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Site: National Guard Armory
ID # KS12119900008
Break: 1.5
Other:
12-6-85

Final Report
Site Inspection
Kansas National Guard Armory
Kansas City, Kansas

TDD # R-07-8303-12B

December 6, 1985

Prepared by Ken Dunn, E&E REM/FIT
for Region VII EPA

30356132
Superfund

Site: _____
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Kansas National Guard Armory
Kansas City, KS
Site Investigation

TDD#R-07-8303-12B
Prepared by Ken Dunn
Region VII FIT

August 13, 1985

Submitted to Paul Doherty, ARPO

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SECTION 1: INTRODUCTION

The Ecology and Environment, Inc. Field Investigation Team (E&E/FIT) was assigned through Technical Directive Document (TDD) R-07-8304-12B to evaluate the sampling results obtained from the Kansas National Guard Armory site in Kansas City, Kansas. The specific elements of this TDD include: determining if contamination is present, if migration of the contaminants is occurring, and preparation of a Site Inspection Form (EPA# 2070-13).

The Kansas National Guard Armory site was formerly used as a dump by a local industry. The FIT conducted two sampling efforts at the site, May 1984 and April 1985, which included the installation of a groundwater monitoring system, as well as groundwater, surface water and sediment sampling.

SECTION 2: SITE HISTORY

2.1 INTRODUCTION

The Kansas National Guard Armory site (KSNGA) is located at 18th and Ridge Streets (Figure 1), Kansas City, Kansas (K.C.K.). The site was previously owned by the City of Kansas City, Kansas. During the 10 year period from 1953 to 1963, the site was used by Owens-Corning Fiberglas Co., K.C.K. as a dump for process wastes. The dump covers approximately 5.5 acres and on average is 25-40 feet deep (Ref. 1). The KSNGA was built in 1955 on a limestone bluff directly adjacent to the dump in 1955 (Ref. 1).

Until the early 1970's, municipal dumps and landfills were unregulated and were operated without current environmental controls. Every 2-4 days, rock, cinder and dirt were used to cover the waste material at KSNGA (Ref. 1). According to the K.C.K. City Engineers' Department, there are no records of any environmental controls employed at this dump (Ref. 2).

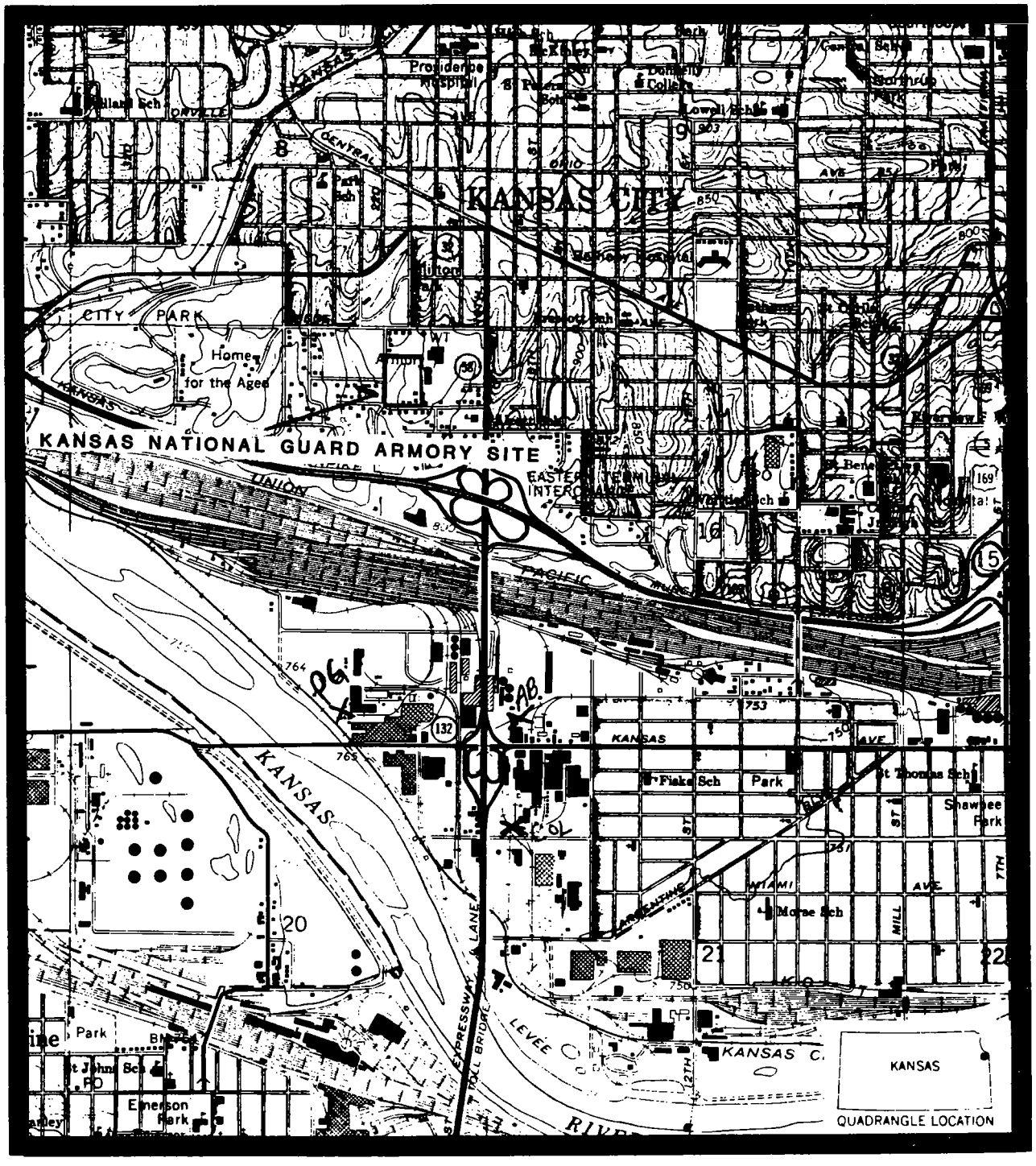
While the dump was in operation it was the object of numerous complaints concerning odors and the seepage of leachate into a ravine located southwest of the landfill. The surface water in this ravine eventually enters the Kansas River, approximately one mile to the south of the landfill area (Ref. 3). As a result of these complaints, the Wyandotte County Health Department conducted an investigation during July 1958, and recommended the immediate closing of the dump. They also recommended "that future disposal of material by Owens-Corning be in a sanitary landfill within a tight clay soil" (Ref. 4). Both recommendations were rejected by the City of K.C.K. (Ref. 3). In 1963, the dump was closed and covered with an unknown depth of local soils. The site became a parking lot and vehicle depot used by the

KANSAS NATIONAL GUARD ARMORY SITE LOCATION

SHAWNEE QUADRANGLE

KANSAS

7.5 MINUTE SERIES (TOPOGRAPHIC)



SCALE 1:24 000

1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 KILOMETER

CONTOUR INTERVAL 10 FEET

DATUM IS MEAN SEA LEVEL

Figure 1

KSNGA, who have added 1 to 2 feet of gravel to the surface of the landfill. There are no complaints on record since closure of the landfill.

The site is located in a heavily traveled, densely populated, residential area of K.C.K. The nearest off-site building is within approximately 100 feet. The covered dump is generally accessible to the public.

According to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), Section 103c, notification submitted by Owens-Corning, the following types of wastes were reportedly disposed of at this site:

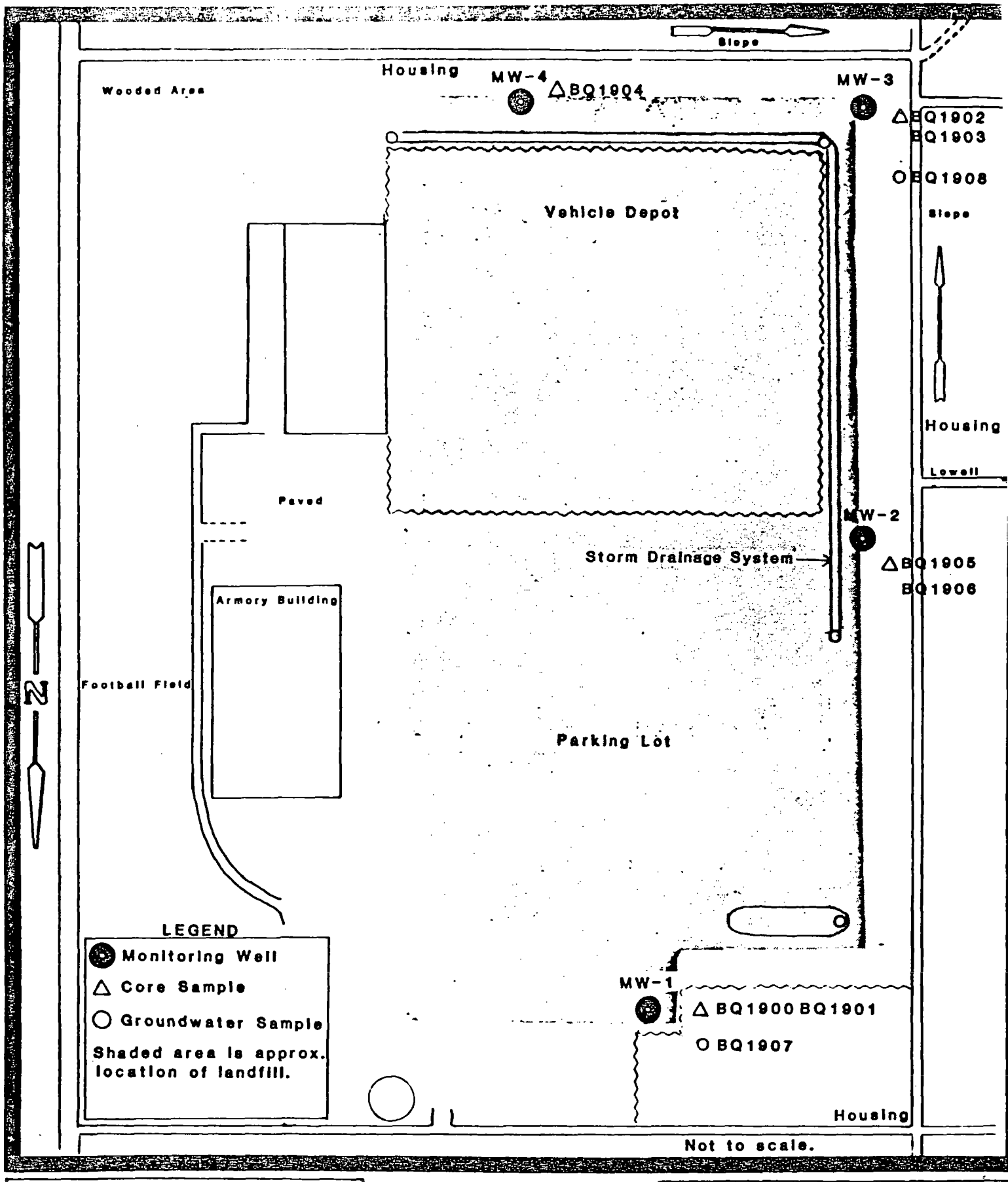
- Metal Sludges
- Solvents
- Phenolic Resins
- Adhesives, 70% phenol-formaldehyde, 30% Vinsol (Vinsol is a by-product of turpentine manufactured from pine tree stumps.)
- Furnace refractory bricks
- Paper
- Asphalt
- Demolition debris resulting from the clean up efforts following efforts following the 1951 flood in K.C.K. (Ref. 5).
- Cinders from local coal-fired power generating plants were also disposed of at the site.

2.2 PAST INVESTIGATIONS

In March 1983, the Ecology & Environment, Inc. (E&E) Field Investigation Team (FIT) conducted a preliminary assessment at this site (Ref. 3). In June, 1983, the EPA Region VII Waste Management Branch recommended that the site be inspected and sampled for increased metal levels in the soil and for the presence of organic compounds such as phenols and formaldehyde.

On May 30th, 1984, E&E performed an on-site inspection of this site. The KSNGA Shop Chief, Sgt. Liestman, stated that there is 1 to 2 feet of packed gravel on top of the landfill's earthen cover (Ref. 1). The dump has approximatley a 3 to 1 slope on the southern and western sides (Figure 2). In the late 1960's, a concrete storm drainage system was installed by the KSNGA to control runoff and erosion from the parking lot and vehicle depot. No signs of erosion, settling or slumping were noticed during the FIT inspection.

On July 23, 1984 E&E collected soil and sediment samples from on



FIELD INVESTIGATIONS OF UNCONTROLLED HAZARDOUS WASTE SITES
TASK REPORT TO THE E.P.A.

TITLE: Kansas National Guard Site Map

T.D.D. R-07-8303-12B

ecology and environment, inc.
SHAWNEE MISSION, KANSAS

Date 12/84 Drawn by KD Scale None

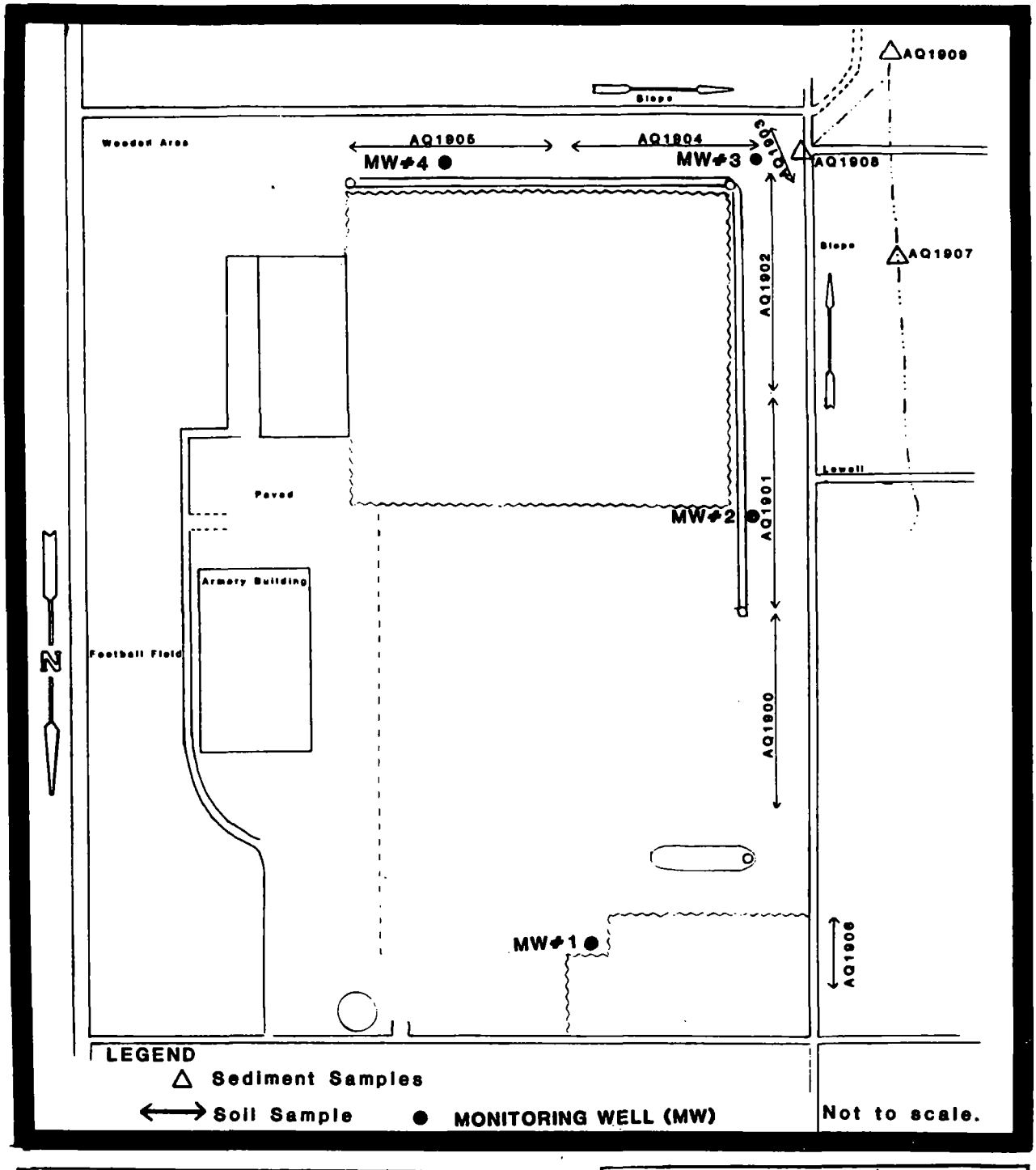
Figure 2-4

and off-site areas. Soil samples were taken at a depth of 0-12 inches. These samples were collected from slopes facing west, south and across the southwest corner of the site. Sediment samples were also collected from the drainage area of the southwest corner of the site, and from a small intermittent creek that is located west and southwest of the site. Creek sediment samples were collected up and down gradient from the landfill. See Figure 3 for sample locations.

In August (14th-17th) 1984, E&E overviewed the drilling and installation of four on-site monitoring wells. Well locations and depths are listed in Table 1 and Figure 2. The wells were located to detect the presence and migration of contaminants from the dump. Monitoring Well (MW) 1 was originally designated as the background well, while MW-2,3 and 4 were located in the presumed downgradient direction, in relation to the dump. Monitoring Well-1 penetrated fiberglass fill material, however, and thus cannot be considered as upgradient of the site.

TABLE 1: MONITORING WELL DEPTHS AND LOCATIONS

WELL	LOCATION	DEPTH OF WELL AND SCREEN INTERVAL	WELL LOG
MW#1	North side of land-fill	42'6" Screen Depth 32' to 42'	0-33' Misc. rock, cinder fill and fiberglass fill, 33' to 37' medium brown silty clay, 37' to 42.5', light brown silty clay.
MW#2	West side of land-fill	42' 6" Screen Depth 27' to 37'	0-7' misc. rock, sand and cinder fill, 7'-42.5' medium black brown silty clay. Auger refusal at 42.5' (rock or boulder).
MW#3	Southwest corner of landfill	15' 0" Screen Depth 5' to 15'	0-7' misc. rock and black cinder fill, 7'-14' lose, wet black cinder fill, 14'-15' black silty clay.
MW#4	South side of land-fill	39' 0" Screen Depth 29' to 39'	0-7' misc. rock, cinder and trash fill. 7-39' medium brown silty clay. Lost auger bit at 39'.



FIELD INVESTIGATIONS OF UNCONTROLLED HAZARDOUS WASTE SITES TASK REPORT TO THE E.P.A.	T.O.D. R-07-8303-12B
TITLE: Sediment and Soil Sampling Map	ecology and environment, inc. SHAWNEE MISSION, KANSAS
	Date 12/84 Drawn by: KD Scale None

Figure 2-6

During the drilling of MW-2, 2 borings were abandoned after 10 and 20 feet after auger refusal due to buried concrete debris. Split spoon sediment samples were collected from each well at the following depths:

	Depth (inches)	Sample #
Monitoring Well #1 (MW-1)	0"-24", 24"-48"	BQ1900, BQ1901
Monitoring Well #2 (MW-2)	0"-24", 24"-48"	BQ1902, BQ1903
Monitoring Well #3 (MW-3)	0"-24", 24"-48"	BQ1904, BQ1905
Monitoring Well #4 (MW-4)	0"-24"	BQ1906

Following the development and subsequent purging of the wells, groundwater samples were collected on August 22, 1984 from MW-1 and MW-3. MW-2 and MW-4 did not contain enough water to be sampled, due to the tight impermeable silty clay encountered. Both of these wells were checked in the fall of 1984 after rainy periods and still did not contain more than 2-3 inches of water. The first round of groundwater samples were not analyzed within the EPA Region VII approved holding times, therefore, monitoring wells 1, 2 and 3 were resampled by FIT in April, 1985.

SECTION 3: GROUNDWATER SAMPLING

3.1 SAMPLING PROCEDURE

On April 5, 1985 groundwater samples were collected from monitoring wells MW-1, MW-2, MW-3 and MW-4. MW-1 was originally intended to be an upgradient background well, however, the well appears to be located on the north edge of the landfill. MW-2 is located along the western edge of the landfill. MW-3 is located at the southwest corner of the site directly downgradient from the landfill. MW-4 is located along the southern edge of the landfill. See Figure 2 for locations.

Each of the monitoring wells was purged of three well volumes 24 hours before sampling. Samples from MW-1 and MW-3 were analyzed for total (unfiltered) and dissolved (filtered) metals (Task 1 and 2), volatile organics and extractable organics (acid and base/neutral fractions). MW-2 only contained enough water to collect one volatile organic sample. MW-4 contained only enough water to collect one volatile organic sample and one unfiltered metals, Task 1 and 2, sample. Results are listed in Tables 2 and 3.

A leachate seep sample was collected from near the southwest corner of the site. The leachate sample was not field filtered and is listed as sample # AKJX2004.

The initial run of samples AKJX2002 (MW-3), AKJX2003 (field blank) and AKJX2004 (leachate seep) yielded low surrogate recovery (Ref. 6) for semivolatiles and were rerun during Region VII EPA lab QA/QC. Surrogate recovery significantly improved during the rerun. Results are shown in Table 3 and Appendix B.

