene	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
Benzoic Acid	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
2,4-Dichlorophenol	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
4-Chloroaniline	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080

Lab ID: 9505088-02B
Sample ID: 9505051150

Collected: 05/05/95 11:50:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
SEMI-VOA/SW846 8270B						
Hexachlorobutadiene	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
2-Methylnaphthalene	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
4-Chloro-3-methylphenol	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
Hexachlorocyclopentadiene	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
2,4,6-Trichlorophenol	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
2,4,5-Trichlorophenol	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
2-Chloronaphthalene	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
2-Nitroaniline	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
Acenaphthylene	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
Dimethylphthalate	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
2,6-Dinitrotoluene	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
Acenaphthene	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
3-Nitroaniline	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
Dibenzofuran	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
2,4-Dinitrotoluene	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
Fluorene	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
4-Chlorophenyl-phenylether	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
Diethylphthalate	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
4-Nitrophenol	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
4,6-Dinitro-2-methylphenol	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
n-Nitrosodiphenylamine	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
4-Nitroaniline	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
4-Bromophenyl-phenylether	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
Hexachlorobenzene	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
Pentachlorophenol	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
2,4-Dinitrophenol	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
Benzidine	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
Phenanthrene	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
Anthracene	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
Di-n-butylphthalate	2.0B	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
Fluoranthene	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
Pyrene	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
Butylbenzylphthalate	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
Benzo(a)anthracene	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
Chrysene	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
3,3'-Dichlorobenzidine	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
bis(2-Ethylhexyl)phthalate	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
Di-n-octyl phthalate	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
Benzo(b)fluoranthene	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
Benzo(k)fluoranthene	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
Benzo(a)pyrene	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
Indeno(1,2,3-cd)pyrene	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
Benzo(g,h,i)perylene	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
2,3,4,6-Tetrachlorophenol	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
Azobenzene	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
Dibenz(a,h)anthracene	ND	mg/Kg	0.030	2.0	05/17/95	SMSSVOA080
SVOA XT/SW846 3520	05/11/95	N/A				

Lab ID: 9505088-02C
Sample ID: 9505051150

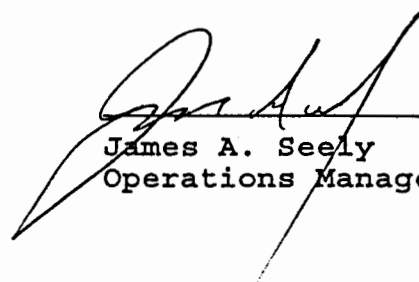
Collected: 05/05/95 11:50:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
TRPH/EPA 418.1						
Total Petroleum HCs	ND	mg/Kg	5.0	1.0	05/11/95	STRPH255

Lab ID: 9505088-02D
Sample ID: 9505051150

Collected: 05/05/95 11:50:00
Matrix: SOIL

TEST / METHOD	RESULT	UNITS	LIMIT	D_F	DATE ANAL	BATCH_ID
CALCIUM(FAA)/SW846 7140						
Calcium, Ca	40800	mg/Kg	1.0	100	05/25/95	SFSICP24
ICP DIG/SW 846 3050	05/10/95	N/A				
METALS by ICP/SW-846 6010						
Silver, Ag	NT	mg/Kg	1.0	1.0	05/21/95	SICP24
Aluminum, Al	9970	mg/Kg	25	1.0	05/21/95	SICP24
Arsenic, As	7.8	mg/Kg	5.0	1.0	05/21/95	SICP24
Boron, B	6.5	mg/Kg	1.5	1.0	05/21/95	SICP24
Barium, Ba	58.0	mg/Kg	0.50	1.0	05/21/95	SICP24
Beryllium, Be	0.39	mg/Kg	0.020	1.0	05/21/95	SICP24
Calcium, Ca	NT	mg/Kg	5.0	1.0	05/21/95	SICP24
Cadmium, Cd	ND	mg/Kg	0.15	1.0	05/21/95	SICP24
Cobalt, Co	2.9	mg/Kg	0.50	1.0	05/21/95	SICP24
Chromium, Cr	7.4	mg/Kg	1.0	1.0	05/21/95	SICP24
Copper, Cu	3.3	mg/Kg	0.50	1.0	05/21/95	SICP24
Iron, Fe	8940	mg/Kg	10	1.0	05/21/95	SICP24
Potassium, K	1420	mg/Kg	5.0	1.0	05/21/95	SICP24
Magnesium, Mg	3060	mg/Kg	5.0	1.0	05/21/95	SICP24
Manganese, Mn	107	mg/Kg	0.10	1.0	05/21/95	SICP24
Sodium, Na	NT	mg/Kg	10	1.0	05/21/95	SICP24
Nickel, Ni	6.6	mg/Kg	0.50	1.0	05/21/95	SICP24
Lead, Pb	5.3	mg/Kg	1.0	1.0	05/21/95	SICP24
Antimony, Sb	ND	mg/Kg	1.5	1.0	05/21/95	SICP24
Selenium, Se	ND	mg/Kg	2.5	1.0	05/21/95	SICP24
Thallium, Tl	NT	mg/Kg	10	1.0	05/21/95	SICP24
Vanadium, V	21.4	mg/Kg	0.15	1.0	05/21/95	SICP24
Zinc, Zn	19.9	mg/Kg	5.0	1.0	05/21/95	SICP24
SILVER (FAA)/SW846 7760						
Silver, Ag	ND	mg/Kg	0.010	1.0	05/24/95	SFSICP24
SODIUM (FAA)/SW846 7770						
Sodium, Na	99.0	mg/Kg	1.0	1.0	05/23/95	SFSICP24
THALLIUM (FAA)/SW846 7840						
Thallium, Tl	ND	mg/Kg	0.10	1.0	05/23/95	SFSICP24



James A. Seely
Operations Manager

WORKORDER COMMENTS

DATE : 05/25/95
WORKORDER:

DEFINITIONS/DATA QUALIFIERS

The following are definitions, abbreviations, and data qualifiers which may have been utilized in your report:

- ND = Analyte "not detected" in analysis at the sample specific detection limit.
- D_F = Sample "dilution factor"
- NT = Analyte "not tested" per client request.
- B = Analyte was also detected in laboratory method QC blank.
- E = Analyte concentration (result) is an estimated value or exceeds analysis calibration range.
- LIMIT = The minimum amount of the analyte that AAL can detect utilizing the specified analysis.

Please Note: Multiply the "Limit" value (AAL's Detection Limit) by Dilution Factor (D_F) to obtain the sample specific Detection Limit.

REPORT COMMENTS



Chain of Custody Record

7300 JEFFERSON, N.E.
ALBUQUERQUE, NEW MEXICO 87109
(505) 345-8964

Lab Job no.: 5088 Date 5 May 95

Page 1 of 2

3332 WEDGEWOOD
EL PASO, TEXAS 79925
(915) 593-6000

1910 N. BIG SPRING
MIDLAND, TEXAS 79705
(915) 570-1116

MELQUIADES ALANIS
6411 LOCAL UNO
CIUDAD JUAREZ, CHIHUAHUA MEXICO 32320

Client KAFB Project Manager / Contact Jerry Sillerud

Address _____ Telephone No. 846-2773

City / State / Zip _____ Fax No. _____

Project Name / Number Bldg. 980 Samplers: (Signature) Scott Pratt

Contract / Purchase Order / Quote KAFB-042695

No. of Containers	Analysis Required								Remarks	
	8240	8270	TRPH	ICP	SCAN					
1	X									Sample Depth Between 5 1/2' + 6 1/2'. Soil is a Light Brown Sand
1		X								
1			X							
1				X						

TIER II

AAL FRACTION NUMBER	Field Sample Number / Location	Date	Time	Sample Type	Type / Size of Container	Preservation								
						Temp.	Chemical							
01A	9505051050	5-5-95	1050	Soil	4 oz. VOA	4°C	N/A	1	X					
1B	↓	↓	↓	↓	4 oz. G.	↓	↓	1		X				
1C	↓	↓	↓	↓	4 oz. G.	↓	↓	1			X			
1D	9505051050	5-5-95	1050	Soil	4 oz. G.	4°C	N/A	1			X			

5 SP
MAY 95

Relinquished by: Scott Pratt
Signature SCOTT PRATT
Printed AAL
Company _____
Reason _____

Date 5 MAY 95
Time 16:30

Received by: Jenkin
Signature Jenkins
Printed AAL
Company _____
Reason _____

Relinquished by: _____
Signature _____
Printed _____
Company _____
Reason _____

Date _____
Time _____

Received by: _____
Signature _____
Printed _____
Company _____
Reason _____

Method of Shipment: _____
Shipment No. _____
Special Instructions: _____

Comments: ORGAN: 377 ABW/EM
WASTE Stream - N

After analysis, samples are to be:

- Disposed of (additional fee)
- Stored (30 days max)
- Stored over 30 days (additional fee)
- Returned to customer