3.2 ANALYTICAL RESULTS

Thirteen base-neutral compounds were detected in MW-3, with three compounds detected in MW-4. The base neutral compounds detected in

Table 2
Metals Data From Groundwater Samples
Kansas National Guard Armory Site, Kansas City, Kansas

ppb	TOTAL METALS				DISSOLVED METALS	
	AKJX2001 MW-1	AKJX2002 MW-3	AKJX2004 Leachate Sample	AKJX2007 MW-4	AKJX2001 MW-1	AKJX2002 MW-3
Aluminum	19000.0	12,000	140,000	120,000	27.0M	---
Antimony	56.0M	79.0	410.0	640.0	---	34.0M
Arsenic*	---	16.0	160.0	30.0	---	11.0
Barium*	260.0	1500.0	12,000	2200.0	58.0M	980.0
Beryllium	2.80M	---	25.0	11.0	1.10M	1.10M
Cadmium*	---	---	65.0	---	---	---
Calcium	230,000	36,000	1,800,000	280,000	240,000	25,000
Chromium*	34.0	28.0	270.0	160.0	---	8.20M
Cobalt	4.20M	6.6M	190.0	95.0	---	---
Copper	39.0	41.0	570.0	160.0	14.0M	8.80M
Iron	28,000	17,000	210,000	360,000	24.0M	700.0
Lead*	---	96.0	3400.0	220.0	---	---
Magnesium	33,000	100,000	310,000	65,000	30,000	110,000
Manganese	380.0	360.0	15,000	15,000	210.0	68.0
Mercury*	---	0.8	1.80	0.4	0.3	---
Nickel	45.0	31.0M	480.0	240.0	---	10.0M
Potassium	4500.0M	74,000	170,000	16,000	530.0M	74,000
Sodium	51,000	1,000,000	1,300,000	68,000	53,000	1,200,000
Vanadium	43.0M	35.0M	290.0	470.0	---	7.10M
Zinc	---	---	3500.0	450.0	---	---

M = The value indicated is below the quantitation limit but above the detection limit.
MW= Monitoring Well
* = National Interim Primary Drinking Water Standard (Source: USEPA, Office of Drinking Water):

Arsenic = 50 ppb
Barium = 1000 ppb
Cadmium = 10 ppb
Chromium = 50 ppb
Lead = 50 ppb
Mercury = 2 ppb

Table 3
Semivolatiles and Volatiles Data from the Groundwater Samples
Kansas National Guard Armory Site, Kansas City, KS

ppb	AKJX2001 MW-1	AKJX2002 MW-3	AKJX2004 Leachate	AKJX2005 MW-4	AKJX2006 MW-2
SEMIVOLATILES (PHENOLS AND PAH COMPOUNDS)					
Phenol			140		
4-Methylphenol			1500		
Fluorene	-	-	-	ND	ND
Phenanthrene	-	-	-	ND	ND
Anthracene	-	7.0 M	-	ND	ND
Fluoranthene	-	32.0 M	-	ND	ND
Pyrene	-	29.0 M	-	ND	ND
Benzo(a)anthracene	-	16.0 M	-	ND	ND
Bis(2-ethylhexyl)phthalate	-	10.0 M	-	ND	ND
Benzo(b)fluoranthene	-	28.0 M	-	ND	ND
Chrysene	-	17.0 M	-	ND	ND
Benzo(a)pyrene	-	28.0 M	-	ND	ND
Indeno(1,2,3,-cd)pyrene	-	10.0 M	-	ND	ND
Benzo(g,h,i)perylene	-	-	-	ND	ND
Acenaphthene	-	-	-	ND	ND
VOLATILES					
Vinyl chloride	-	5.00M	-	-	-
Methylene chloride	4.00 M	2.00M	4.00 M	15.0	17.0
Tetrachloroethene	5.00 J	-	-	3.00 M	-

NOTE: Values not shown are below the detection limit.
M = The value indicated is below the quantitation limit but above the detection limit
J = Value is of unknown quality; approximate value.
ND = Not Determined.
PAH = Polynuclear Aromatic Hydrocarbons

the water may be attributed to the breakdown of large quantities of plastic materials known to have been buried at the site. Concentrations detected were near the analytical detection limits.

A wide range of metal concentrations were detected in MW-1, MW-3 and MW-4. The leachate seep sample contained elevated levels of all detected metals. The source of these metals may be attributed to the leaching of the cinder fill material and leaching of the metal sludges and other materials disposed of in the landfill. See Table 2 for analytical results.

SECTION 4: SEDIMENT AND SOIL SAMPLING

4.1 DRAINAGE SEDIMENT SAMPLES

Two sediment samples were collected within an off-site intermittent creek that flows southwest of the site. A storm water drainage ditch located at the southwest corner of the site intersects this creek approximately 500 feet south of the site (See Figure 3). Leachate from the landfill is known to flow into the drainage ditch, then into the creek, during high precipitation events. Sediment samples were collected upgradient and downgradient of the landfill. One sediment sample was collected from the storm sewer drainage area at the southwest corner of the site. Sample numbers and locations are listed below:

Sample Number	Location
AQ1907	Most upgradient creek sample
AQ1908	Storm sewer drainage ditch area
AQ1909	1,000 ft. downstream from the site

Sediment samples were analyzed for metals (task 1 and 2), volatile organics and extractable organics (acid and base/ neutral fractions).

There were no metals detected at levels higher than background in any of the sediment samples. All metals detected were within the range established for Missouri soils by the U. S. Geological Survey (Ref. 7).

There were no acid organics or volatile organics found at laboratory detection limits in any of the sediment samples.

The following base/neutral organics were found at elevated levels (higher than background) in the southwest corner sample (AQ1908), collected from a drainage ditch into which leachate flows:

Fluoranthene	1,100 ppb
Benzo (B) Fluoranthene	890 ppb
Pyrene	900 ppb
Benzo (A) Anthracene	900 ppb
Chrysene	900 ppb
Anthracene	520 ppb
Phenanthrene	520 ppb

These base/neutral organic compounds may be attributed to the breakdown of plastics dumped at the landfill. The PCB compound # 1254 was also detected, at 44 ppb in this sample.

The following pesticide organic compounds were detected in the downgradient sediment sample (AQ1909): Aldrin 15 ppb, Dieldrin 29 ppb, and Chlordane 30 ppb. These elevated levels are probably due to surface runoff from the landfill as well as local yards and fields.

4.2 SOIL SAMPLES

Soil samples were collected along the south and west facing slopes and across the southwest corner of the site (see Figure 3). Samples were taken at a depth of 0-12 inches. Most samples contained large amounts of cinder fill material that was used at the landfill as a cover material. The cinder fill came from local electric power plants and was dumped by the City of Kansas City, Kansas. The sample number and sample locations are listed below:

Sample Number	Sample Location
AQ1900	West facing slope
AQ1901	West facing slope
AQ1902	West facing slope
AQ1903	Southwest corner
AQ1904	South facing slope
AQ1905	South facing slope
AQ1906	Assumed Background

Samples were analyzed for metals (Task 1 and 2), volatile organics, extractable organics (acids and base/neutral fractions).

The soil samples taken from the slopes of the landfill had elevated (higher than the control sample) readings in the following metals. The background sample was collected from a field west of the site.

Metal	BKG	AQ1900	AQ1901	AQ1902	AQ1903	AQ1904	AQ1905
Aluminum	11,000	24,000	44,000	40,000	43,000	35,000	50,000
Arsenic	19	38	74	77	51	47	63
Barium	120	250	370	370	410	380	480
Chromium	14	32	71	62	65	52	110
Iron	25,000	56,000	107,000	101,000	117,000	93,000	137,000
Vanadium	20	50	96	85	97	81	110

The above sample results are reported in ppm. These elevated values are probably due to the coal cinder fill material that was used as a cover soil.

The following soil samples had elevated levels (higher than background sample) of the following base/neutral organics.

Base/Neutral Organics (ppb)	BKG	AQ1900	AQ1901	AQ1902	AQ1903	AQ1904	AQ1905
Fluoranthene	U	460.0	U	480.0	730.0	6,100.0	310
Bis (2-ethylhexyl) phthalate	U	2,600	5,100	U	460	U	U
Benzo (a) anthracene	U	570	U	610	720	5,700	U
Benzo (b) fluoranthene	U	610	U	540	660	5,400	U
Chrysene	U	570	U	610	720	5,700	U
Anthracene	U	U	U	470	460	4,600	U
Phenanthrene	U	U	U	470	460	4,600	U
Pyrene	U	370	U	520	610	5,300	240

U = Undetected

These elevated levels of base/neutral organics may be attributed to the breakdown of plastics materials that were dumped in the landfill.

The following soil samples had elevated (higher than background sample) concentrations of the compound PCB 1254. Four priority pollutant pesticides were detected in very low concentrations. KSNGA personnel stated that they have sprayed herbicides along the sides of the landfill for weed control (Ref. 1).

Volatile organics were not detected in any of the soil samples. Low concentrations of PCB-1254 were found as shown below.

	BKG	AQ1900	AQ1901	AQ1902	AQ1903	AQ1904	AQ1905
PCB 1254 (ppb)	U	55.0	20.0	38.0	54.0	170.0	110.0

U = Undetected (detection limit of 20 ppb)

4.3 SUBSURFACE SEDIMENT SAMPLES

Subsurface sediment samples were collected during the installation of the groundwater monitoring wells. All samples were collected with a split spoon. The following base/neutral organics were found at levels higher than background.

(ppb)	Sample #, Location, and Depth BQ1901** MW-1 24"-48"	 BQ1902** MW-2 24"-48"
Phenanthrene	-	1900.0
Anthracene	-	490.0
Benzo(a)anthracene	-	1800.0
Bis(2-ethylhexyl)phthalate	5000.0	750.0
Benzo(b)fluoranthene	-	2700.0
Benzo(a)pyrene	-	1900.0
Indeno(1,2,3-cd)pyrene	-	600.0
Benzo(g,h,i)perylene	-	490.0
Fluoranthene	-	10000.0
Chrysene	-	1800.0

** Values are approximate as the holding time was exceeded on these samples.

The following volatile organics were found at levels higher than background.

(ppb)	BQ1900 MW-1 0-24"	BQ1901 MW-1 24-48"	BQ1902 MW-3 24-48"	BQ1903 MW-3 0-24"	BQ1905 MW-2 0-24"	BQ1906 MW-2 24-48"
Methylene chloride	270.0	270.0	110.0	61.0	210.0	260.0
Acetone	17.0	440.0	-	-	-	-
Carbon disulfide	13.0	440.0	44.0	34.0	39.0	47.0
2-Butanone	18.0	230.0	-	63.0	49.0	-
Trichloroethene	20.0	48.0	-	-	20.0	25.0
Toluene	12.0	120.0	-	-	-	-

** Values are again approximate due to a delay in analysis of the samples.

The volatile and base/neutral compounds can probably be attributed to the breakdown of plastics and residues of petroleum products and solvents known to have been dumped at the landfill.

The sample analyses results for metals, Task 1 and 2, are shown in Table 4. These elevated values may be due to the coal cinder fill material that was used as a cover and fill soil. Several compounds were tentatively identified on a GC/MS scan. These are listed in Appendix B.

Table 4
Metals Data from Subsurface Sediment Sampling
Kansas National Guard Armory Site, Kansas City, Kansas

ppm	Sample and Location					
	BQ1900 MW-1; 0-24"	BQ1901 MW-1; 24-48"	BQ1902 MW-3; 24-48"	BQ1903 MW-3; 0-24"	BQ1905 MW-2; 0-24"	BQ1906 MW-2; 24-48"
Aluminum	9700	16000	43000	48000	40000	51000
Arsenic	7.60	10.0	27.0	29.0	24.0	27.0
Barium	110	270	460.0	360	290	330
Cadmium	1.50	1.60	3.00	3.70	29.0	3.60
Chromium	10.0	59.0	60.0	63.0	54.0	68.0
Cobalt	5.50	---	27.0	29.0	26.0	34.0
Copper	14.0	3.30	53.0	57.0	50.0	63.0
Iron	12000	1600	120000	136000	112000	147000
Lead	30.0	25.0	64.0	71.0	52.0	69.0
Manganese	190	70.0	670	690	600	780
Selenium	.80	2.30	3.20	2.80	4.50	14.0
Tin	3.00	22.0	19.0	19.0	17.0	15.0
Vanadium	22.0	11.0	92.0	97.0	77.0	100

NOTE: MW = Monitoring Well
Values not shown are below the detection limit.

SECTION 5: LOCAL HYDROGEOLOGY

The Kansas National Guard Armory Site is located on the dissected limestone bluffs along the north side of the Kansas River valley with the site being approximately 1 mile north of the river. The Armory buildings are built on this limestone bluff. The landfill is located on the west face of the bluff in a hollow which is 30 to 40 feet in depth. The landfill surface is near the top of the bluff. The top surface of the landfill was converted into a parking lot and vehicle deport for the Armory.

Based on a review of logs from wells within a 1 mile radius of the site, the water table is at a depth of approximately 5 to 30 feet (Ref. 8,9). The depth to the water table was found to be highly variable, dependent upon the location of the well (topographically). The water table was found at shallower depths in low ravine areas, and higher, toward the top of the ridges or bluffs. Directly downgradient of the site at MW-3 (toward the bottom of the hollow) groundwater was recorded at a depth of 4.5 feet. Slightly upgradient, at MW-1, groundwater was recorded at a depth of 25 feet. Regional groundwater flow is assumed to be southerly toward the Kansas River.

Based on interviews with Armory personnel and Wyandotte County Health Department records (Ref. 4,5), it is assumed that a small intermittent spring is located along the base of the limestone bluff at the northeast corner of the landfill. Flow from this spring enters the intermittent creek that is south and west of the landfill (See Section 4). This spring is buried under the existing landfill.

It is suspected that this spring along with the downward migration of water through the top and sloping surfaces of the landfill contributes to the seepage located at the southwest corner of the

site. A storm sewer system has been installed at the site by the City of Kansas City and the KSNGA. This sewer system was designed to control runoff problems from the landfill. Storm water is directed from the top of the landfill (i.e. Armory parking area) to the southwest toe of the landfill and into the intermittent stream mentioned before.

FIT observations of the seepage area, from May through November of 1984 indicate that the seepage is minimal even during times of high rainfall. The seepage appears clear and no odors were detected.

Results from collected seepage samples indicate minor to moderate amounts of organic contaminants. Most noteworthy are phenol concentrations: phenol, 140 ppb and 4-methylphenol, 1500 ppb. Results also indicate heavy metal contamination. These higher than normal metals values are probably the result of the leachate seeping through the landfill and the cinderfill material.

SECTION 6: CONCLUSIONS

The sampling efforts of July and August, 1984 have identified minor contamination of the soil and sediment on-site at the Kansas National Guard Armory Site. The higher than background metal concentrations found in the soil and sediment samples may be due to coal cinder material used as part of the soil cover at the site. The organics identified in the soil and sediment samples do not appear to be migrating off-site. The presence of the organics is probably due to the breakdown of the known plastics, and plasticizer compounds disposed of in the landfill.

Groundwater around the site was found to be contaminated with heavy metals and organics (mainly phenols and PAH's). Four monitoring wells were installed and subsequently sampled. A leachate seep, originating from a pre-existing spring, contained the highest concentrations of heavy metals and the only positive phenol contamination. Metals may have been leached from the cinder material used at the landfill and derived from leaching of the metal sludges known to have been dumped into the landfill.

All residences within a 3 mile radius of the site use city supplied drinking water or have water delivered by truck (Ref. 10). Local groundwater around the site is not know to be used. Limited use of springs may occur in some areas by private residences. The nearest known groundwater wells are a 35 foot deep residential garden irrigation well located approximately 3 miles east of the site; and five, 60 to 100 feet deep industrial wells located 1 1/2 miles south of the site. The industrial wells are known to utilize groundwater from the Kansas River alluvial aquifer (Ref. 10).

The site inspection form (Form 2070-13) is included as Appendix A. Appendix D is a draft ranking of the site according to the Hazard Ranking System (HRS).

SECTION 7: REFERENCES

1. Interview with Sergeant Liestman, Shop Chief, Kansas National Guard Armory, Kansas City, Kansas, May 29, 1984.

2. Phone interview with Bill Sellings, Kansas City, Kansas, City Engineers Department., June 14, 1984.

3. Preliminary Assessment Report for the Kansas National Guard Armory, Kansas City, Kansas - Gary Kepko, Ecology & Environment, Inc., April 25, 1983.

4. Letter from J. J. Burris, District Engineer, Div. of Sanitation, Kansas State Board of Health, Topeka, Kansas, to Nellie G. Walker, M.D., Director, Kansas City-Wyandotte County Health Dept., Kansas City, Kansas, July 11, 1958.

5. Interview with Sergeant Liley, Kansas National Guard Armory, Kansas City, Kansas, June 18, 1984.

6. Telephone conversation record, September 18, 1985 between Debbie Morey, EPA lab and FIT, in FIT file #R-07-8303-12B.

7. Conner, Jon J., and Shacklette, H.T., Background Geochemistry of Some Rocks, Soils, Plants and Vegetables in the Conterminous United States, Geological Survey Professional Paper 574-F (1975).

8. Preliminary Assessment Report for the Kansas City Post Office, Kansas City, Kansas, James Jackson - Ecology & Environment, Inc., January 27, 1984.

9. Trip Report and well logs from installation of monitoring wells at the Kansas National Guard Armory Site by E&E/FIT, August, 1984.

10. Phone conversation with Chuck Billups, Kansas City, Kansas Water Dept., June 21, 1985.

APPENDIX A

SITE INSPECTION FORM

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 1 - SITE LOCATION AND INSPECTION INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
KS	21189008

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Kansas National Guard Armory	18th and Ridge

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Kansas City	KS	66102	Wyandotte		

09 COORDINATES LATITUDE	LONGITUDE	10 TYPE OF OWNERSHIP (Check one)
39 0 6 0 4.0N	0 9 4 38 3 5 . 0W	☒ A. PRIVATE ☐ B. FEDERAL ____ ☒ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL ☐ F. OTHER ____ ☐ G. UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION	02 SITE STATUS	03 YEARS OF OPERATION
7 18 84 (MONTH DAY YEAR)	☐ ACTIVE ☒ INACTIVE	1950 (BEGINNING YEAR) 1963 (ENDING YEAR) ____ UNKNOWN

04 AGENCY PERFORMING INSPECTION (Check all that apply)

☐ A. EPA ☐ B. EPA CONTRACTOR Ecology & Environment (Name of firm) ☐ C. MUNICIPAL ☐ D. MUNICIPAL CONTRACTOR ____ (Name of firm)
☐ E. STATE ☐ F. STATE CONTRACTOR ____ (Name of firm) FIT ☐ G. OTHER ____ (Specify)

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO
Ken Dunn	Field Investigation Team	E&E	(913 432-9961

09 OTHER INSPECTORS	10 TITLE	11 ORGANIZATION	12 TELEPHONE NO.
			( )
			( )
			( )
			( )
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO
Sergeant Liestman	shop chief	18th & Ridge, KCK	(913 342-3327
Sergeant Liley	armory chief	18th & Ridge, KCK	(913 342-3327
			( )
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
☒ PERMISSION ☐ WARRANT		sunny and hot

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO.
Patrick Costello	EPA Region VII	(816) 374-6864

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
Ken Dunn	E&E	FIT	913-432-9961	8 6 84 (MONTH DAY YEAR)

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
KS1	21189008

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES *(Check all that apply)*

- [x] A. SOLID
- [ ] B. POWDER, FINES
- [x] C. SLUDGE
- [ ] D. OTHER _____ *(Specify)*
- [ ] E. SLURRY
- [x] F. LIQUID
- [ ] G. GAS

02 WASTE QUANTITY AT SITE *(Measures of waste quantities must be independent)*

TONS _____

CUBIC YARDS unknown

NO. OF DRUMS _____

03 WASTE CHARACTERISTICS *(Check all that apply)*

- [x] A. TOXIC
- [ ] B. CORROSIVE
- [ ] C. RADIOACTIVE
- [ ] D. PERSISTENT
- [ ] E. SOLUBLE
- [ ] F. INFECTIOUS
- [ ] G. FLAMMABLE
- [ ] H. IGNITABLE
- [ ] I. HIGHLY VOLATILE
- [ ] J. EXPLOSIVE
- [ ] K. REACTIVE
- [ ] L. INCOMPATIBLE
- [ ] M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS	unknown		
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS	unknown		phenols, resins, formaldehyde
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS	unknown		metal sludges

IV. HAZARDOUS SUBSTANCES *(See Appendix for most frequently cited CAS Numbers)*

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
OCC	phenols	108-95-2	landfill	unknown	unknown
OCC	formaldehyde	50-00-0	landfill	unknown	unknown

V. FEEDSTOCKS *(See Appendix for CAS Numbers)*

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS	fiberglass		FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*

EPA Region VII file, Site Inspection Report Manual

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
KS1	21189008

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: _____
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

Possible leachate migration to groundwater.

01 ☒ B. SURFACE WATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: _____
02 ☐ OBSERVED (DATE: 1950's) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

Possible leachate entering into Kansas River in the 1950's.

01 ☐ C. CONTAMINATION OF AIR
03 POPULATION POTENTIALLY AFFECTED: _____
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

NA

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS
03 POPULATION POTENTIALLY AFFECTED: _____
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

NA

01 ☐ E. DIRECT CONTACT
03 POPULATION POTENTIALLY AFFECTED: _____
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

NA

01 ☐ F. CONTAMINATION OF SOIL
03 AREA POTENTIALLY AFFECTED: approx. 7-10 acres (Acres)
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

Area of landfill plus possible leachate migration.

01 ☐ G. DRINKING WATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: _____
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

NA

01 ☐ H. WORKER EXPOSURE/INJURY
03 WORKERS POTENTIALLY AFFECTED: _____
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

NA

01 ☐ I. POPULATION EXPOSURE/INJURY
03 POPULATION POTENTIALLY AFFECTED: _____
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

NA

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
KS1	21189008

II. HAZARDOUS CONDITIONS AND INCIDENTS *(Continued)*

01 ☐ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

NA

01 ☐ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION *(Include name(s) of species)*

NA

01 ☐ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

NA

01 ☐ M. UNSTABLE CONTAINMENT OF WASTES *(Spills/Runoff/Standing liquids, Leaking drums)* — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

NA

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

NA

01 ☒ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

Leachate seeps from the southwest corner at the landfill into the local storm sewer system.

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

NA

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

NA

III. TOTAL POPULATION POTENTIALLY AFFECTED: zero

IV. COMMENTS

V. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
KS1	21189008

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
☐ A. NPDES				
☐ B. UIC				
☐ C. AIR				
☐ D. RCRA				
☐ E. RCRA INTERIM STATUS				
☐ F. SPCC PLAN				
☐ G. STATE (Specify)				
☐ H. LOCAL (Specify)				
☐ I. OTHER (Specify)				
☐ J. NONE				

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE
☐ A. SURFACE IMPOUNDMENT		
☐ B. PILES		
☐ C. DRUMS, ABOVE GROUND		
☐ D. TANK, ABOVE GROUND		
☐ E. TANK, BELOW GROUND		
☒ F. LANDFILL	5.5	acres
☐ G. LANDFARM		
☐ H. OPEN DUMP		
☐ I. OTHER (Specify)		

04 TREATMENT (Check all that apply)

- ☐ A. INCENERATION
- ☐ B. UNDERGROUND INJECTION
- ☒ C. CHEMICAL/PHYSICAL
- ☒ D. BIOLOGICAL
- ☐ E. WASTE OIL PROCESSING
- ☐ F. SOLVENT RECOVERY
- ☐ G. OTHER RECYCLING/RECOVERY
- ☐ H. OTHER landfill (Specify)

05 OTHER

- ☐ A. BUILDINGS ON SITE

06 AREA OF SITE

12 (Acres)

07 COMMENTS

The entire Kansas National Guard Armory Site covers approximately 12 acres; the landfill covers approximately 5.5 acres of the total 12 acres.

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)

☒ A. ADEQUATE, SECURE ☐ B. MODERATE ☐ C. INADEQUATE, POOR ☐ D. INSECURE, UNSOUND, DANGEROUS

02 DESCRIPTION OF DRUMS, DIKING, LINERS, BARRIERS, ETC.

Landfill was closed in 1963. The top has been capped, leveled and covered by approximately 2 feet of gravel. The sides are covered by a thin layer of soil (approximately 12 inches) and sustain a healthy growth of weeds and wild grasses.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: ☐ YES ☒ NO

02 COMMENTS

VI. SOURCES OF INFORMATION (Cite specific references, e.g. state files, sample analysis, reports)

EPA Region VII files
Site work plan by Ken Dunn, E&E FIT

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE: KS1 | 02 SITE NUMBER: 21189008

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as applicable)

	SURFACE	WELL
COMMUNITY	A. ☒	B. ☐
NON-COMMUNITY	C. ☐	D. ☐

02 STATUS

ENDANGERED	AFFECTED	MONITORED
A. ☐	B. ☐	C. ☒
D. ☐	E. ☐	F. ☐

03 DISTANCE TO SITE

A. 5 (mi)

B. _____ (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)

☐ A. ONLY SOURCE FOR DRINKING ☐ B. DRINKING (Other sources available) COMMERCIAL, INDUSTRIAL, IRRIGATION (No other water sources available) ☐ C. COMMERCIAL, INDUSTRIAL, IRRIGATION (Limited other sources available) ☒ D. NOT USED, UNUSEABLE

02 POPULATION SERVED BY GROUND WATER 0

03 DISTANCE TO NEAREST DRINKING WATER WELL 0 (mi)

04 DEPTH TO GROUNDWATER	05 DIRECTION OF GROUNDWATER FLOW	06 DEPTH TO AQUIFER OF CONCERN	07 POTENTIAL YIELD OF AQUIFER	08 SOLE SOURCE AQUIFER
approx. 5 (ft)	southerly	3-5 (ft)	unknown (gpd)	☐ YES ☒ NO

09 DESCRIPTION OF WELLS (Including useage, depth, and location relative to population and buildings)

There are no known wells in the aquifer of concern within a 3 mile radius.

10 RECHARGE AREA: ☒ YES ☐ NO

COMMENTS: The landfill is located within the recharge area of local groundwater.

11 DISCHARGE AREA: ☒ YES ☐ NO

COMMENTS: There is apparent leachate discharge at the southwest corner of the landfill.

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

☐ A. RESERVOIR, RECREATION DRINKING WATER SOURCE ☐ B. IRRIGATION, ECONOMICALLY IMPORTANT RESOURCES ☒ C. COMMERCIAL, INDUSTRIAL ☐ D. NOT CURRENTLY USED

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME:	AFFECTED	DISTANCE TO SITE
Kansas River	☐	1½ (mi)
	☐	(mi)
	☐	(mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN Heavily populated urban residential area

ONE (1) MILE OF SITE: A. _____ NO. OF PERSONS

TWO (2) MILES OF SITE: B. _____ NO. OF PERSONS

THREE (3) MILES OF SITE: C. _____ NO. OF PERSONS

02 DISTANCE TO NEAREST POPULATION: 0.1 (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE: Heavily populated and developed urban area

04 DISTANCE TO NEAREST OFF-SITE BUILDING: 0.1 (mi)

05 POPULATION WITHIN VICINITY OF SITE (Provide narrative description of nature of population within vicinity of site, e.g., rural, village, densely populated urban area)

Site is located within a densely populated area of Kansas City, Kansas.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
KS 1	21189008

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

☐ A. $10^{-6} - 10^{-8}$ cm/sec ☐ B. $10^{-4} - 10^{-6}$ cm/sec ☐ C. $10^{-4} - 10^{-3}$ cm/sec ☐ D. GREATER THAN 10^{-3} cm/sec

02 PERMEABILITY OF BEDROCK (Check one)

☒ A. IMPERMEABLE (Less than 10^{-6} cm/sec) ☐ B. RELATIVELY IMPERMEABLE ($10^{-4} - 10^{-6}$ cm/sec) ☐ C. RELATIVELY PERMEABLE ($10^{-2} - 10^{-4}$ cm/sec) ☐ D. VERY PERMEABLE (Greater than 10^{-2} cm/sec)

03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH
60 (ft)	2-5 (ft)	6.8-7.2

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE: SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
6 (in)	3 (in)	15-20 %	south/southwest	5-10 %

09 FLOOD POTENTIAL

SITE IS IN NA YEAR FLOODPLAIN

10 ☐ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS (5 acre minimum)

ESTUARINE: A. NA (mi)

OTHER: B. _____ (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)

_____ (mi)

ENDANGERED SPECIES: NA

13 LAND USE IN VICINITY

DISTANCE TO:

COMMERCIAL/INDUSTRIAL	RESIDENTIAL AREAS; NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES	AGRICULTURAL LANDS: PRIME AG LAND	AGRICULTURAL LANDS: AG LAND
A. 0.5 (mi)	B. 0.1 (mi)	C. _____ (mi)	D. _____ (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

Site is in a densely populated area of Kansas City, Kansas. The area is predominantly resiential. The site is located along the bluffs above the Kansas River floodplain. The Kansas River is approximately 1.2 mile to the south of the site.

VII. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA Region VII files, USGS Topographic Quad. Map, Prelimianry Assessment Report by Gary Kepko, E&E FIT, HRS users Manual

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 6 - SAMPLE AND FIELD INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
KS 1	21189008

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER	2	EPA Region VII Laboratory	6/15/85
SURFACE WATER			
WASTE			
AIR			
RUNOFF			
SPILL			
SOIL	15	EPA Region VII Laboratory	11-84
VEGETATION			
OTHER			

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
PH	of groundwater from monitoring wells
Temp	" " "
Conductivity	" " "

IV. PHOTOGRAPHS AND MAPS

01 TYPE ☒ GROUND ☐ AERIAL

02 IN CUSTODY OF Ecology & Environment (Name of organization or individual)

03 MAPS ☒ YES ☐ NO

04 LOCATION OF MAPS EPA (with report) TDD R-07-8303-12A

V. OTHER FIELD DATA COLLECTED *(Provide narrative description)*

Well logs from the construction of groundwater monitoring wells.

VI. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*

Trip report and final report of Kansas National Guard Armory Site prepared by E&E/FIT 2-1985

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 7 - OWNER INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
KS 1	21189008

II. CURRENT OWNER(S)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE
Kansas National Guard		18th and Ridge		Kansas City	KS	66102

PARENT COMPANY (If applicable)

08 NAME	09 D+B NUMBER	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE	12 CITY	13 STATE	14 ZIP CODE

III. PREVIOUS OWNER(S) (List most recent first)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE
City of Kansas City, Ks		701 North 7th		Kansas City	KS	66101

IV. REALTY OWNER(S) (If applicable; list most recent first)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - OPERATOR INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
KS 1	21189008

II. CURRENT OPERATOR (Provide if different from owner)			OPERATOR'S PARENT COMPANY (If applicable)		
01 NAME same as current owner		02 D+B NUMBER	10 NAME		11 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)		13 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER				

III. PREVIOUS OPERATOR(S) (List most recent first; provide only if different from owner)			PREVIOUS OPERATORS' PARENT COMPANIES (If applicable)		
NAME		02 D+B NUMBER	10 NAME		11 D+B NUMBER
STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)		13 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD				
01 NAME		02 D+B NUMBER	10 NAME		11 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)		13 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD				
01 NAME		02 D+B NUMBER	10 NAME		11 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)		13 SIC CODE
	06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD				

IV. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 9 - GENERATOR/TRANSPORTER INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
KS 1	21189008

II. ON-SITE GENERATOR

01 NAME	02 D+B NUMBER
NA	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

III. OFF-SITE GENERATOR(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

IV. TRANSPORTER(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
KS 1	21189008

II. PAST RESPONSE ACTIVITIES

01 ☐ A. WATER SUPPLY CLOSED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ B. TEMPORARY WATER SUPPLY PROVIDED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ C. PERMANENT WATER SUPPLY PROVIDED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ D. SPILLED MATERIAL REMOVED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ E. CONTAMINATED SOIL REMOVED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ F. WASTE REPACKAGED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ G. WASTE DISPOSED ELSEWHERE — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☒ H. ON SITE BURIAL — 02 DATE July 1958 — 03 AGENCY Wyandotte County Health Department
04 DESCRIPTION Landfill operated from 1958 to 1963. The Wyandotte Dept. investigated complaints by local neighbors of the landfill concerning odors & leachate.

01 ☐ I. IN SITU CHEMICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ J. IN SITU BIOLOGICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ K. IN SITU PHYSICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ L. ENCAPSULATION — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ M. EMERGENCY WASTE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ N. CUTOFF WALLS — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ O. EMERGENCY DIKING/SURFACE WATER DIVERSION — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ P. CUTOFF TRENCHES/SUMP — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ Q. SUBSURFACE CUTOFF WALL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
KS 1	21189008

II PAST RESPONSE ACTIVITIES *(Continued)*

01 ☐ R. BARRIER WALLS CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☒ S. CAPPING/COVERING — 02 DATE 1963 — 03 AGENCY City of Kansas City, Ks
04 DESCRIPTION
The landfill was capped and covered with a combination of soil and cinderfill.

01 ☐ T. BULK TANKAGE REPAIRED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ U. GROUT CURTAIN CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ V. BOTTOM SEALED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ W. GAS CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ X. FIRE CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ Y. LEACHATE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ Z. AREA EVACUATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ 1. ACCESS TO SITE RESTRICTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ 2. POPULATION RELOCATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ 3. OTHER REMEDIAL ACTIVITIES — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

III. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 11 - ENFORCEMENT INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
KS 1	21189008

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION ☐ YES ☒ NO

02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

NA

III. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*

APPENDIX B

LABORATORY DATA SHEETS FOR SAMPLE RESULTS

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DATE 10-11-84

SUBJECT Transmittal of Laboratory Data

FROM Charles P. Hensley CPH
Chief, Laboratory Branch, ENSV

TO Keffer
Attn Dunn

Analyses have been completed for the following activities and the data results are attached.

Activity No.	Description
4619	Kansas National Guard Armory

Attachments

cc: Data Files

EPA Form 1320-6 (Rev. 3-76)

DATA QUALIFIERS FOR EPA REGION VII

U not detected. For EPA VII lab data U is applied only in conjunction with detection limits. For contract lab data it is applied to contract required limits.

M The value indicated is below the quantitation limit but above the detection limit.

J The value is of unknown quality. Approximate value.

I analysis attempted but no result can be reported.

ANALYSIS TYPE: CONTRACT INORGANICS

TITLE: KANSAS NAT. GUARD
MATRIX: SEDIMENT
SAMPLE PREP:____/____/____/____
REVIEWER: KCS/JRD/____/____/____/____/____/____

LAB: WIL
UNITS: ~~UG/KG~~ mg/kg
ANALYST/ENTRY: COM

CASE: 3049
METHOD #: 9001M0
DATE: 09/13/84

SAMPLE NUMBERS

COMPOUND	STORET#	AQ1900	AQ1901	AQ1902	AQ1903	AQ1904	AQ1905	AQ1906 (control)	AQ1907 (control)
ALUMINUM	01108	24000.	44000.	40000.	43000.	35000.	50000.	11000.	33000.
ANTIMONY	01098	1. U	1. U	1. U	1. U	1. U	1. U	1. U	1. U
ARSENIC	01003	38.	74.	77.	51.	47.	63.	19.	40.
BARIUM	01008	250.	370.	370.	410.	380.	480.	120.	260.
BERYLLIUM	01013	3.6	7.9	7.2	8.1	7.1	10.	.8	7.8
BORON	01023	5. U	5. U	5. U	5. U	5. U	5. U	5. U	5. U
CADMIUM	01028	.75	.74	.77	.81	1.2	1.	.9	.2
CHROMIUM	01029	32.	71.	62.	65.	52.	110.	14.	44.
COBALT	01038	21.	29.	26.	31.	25.	37.	6.	18.
COPPER	01043	66.	46.	46.	47.	48.	56.	24.	27.
IRON	01170	56000.	107000.	101000.	117000.	93000.	137000.	25000.	88000.
LEAD	01052	69.	58.	3700.	61.	110.	83.	140.	110.
MANGANESE	01053	550.	750.	740.	750.	730.	780.	300.	560.
MERCURY	71921	.08	.01 U	.06	.06	.1	.1	.01 U	.01 U
NICKEL	01068	59.	89.	82.	91.	77.	120.	14.	48.
SELENIUM	01148	.1 U	.1 U	.1 U	.1 U	.3	2. U	.1 U	.1 U
SILVER	01078	.5 U	.5 U	.5 U	.5 U	.5 U	.5 U	.5 U	.5 U
THALLIUM	34480	.5 U	.5 U	.5 U	.5 U	.5 U	.5 U	.5 U	.5 U
TIN	01103	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U	1.5U
VANADIUM	01088	50.	96.	85.	97.	81.	110.	20.	72.
ZINC	01093	190.	210.	220.	200.	260.	250.	250.	49.

ANALYSIS TYPE: CONTRACT INORGANICS

TITLE: KANSAS NAT. GUARD
MATRIX: SEDIMENT
SAMPLE PREP:____/____/____/____
REVIEWER: GCS/JCS/____/____/____/____/____/____

LAB: WIL
UNITS: ~~UG/KG~~ mg/kg
ANALYST/ENTRY: COM

CASE: 3049
METHOD #: 9001M03
DATE: 09/13/84

SAMPLE NUMBERS

COMPOUND	STORET#	AQ1908	AQ1909
ALUMINUM	01108	8800.	20000.
ANTIMONY	01098	1. U	1. U
ARSENIC	01003	13.	28.
BARIUM	01008	100.	210.
BERYLLIUM	01013	1.	4.4
~~BORON~~	~~01023~~	~~5. U~~	~~5. U~~
CADMIUM	01028	.51	.4
CHROMIUM	01029	12.	18.
COBALT	01038	4.	12.
COPPER	01043	9.	20.
IRON	01170	13000.	53000.
LEAD	01052	26.	33.
MANGANESE	01053	210.	430.
MERCURY	71921	.01 U	.01 U
NICKEL	01068	10.	31.
SELENIUM	01148	.1 U	.1 U
SILVER	01078	.5 U	.5 U
THALLIUM	34480	.5 U	.5 U
TIN	01103	1.5U	1.5U
VANADIUM	01088	20.	40.
ZINC	01093	60.	65.

ANALYSIS TYPE: CONTRACT ACID ORGANICS

TITLE: KANSAS NAT. GUARD
MATRIX: SEDIMENT
SAMPLE PREP: ___/___/___
REVIEWER: GCS/CAT/JMC 9/17/84/___/___

LAB: GCA
UNITS: UG/KG
ANALYST/ENTRY: COA

CASE: 3049
METHOD #: 9301M02
DATE: 09/17/84

SAMPLE NUMBERS

COMPOUND	STORET#	AQ1900	AQ1901	AQ1902	AQ1903	AQ1904	AQ1905	AQ1906 control	AQ1908
2,4,6 TRICHLOROPHENOL	34624	200. U	200. U	200. U	200. U	200. U	200. U	300. U	300. U
P-CHLORO-M-CRESOL	34455	400. U	400. U	400. U	400. U	400. U	400. U	600. U	600. U
2-CHLOROPHENOL	34589	200. U	200. U	200. U	200. U	200. U	200. U	300. U	300. U
2,4 DICHLOROPHENOL	34604	200. U	200. U	200. U	200. U	200. U	200. U	300. U	300. U
2,4 DIMETHYLPHENOL	34609	200. U	200. U	200. U	200. U	200. U	200. U	300. U	300. U
2-NITROPHENOL	34594	400. U	400. U	400. U	400. U	400. U	400. U	600. U	600. U
4-NITROPHENOL	34649	2000. U	2000. U	2000. U	2000. U	2000. U	2000. U	3000. U	3000. U
2,4-DINITROPHENOL	34619	1000. U	1000. U	1000. U	1000. U	1000. U	1000. U	1500. U	1500. U
4,6 DINITRO-2-METHYLPHENOL	34660	400. U	400. U	400. U	400. U	400. U	400. U	600. U	600. U
PENTACHLOROPHENOL	39061	400. U	400. U	400. U	400. U	400. U	400. U	600. U	600. U
PHENOL	34695	200. U	200. U	200. U	200. U	200. U	200. U	300. U	300. U

ANALYSIS TYPE: CONTRACT ACID ORGANICS

TITLE: KANSAS NAT. GUARD
MATRIX: SEDIMENT
SAMPLE PREP: ___/___/___/___
REVIEWER: GCS/EAF/[illegible]/10/31/87/___/___/___

LAB: GCA
UNITS: UG/KG
ANALYST/ENTRY: COA

CASE: 3049
METHOD #: 9301M02
DATE: 10/02/84

SAMPLE NUMBERS

COMPOUND	STORET#	AQ1907	
2,4,6 TRICHLOROPHENOL	34624	.	I
P-CHLORO-M-CRESOL	34455	.	I
2-CHLOROPHENOL	34589	300.	U
2,4 DICHLOROPHENOL	34604	300.	U
2,4 DIMETHYLPHENOL	34609	300.	U
2-NITROPHENOL	34594	600.	U
4-NITROPHENOL	34649	.	I
2,4-DINITROPHENOL	34619	.	I
4,6 DINITRO-2-METHYLPHENOL	34660	.	I
PENTACHLOROPHENOL	39061	.	I
PHENOL	34695	300.	U

ANALYSIS TYPE: CONTRACT ACID ORGANICS

TITLE: KANSAS NAT. GUARD
MATRIX: SEDIMENT
SAMPLE PREP: ___/___/___
REVIEWER: GCS/EAF JMK 9/17/84 ___/___

LAB: GCA
UNITS: UG/KG
ANALYST/ENTRY: COA

CASE: 3049
METHOD #: 9301M02
DATE: 09/17/84

SAMPLE NUMBERS

COMPOUND	STORET#	AQ1909
2,4,6 TRICHLOROPHENOL	34624	200. U
P-CHLORO-M-CRESOL	34455	400. U
2-CHLOROPHENOL	34589	200. U
2,4 DICHLOROPHENOL	34604	200. U
2,4 DIMETHYLPHENOL	34609	200. U
2-NITROPHENOL	34594	400. U
4-NITROPHENOL	34649	2000. U
2,4-DINITROPHENOL	34619	1000. U
4,6 DINITRO-2-METHYLPHENOL	34660	400. U
PENTACHLOROPHENOL	39061	400. U
PHENOL	34695	200. U

ANALYSIS TYPE: CONTRACT BASE-NEU ORGANICS

TITLE: KANSAS NAT. GUARD
MATRIX: SEDIMENT
SAMPLE PREP: ____/____/____
REVIEWER: GCS/EAF/JMC 9/17/84 ____/____/____

LAB: GCA
UNITS: UG/KG
ANALYST/ENTRY: COB

CASE: 3049
METHOD #: 9301M02
DATE: 09/17/84

SAMPLE NUMBERS

COMPOUND	STORET#	AQ1900	AQ1901	AQ1902	AQ1903	AQ1904	AQ1905	AQ1906	AQ1908
ACENAPHTHENE	34208	200. U	200. U	200. U	200. U	200. U	200. U	300. U	300. U
BENZIDINE	39121	800. U	800. U	800. U	800. U	800. U	800. U	1200. U	1200. U
1,2,4 TRICHLOROBENZENE	34554	200. U	200. U	200. U	200. U	200. U	200. U	300. U	300. U
HEXACHLOROBENZENE	39701	200. U	200. U	200. U	200. U	200. U	200. U	300. U	300. U
HEXACHLOROETHANE	34399	200. U	200. U	200. U	200. U	200. U	200. U	300. U	300. U
BIS(2-CHLOROETHYL)ETHER	34276	200. U	200. U	200. U	200. U	200. U	200. U	300. U	300. U
2-CHLORONAPHTHALENE	34584	200. U	200. U	200. U	200. U	200. U	200. U	300. U	300. U
1,2 DICHLOROBENZENE	34539	200. U	200. U	200. U	200. U	200. U	200. U	300. U	300. U
1,3 DICHLOROBENZENE	34569	200. U	200. U	200. U	200. U	200. U	200. U	300. U	300. U
1,4 DICHLOROBENZENE	34574	200. U	200. U	200. U	200. U	200. U	200. U	300. U	300. U
3,3' DICHLOROBENZIDINE	34634	400. U	400. U	400. U	400. U	400. U	400. U	600. U	600. U
2,4 DINITROTOLUENE	34614	400. U	400. U	400. U	400. U	400. U	400. U	600. U	600. U
2,6 DINITROTOLUENE	34629	200. U	200. U	200. U	200. U	200. U	200. U	300. U	300. U
1,2 DIPHENYLHYDRAZINE	34349	400. U	400. U	400. U	400. U	400. U	400. U	600. U	600. U
FLUORANTHENE	34379	460.	200. U	480.	730.	6100.	310.	300. U	1100.
4-CHLOROPHENYL PHENYL ETHER	34644	200. U	200. U	200. U	200. U	200. U	200. U	300. U	300. U
4-BROMOPHENYL PHENYL ETHER	34639	200. U	200. U	200. U	200. U	200. U	200. U	300. U	300. U
BIS(2-CHLOROISOPROPYL)ETHER	34286	400. U	400. U	400. U	400. U	400. U	400. U	600. U	600. U
BIS(2-CHLOROETHOXY)METHANE	34281	400. U	400. U	400. U	400. U	400. U	400. U	600. U	600. U
HEXACHLOROBUTADIENE	39705	200. U	200. U	200. U	200. U	200. U	200. U	300. U	300. U
HEXACHLOROCYCLOPENTADIENE	34389	200. U	200. U	200. U	200. U	200. U	200. U	300. U	300. U
ISOPHORONE	34411	200. U	200. U	200. U	200. U	200. U	200. U	300. U	300. U
NAPHTHALENE	34411	200. U	200. U	200. U	200. U	200. U	200. U	300. U	300. U
NITROBENZENE	34450	200. U	200. U	200. U	200. U	200. U	200. U	300. U	300. U
N-NITROSODIPHENYLAMINE	34436	200. U	200. U	200. U	200. U	200. U	200. U	300. U	300. U
N-NITROSODI-N-PROPYLAMINE	34431	200. U	200. U	200. U	200. U	200. U	200. U	300. U	300. U
BIS(2-ETHYLHEXYL) PHTHALATE	39102	2600.	5100.	200. U	460.	200. U	200. U	370.	300. U
BENZYL BUTYL PHTHALATE	34295	200. U	200. U	200. U	200. U	200. U	200. U	300. U	300. U
DI-N-BUTYL PHTHALATE	39112	200. U	200. U	200. U	200. U	200. U	200. U	300. U	300. U
DI-N-OCTYL PHTHALATE	34599	390.	500.	200. U	200. U	200. U	200. U	300. U	300. U
DIETHYL PHTHALATE	34339	200. U	200. U	200. U	200. U	200. U	200. U	300. U	300. U
DIMETHYL PHTHALATE	34344	200. U	200. U	200. U	200. U	200. U	200. U	300. U	300. U
BENZO(A)ANTHRACENE	34529	570.	200. U	610.	720.	5700.	200. U	300. U	900.
BENZO(A)PYRENE	34250	230. M	400. U	250. M	280. M	2400.	400. U	600. U	360. M
BENZO(B)FLUORANTHENE OR Benzo(k) Fluoranthene	34233	610.	400. U	540.	660.	5400.	400. U	600. U	890.
~~BENZO(K)FLUORANTHENE~~	~~34245~~	~~400. U~~	~~400. U~~	~~400. U~~	~~400. U~~	~~400. U~~	~~400. U~~	~~600. U~~	~~600. U~~
CHRYSENE	34323	570.	200. U	610.	720.	5700.	200. U	300. U	900.
ACENAPHTHYLENE	34203	200. U	200. U	200. U	200. U	200. U	200. U	300. U	300. U
ANTHRACENE	34223	200. U	200. U	470.	460.	4600.	200. U	300. U	520.
BENZO(GHI)PERYLENE	34524	400. U	400. U	400. U	400. U	1500.	400. U	600. U	600. U
FLUORENE	34384	200. U	200. U	200. U	200. U	200. U	200. U	300. U	300. U
PHENANTHRENE	34464	200. U	200. U	470.	460.	4600.	200. U	300. U	520.
DIBENZO(A,H)ANTHRACENE	34559	400. U	400. U	400. U	400. U	620.	400. U	600. U	600. U
INDENO(1,2,3,CD)PYRENE	34406	400. U	400. U	400. U	400. U	980.	400. U	600. U	600. U
PYRENE	34472	370.	200. U	520.	610.	5300.	240.	300. U	900.

ANALYSIS TYPE: CONTRACT BASE-NEU ORGANICS

TITLE: KANSAS NAT. GUARD
MATRIX: SEDIMENT
SAMPLE PREP: ____/____/____/____
REVIEWER: GCS/EAE/JAC 10/13/87 ____/____/____

LAB: GCA
UNITS: UG/KG
ANALYST/ENTRY: COB

CASE: 3049
METHOD #: 9301M02
DATE: 10/02/84

SAMPLE NUMBERS

COMPOUND	STORET#	AQ1907
ACENAPHTHENE	34208	300. U
BENZIDINE	39121	1200. U
1,2,4 TRICHLOROBENZENE	34554	300. U
HEXACHLOROBENZENE	39701	300. U
HEXACHLOROETHANE	34399	300. U
BIS(2-CHLOROETHYL)ETHER	34276	300. U
2-CHLORONAPHTHALENE	34584	300. U
1,2 DICHLOROBENZENE	34539	300. U
1,3 DICHLOROBENZENE	34569	300. U
1,4 DICHLOROBENZENE	34574	300. U
3,3' DICHLOROBENZIDINE	34634	600. U
2,4 DINITROTOLUENE	34614	600. U
2,6 DINITROTOLUENE	34629	300. U
1,2 DIPHENYLHYDRAZINE	34349	600. U
FLUORANTHENE	34379	300. U
4-CHLOROPHENYL PHENYL ETHER	34644	300. U
4-BROMOPHENYL PHENYL ETHER	34639	300. U
BIS(2-CHLOROISOPROPYL)ETHER	34286	600. U
BIS(2-CHLOROETHOXY)METHANE	34281	600. U
HEXACHLOROBUTADIENE	39705	300. U
HEXACHLOROCYCLOPENTADIENE	34389	300. U
ISOPHORONE	34411	300. U
NAPHTHALENE	34411	300. U
NITROBENZENE	34450	300. U
N-NITROSODIPHENYLAMINE	34436	300. U
N-NITROSODI-N-PROPYLAMINE	34431	300. U
BIS(2-ETHYLHEXYL) PHTHALATE	39102	300. U
BENZYL BUTYL PHTHALATE	34295	300. U
DI-N-BUTYL PHTHALATE	39112	300. U
DI-N-OCTYL PHTHALATE	34599	300. U
DIETHYL PHTHALATE	34339	300. U
DIMETHYL PHTHALATE	34344	300. U
BENZO(A)ANTHRACENE	34529	300. U
BENZO(A)PYRENE	34250	600. U
BENZO(B)FLUORANTHENE OR	34233	600. U
BENZO(K)FLUORANTHENE	34245	~~600. U~~
CHRYSENE	34323	300. U
ACENAPHTHYLENE	34203	300. U
ANTHRACENE	34223	300. U
BENZO(GHI)PERYLENE	34524	600. U
FLUORENE	34384	300. U
PHENANTHRENE	34464	300. U
DIBENZO(A,H)ANTHRACENE	34559	600. U
INDENO(1,2,3,CD)PYRENE	34406	600. U
PYRENE	34472	300. U

ANALYSIS TYPE: CONTRACT BASE-NEU ORGANICS

TITLE: KANSAS NAT. GUARD
MATRIX: SEDIMENT
SAMPLE PREP:____/____/____/____
REVIEWER: KLS/EAF/____/____/____/____/____/____

LAB: GCA
UNITS: UG/KG
ANALYST/ENTRY: COB

CASE: 3049
METHOD #: 9301M02
DATE: 09/17/84

SAMPLE NUMBERS

COMPOUND	STORET#	AQ1909
ACENAPHTHENE	34208	200. U
BENZIDINE	39121	800. U
1,2,4 TRICHLOROBENZENE	34554	200. U
HEXACHLOROBENZENE	39701	200. U
HEXACHLOROETHANE	34399	200. U
BIS(2-CHLOROETHYL)ETHER	34276	200. U
2-CHLORONAPHTHALENE	34584	200. U
1,2 DICHLOROBENZENE	34539	200. U
1,3 DICHLOROBENZENE	34569	200. U
1,4 DICHLOROBENZENE	34574	200. U
3,3' DICHLOROBENZIDINE	34634	400. U
2,4 DINITROTOLUENE	34614	400. U
2,6 DINITROTOLUENE	34629	200. U
1,2 DIPHENYLHYDRAZINE	34349	400. U
FLUORANTHENE	34379	200. U
4-CHLOROPHENYL PHENYL ETHER	34644	200. U
4-BROMOPHENYL PHENYL ETHER	34639	200. U
BIS(2-CHLOROISOPROPYL)ETHER	34286	400. U
BIS(2-CHLOROETHOXY)METHANE	34281	400. U
HEXACHLOROBUTADIENE	39705	200. U
HEXACHLOROCYCLOPENTADIENE	34389	200. U
ISOPHORONE	34411	200. U
NAPHTHALENE	34411	200. U
NITROBENZENE	34450	200. U
N-NITROSODIPHENYLAMINE	34436	200. U
N-NITROSODI-N-PROPYLAMINE	34431	200. U
BIS(2-ETHYLHEXYL) PHTHALATE	39102	350.
BENZYL BUTYL PHTHALATE	34295	200. U
DI-N-BUTYL PHTHALATE	39112	200. U
DI-N-OCTYL PHTHALATE	34599	200. U
DIETHYL PHTHALATE	34339	200. U
DIMETHYL PHTHALATE	34344	200. U
BENZO(A)ANTHRACENE	34529	200. U
BENZO(A)PYRENE	34250	400. U
BENZO(B)FLUORANTHENE OR Benzo(k)fluoranthene	34233	400. U
~~BENZO(K)FLUORANTHENE~~	~~34245~~	~~400. U~~
CHRYSENE	34323	200. U
ACENAPHTHYLENE	34203	200. U
ANTHRACENE	34223	200. U
BENZO(GHI)PERYLENE	34524	400. U
FLUORENE	34384	200. U
PHENANTHRENE	34464	200. U
DIBENZO(A,H)ANTHRACENE	34559	400. U
INDENO(1,2,3,CD)PYRENE	34406	400. U
PYRENE	34472	200. U

TITLE: KANSAS NAT. GUARD
MATRIX: SEDIMENT
REVIEWED BY: GCS

ANALYSIS: GC/MS SCANS
UNITS: UG/KG
DATE: 09/17/84

LAB: GCA
CASE NO: 3049
METHOD NO: 9301M02

TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.	COMPOUND NAME **	FRACTION	EST. CONC. *	
AQ1900	UNKNOWN (SCAN 856)	BNA	680	J
AQ1900	UNKNOWN (SCAN 1094)	BNA	11000	J
AQ1900	UNKNOWN (SCAN 1314)	BNA	410	J
AQ1901	NOTHING SIGNIFICANT FOUND			
AQ1902	NOTHING SIGNIFICANT FOUND			
AQ1903	UNKNOWN (SCAN 854)	BNA	790	J
AQ1903	UNKNOWN (SCAN 1092)	BNA	1600	J
AQ1904	UNKNOWN (SCAN 1092)	BNA	6200	J
AQ1905	NOTHING SIGNIFICANT FOUND			
AQ1906	UNKNOWN (SCAN 853)	BNA	910	J
~~AQ1907~~	~~UNKNOWN (SCAN 1093)~~	~~BNA~~	~~13000~~	~~J~~
~~AQ1907~~	~~UNKNOWN (SCAN 1311)~~	~~BNA~~	~~1400~~	~~J~~
AQ1908	NOTHING SIGNIFICANT FOUND			
AQ1909	UNKNOWN (SCAN 954)	BNA	840	J
AQ1909	UNKNOWN (SCAN 1092)	BNA	900	J
AQ1909	UNKNOWN (SCAN 1295)	BNA	570	J

* THIS IS A CRUDE ESTIMATION BASED ON RESPONSE RELATIVE TO AN INTERNAL STANDARD. AN AUTHENTIC STANDARD HAS NOT BEEN RUN.
** THE COMPOUNDS WERE IDENTIFIED USING A LIBRARY SEARCH ROUTINE. AUTHENTIC STANDARDS HAVE NOT BEEN ANALYZED TO VERIFY COMPOUND MASS SPECTRA AND RETENTION TIMES.

TITLE: KANSAS NAT. GUARD
MATRIX: SEDIMENT
REVIEWED BY: GCS

ANALYSIS: GC/MS SCANS
UNITS: UG/KG
DATE: 10/02/84

LAB: GCA
CASE NO: 3049
METHOD NO: 9301MO.

TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.	COMPOUND NAME **	FRACTION	EST. CONC. *	
AQ1907	UNKNOWN (SCAN 706)	BNA	3100	J
AQ1907	UNKNOWN (SCAN 962)	BNA	4400	J
AQ1907	UNKNOWN (SCAN 1206)	BNA	29000	J
AQ1907	UNKNOWN (SCAN 1420)	BNA	8600	J

* THIS IS A CRUDE ESTIMATION BASED ON RESPONSE RELATIVE TO AN INTERNAL STANDARD. AN AUTHENTIC STANDARD HAS NOT BEEN RUN.
** THE COMPOUNDS WERE IDENTIFIED USING A LIBRARY SEARCH ROUTINE. AUTHENTIC STANDARDS HAVE NOT BEEN ANALYZED TO VERIFY COMPOUND MASS SPECTRA AND RETENTION TIMES.

ANALYSIS TYPE: HSL EXTRACTABLES

TITLE: KANSAS NAT. GUARD
MATRIX: SEDIMENT
SAMPLE PREP: ___/___/___/___
REVIEWER: GCS/EAF/[illegible] 9/12/84 ___/___/___

LAB: GCA
UNITS: UG/KG
ANALYST/ENTRY: COH

CASE: 3049
METHOD #: 9301M02
DATE: 09/17/84

SAMPLE NUMBERS

COMPOUND	STORET#	AQ1900	AQ1901	AQ1902	AQ1903	AQ1904	AQ1905	AQ1906	AQ1908
ANILINE	*****	200. U	200. U	200. U	200. U	200. U	200. U	300. U	300. U
BENZYL ALCOHOL	75212	400. U	400. U	400. U	400. U	400. U	400. U	600. U	600. U
4-CHLOROANILINE	*****	1000. U	1000. U	1000. U	1000. U	1000. U	1000. U	1500. U	1500. U
DIBENZOFURAN	75647	200. U	200. U	200. U	200. U	200. U	200. U	300. U	300. U
2 METHYLNAPHTHALENE	*****	400. U	400. U	400. U	400. U	400. U	400. U	600. U	600. U
2-NITROANILINE	*****	2000. U	2000. U	2000. U	2000. U	2000. U	2000. U	3000. U	3000. U
3-NITROANILINE	*****	2000. U	2000. U	2000. U	2000. U	2000. U	2000. U	3000. U	3000. U
4-NITROANILINE	*****	2000. U	2000. U	2000. U	2000. U	2000. U	2000. U	3000. U	3000. U
BENZOIC ACID	75315	2000. U	2000. U	2000. U	2000. U	2000. U	2000. U	3000. U	3000. U
2-METHYLPHENOL	*****	200. U	200. U	200. U	200. U	200. U	200. U	300. U	300. U
4-METHYLPHENOL	*****	200. U	200. U	200. U	200. U	200. U	200. U	300. U	300. U
2,4,5 TRICHLOROPHENOL	*****	2000. U	2000. U	2000. U	2000. U	2000. U	2000. U	3000. U	3000. U

ANALYSIS TYPE: HSL EXTRACTABLES

TITLE: KANSAS NAT. GUARD
MATRIX: SEDIMENT
SAMPLE PREP: ___/___/___/___
REVIEWER: KS/EAF/[illegible] ___/___/___/___

LAB: GCA
UNITS: UG/KG
ANALYST/ENTRY: COH

CASE: 3049
METHOD #: 9301MO.
DATE: 10/02/84

SAMPLE NUMBERS

COMPOUND	STORET#	AQ1907	
ANILINE	*****	300.	U
BENZYL ALCOHOL	75212	600.	U
4-CHLOROANILINE	*****	1500.	U
DIBENZOFURAN	75647	300.	U
2 METHYLNAPHTHALENE	*****	600.	U
2-NITROANILINE	*****	3000.	U
3-NITROANILINE	*****	3000.	U
4-NITROANILINE	*****	3000.	U
BENZOIC ACID	75315	3000.	U
2-METHYLPHENOL	*****	300.	U
4-METHYLPHENOL	*****	300.	U
2,4,5 TRICHLOROPHENOL	*****	.	I

ANALYSIS TYPE: HSL EXTRACTABLES

TITLE: KANSAS NAT. GUARD
MATRIX: SEDIMENT
SAMPLE PREP: ___/___/___
REVIEWER: GCS/GAE [signature] 9/12/87/___/___

LAB: GCA
UNITS: UG/KG
ANALYST/ENTRY: COH

CASE: 3049
METHOD #: 9301M02
DATE: 09/17/84

SAMPLE NUMBERS

COMPOUND	STORET#	AQ1909
ANILINE	*****	200. U
BENZYL ALCOHOL	75212	400. U
4-CHLOROANILINE	*****	1000. U
DIBENZOFURAN	75647	200. U
2 METHYLNAPHTHALENE	*****	400. U
2-NITROANILINE	*****	2000. U
3-NITROANILINE	*****	2000. U
4-NITROANILINE	*****	2000. U
BENZOIC ACID	75315	2000. U
2-METHYLPHENOL	*****	200. U
4-METHYLPHENOL	*****	200. U
2,4,5 TRICHLOROPHENOL	*****	2000. U

ANALYSIS TYPE: CONTRACT PESTICIDE ORGANICS

TITLE: KANSAS NAT. GUARD
MATRIX: SEDIMENT
SAMPLE PREP:____/____/____
REVIEWER: GCS/EAF/[illegible] 10/3/84/[illegible]/____/____

LAB: GCA
UNITS: UG/KG
ANALYST/ENTRY: COP

CASE: 3049
METHOD #: 9301M02
DATE: 10/02/84

SAMPLE NUMBERS

COMPOUND	STORET#	AQ1900	AQ1901	AQ1902	AQ1903	AQ1904	AQ1905	AQ1906	AQ1907
ALDRIN	39333	2. U	2. U	2. U	2. U	2. U	2. U	2. U	2. U
DIELDRIN	39383	2. U	2. U	1. M	1.2M	3.9	1. M	2. U	2. U
CHLORDANE	39351	20. U	20. U	20. U	20. U	20. U	20. U	64.	25.
4,4,DDT	39301	2. U	2. U	2. U	2. U	2. U	2. U	2. U	2. U
4,4, DDE	39321	2. U	2. U	2. U	2. U	2. U	2. U	2. U	2. U
4,4 DDD	39311	2. U	2. U	2. U	2. U	2. U	2. U	2. U	2. U
ALPHA ENDOSULFAN	34364	2. U	2. U	2. U	2. U	2. U	2. U	2. U	2. U
BETA ENDOSULFAN	34359	2. U	2. U	7.3	2. U	2. U	3.2	2.4	2. U
ENDOSULFAN SULFATE	34354	2. U	2. U	2. U	2. U	2. U	2. U	2. U	2. U
ENDRIN	39393	2. U	2. U	2. U	2. U	2. U	2. U	2. U	2. U
ENDRIN ALDEHYDE	34369	2. U	2. U	2. U	2. U	2. U	2. U	2. U	2. U
HEPTACHLOR	39413	2. U	2. U	2. U	2. U	2. U	2. U	2. U	2. U
HEPTACHLOR EPOXIDE	39423	2. U	2. U	2. U	2. U	2. U	2. U	2. U	2. U
ALPHA BHC	39076	2. U	1.1M	2. U	2. U	2. U	2. U	2.5	2. U
BETA BHC	34257	2. U	2. U	2. U	2. U	2. U	2. U	2. U	2. U
DELTA BHC	34262	2. U	2. U	2. U	2. U	2. U	2. U	2. U	2. U
GAMMA BHC (LINDANE)	39343	2. U	2. U	2. U	2. U	2. U	2. U	2. U	2. U
PCB 1242	39499	20. U	20. U	20. U	20. U	20. U	23.	20. U	20. U
PCB 1254	39507	55.	20.	38.	54.	170.	110.	20. U	20. U
PCB 1221	39491	20. U	20. U	20. U	20. U	20. U	20. U	20. U	20. U
PCB 1232	39495	20. U	20. U	20. U	20. U	20. U	20. U	20. U	20. U
PCB 1248	39503	20. U	20. U	20. U	20. U	20. U	20. U	20. U	20. U
PCB 1260	39511	20. U	20. U	20. U	20. U	20. U	20. U	20. U	20. U
PCB 1016	39514	20. U	20. U	20. U	20. U	20. U	20. U	20. U	20. U
TOXAPHENE	39403	20. U	20. U	20. U	20. U	20. U	20. U	20. U	20. U

ANALYSIS TYPE: CONTRACT PESTICIDE ORGANICS

TITLE: KANSAS NAT. GUARD
MATRIX: SEDIMENT
SAMPLE PREP: ___/___/___
REVIEWER: GCS/EAF/JMC 10/3/84 ___/___/___

LAB: GCA
UNITS: UG/KG
ANALYST/ENTRY: COP

CASE: 3049
METHOD #: 9301M02
DATE: 10/02/84

SAMPLE NUMBERS

COMPOUND	STORET#	AQ1908	AQ1909
ALDRIN	39333	2. U	15.
DIELDRIN	39383	2. U	29.
CHLORDANE	39351	20. U	30.
4,4,DDT	39301	2. U	2. U
4,4, DDE	39321	2. U	2. U
4,4 DDD	39311	2. U	2. U
ALPHA ENDOSULFAN	34364	2. U	2. U
BETA ENDOSULFAN	34359	2. U	2. U
ENDOSULFAN SULFATE	34354	2. U	2. U
ENDRIN	39393	2. U	2. U
ENDRIN ALDEHYDE	34369	2. U	2. U
HEPTACHLOR	39413	2. U	2. U
HEPTACHLOR EPOXIDE	39423	2. U	2. U
ALPHA BHC	39076	2. U	2. U
BETA BHC	34257	2. U	2. U
DELTA BHC	34262	2. U	2. U
GAMMA BHC (LINDANE)	39343	2. U	2. U
PCB 1242	39499	20. U	20. U
PCB 1254	39507	44.	20. U
PCB 1221	39491	20. U	20. U
PCB 1232	39495	20. U	20. U
PCB 1248	39503	20. U	20. U
PCB 1260	39511	20. U	20. U
PCB 1016	39514	20. U	20. U
TOXAPHENE	39403	20. U	20. U

ANALYSIS TYPE: CONTRACT VOLATILE ORGANICS

TITLE: KANSAS NAT. GUARD
MATRIX: SEDIMENT
SAMPLE PREP: ___/___/___
REVIEWER: GCS/EAF/JMG 9/17/84/___/___

LAB: GCA
UNITS: UG/KG
ANALYST/ENTRY: COV

CASE: 3049
METHOD #: 9301M02
DATE: 09/17/84

SAMPLE NUMBERS

COMPOUND	STORET#	AQ1900	AQ1901	AQ1902	AQ1903	AQ1904	AQ1905	AQ1906	AQ1907
ACROLEIN	34213	10000. U	10000. U	10000. U	9000. U	10000. U	10000. U	13000. U	7000. U
ACRYLONITRILE	34218	10000. U	10000. U	10000. U	9000. U	10000. U	10000. U	13000. U	7000. U
BENZENE	34237	500. U	500. U	500. U	450. U	500. U	500. U	650. U	350. U
CARBON TETRACHLORIDE	34299	500. U	500. U	500. U	450. U	500. U	500. U	650. U	350. U
CHLOROBENZENE	34304	500. U	500. U	500. U	450. U	500. U	500. U	650. U	350. U
1,2 DICHLOROETHANE	34534	500. U	500. U	500. U	450. U	500. U	500. U	650. U	350. U
1,1,1 TRICHLOROETHANE	34509	500. U	500. U	500. U	450. U	500. U	500. U	650. U	350. U
1,1 DICHLOROETHANE	34499	500. U	500. U	500. U	450. U	500. U	500. U	650. U	350. U
1,1,2 TRICHLOROETHANE	34514	500. U	500. U	500. U	450. U	500. U	500. U	650. U	350. U
1,1,2,2 TETRACHLOROETHANE	34519	1000. U	1000. U	1000. U	900. U	1000. U	1000. U	1300. U	700. U
CHLOROETHANE	34314	1000. U	1000. U	1000. U	900. U	1000. U	1000. U	1300. U	700. U
2-CHLOROETHYLVINYL ETHER	34579	1000. U	1000. U	1000. U	900. U	1000. U	1000. U	1300. U	700. U
CHLOROFORM	34318	500. U	500. U	500. U	520.	500. U	500. U	650. U	350. U
1,1 DICHLOROETHYLENE	34504	500. U	500. U	500. U	450. U	500. U	500. U	650. U	350. U
TRANS 1,2 DICHLOROETHENE	34549	1000. U	1000. U	1000. U	900. U	1000. U	1000. U	1300. U	700. U
1,2 DICHLOROPROPANE	34544	1000. U	1000. U	1000. U	900. U	1000. U	1000. U	1300. U	700. U
TRANS 1,3 DICHLOROPROPENE	34697	500. U	500. U	500. U	450. U	500. U	500. U	650. U	350. U
CIS 1,3 DICHLOROPROPENE	34702	1000. U	1000. U	1000. U	900. U	1000. U	1000. U	1300. U	700. U
ETHYLBENZENE	34374	500. U	500. U	500. U	450. U	500. U	500. U	650. U	350. U
METHYLENE CHLORIDE	34426	. I	. I	. I	. I	. I	. I	650. U	. I
CHLOROMETHANE	34421	1000. U	1000. U	1000. U	900. U	1000. U	1000. U	1300. U	700. U
BROMOMETHANE	34416	1000. U	1000. U	1000. U	900. U	1000. U	1000. U	1300. U	700. U
BROMOFORM	34290	1000. U	1000. U	1000. U	900. U	1000. U	1000. U	1300. U	700. U
BROMODICHLOROMETHANE	34330	500. U	500. U	500. U	450. U	500. U	500. U	650. U	350. U
CHLORODIBROMOMETHANE	34309	500. U	500. U	500. U	450. U	500. U	500. U	650. U	350. U
TETRACHLOROETHENE	34478	500. U	500. U	500. U	520.	500. U	500. U	650. U	350. U
TOLUENE	34483	500. U	500. U	500. U	450. U	500. U	500. U	650. U	350. U
TRICHLOROETHENE	34487	500. U	500. U	500. U	450. U	500. U	500. U	650. U	350. U
VINYL CHLORIDE	34495	1000. U	1000. U	1000. U	900. U	1000. U	1000. U	1300. U	700. U

ANALYSIS TYPE: CONTRACT VOLATILE ORGANICS

TITLE: KANSAS NAT. GUARD
MATRIX: SEDIMENT
SAMPLE PREP: ___/___/___
REVIEWER: GCS/CAF/GMC 9/12/84/___/___

LAB: GCA
UNITS: UG/KG
ANALYST/ENTRY: COV

CASE: 3049
METHOD #: 9301MG
DATE: 09/17/84

SAMPLE NUMBERS

COMPOUND	STORET#	AQ1908	AQ1909
ACROLEIN	34213	12000. U	10000. U
ACRYLONITRILE	34218	12000. U	10000. U
BENZENE	34237	600. U	500. U
CARBON TETRACHLORIDE	34299	600. U	500. U
CHLOROBENZENE	34304	600. U	500. U
1,2 DICHLOROETHANE	34534	600. U	500. U
1,1,1 TRICHLOROETHANE	34509	600. U	500. U
1,1 DICHLOROETHANE	34499	600. U	500. U
1,1,2 TRICHLOROETHANE	34514	600. U	500. U
1,1,2,2 TETRACHLOROETHANE	34519	1200. U	1000. U
CHLOROETHANE	34314	1200. U	1000. U
2-CHLOROETHYLVINYL ETHER	34579	1200. U	1000. U
CHLOROFORM	34318	600. U	500. U
1,1 DICHLOROETHYLENE	34504	600. U	500. U
TRANS 1,2 DICHLOROETHENE	34549	1200. U	1000. U
1,2 DICHLOROPROPANE	34544	1200. U	1000. U
TRANS 1,3 DICHLOROPROPENE	34697	600. U	500. U
CIS 1,3 DICHLOROPROPENE	34702	1200. U	1000. U
ETHYLBENZENE	34374	600. U	500. U
METHYLENE CHLORIDE	34426	. I	. I
CHLOROMETHANE	34421	1200. U	1000. U
BROMOMETHANE	34416	1200. U	1000. U
BROMOFORM	34290	1200. U	1000. U
BROMODICHLOROMETHANE	34330	600. U	500. U
CHLORODIBROMOMETHANE	34309	600. U	500. U
TETRACHLOROETHENE	34478	600. U	500. U
TOLUENE	34483	600. U	500. U
TRICHLOROETHENE	34487	600. U	500. U
VINYL CHLORIDE	34495	1200. U	1000. U

TITLE: KANSAS NAT. GUARD
MATRIX: SEDIMENT
REVIEWED BY: GCS

ANALYSIS: GC/MS SCANS
UNITS: UG/KG
DATE: 09/17/84

LAB: GCA
CASE NO: 3049
METHOD NO: 9301M02

TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.	COMPOUND NAME **	FRACTION	EST. CONC. *	
AQ1900	NOTHING SIGNIFICANT FOUND			
AQ1901	NOTHING SIGNIFICANT FOUND			
AQ1902	UNKNOWN (SCAN 665)	VOA	860	J
AQ1903	UNKNOWN (SCAN 678)	VOA	1700	J
AQ1904	UNKNOWN (SCAN 661)	VOA	980	J
AQ1905	UNKNOWN (SCAN 670)	VOA	1000	J
AQ1906	NOTHING SIGNIFICANT FOUND			
AQ1907	UNKNOWN (SCAN 662)	VOA	570	J
AQ1908	NOTHING SIGNIFICANT FOUND			
AQ1909	NOTHING SIGNIFICANT FOUND			

* THIS IS A CRUDE ESTIMATION BASED ON RESPONSE RELATIVE TO AN INTERNAL STANDARD. AN AUTHENTIC STANDARD HAS NOT BEEN RUN.
** THE COMPOUNDS WERE IDENTIFIED USING A LIBRARY SEARCH ROUTINE. AUTHENTIC STANDARDS HAVE NOT BEEN ANALYZED TO VERIFY COMPOUND MASS SPECTRA AND RETENTION TIMES.

ANALYSIS TYPE: HSL VOLATILES

TITLE: KANSAS NAT. GUARD
MATRIX: SEDIMENT
SAMPLE PREP: ___/___/___
REVIEWER: GCS/EAF/MS 9/12/87/___/___

LAB: GCA
UNITS: UG/KG
ANALYST/ENTRY: COS

CASE: 3049
METHOD #: 9301M02
DATE: 09/17/84

SAMPLE NUMBERS

COMPOUND	STORET#	AQ1900	AQ1901	AQ1902	AQ1903	AQ1904	AQ1905	AQ1906	AQ1907
ACETONE	75059	. I	. I	. I	. I	. I	. I	. I	. I
2-BUTANONE	75078	20000. U	20000. U	20000. U	18000. U	20000. U	20000. U	26000. U	14000. U
CARBON DISULFIDE	78544	1000. U	1000. U	1000. U	900. U	1000. U	1000. U	1300. U	700. U
2-HEXANONE	75166	10000. U	10000. U	10000. U	9000. U	10000. U	10000. U	13000. U	7000. U
4-METHYL-2-PENTANONE	75169	10000. U	10000. U	10000. U	9000. U	10000. U	10000. U	13000. U	7000. U
STYRENE	75129	500. U	500. U	500. U	450. U	500. U	500. U	650. U	350. U
VINYL ACETATE	*****	1000. U	1000. U	1000. U	900. U	1000. U	1000. U	1300. U	700. U
O XYLENE	45510	500. U	500. U	500. U	450. U	500. U	500. U	650. U	350. U

ANALYSIS TYPE: HSL VOLATILES

TITLE: KANSAS NAT. GUARD
MATRIX: SEDIMENT
SAMPLE PREP: ___/___/___/___
REVIEWER: KCS/EAF/DTG 9/12/84/___/___

LAB: GCA
UNITS: UG/KG
ANALYST/ENTRY: COS

CASE: 3049
METHOD #: 9301M02
DATE: 09/17/84

SAMPLE NUMBERS

COMPOUND	STORET#	AQ1908		AQ1909	
ACETONE	75059	.	I	.	I
2-BUTANONE	75078	24000.	U	20000.	U
CARBON DISULFIDE	78544	1200.	U	1000.	U
2-HEXANONE	75166	12000.	U	10000.	U
4-METHYL-2-PENTANONE	75169	12000.	U	10000.	U
STYRENE	75129	600.	U	500.	U
VINYL ACETATE	*****	1200.	U	1000.	U
O XYLENE	45510	600.	U	500.	U

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DATE 5-31-85

SUBJECT Transmittal of Laboratory Data

FROM Charles P. Hensley CPH
Chief, Laboratory Branch, ENSV

TO Keffer

Analyses have been completed for the following activities and the data results are attached.

Activity No.	Description
BG 19	Kansas National Guard Armory (Complete transmital)

Attachments

cc: Data Files

RECEIVED
JUN 07 1985
E & E K.C.K.

EPA Form 1320-6 (Rev. 3-76)

DATA QUALIFIERS FOR EPA REGION VII

U not detected. For EPA VII lab data U is applied only in conjunction with detection limits. For contract lab data it is applied to contract required limits.

M The value indicated is below the quantitation limit but above the detection limit.

J The value is of unknown quality. Approximate value.

I analysis attempted but no result can be reported.

ANALYSIS TYPE: CONTRACT INORGANICS

TITLE: KANSAS NAT. GUARD
MATRIX: SEDIMENT
SAMPLE PREP:____/____/____/____
REVIEWER: GCS/EAF/AMC/9RCT/____/____/____/____

LAB: UST
UNITS: ~~UG/KG~~ mg/kg
ANALYST/ENTRY: COM

CASE: 3081
METHOD #: 9001M05
DATE: 09/19/84

SAMPLE NUMBERS

COMPOUND	STORET#	BQ1900	BQ1901	BQ1902	BQ1903	BQ1905	BQ1906
ALUMINUM	01108	9700.	16000.	43000.	48000.	40000.	51000.
ANTIMONY	01098	1.2	2.5	2.	2.4	1.8	1.8
ARSENIC	01003	7.6	10.	27.	29.	24.	27.
BARIUM	01008	110.	270.	460.	360.	290.	330.
BERYLLIUM	01013	.41	.25 U	6.3	6.2	5.2	6.8
~~BORON~~	~~01023~~	~~. U~~	~~. U~~	~~. U~~	~~. U~~	~~. U~~	~~. U~~
CADMIUM	01028	1.5	1.6	3.	3.7	2.9	3.6
CHROMIUM	01029	10.	59.	60.	63.	54.	68.
COBALT	01038	5.5	2.5U	27.	29.	26.	34.
COPPER	01043	14.	3.3	53.	57.	50.	63.
IRON	01170	12000.	1600.	120000.	136000.	112000.	147000.
LEAD	01052	30.	25.	64.	71.	52.	69.
MANGANESE	01053	190.	70.	670.	690.	600.	780.
MERCURY	71921	.01 U	.01 U	.01 U	.01 U	.01 U	6.2
NICKEL	01068	12. J	2. U	85. J	470. J	83. J	110. J
SELENIUM	01148	.8	2.3	3.2	2.8	4.5	14.
SILVER	01078	.5 U	.5 U	.5 U	.5 U	.5 U	.5 U
THALLIUM	34480	.5 U	.5 U	.5 U	.6	1.	.5 U
TIN	01103	3.	22.	19.	19.	17.	15.
VANADIUM	01088	22.	11.	92.	97.	77.	100.
ZINC	01093	100. J	35. J	170. J	170. J	180. J	230. J

TITLE: KANSAS NAT. GUARD ARMORY
MATRIX: SEDIMENT
REVIEWED BY: GCS

ANALYSIS: GC/MS SCANS
UNITS: UG/KG
DATE: 05/29/85

LAB: WES
CASE NO: 3081
METHOD NO: 9302M01

TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.	COMPOUND NAME **	FRACTION	EST. CONC. *	
BQ190000	PENTENONE	BNA	600	J
BQ190000	DIMETHYLNAPHTHALENE	BNA	400	J
BQ190000	OCTADECANOIC ACID	BNA	3000	J
BQ190000	15 CMPDS. FOUND,CAN'T BE ID'ED	BNA		J
BQ190000	TRICHLOROFLUOROMETHANE	VOA	6	J
BQ190000	DIETHOXYETHANE	VOA	14	J
BQ190001	HEPTADECANE	BNA	4000	J
BQ190001	19 CMPDS. FOUND,CAN'T BE ID'ED	BNA		J
BQ190001	TRICHLOROFLUOROMETHANE	VOA	60	J
BQ190002	PROPYLHEPTANE	BNA	800	J
BQ190002	OCTACHLOROBIPHENYL	BNA	800	J
BQ190002	18 CMPDS. FOUND,CAN'T BE ID'ED	BNA		J
BQ190003	PENTENONE	BNA	200	J
BQ190003	METHYLPENTENONE	BNA	1000	J
BQ190003	METHYLPENTANOL	BNA	500	J
BQ190003	DIMETHYLPENTANOL	BNA	30000	J
BQ190003	TRIMETHYLHEXANE	BNA	300	J
BQ190003	DIMETHYLFURANONE	BNA	200	J
BQ190003	7 CMPDS. FOUND, CAN'T BE ID'ED	BNA		J
BQ190005	DIMETHYLPENTENE	BNA	900	J
BQ190005	METHYLPENTANOL	BNA	1000	J
BQ190005	9 CMPDS. FOUND, CAN'T BE ID'ED	BNA		J
BQ190005	DIETHOXYETHANE	VOA	36	J

* THIS IS A CRUDE ESTIMATION BASED ON RESPONSE RELATIVE TO AN INTERNAL STANDARD. AN AUTHENTIC STANDARD HAS NOT BEEN RUN.

** THE COMPOUNDS WERE IDENTIFIED USING A LIBRARY SEARCH ROUTINE. AUTHENTIC STANDARDS HAVE NOT BEEN ANALYZED TO VERIFY COMPOUND MASS SPECTRA AND RETENTION TIMES.

TITLE: KANSAS NAT. GUARD ARMORY
MATRIX: SEDIMENT
REVIEWED BY: GCS

ANALYSIS: GC/MS SCANS
UNITS: UG/KG
DATE: 05/29/85

LAB: WES
CASE NO: 3081
METHOD NO: 9302M01

TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.	COMPOUND NAME **	FRACTION	EST. CONC. *	
BQ190006	ETHYLCYCLOPENTANE	BNA	8000	J
BQ190006	METHYLHEPTANE	BNA	600	J
BQ190006	DIMETHYLCYCLOHEXANE	BNA	1000	J
BQ190006	14 CMPDS. FOUND,CAN'T BE ID'ED	BNA		J
BQ190006	DIETHOXYETHANE	VOA	25	J

* THIS IS A CRUDE ESTIMATION BASED ON RESPONSE RELATIVE TO AN INTERNAL STANDARD. AN AUTHENTIC STANDARD HAS NOT BEEN RUN.

** THE COMPOUNDS WERE IDENTIFIED USING A LIBRARY SEARCH ROUTINE. AUTHENTIC STANDARDS HAVE NOT BEEN ANALYZED TO VERIFY COMPOUND MASS SPECTRA AND RETENTION TIMES.

TITLE: KANSAS NAT. GUARD ARMORY
MATRIX: WATER
REVIEWED BY: GCS

ANALYSIS: GC/MS SCANS
UNITS: UG/L
DATE: 05/29/85

LAB: WES
CASE NO: 3081
METHOD NO: 9302M01

TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.	COMPOUND NAME **	FRACTION	EST. CONC. *
BQ190007	DICHLOROFLUOROMETHANE	VOA	10 J
BQ190007	METHYLETHYLACETATE	VOA	10 J
BQ190007	1 CMPD. FOUND, CAN'T BE ID'ED	BNA	J
BQ190008	ALCOHOL	VOA	10 J
BQ190008	METHYLETHYLACETATE	VOA	10 J
BQ190008	TRIETHYLBENZENE	BNA	10 J
BQ190008	METHYLETHYLBENZENE	BNA	10 J
BQ190008	1 CMPD. FOUND, CAN'T BE ID'ED	BNA	J

* THIS IS A CRUDE ESTIMATION BASED ON RESPONSE RELATIVE TO AN INTERNAL STANDARD. AN AUTHENTIC STANDARD HAS NOT BEEN RUN.

** THE COMPOUNDS WERE IDENTIFIED USING A LIBRARY SEARCH ROUTINE. AUTHENTIC STANDARDS HAVE NOT BEEN ANALYZED TO VERIFY COMPOUND MASS SPECTRA AND RETENTION TIMES.

TITLE: KANSAS NAT. GUARD ARMORY
MATRIX: WATER
REVIEWED BY: GCS

ANALYSIS: GC/MS SCANS
UNITS: UG/L
DATE: 05/29/85

LAB: WES
CASE NO: 3081
METHOD NO: 9302M01

TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.	COMPOUND NAME **	FRACTION	EST. CONC. *
BQ190007	DICHLOROFLUOROMETHANE	VOA	10 J
BQ190007	METHYLETHYLACETATE	VOA	10 J
BQ190007	1 CMPD. FOUND, CAN'T BE ID'ED	BNA	J
BQ190008	ALCOHOL	VOA	10 J
BQ190008	METHYLETHYLACETATE	VOA	10 J
BQ190008	TRIETHYLBENZENE	BNA	10 J
BQ190008	METHYLETHYLBENZENE	BNA	10 J
BQ190008	1 CMPD. FOUND, CAN'T BE ID'ED	BNA	J

* THIS IS A CRUDE ESTIMATION BASED ON RESPONSE RELATIVE TO AN INTERNAL STANDARD. AN AUTHENTIC STANDARD HAS NOT BEEN RUN.

** THE COMPOUNDS WERE IDENTIFIED USING A LIBRARY SEARCH ROUTINE. AUTHENTIC STANDARDS HAVE NOT BEEN ANALYZED TO VERIFY COMPOUND MASS SPECTRA AND RETENTION TIMES.

ANALYSIS TYPE: SEMIVOLATILES (PAGE 1)

TITLE: KANSAS NAT'L GUARD ARMORY
LAB: WES
SAMPLE PREP:_____ ANALYST/ENTRY: E05

MATRIX: SEDIMENT
METHOD: 9302M01
REVIEWER: [illegible]

UNITS: UG/KG
CASE: 3081
DATE: 05/29/85

SAMPLE NUMBERS

COMPOUND	~~BQ190000~~ BQ1900		~~BQ190001~~ BQ1901		~~BQ190002~~ BQ1902		~~BQ190003~~ BQ1903	
N-NITROSODIMETHYLAMINE	400	U	4400.	U	400	U	350	U
PHENOL	400	U	4400.	U	400	U	350	U
ANILINE	400	U	4400.	U	400	U	350	U
BIS(2-CHLOROETHYL) ETHER	400	U	4400.	U	400	U	350	U
2-CHLOROPHENOL	400	U	4400.	U	400	U	350	U
1,3 DICHLOROBENZENE	400	U	4400.	U	400	U	350	U
1,4 DICHLOROBENZENE	400	U	4400.	U	400	U	350	U
BENZYL ALCOHOL	400	U	4400.	U	400	U	350	U
1,2 DICHLOROBENZENE	400	U	4400.	U	400	U	350	U
2-METHYLPHENOL	400	U	4400.	U	400	U	350	U
BIS(2-CHLOROISOPROPYL)ETHER	400	U	4400.	U	400	U	350	U
4-METHYLPHENOL	400	U	4400.	U	400	U	350	U
N-NITROSO-DIPROPYLAMINE	400	U	4400.	U	400	U	350	U
HEXACHLOROETHANE	400	U	4400.	U	400	U	350	U
NITROBENZENE	400	U	4400.	U	400	U	350	U
ISOPHORONE	400	U	4400.	U	400	U	350	U
2-NITROPHENOL	400	U	4400.	U	400	U	350	U
2,4-DIMETHYLPHENOL	400	U	4400.	U	400	U	350	U
BENZOIC ACID	1900.	U	21000.	U	1900.	U	1700.	U
BIS(2-CHLOROETHOXY) METHANE	400	U	4400.	U	400	U	350	U
2,4 DICHLOROPHENOL	400	U	4400.	U	400	U	350	U
1,2,4-TRICHLOROBENZENE	400	U	4400.	U	400	U	350	U
NAPHTHALENE	400	U	4400.	U	400	U	350	U
4-CHLOROANILINE	400	U	4400.	U	400	U	350	U
HEXACHLOROBUTADIENE	400	U	4400.	U	400	U	350	U
4-CHLORO-3-METHYLPHENOL	400	U	4400.	U	400	U	350	U
2-METHYLNAPHTHALENE	400	U	4400.	U	400	U	350	U
HEXACHLOROCYCLOPENTADIENE	400	U	4400.	U	400	U	350	U
2,4,6-TRICHLOROPHENOL	400	U	4400.	U	400	U	350	U
2,4,5-TRICHLOROPHENOL	1900.	U	21000.	U	1900.	U	1700.	U
2-CHLORONAPHTHALENE	400	U	4400.	U	400	U	350	U
2-NITROANILINE	1900.	U	21000.	U	1900.	U	1700.	U
DIMETHYLPHTHALATE	400	U	4400.	U	400	U	350	U
ACENAPHTHYLENE	400	U	4400.	U	400	U	350	U
3-NITROANILINE	1900.	U	21000.	U	1900.	U	1700.	U
ACENAPHTHENE	400	U	4400.	U	400	U	350	U
2,4-DINITROPHENOL	400	U	4400.	U	400	U	350	U
4-NITROPHENOL	1900.	U	21000.	U	1900.	U	1700.	U
DIBENZOFURAN	400	U	4400.	U	400	U	350	U
2,4-DINITROTOULENE	400	U	4400.	U	400	U	350	U

ANALYSIS TYPE: SEMIVOLATILES (PAGE 2)

TITLE: KANSAS NAT'L GUARD ARMORY
LAB: WES
SAMPLE PREP:_____ ANALYST/ENTRY: E06

MATRIX: SEDIMENT
METHOD: 9302M01
REVIEWER: _____

UNITS: UG/KG
CASE: 3081
DATE: 05/29/85

SAMPLE NUMBERS

COMPOUND	~~BQ190000~~ BQ1900		~~BQ190001~~ BQ1901		~~BQ190002~~ BQ1902		~~BQ190003~~ BQ1903	
2,6-DINITROTOLUENE	400	U	4400.	U	400	U	350	U
DIETHYLPHTHALATE	400	U	4400.	U	400	U	350	U
4-CHLOROPHENYL PHENYL ETHER	400	U	4400.	U	400	U	350	U
FLUORENE	400	U	4400.	U	400	U	350	U
4-NITROANILINE	1900.	U	21000.	U	1900.	U	1700.	U
4,6-DINITRO-2-METHYLPHENOL	1900.	U	21000.	U	1900.	U	1700.	U
N-NITROSODIPHENYLAMINE	400	U	4400.	U	400	U	350	U
4-BROMOPHENYL PHENYL ETHER	400	U	4400.	U	400	U	350	U
HEXACHLOROBENZENE	400	U	4400.	U	400	U	350	U
PENTACHLOROPHENOL	1900.	U	21000.	U	1900.	U	1700.	U
PHENANTHRENE	400	U	4400.	U	1900.	J	350	U
ANTHRACENE	400	U	4400.	U	490	J	350	U
DI-N-BUTYLPHTHALATE	400	U	4400.	U	400	U	350	U
FLUORANTHENE	400	U	4400.	U	10000.	J	350	U
BENZIDINE		I		I	3800.	U		I
PYRENE	400	U	4400.	U	400	U	350	U
BUTYL BENZYL PHTHALATE	400	U	4400.	U	400	U	350	U
3,3' DICHLOROBENZIDINE	790	U	8800.	U	790	U	700	U
BENZO(A)ANTHRACENE	400	U	4400.	U	1800.	J	350	U
BIS(2-ETHYLHEXYL)PHTHALATE	400	U	5000.	J	750	J	350	U
CHRYSENE	400	U	4400.	U	1800.	J	350	U
DI-N-OCTYL PHTHALATE	400	U	4400.	U	400	U	350	U
BENZO(B)FLUORANTHENE	400	U	4400.	U	2700.	J	350	U
BENZO(K)FLUORANTHENE	400	U	4400.	U	400	U	350	U
BENZO(A)PYRENE	400	U	4400.	U	1900.	J	350	U
INDENO(1,2,3-CD)PYRENE	400	U	4400.	U	600	J	350	U
DIBENZO(A,H)ANTHRACENE	400	U	4400.	U	400	U	350	U
BENZO(G,H,I)PERYLENE	400	U	4400.	U	490	J	350	U

ANALYSIS TYPE: VOLATILE ANALYSES

TITLE: KANSAS NAT'L GUARD ARMORY
LAB: WES
SAMPLE PREP:_____ ANALYST/ENTRY: E04

MATRIX: SEDIMENT
METHOD: 9302M01
REVIEWER: CAE KLS

UNITS: UG/KG
CASE: 3081
DATE: 05/29/30

SAMPLE NUMBERS

COMPOUND	MW-1 0-24 ~~BQ190000~~ BQ1900		MW-1 24-48 ~~BQ190001~~ BQ1901		MW-2 0-48 ~~BQ190002~~ BQ1902		MW-2 0-24 ~~BQ190003~~ BQ1903	
CHLOROMETHANE	12.0	U	59.0	U	51.0	U	46.0	U
BROMOMETHANE	12.0	U	59.0	U	51.0	U	46.0	U
VINYL CHLORIDE	12.0	U	59.0	U	51.0	U	46.0	U
CHLOROETHANE	12.0	U	59.0	U	51.0	U	46.0	U
METHYLENE CHLORIDE	270	J	270	J	110	J	61.0	J
ACETONE	17.0	J	440	J		I		I
CARBON DISULFIDE	13.0	J	440	J	44.0	J	34.0	J
1,1 DICHLOROETHENE	6.00	U	30.0	U	26.0	U	23.0	U
1,1 DICHLOROETHANE	6.00	U	30.0	U	26.0	U	23.0	U
TRANS-1,2,-DICHLOROETHENE	6.00	U	30.0	U	26.0	U	23.0	U
CHLOROFORM	6.00	U	30.0	U	26.0	U	23.0	U
1,2,DICHLOROETHANE		I		I		I		I
2-BUTANONE	18.0	J	230	J		I	63.0	J
1,1,1 TRICHLOROETHANE	6.00	U	30.0	U	26.0	U	23.0	U
CARBON TETRACHLORIDE		I		I		I		I
VINYL ACETATE		I		I		I		I
BROMODICHLOROMETHANE		I		I		I		I
1,1,2,2,-TETRACHLOROETHANE	6.00	U	30.0	U	26.0	U	23.0	U
1,2-DICHLOROPROPANE		I		I		I		I
TRANS-1,3-DICHLOROPROPENE	6.00	U	30.0	U	26.0	U	23.0	U
TRICHLOROETHENE	20.0	J	48.0	J	26.0	U	23.0	U
DIBROMOCHLOROMETHANE	6.00	U	30.0	U	26.0	U	23.0	U
1,1,2-TRICHLOROETHANE	6.00	U	30.0	U	26.0	U	23.0	U
BENZENE	6.00	U	30.0	U	26.0	U	23.0	U
CIS-1,3-DICHLOROPROPENE	6.00	U	30.0	U	26.0	U	23.0	U
2-CHLOROETHYL VINYL ETHER		I		I		I		I
BROMOFORM		I		I		I		I
2-HEXANONE		I		I		I		I
4-METHYL-2-PENTANONE		I		I		I		I
TETRACHLOROETHENE	6.00	U	30.0	U	26.0	U	23.0	U
TOLUENE	12.0	J	120	J	26.0	U	23.0	U
CHLOROBENZENE	6.00	U	30.0	U	26.0	U	23.0	U
ETHYL BENZENE	6.00	U	30.0	U	26.0	U	23.0	U
STYRENE	6.00	U	30.0	U	26.0	U	23.0	U
TOTAL XYLENES	6.00	U	30.0	U	26.0	U	23.0	U

ANALYSIS TYPE: VOLATILE ANALYSES

TITLE: KANSAS NAT'L GUARD ARMORY
LAB: WES
SAMPLE PREP:_____ ANALYST/ENTRY: E04

MATRIX: SEDIMENT
METHOD: 9302M01
REVIEWER: EAE KCS

UNITS: UG/KG
CASE: 3081
DATE: 05/29/30

SAMPLE NUMBERS

COMPOUND	~~BQ190005~~ BQ1905		~~BQ190006~~ BQ1906	
CHLOROMETHANE	36.0	U	48.0	U
BROMOMETHANE	36.0	U	48.0	U
VINYL CHLORIDE	36.0	U	48.0	U
CHLOROETHANE	36.0	U	48.0	U
METHYLENE CHLORIDE	210	J	260	J
ACETONE		I		I
CARBON DISULFIDE	39.0	J	47.0	J
1,1 DICHLOROETHENE	18.0	U	24.0	U
1,1 DICHLOROETHANE	18.0	U	24.0	U
TRANS-1,2,-DICHLOROETHENE	18.0	U	24.0	U
CHLOROFORM	18.0	U	24.0	U
1,2,DICHLOROETHANE		I		I
2-BUTANONE	49.0	J		I
1,1,1 TRICHLOROETHANE	18.0	U	24.0	U
CARBON TETRACHLORIDE		I		I
VINYL ACETATE		I		I
BROMODICHLOROMETHANE		I		I
1,1,2,2,-TETRACHLOROETHANE	18.0	U	24.0	U
1,2-DICHLOROPROPANE		I		I
TRANS-1,3-DICHLOROPROPENE	18.0	U	24.0	U
TRICHLOROETHENE	20.0	J	25.0	J
DIBROMOCHLOROMETHANE	18.0	U	24.0	U
1,1,2-TRICHLOROETHANE	18.0	U	24.0	U
BENZENE	18.0	U	24.0	U
CIS-1,3-DICHLOROPROPENE	18.0	U	24.0	U
2-CHLOROETHYL VINYL ETHER		I		I
BROMOFORM		I		I
2-HEXANONE		I		I
4-METHYL-2-PENTANONE		I		I
TETRACHLOROETHENE	18.0	U	24.0	U
TOLUENE	18.0	U	24.0	U
CHLOROBENZENE	18.0	U	24.0	U
ETHYL BENZENE	18.0	U	24.0	U
STYRENE	18.0	U	24.0	U
TOTAL XYLENES	18.0	U	24.0	U

ANALYSIS TYPE: SEMIVOLATILES (PAGE 1)

TITLE: KANSAS NAT'L GUARD ARMORY
LAB: WES
SAMPLE PREP:_____ ANALYST/ENTRY: E05

MATRIX: SEDIMENT
METHOD: 9302M01
REVIEWER: _____

UNITS: UG/KG
CASE: 3081
DATE: 05/29/85

SAMPLE NUMBERS

COMPOUND	~~BQ190005~~ BQ1905		~~BQ190006~~ BQ1906	
N-NITROSODIMETHYLAMINE	340	U	330	U
PHENOL	340	U	330	U
ANILINE	340	U	330	U
BIS(2-CHLOROETHYL) ETHER	340	U	330	U
2-CHLOROPHENOL	340	U	330	U
1,3 DICHLOROBENZENE	340	U	330	U
1,4 DICHLOROBENZENE	340	U	330	U
BENZYL ALCOHOL	340	U	330	U
1,2 DICHLOROBENZENE	340	U	330	U
2-METHYLPHENOL	340	U	330	U
BIS(2-CHLOROISOPROPYL)ETHER	340	U	330	U
4-METHYLPHENOL	340	U	330	U
N-NITROSO-DIPROPYLAMINE	340	U	330	U
HEXACHLOROETHANE	340	U	330	U
NITROBENZENE	340	U	330	U
ISOPHORONE	340	U	330	U
2-NITROPHENOL	340	U	330	U
2,4-DIMETHYLPHENOL	340	U	330	U
BENZOIC ACID	1600.	U	1600.	U
BIS(2-CHLOROETHOXY) METHANE	340	U	330	U
2,4 DICHLOROPHENOL	340	U	330	U
1,2,4-TRICHLOROBENZENE	340	U	330	U
NAPHTHALENE	340	U	330	U
4-CHLOROANILINE	340	U	330	U
HEXACHLOROBUTADIENE	340	U	330	U
4-CHLORO-3-METHYLPHENOL	340	U	330	U
2-METHYLNAPHTHALENE	340	U	330	U
HEXACHLOROCYCLOPENTADIENE	340	U	330	U
2,4,6-TRICHLOROPHENOL	340	U	330	U
2,4,5-TRICHLOROPHENOL	1600.	U	1600.	U
2-CHLORONAPHTHALENE	340	U	330	U
2-NITROANILINE	1600.	U	1600.	U
DIMETHYLPHTHALATE	340	U	330	U
ACENAPHTHYLENE	340	U	330	U
3-NITROANILINE	1600.	U	1600.	U
ACENAPHTHENE	340	U	330	U
2,4-DINITROPHENOL	340	U	330	U
4-NITROPHENOL	1600.	U	1600.	U
DIBENZOFURAN	340	U	330	U
2,4-DINITROTOULENE	340	U	330	U

ANALYSIS TYPE: SEMIVOLATILES (PAGE 2)

TITLE: KANSAS NAT'L GUARD ARMORY
LAB: WES
SAMPLE PREP:_____ ANALYST/ENTRY: E06

MATRIX: SEDIMENT
METHOD: 9302M01
REVIEWER: _____

UNITS: UG/KG
CASE: 3081
DATE: 05/29/85

SAMPLE NUMBERS

COMPOUND	MW-3 ~~BQ190005~~ BQ1905		MW-3 ~~BQ190006~~ BQ1906	
2,6-DINITROTOLUENE	340	U	330	U
DIETHYLPHTHALATE	340	U	330	U
4-CHLOROPHENYL PHENYL ETHER	340	U	330	U
FLUORENE	340	U	330	U
4-NITROANILINE	1600.	U	1600.	U
4,6-DINITRO-2-METHYLPHENOL	1600.	U	1600.	U
N-NITROSODIPHENYLAMINE	340	U	330	U
4-BROMOPHENYL PHENYL ETHER	340	U	330	U
HEXACHLOROBENZENE	340	U	330	U
PENTACHLOROPHENOL	1600.	U	1600.	U
PHENANTHRENE	340	U	330	U
ANTHRACENE	340	U	330	U
DI-N-BUTYLPHTHALATE	340	U	330	U
FLUORANTHENE	340	U	330	U
BENZIDINE		I		I
PYRENE	340	U	330	U
BUTYL BENZYL PHTHALATE	340	U	330	U
3,3' DICHLOROBENZIDINE	680	U	660	U
BENZO(A)ANTHRACENE	340	U	330	U
BIS(2-ETHYLHEXYL)PHTHALATE	340	U	330	U
CHRYSENE	340	U	330	U
DI-N-OCTYL PHTHALATE	340	U	330	U
BENZO(B)FLUORANTHENE	340	U	330	U
BENZO(K)FLUORANTHENE	340	U	330	U
BENZO(A)PYRENE	340	U	330	U
INDENO(1,2,3-CD)PYRENE	340	U	330	U
DIBENZO(A,H)ANTHRACENE	340	U	330	U
BENZO(G,H,I)PERYLENE	340	U	330	U

ANALYSIS TYPE: CONTRACT METALS

TITLE: KANSAS NATIONAL GUARD
LAB: UST
SAMPLE PREP:_____ ANALYST/ENTRY: AMC

MATRIX: WATER
METHOD: 9001M05
REVIEWER: [illegible]

UNITS: UG/L
CASE: 3081
DATE: 11-29-84

SAMPLE NUMBERS

COMPOUND	BQ1907		BQ1908	
ALUMINUM	310000		60000	
ANTIMONY	34.	J	47.	J
ARSENIC	620.		150.	
BARIUM	3200		2500	
BERYLLIUM	19.		8.6	
CADMIUM	9.9		9.8	
CALCIUM		I		I
CHROMIUM	410.		100.	
COBALT	160.		40.	M
COPPER	500.		140.	
IRON	410000		63000	
LEAD	55.		240.	
MAGNESIUM		I		I
MANGANESE	4100		1700	
MERCURY	14.	J	37.	J
NICKEL	520.		90.	
POTASSIUM		I		I
SELENIUM	2.9		9.0	
SILVER	10.0	U	10.0	U
SODIUM		I		I
THALLIUM	8.0	M	14.	
TIN	17.	M	48.	
VANADIUM	420.		140.	M
ZINC	910.		680.	

ANALYSIS TYPE: VOLATILE ANALYSES

'ITLE: KANSAS NAT'L GUARD ARMORY
.AB: WES
;AMPLE PREP:_____ ANALYST/ENTRY: E01

MATRIX: WATER
METHOD: 9302M01
REVIEWER: CA ___ CS

UNITS: UG/L
CASE: 3081
DATE: 05/28/85

SAMPLE NUMBERS

COMPOUND	~~BQ190007~~ BQ1907		~~BQ190008~~ BQ1908		~~BQ190009F~~ BQ1909F	
CHLOROMETHANE	10.0	U	10.0	U	10.0	U
BROMOMETHANE	10.0	U	10.0	U	10.0	U
VINYL CHLORIDE	10.0	U	10.0	U	10.0	U
CHLOROETHANE	10.0	U	10.0	U	10.0	U
METHYLENE CHLORIDE	5.00	U	5.00	U	19.0	U
ACETONE		I		I		I
CARBON DISULFIDE	5.00	U	5.00	U	5.50	U
1,1 DICHLOROETHENE	5.00	U	5.00	U	5.00	U
1,1 DICHLOROETHANE	5.00	U	5.00	U	5.00	U
TRANS-1,2,-DICHLOROETHENE	5.00	U	5.00	U	5.00	U
CHLOROFORM	5.00	U	5.00	U	5.00	U
1,2,DICHLOROETHANE		I		I		I
2-BUTANONE		I		I		I
1,1,1 TRICHLOROETHANE	5.00	U	5.00	U	5.00	U
CARBON TETRACHLORIDE	5.00	U	5.00	U	5.00	U
VINYL ACETATE		I		I		I
BROMODICHLOROMETHANE		I		I		I
1,1,2,2,-TETRACHLOROETHANE	5.00	U	5.00	U	5.00	U
1,2-DICHLOROPROPANE		I		I		I
TRANS-1,3-DICHLOROPROPENE	5.00	U	5.00	U	5.00	U
TRICHLOROETHENE	5.00	U	5.00	U	5.00	U
DIBROMOCHLOROMETHANE	5.00	U	5.00	U	5.00	U
1,1,2-TRICHLOROETHANE	5.00	U	5.00	U	5.00	U
BENZENE	5.00	U	5.00	U	5.00	U
CIS-1,3-DICHLOROPROPENE	5.00	U	5.00	U	5.00	U
2-CHLOROETHYL VINYL ETHER		I		I		I
BROMOFORM		I		I		I
2-HEXANONE		I		I		I
4-METHYL-2-PENTANONE		I		I		I
TETRACHLOROETHENE	5.00	U	5.00	U	5.00	U
TOLUENE	5.00	U	5.00	U	5.00	U
CHLOROBENZENE	5.00	U	5.00	U	5.00	U
ETHYL BENZENE	5.00	U	5.00	U	5.00	U
STYRENE	5.00	U	5.00	U	5.00	U
TOTAL XYLENES	5.00	U	5.00	U	5.00	U

ANALYSIS TYPE: SEMIVOLATILES (PAGE 2)

TITLE: KANSAS NAT'L GUARD ARMORY
LAB: WES
SAMPLE PREP:_____ ANALYST/ENTRY: E03

MATRIX: WATER
METHOD: 9302M01
REVIEWER: [illegible]

UNITS: UG/L
CASE: 3081
DATE: 05/28/85

SAMPLE NUMBERS

COMPOUND	~~BQ170007~~ BQ1907		~~BQ190008~~ BQ1908		~~BQ190009F~~ BQ1909F
2,6-DINITROTOLUENE	10.0	U	10.0	U	I
DIETHYLPHTHALATE	10.0	U	10.0	U	I
4-CHLOROPHENYL PHENYL ETHER	10.0	U	10.0	U	I
FLUORENE	10.0	U	10.0	U	I
4-NITROANILINE	50.0	U	50.0	U	I
4,6-DINITRO-2-METHYLPHENOL	50.0	U	50.0	U	I
N-NITROSODIPHENYLAMINE	10.0	U	10.0	U	I
4-BROMOPHENYL PHENYL ETHER	10.0	U	10.0	U	I
HEXACHLOROBENZENE	10.0	U	10.0	U	I
PENTACHLOROPHENOL	50.0	U	50.0	U	I
PHENANTHRENE	10.0	U	10.0	U	I
ANTHRACENE	10.0	U	10.0	U	I
DI-N-BUTYLPHTHALATE	10.0	U	10.0	U	I
FLUORANTHENE	10.0	U	10.0	U	I
BENZIDINE	100	U	100	U	I
PYRENE	10.0	U	10.0	U	I
BUTYL BENZYL PHTHALATE	10.0	U	10.0	U	I
3,3' DICHLOROBENZIDINE	20.0	U	20.0	U	I
BENZO(A)ANTHRACENE	10.0	U	10.0	U	I
BIS(2-ETHYLHEXYL)PHTHALATE	10.0	U	10.0	U	I
CHRYSENE	10.0	U	10.0	U	I
DI-N-OCTYL PHTHALATE	10.0	U	10.0	U	I
BENZO(B)FLUORANTHENE	10.0	U	10.0	U	I
BENZO(K)FLUORANTHENE	10.0	U	10.0	U	I
BENZO(A)PYRENE	10.0	U	10.0	U	I
INDENO(1,2,3-CD)PYRENE	10.0	U	10.0	U	I
DIBENZO(A,H)ANTHRACENE	10.0	U	10.0	U	I
BENZO(G,H,I)PERYLENE	10.0	U	10.0	U	I

ANALYSIS TYPE: SEMIVOLATILES (PAGE 1)

TITLE: KANSAS NAT'L GUARD ARMORY
LAB: WES
SAMPLE PREP:_____ ANALYST/ENTRY: E02

MATRIX: WATER
METHOD: 9302M01
REVIEWER: GA GCS

UNITS: UG/L
CASE: 3081
DATE: 05/28/85

SAMPLE NUMBERS

COMPOUND	~~BQ190007~~ BQ1907		~~BQ190008~~ BQ1908		~~BQ190009F~~ BQ1909F	
N-NITROSODIMETHYLAMINE	10.0	U	10.0	U		I
PHENOL	10.0	U	10.0	U		I
ANILINE	10.0	U	10.0	U		I
BIS(2-CHLOROETHYL) ETHER	10.0	U	10.0	U		I
2-CHLOROPHENOL	10.0	U	10.0	U		I
1,3 DICHLOROBENZENE	10.0	U	10.0	U		I
1,4 DICHLOROBENZENE	10.0	U	10.0	U		I
BENZYL ALCOHOL	10.0	U	10.0	U		I
1,2 DICHLOROBENZENE	10.0	U	10.0	U		I
2-METHYLPHENOL	10.0	U	10.0	U		I
BIS(2-CHLOROISOPROPYL)ETHER	10.0	U	10.0	U		I
4-METHYLPHENOL	10.0	U	10.0	U		I
N-NITROSO-DIPROPYLAMINE	10.0	U	10.0	U		I
HEXACHLOROETHANE	10.0	U	10.0	U		I
NITROBENZENE	10.0	U	10.0	U		I
ISOPHORONE	10.0	U	10.0	U		I
2-NITROPHENOL	10.0	U	10.0	U		I
2,4-DIMETHYLPHENOL	10.0	U	10.0	U		I
BENZOIC ACID	50.0	U	50.0	U		I
BIS(2-CHLOROETHOXY) METHANE	10.0	U	10.0	U		I
2,4 DICHLOROPHENOL	10.0	U	10.0	U		I
1,2,4-TRICHLOROBENZENE	10.0	U	10.0	U		I
NAPHTHALENE	10.0	U	10.0	U		I
4-CHLOROANILINE	10.0	U	10.0	U		I
HEXACHLOROBUTADIENE	10.0	U	10.0	U		I
4-CHLORO-3-METHYLPHENOL	10.0	U	10.0	U		I
2-METHYLNAPHTHALENE	10.0	U	10.0	U		I
HEXACHLOROCYCLOPENTADIENE	10.0	U	10.0	U		I
2,4,6-TRICHLOROPHENOL	10.0	U	10.0	U		I
2,4,5-TRICHLOROPHENOL	50.0	U	50.0	U		I
2-CHLORONAPHTHALENE	10.0	U	10.0	U		I
2-NITROANILINE	50.0	U	50.0	U		I
DIMETHYLPHTHALATE	10.0	U	10.0	U		I
ACENAPHTHYLENE	10.0	U	10.0	U		I
3-NITROANILINE	50.0	U	50.0	U		I
ACENAPHTHENE	10.0	U	10.0	U		I
2,4-DINITROPHENOL	10.0	U	10.0	U		I
4-NITROPHENOL	50.0	U	50.0	U		I
DIBENZOFURAN	10.0	U	10.0	U		I
2,4-DINITROTOULENE	10.0	U	10.0	U		I

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

SFE / SFID 6/15

DATE 6-12-85

SUBJECT Transmittal of Laboratory Data

FROM Charles P. Hensley CPK
Chief, Laboratory Branch, ENSV

TO Keffer

Analyses have been completed for the following activities and the data results are attached.

Activity No.	Description
AKJX2	National Guard Armory (complete transmittal)

Attachments

cc: Data Files

RECEIVED
JUN 17 1985
E&E K.C.K.

EPA Form 1320-6 (Rev. 3-76)

ANALYSIS TYPE: METALS (CONTRACTOR)

TITLE: KANSAS NAT. GAURD ARMORY
LAB: VER
SAMPLE PREP:_____ ANALYST/ENTRY: E69

MATRIX: WATER
METHOD: 9001M06
REVIEWER: CE BLS

UNITS: UG/L
CASE: 4190
DATE: 05/16/85

SAMPLE NUMBERS

COMPOUND	AKJX2001 (MW1)		AKJX2001A (MW3 filtered)		AKJX2002 (MW3 unfiltered)		AKJX2002A (unfiltered)	
ALUMINUM	19000.		27.0	M	12000.		200	U
ANTIMONY	56.0	M	60.0	U	79.0		34.0	M
ARSENIC	10.0	U	10.0	U	16.0		11.0	
BARIUM	260		58.0	M	1500.		980	
BERYLLIUM	2.80	M	1.10	M	5.00	U	1.10	M
CADMIUM	5.00	U	5.00	U	5.00	U	5.00	U
CALCIUM	230000.		240000.		36000.		25000.	
CHROMIUM	34.0		10.0	U	28.0		8.20	M
COBALT	4.20	M	50.0	U	6.60	M	50.0	U
COPPER	39.0		14.0	M	41.0		8.80	M
IRON	28000.		24.0	M	17000.		700	
LEAD	5.00	U	5.00	U	96.0		5.00	U
MAGNESIUM	33000.		30000.		100000.		110000.	
MANGANESE	380		210		360		68.0	
MERCURY	0.2	U	0.3		0.8		0.2	U
NICKEL	45.0		40.0	U	31.0	M	10.0	M
POTASSIUM	4500.	M	530	M	74000.		74000.	
SELENIUM	5.00	U	5.00	U	5.00	U	5.00	U
SILVER	10.0	U	10.0	U	10.0	U	10.0	U
SODIUM	51000.		53000.		1000000.		1200000.	
THALLIUM	10.0	U	10.0	U	10.0	U	10.0	U
TIN	40.0	U	40.0	U	40.0	U	40.0	U
VANADIUM	43.0	M	50.0	U	35.0	M	7.10	M
ZINC	170	U	92.0	U	220	U	27.0	U
CYANIDE		I		I		I		I

ANALYSIS TYPE: METALS (CONTRACTOR)

TITLE: KANSAS NAT. GAURD ARMORY
LAB: VER
SAMPLE PREP:_____ ANALYST/ENTRY: E69

MATRIX: WATER
METHOD: 9001M06
REVIEWER: _____

UNITS: UG/L
CASE: 4190
DATE: 05/16/85

SAMPLE NUMBERS

COMPOUND	AKJX2004 (unfiltered)		AKJX2007 (unfiltered)	
ALUMINUM	140000.		120000.	
ANTIMONY	410		640	
ARSENIC	160		30.0	
BARIUM	12000.		2200.	
BERYLLIUM	25.0		11.0	
CADMIUM	65.0		5.00	U
CALCIUM	1800000.		280000.	
CHROMIUM	270		160	
COBALT	190		93.0	
COPPER	570		160	
IRON	210000.		360000.	
LEAD	3400.		220	
MAGNESIUM	310000.		65000.	
MANGANESE	15000.		15000.	
MERCURY	1.80		0.4	
NICKEL	480		240	
POTASSIUM	170000.		16000.	
SELENIUM	5.00	U	5.00	U
SILVER	10.0	U	10.0	U
SODIUM	1300000.		68000.	
THALLIUM	10.0	U	10.0	U
TIN	40.0	U	40.0	U
VANADIUM	290		470	
ZINC	3500.		450	
CYANIDE		I		I

ANALYSIS TYPE: VOLATILE ANALYSES

TITLE: KANSAS NAT. GAURD SHPT 1 MATRIX: WATER UNITS: UG/L
LAB: WCT METHOD: 9521M00 CASE: 4190
SAMPLE PREP:_____ ANALYST/ENTRY: E24 REVIEWER: _____ DATE: 06/05/85

SAMPLE NUMBERS

COMPOUND	AKJX2001		AKJX2002		AKJX2003F		AKJX2004	
CHLOROMETHANE	10.0	U	10.0	U	10.0	U	10.0	U
BROMOMETHANE	10.0	U	10.0	U	10.0	U	10.0	U
VINYL CHLORIDE	10.0	U	5.00	M	10.0	U	10.0	U
CHLOROETHANE	10.0	U	10.0	U	10.0	U	10.0	U
METHYLENE CHLORIDE	4.00	M	2.00	M	4.00	M	4.00	M
ACETONE		I		I		I		I
CARBON DISULFIDE	5.00	U	5.00	U	5.00	U	5.00	U
1,1 DICHLOROETHENE	5.00	U	5.00	U	5.00	U	5.00	U
1,1 DICHLOROETHANE	5.00	U	5.00	U	5.00	U	5.00	U
TRANS-1,2,-DICHLOROETHENE	5.00	U	5.00	U	5.00	U	5.00	U
CHLOROFORM	5.00	U	5.00	U	5.00	U	5.00	U
1,2,DICHLOROETHANE	5.00	U	5.00	U	5.00	U	5.00	U
2-BUTANONE		I		I		I		I
1,1,1 TRICHLOROETHANE		I		I		I		I
CARBON TETRACHLORIDE		I		I		I		I
VINYL ACETATE	10.0	U	10.0	U	10.0	U	10.0	U
BROMODICHLOROMETHANE		I		I		I		I
1,1,2,2,-TETRACHLOROETHANE	5.00	U	5.00	U	5.00	U	5.00	U
1,2-DICHLOROPROPANE	5.00	U	5.00	U	5.00	U	5.00	U
TRANS-1,3-DICHLOROPROPENE		I		I		I		I
TRICHLOROETHENE	5.00	U	5.00	U	5.00	U	5.00	U
DIBROMOCHLOROMETHANE		I		I		I		I
1,1,2-TRICHLOROETHANE		I		I		I		I
BENZENE	5.00	U	5.00	U	5.00	U	5.00	U
CIS-1,3-DICHLOROPROPENE		I		I		I		I
2-CHLOROETHYL VINYL ETHER		I		I		I		I
BROMOFORM		I		I		I		I
2-HEXANONE	10.0	U	10.0	U	10.0	U	10.0	U
4-METHYL-2-PENTANONE	10.0	U	10.0	U	10.0	U	10.0	U
TETRACHLOROETHENE	5.00	J	5.00	U	5.00	U	5.00	U
TOLUENE	5.00	U	5.00	U	5.00	U	5.00	U
CHLOROBENZENE	5.00	U	5.00	U	5.00	U	5.00	U
ETHYL BENZENE	5.00	U	5.00	U	5.00	U	5.00	U
STYRENE	5.00	U	5.00	U	5.00	U	5.00	U
TOTAL XYLENES	5.00	U	5.00	U	5.00	U	5.00	U

ANALYSIS TYPE: VOLATILE ANALYSES

TITLE: KANSAS NAT. GAURD SHPT 1 MATRIX: WATER UNITS: UG/L
LAB: WCT METHOD: 9521M00 CASE: 4190
SAMPLE PREP:_____ ANALYST/ENTRY: E24 REVIEWER: GK KLS DATE: 06/05/85

SAMPLE NUMBERS

COMPOUND	AKJX2005		AKJX2006	
CHLOROMETHANE	10.0	U	10.0	U
BROMOMETHANE	10.0	U	10.0	U
VINYL CHLORIDE	10.0	U	10.0	U
CHLOROETHANE	10.0	U	10.0	U
METHYLENE CHLORIDE	15.0		17.0	
ACETONE		I		I
CARBON DISULFIDE	5.00	U	5.00	U
1,1 DICHLOROETHENE	5.00	U	5.00	U
1,1 DICHLOROETHANE	5.00	U	5.00	U
TRANS-1,2,-DICHLOROETHENE	5.00	U	5.00	U
CHLOROFORM	5.00	U	5.00	U
1,2,DICHLOROETHANE	5.00	U	5.00	U
2-BUTANONE		I		I
1,1,1 TRICHLOROETHANE		I		I
CARBON TETRACHLORIDE		I		I
VINYL ACETATE		I		I
BROMODICHLOROMETHANE	5.00	U	5.00	U
1,1,2,2,-TETRACHLOROETHANE	5.00	U	5.00	U
1,2-DICHLOROPROPANE	5.00	U	5.00	U
TRANS-1,3-DICHLOROPROPENE	5.00	U	5.00	U
TRICHLOROETHENE	5.00	U	5.00	U
DIBROMOCHLOROMETHANE		I		I
1,1,2-TRICHLOROETHANE		I		I
BENZENE	5.00	U	5.00	U
CIS-1,3-DICHLOROPROPENE		I		I
2-CHLOROETHYL VINYL ETHER		I		I
BROMOFORM		I		I
2-HEXANONE	10.0	U	10.0	U
4-METHYL-2-PENTANONE	10.0	U	10.0	U
TETRACHLOROETHENE	3.00	M	5.00	U
TOLUENE	5.00	U	5.00	U
CHLOROBENZENE	5.00	U	5.00	U
ETHYL BENZENE	5.00	U	5.00	U
STYRENE	5.00	U	5.00	U
TOTAL XYLENES	5.00	U	5.00	U

ANALYSIS TYPE: SEMIVOLATILES (PAGE 1)

TITLE: KANSAS NAT. GAURD SHPT 1 MATRIX: WATER UNITS: UG/L
LAB: WCT METHOD: 9521M00 CASE: 4190
SAMPLE PREP:_____ ANALYST/ENTRY: E25 REVIEWER: [illegible] GCS DATE: 06/05/85

SAMPLE NUMBERS

COMPOUND	AKJX2001		AKJX2002		AKJX2004	
N-NITROSODIMETHYLAMINE	20.0	U	20.0	U	20.0	U
PHENOL	20.0	U	20.0	U	20.0	U
ANILINE	20.0	U	20.0	U	20.0	U
BIS(2-CHLOROETHYL) ETHER	20.0	U	20.0	U	20.0	U
2-CHLOROPHENOL	20.0	U	20.0	U	20.0	U
1,3 DICHLOROBENZENE	20.0	U	20.0	U	20.0	U
1,4 DICHLOROBENZENE	20.0	U	20.0	U	20.0	U
BENZYL ALCOHOL	20.0	U	20.0	U	20.0	U
1,2 DICHLOROBENZENE	20.0	U	20.0	U	20.0	U
2-METHYLPHENOL	20.0	U	20.0	U	20.0	U
BIS(2-CHLOROISOPROPYL)ETHER	20.0	U	20.0	U	20.0	U
4-METHYLPHENOL	20.0	U	20.0	U	20.0	U
N-NITROSO-DIPROPYLAMINE	20.0	U	20.0	U	20.0	U
HEXACHLOROETHANE	20.0	U	20.0	U	20.0	U
NITROBENZENE	20.0	U	20.0	U	20.0	U
ISOPHORONE	20.0	U	20.0	U	20.0	U
2-NITROPHENOL	20.0	U	20.0	U	20.0	U
2,4-DIMETHYLPHENOL	20.0	U	20.0	U	20.0	U
BENZOIC ACID	100	U	100	U	100	U
BIS(2-CHLOROETHOXY) METHANE	20.0	U	20.0	U	20.0	U
2,4 DICHLOROPHENOL	20.0	U	20.0	U	20.0	U
1,2,4-TRICHLOROBENZENE	20.0	U	20.0	U	20.0	U
NAPHTHALENE	20.0	U	20.0	U	20.0	U
4-CHLOROANILINE	20.0	U	20.0	U	20.0	U
HEXACHLOROBUTADIENE	20.0	U	20.0	U	20.0	U
4-CHLORO-3-METHYLPHENOL	20.0	U	20.0	U	20.0	U
2-METHYLNAPHTHALENE	20.0	U	20.0	U	20.0	U
HEXACHLOROCYCLOPENTADIENE	20.0	U	20.0	U	20.0	U
2,4,6-TRICHLOROPHENOL	20.0	U	20.0	U	20.0	U
2,4,5-TRICHLOROPHENOL	100	U	100	U	100	U
2-CHLORONAPHTHALENE	20.0	U	20.0	U	20.0	U
2-NITROANILINE	100	U	100	U	100	U
DIMETHYLPHTHALATE	20.0	U	20.0	U	20.0	U
ACENAPHTHYLENE	20.0	U	20.0	U	20.0	U
3-NITROANILINE	100	U	100	U	100	U
ACENAPHTHENE	20.0	U	2.00	M	20.0	U
2,4-DINITROPHENOL	20.0	U	20.0	U	20.0	U
4-NITROPHENOL	100	U	100	U	100	U
DIBENZOFURAN	20.0	U	20.0	U	20.0	U
2,4-DINITROTOULENE	20.0	U	20.0	U	20.0	U

ANALYSIS TYPE: SEMIVOLATILES (PAGE 2)

TITLE: KANSAS NAT. GAURD SHPT 1 MATRIX: WATER UNITS: UG/L
LAB: WCT METHOD: 9521M00 CASE: 4190
SAMPLE PREP:_____ ANALYST/ENTRY: E26 REVIEWER: GLS DATE: 06/05/85

SAMPLE NUMBERS :

COMPOUND	AKJX2001		AKJX2002		AKJX2004	
2,6-DINITROTOLUENE	20.0	U	20.0	U	20.0	U
DIETHYLPHTHALATE	20.0	U	20.0	U	20.0	U
4-CHLOROPHENYL PHENYL ETHER	20.0	U	20.0	U	20.0	U
FLUORENE	20.0	U	3.00	M	20.0	U
4-NITROANILINE	100	U	100	U	100	U
4,6-DINITRO-2-METHYLPHENOL	100	U	100	U	100	U
N-NITROSODIPHENYLAMINE	20.0	U	20.0	U	20.0	U
4-BROMOPHENYL PHENYL ETHER	20.0	U	20.0	U	20.0	U
HEXACHLOROBENZENE	20.0	U	20.0	U	20.0	U
PENTACHLOROPHENOL	100	U	100	U	100	U
PHENANTHRENE	20.0	U	16.0	M	20.0	U
ANTHRACENE	20.0	U	7.00	M	20.0	U
DI-N-BUTYLPHTHALATE	20.0	U	20.0	U	20.0	U
FLUORANTHENE	20.0	U	27.0		4.00	M
BENZIDINE	200	U	200	U	200	U
PYRENE	20.0	U	27.0		20.0	U
BUTYL BENZYL PHTHALATE	20.0	U	20.0	U	20.0	U
3,3' DICHLOROBENZIDINE	40.0	U	40.0	U	40.0	U
BENZO(A)ANTHRACENE	20.0	U	14.0	M	20.0	U
BIS(2-ETHYLHEXYL)PHTHALATE	20.0	U	26.0		9.00	M
CHRYSENE	20.0	U	17.0	M	20.0	U
DI-N-OCTYL PHTHALATE	20.0	U	20.0	U	20.0	U
BENZO(B)FLUORANTHENE OR	20.0	U	20.0		4.00	M
BENZO(K)FLUORANTHENE	~~20.0~~	~~U~~	~~20.0~~	~~U~~	~~20.0~~	~~U~~
BENZO(A)PYRENE	20.0	U	13.0	M	20.0	U
INDENO(1,2,3-CD)PYRENE	20.0	U	10.0	M	20.0	U
DIBENZO(A,H)ANTHRACENE	20.0	U	20.0	U	20.0	U
BENZO(G,H,I)PERYLENE	20.0	U	13.0	M	20.0	U

TITLE: KANSAS NAT. GUARD ARMORY SHPT ANALYSIS: GC/MS SCANS LAB: WCT
MATRIX: WATER UNITS: UG/L CASE NO: 4190
REVIEWED BY: GCS GCS DATE: 6/5/85 EAF METHOD NO: 9521M00

TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.	COMPOUND NAME **	FRACTION	EST. CONC. *
AKJX2001	METHYLCYCLOHEXANE	BNA	10 J
AKJX2001	2 CMPDS FOUND CAN'T BE ID'ED	BNA	J
AKJX2002	ETHYLMETHYLBENZENESULFONAMIDE	BNA	10 J
AKJX2002	3 CMPDS FOUND CAN'T BE ID'ED	BNA	J
AKJX2003F	NOTHING SIGNIFICANT FOUND		
AKJX2004	THIOBISMETHANE	BNA	20 J
AKJX2004	BENZENEACETICACID	BNA	30 J
AKJX2004	TETRADECANOICACID	BNA	200 J
AKJX2004	HEXADECANOICACID	BNA	500 J
AKJX2004	16 CMPDS FOUND CAN'T BE ID'ED	BNA	J
AKJX2005	NOTHING SIGNIFICANT FOUND		
AKJX2006	NOTHING SIGNIFICANT FOUND		

* THIS IS A CRUDE ESTIMATION BASED ON RESPONSE RELATIVE TO AN INTERNAL STANDARD. AN AUTHENTIC STANDARD HAS NOT BEEN RUN.

** THE COMPOUNDS WERE IDENTIFIED USING A LIBRARY SEARCH ROUTINE. AUTHENTIC STANDARDS HAVE NOT BEEN ANALYZED TO VERIFY COMPOUND MASS SPECTRA AND RETENTION TIMES.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

EQE/SPFD 9/3

DATE 9-3-85

SUBJECT Transmittal of Laboratory Data

FROM Charles P. Hensley CH
Chief, Laboratory Branch, ENSV

TO Keffer

Analyses have been completed for the following activities and the data results are attached.

Activity No.	Description
AKJX2	National Guard Armory (rerun data)

Attachments

cc: Data Files

RECEIVED
SEP 04 1985
E&E K.C.K.

EPA Form 1320-6 (Rev. 3-76)

DATA QUALIFIERS FOR EPA REGION VII

U not detected. For EPA VII lab data U is applied only in conjunction with detection limits. For contract lab data it is applied to contract required limits.

M The value indicated is below the quantitation limit but above the detection limit.

J The associated value is an estimated quantity because quality control criteria were not met.

I Analysis attempted but no result can be reported.

ANALYSIS TYPE: SEMIVOLATILES (PAGE 1)

TITLE: KS.NAT.GUARD ARMORY-RERUN
LAB: WCT
SAMPLE PREP:_____ ANALYST/ENTRY: E25

MATRIX: WATER
METHOD: 9521M00
REVIEWER: _____

UNITS: UG/L
CASE: 4190
DATE: 08/23/85

SAMPLE NUMBERS

COMPOUND	AKJX2002		AKJX2004	
N-NITROSODIMETHYLAMINE	40.0	U	100	U
PHENOL	40.0	U	140	
ANILINE	40.0	U	100	U
BIS(2-CHLOROETHYL) ETHER	40.0	U	100	U
2-CHLOROPHENOL	40.0	U	100	U
1,3 DICHLOROBENZENE	40.0	U	100	U
1,4 DICHLOROBENZENE	40.0	U	100	U
BENZYL ALCOHOL	40.0	U	100	U
1,2 DICHLOROBENZENE	40.0	U	100	U
2-METHYLPHENOL	40.0	U	100	U
BIS(2-CHLOROISOPROPYL)ETHER	40.0	U	100	U
4-METHYLPHENOL	40.0	U	1500.	
N-NITROSO-DIPROPYLAMINE	40.0	U	100	U
HEXACHLOROETHANE	40.0	U	100	U
NITROBENZENE	40.0	U	100	U
ISOPHORONE	40.0	U	100	U
2-NITROPHENOL	40.0	U	100	U
2,4-DIMETHYLPHENOL	40.0	U	100	U
BENZOIC ACID	200	U	500	U
BIS(2-CHLOROETHOXY) METHANE	40.0	U	100	U
2,4 DICHLOROPHENOL	40.0	U	100	U
1,2,4-TRICHLOROBENZENE	40.0	U	100	U
NAPHTHALENE	40.0	U	100	U
4-CHLOROANILINE	40.0	U	100	U
HEXACHLOROBUTADIENE	40.0	U	100	U
4-CHLORO-3-METHYLPHENOL	40.0	U	100	U
2-METHYLNAPHTHALENE	40.0	U	100	U
HEXACHLOROCYCLOPENTADIENE	40.0	U	100	U
2,4,6-TRICHLOROPHENOL	40.0	U	100	U
2,4,5-TRICHLOROPHENOL	200	U	500	U
2-CHLORONAPHTHALENE	40.0	U	100	U
2-NITROANILINE	200	U	500	U
DIMETHYLPHTHALATE	40.0	U	100	U
ACENAPHTHYLENE	40.0	U	100	U
3-NITROANILINE	200	U	500	U
ACENAPHTHENE	40.0	U	100	U
2,4-DINITROPHENOL	40.0	U	100	U
4-NITROPHENOL	200	U	500	U
DIBENZOFURAN	40.0	U	100	U
2,4-DINITROTOULENE	40.0	U	100	U

ANALYSIS TYPE: SEMIVOLATILES (PAGE 2)

TITLE: KS.NAT.GUARD ARMORY-RERUN
LAB: WCT
SAMPLE PREP:_____ ANALYST/ENTRY: E26

MATRIX: WATER
METHOD: 9521M00
REVIEWER: [illegible]

UNITS: UG/L
CASE: 4190
DATE: 08/23/85

SAMPLE NUMBERS

COMPOUND	AKJX2002		AKJX2004	
2,6-DINITROTOLUENE	40.0	U	100	U
DIETHYLPHTHALATE	40.0	U	100	U
4-CHLOROPHENYL PHENYL ETHER	40.0	U	100	U
FLUORENE	40.0	U	100	U
4-NITROANILINE	200	U	500	U
4,6-DINITRO-2-METHYLPHENOL	200	U	500	U
N-NITROSODIPHENYLAMINE	40.0	U	100	U
4-BROMOPHENYL PHENYL ETHER	40.0	U	100	U
HEXACHLOROBENZENE	40.0	U	100	U
PENTACHLOROPHENOL	200	U	500	U
PHENANTHRENE	40.0	U	100	U
ANTHRACENE	7.00	M	100	U
DI-N-BUTYLPHTHALATE	40.0	U	100	U
FLUORANTHENE	32.0	M	100	U
BENZIDINE	200	M	1000.	U
PYRENE	29.0	M	100	U
BUTYL BENZYL PHTHALATE	40.0	U	100	U
3,3' DICHLOROBENZIDINE	80.0	U	200	U
BENZO(A)ANTHRACENE	16.0	M	100	U
BIS(2-ETHYLHEXYL)PHTHALATE	10.0	M	100	U
CHRYSENE	17.0	M	100	U
DI-N-OCTYL PHTHALATE	40.0	U	100	U
BENZO(B)FLUORANTHENE	28.0	M	100	U
BENZO(K)FLUORANTHENE	28.0	M	100	U
BENZO(A)PYRENE	17.0	M	100	U
INDENO(1,2,3-CD)PYRENE	10.0	M	100	U
DIBENZO(A,H)ANTHRACENE	40.0	U	100	U
BENZO(G,H,I)PERYLENE	12.0	M	100	U

APPENDIX C

CHAIN OF CUSTODY RECORDS AND FIELD SHEETS

CHAIN OF CUSTODY RECORD
ENVIRONMENTAL PROTECTION AGENCY – REGION VII

WORK LEADER (PRINT)	NAME OF SURVEY OR ACTIVITY	DATE OF COLLECTION (DAY / MONTH / YEAR)	SHEET / of

DESCRIPTION OF SHIPMENT

___ PIECE(S) CONSISTING OF ___ BOX(S)

___ ICE CHEST(S); OTHER _____

VOUCHER OR RECEIPT NO.

CONTENTS OF SHIPMENT

LABORATORY SAMPLE NO.	TYPES OF CONTAINERS: CUBITAINER	GLASS JAR	DO BOTTLE	BIO. BOTTLE	LABORATORY SAMPLE NO.	TYPES OF CONTAINERS: CUBITAINER	GLASS JAR	DO BOTTLE	BIO. BOTTLE
	NO. OF CONTAINERS PER LAB NO.					NO. OF CONTAINERS PER LAB NO.			

PERSONNEL CUSTODY RECORD

RELINQUISHED BY (SAMPLER)	RECEIVED BY	DATE	TIME	REASON FOR CHANGE OF CUSTODY
☐ SEALED ☐ UNSEALED	☐ SEALED ☐ UNSEALED			
RELINQUISHED BY	RECEIVED BY	DATE	TIME	REASON FOR CHANGE OF CUSTODY
☐ SEALED ☐ UNSEALED	☐ SEALED ☐ UNSEALED			
RELINQUISHED BY	RECEIVED BY	DATE	TIME	REASON FOR CHANGE OF CUSTODY
☐ SEALED ☐ UNSEALED	☐ SEALED ☐ UNSEALED			
RELINQUISHED BY	RECEIVED BY	DATE	TIME	REASON FOR CHANGE OF CUSTODY
☐ SEALED ☐ UNSEALED	☐ SEALED ☐ UNSEALED			
RELINQUISHED BY	RECEIVED BY	DATE	TIME	REASON FOR CHANGE OF CUSTODY
☐ SEALED ☐ UNSEALED	☐ SEALED ☐ UNSEALED			
RELINQUISHED BY	RECEIVED BY	DATE	TIME	REASON FOR CHANGE OF CUSTODY
☐ SEALED ☐ UNSEALED	☐ SEALED ☐ UNSEALED			

FIELD SHEET

ENVIRONMENTAL PROTECTION AGENCY – REGION VII

SURVEILLANCE AND ANALYSIS DIVISION, 25 FUNSTON ROAD, KANSAS CITY, KANSAS 65115

STATION IDENTIFICATION

SURVEY NO _____ SURVEY LEADER Ken Dunn, Et E STORET NO _____

DESCRIPTION Kansas National Guard Armory, Kansas City, Kansas

GRAB SAMPLE DATA

FLOW	TEMP °C		PH	DO	FECAL COLI	OIL & GREASE	OTHER	OTHER
☐ 00059 (GPM) ☒ 00061 (CFS)	AIR 00020	WATER 00010						

COLLECTION DATE YR 84 7 DAY 18 TIME _____ SAMPLER NAME CODE _____ LAB NO AQ1900

			00400					

COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____

COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____

COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____

COMPOSITE SAMPLE DATA

BEGIN DATE YR _____ MO _____ DAY _____ TIME _____ LAB NO _____

END DATE YR _____ MO _____ DAY _____ TIME _____ EQUIPMENT CODE _____

FLOW RATE _____ 50050 MGD _____ 50052 1000's OF GAL DURING COMPOSITE PERIOD SAMPLER NAME CODE _____

WATER CHEMISTRY

LAB NO AQ1900

SAMPLE CONTAINER	TAG COLOR	PRESERVATIVE	LABORATORY MOBILE	LABORATORY REGION	ANALYSES
1 pint glass jar	Purple + Lime	None		✓	Extract organics [illegible] and Rose [illegible] Volatile
1 pint glass jar	White	"		✓	Metals

CONTACT _____ SAMPLE ☐ YES SPLIT ☒ NO _____

REMARKS Soil sample: 0-12 inch depth, North 1

7 EPA 9263 16 75

ENVIRONMENTAL PROTECTION AGENCY – REGION VII

SURVEILLANCE AND ANALYSIS DIVISION, 25 FUNSTON ROAD, KANSAS CITY, KANSAS 65115

STATION IDENTIFICATION

SURVEY NO _____ SURVEY LEADER Ken Dunn, E+E _____ STORET NO _____

DESCRIPTION Kansas National Guard Armory, Kansas City, Kansas

GRAB SAMPLE DATA

FLOW	TEMP °C AIR	TEMP °C WATER	PH	DO	FECAL COLI	OIL & GREASE	OTHER	OTHER
☐ 00059 (GPM) ☐ 00061 (CFS)	00020	00010						
COLLECTION DATE YR 84 MO 7 DAY 18 TIME _____ SAMPLER NAME CODE _____ LAB NO AQ1901								
			00400					
COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____								
COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____								
COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____								

COMPOSITE SAMPLE DATA

BEGIN DATE YR _____ MO _____ DAY _____ TIME _____ LAB NO _____

END DATE YR _____ MO _____ DAY _____ TIME _____ EQUIPMENT CODE _____

FLOW RATE _____ (50056) MGD _____ (50050) 1000's OF GAL DURING COMPOSITE PERIOD SAMPLER NAME CODE _____

WATER CHEMISTRY

LAB NO AQ1901

SAMPLE CONTAINER	TAG COLOR	PRESERVATIVE	LABORATORY MOBILE	LABORATORY REGION	ANALYSES
1 pint glass jar	Purple + Lime	None		✓	Extract Organics and Base Neutral Volatile
" " " "	White	"		✓	Metals

CONTACT _____ SAMPLE SPLIT ☐ YES ☒ NO _____

REMARKS Soil Sample; 0-12 inch depth, North 2

EPA 9263.10-75

ENVIRONMENTAL PROTECTION AGENCY – REGION VII
SURVEILLANCE AND ANALYSIS DIVISION, 25 FUNSTON ROAD, KANSAS CITY, KANSAS 65115

STATION IDENTIFICATION

SURVEY NO _____ SURVEY LEADER Ken Dunn, E+E STORET NO _____

DESCRIPTION Kansas National Guard Armory, Kansas City, Kansas

GRAB SAMPLE DATA

FLOW	TEMP °C AIR 00020	TEMP °C WATER 00010	PH	DO	FECAL COLI	OIL & GREASE	OTHER	OTHER
☐ 00059 (GPM) ☐ 00061 (CFS)								

COLLECTION DATE YR 84 MO 7 DAY 18 TIME _____ SAMPLER NAME CODE _____ LAB NO AQ1902

			00400					

COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____

COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____

COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____

COMPOSITE SAMPLE DATA

BEGIN DATE YR _____ MO _____ DAY _____ TIME _____ LAB NO _____

END DATE YR _____ MO _____ DAY _____ TIME _____ EQUIPMENT CODE _____

FLOW RATE _____ 50050 MGD _____ 50052 1000's OF GAL DURING COMPOSITE PERIOD SAMPLER NAME CODE _____

WATER CHEMISTRY

LAB NO AQ1902

SAMPLE CONTAINER	TAG COLOR	PRESERVATIVE	LABORATORY MOBILE	LABORATORY REGION	ANALYSES
1 pint glass jar	Purple + Lime	None		✓	Extract organics, Acid and Base neutral Volatile
" " " "	White	"		✓	Metals

CONTACT _____ SAMPLE ☐ YES SPLIT ☒ NO _____

REMARKS Soil Sample; 0-12 inch depth, North 3

7-EPA 9263 (6 75)

ENVIRONMENTAL PROTECTION AGENCY – REGION VII
SURVEILLANCE AND ANALYSIS DIVISION, 25 FUNSTON ROAD, KANSAS CITY, KANSAS 65115

STATION IDENTIFICATION

SURVEY NO _____ SURVEY LEADER Ken Dunn, E & E STORET NO _____

DESCRIPTION Kansas National Guard Armory, Kansas City, Kansas

GRAB SAMPLE DATA

FLOW	TEMP °C AIR 00020	TEMP °C WATER 00010	PH	DO	FECAL COLI	OIL & GREASE	OTHER	OTHER
☐ 00059 (GPM) ☐ 00061 (CFS)								
COLLECTION DATE YR 84 MO 7 DAY 18 TIME _____ SAMPLER NAME CODE _____ LAB NO AQ1903								
			00400					
COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____								
COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____								
COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____								

COMPOSITE SAMPLE DATA

BEGIN DATE YR _____ MO _____ DAY _____ TIME _____ LAB NO _____

END DATE YR _____ MO _____ DAY _____ TIME _____ EQUIPMENT CODE _____

FLOW RATE _____ 50050 MGD _____ 50051 1000's OF GAL DURING COMPOSITE PERIOD SAMPLER NAME CODE _____

WATER CHEMISTRY

LAB NO AQ1903

SAMPLE CONTAINER	TAG COLOR	PRESERVATIVE	LABORATORY MOBILE	LABORATORY REGION	ANALYSES
1 pint glass jar	Purple + Line	None		✓	Extract Organics Acid and Base Neutral Volatile
" " " "	White	"		✓	Metals

CONTACT _____ SAMPLE ☐ YES SPLIT ☒ NO _____

REMARKS Soil Sample; 0-12 inch depth corner

EPA 9263.16-75. GSA MC 78-3.9

ENVIRONMENTAL PROTECTION AGENCY – REGION VII

SURVEILLANCE AND ANALYSIS DIVISION, 25 FUNSTON ROAD, KANSAS CITY, KANSAS 65115

STATION IDENTIFICATION

SURVEY NO _____ SURVEY LEADER Ken Dunn, Et E STORET NO _____

DESCRIPTION Kansas National Guard Armory, Kansas City, Kansas

GRAB SAMPLE DATA

FLOW	TEMP °C AIR	TEMP °C WATER	PH	DO	FECAL COLI	OIL & GREASE	OTHER	OTHER
☐ 00059 (GPM) ☐ 00061 (CFS)	00020	00010						

COLLECTION DATE YR 84 7 DAY 18 TIME _____ SAMPLER NAME CODE _____ LAB NO AQ1904

			00400					

COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____

COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____

COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____

COMPOSITE SAMPLE DATA

BEGIN DATE YR _____ MO _____ DAY _____ TIME _____ LAB NO _____

END DATE YR _____ MO _____ DAY _____ TIME _____ EQUIPMENT CODE _____

FLOW RATE _____ 50050 MGD _____ 50052 1000's OF GAL DURING COMPOSITE PERIOD SAMPLER NAME CODE _____

WATER CHEMISTRY

LAB NO AQ1904

SAMPLE CONTAINER	TAG COLOR	PRESERVATIVE	LABORATORY MOBILE	LABORATORY REGION	ANALYSES
1 pint glass jar	Purple + Line	None		✓	Extract organics, Acid and Basenautral Volatile
" " " "	White	"		✓	Metals

CONTACT _____ SAMPLE ☐ YES SPLIT ☒ NO _____

REMARKS Soil Sample; 0-12 inch East 1

7-EPA 9263 (6-75)

ENVIRONMENTAL PROTECTION AGENCY — REGION VII

SURVEILLANCE AND ANALYSIS DIVISION, 25 FUNSTON ROAD, KANSAS CITY, KANSAS 65115

STATION IDENTIFICATION

SURVEY NO _____ SURVEY LEADER Ken Dunn, Et E STORET NO _____

DESCRIPTION Kansas National Guard Armory, Kansas City, Kansas

GRAB SAMPLE DATA

FLOW	TEMP °C AIR	TEMP °C WATER	PH	DO	FECAL COLI	OIL & GREASE	OTHER	OTHER
☐ 00059 (GPM) ☐ 00061 (CFS)	00020	00010						

COLLECTION DATE YR 84 7 DAY 18 TIME _____ SAMPLER NAME CODE _____ LAB NO AQ1905

			00400					

COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____

COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____

COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____

COMPOSITE SAMPLE DATA

BEGIN DATE YR _____ MO _____ DAY _____ TIME _____ LAB NO _____

END DATE YR _____ MO _____ DAY _____ TIME _____ EQUIPMENT CODE _____

FLOW RATE _____ 50050 MGD _____ 50050 1000's OF GAL DURING COMPOSITE PERIOD SAMPLER NAME CODE _____

WATER CHEMISTRY LAB NO AQ1905

SAMPLE CONTAINER	TAG COLOR	PRESERVATIVE	LABORATORY MOBILE	LABORATORY REGION	ANALYSES
1 pint glass jar	Purple + Lime	None		✓	Extract organics, Acid and Base neutral Volatile
" " " "	White	"		✓	Metals

CONTACT _____ SAMPLE ☐ YES SPLIT ☒ NO _____

REMARKS Soil Sample; 0-12 inch, East 2

7 EPA 9263 16/75 GSA NO. 78-115

ENVIRONMENTAL PROTECTION AGENCY — REGION VII

SURVEILLANCE AND ANALYSIS DIVISION, 25 FUNSTON ROAD, KANSAS CITY, KANSAS 65115

STATION IDENTIFICATION

SURVEY NO _____ SURVEY LEADER Ken Dunn, Et E STORET NO _____

DESCRIPTION Kansas National Guard Armory, Kansas City, Kansas

GRAB SAMPLE DATA

FLOW	TEMP °C AIR	TEMP °C WATER	PH	DO	FECAL COLI	OIL & GREASE	OTHER	OTHER
☐ 00059 (GPM) ☐ 00061 (CFS)	00020	00010						

COLLECTION DATE YR 84 7 DAY 18 TIME _____ SAMPLER NAME CODE _____ LAB NO AQ1906

			00400					

COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____

COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____

COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____

COMPOSITE SAMPLE DATA

BEGIN DATE YR _____ MO _____ DAY _____ TIME _____ LAB NO _____

END DATE YR _____ MO _____ DAY _____ TIME _____ EQUIPMENT CODE _____

FLOW RATE _____ 50050 MGD _____ 50052 1000's OF GAL DURING COMPOSITE PERIOD SAMPLER NAME CODE _____

WATER CHEMISTRY

LAB NO AQ1906

SAMPLE CONTAINER	TAG COLOR	PRESERVATIVE	LABORATORY MOBILE	LABORATORY REGION	ANALYSES
1 pint glass jar	Purple + Lime	None		✓	Extract organics, Acid and Base neutral Volatile
" " " "	White	"		✓	Metals

CONTACT _____ SAMPLE ☐ YES SPLIT ☒ NO _____

REMARKS Soil Sample; Background

7 EPA 9263 14 75

ENVIRONMENTAL PROTECTION AGENCY – REGION VII
SURVEILLANCE AND ANALYSIS DIVISION, 25 FUNSTON ROAD, KANSAS CITY, KANSAS 65115

STATION IDENTIFICATION

SURVEY NO _____ SURVEY LEADER Ken Dunn, E+E _____ STORET NO _____

DESCRIPTION Kansas National Guard Armory, Kansas City, Kansas

GRAB SAMPLE DATA

FLOW	TEMP °C AIR	TEMP °C WATER	PH	DO	FECAL COLI	OIL & GREASE	OTHER	OTHER
☐ 00059 (GPM) ☐ 00061 (CFS)	00020	00010						

COLLECTION DATE YR 84 MO 7 DAY 18 TIME _____ SAMPLER NAME CODE _____ LAB NO AQ1907

			00400					

COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____

COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____

COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____

COMPOSITE SAMPLE DATA

BEGIN DATE YR _____ MO _____ DAY _____ TIME _____ LAB NO _____

END DATE YR _____ MO _____ DAY _____ TIME _____ EQUIPMENT CODE _____

FLOW RATE _____ SCFSC MGD _____ SCFSC 1000's OF GAL DURING COMPOSITE PERIOD SAMPLER NAME CODE _____

WATER CHEMISTRY

LAB NO AQ1907

SAMPLE CONTAINER	TAG COLOR	PRESERVATIVE	LABORATORY MOBILE	LABORATORY REGION	ANALYSES
1 pint glass jar	Purple + Lime	None		✓	Extract Organics, Acid and Base neutral Volatile
" " " "	White	"		✓	Metals

CONTACT _____ SAMPLE ☐ YES SPLIT ☒ NO _____

REMARKS Creek Sediment, Background

FIELD SHEET

ENVIRONMENTAL PROTECTION AGENCY — REGION VII

SURVEILLANCE AND ANALYSIS DIVISION, 25 FUNSTON ROAD, KANSAS CITY, KANSAS 65115

STATION IDENTIFICATION

SURVEY NO _____ SURVEY LEADER Ken Dunn, Et E STORET NO _____

DESCRIPTION Kansas National Guard Armory, Kansas City, Kansas

GRAB SAMPLE DATA

FLOW	TEMP °C		PH	DO	FECAL COLI	OIL & GREASE	OTHER	OTHER
☐ 00059 (GPM) ☐ 00061 (CFS)	AIR 00020	WATER 00010						

COLLECTION DATE YR 84 7 DAY 18 TIME _____ SAMPLER NAME CODE _____ LAB NO AQ1908

			00400					

COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____

COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____

COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____

COMPOSITE SAMPLE DATA

BEGIN DATE YR _____ MO _____ DAY _____ TIME _____ LAB NO _____

END DATE YR _____ MO _____ DAY _____ TIME _____ EQUIPMENT CODE _____

FLOW RATE _____ 50050 MGD _____ 50052 1000's OF GAL DURING COMPOSITE PERIOD SAMPLER NAME CODE _____

WATER CHEMISTRY LAB NO AQ1908

SAMPLE CONTAINER	TAG COLOR	PRESERVATIVE	LABORATORY MOBILE	LABORATORY REGION	ANALYSES
1 pint glass jar	Purple + Lime	None		✓	Extract organics, Acid and Base neutral Volatile
" " " "	White	"		✓	Metals

CONTACT _____ SAMPLE ☐ YES SPLIT ☒ NO

REMARKS Creek Sediment; Taken from corner rock

7 884 9263 16 75 GSA WC 78 1690

FIELD SHEET

ENVIRONMENTAL PROTECTION AGENCY — REGION VII

SURVEILLANCE AND ANALYSIS DIVISION, 25 FUNSTON ROAD, KANSAS CITY, KANSAS 65115

STATION IDENTIFICATION

SURVEY NO _____ SURVEY LEADER Ken Dunn, Et E STORET NO _____

DESCRIPTION Kansas National Guard Armory, Kansas City, Kansas

GRAB SAMPLE DATA

FLOW	TEMP °C		PH	DO	FECAL COLI	OIL & GREASE	OTHER	OTHER
☐ C0059 (GPM) ☐ 00061 (CFS)	AIR 00020	WATER 00010						

COLLECTION DATE YR 84 7 DAY 18 TIME _____ SAMPLER NAME CODE _____ LAB NO AQ1909

			00400					

COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____

COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____

COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____

COMPOSITE SAMPLE DATA

BEGIN DATE YR _____ MO _____ DAY _____ TIME _____ LAB NO. _____

END DATE YR _____ MO _____ DAY _____ TIME _____ EQUIPMENT CODE _____

FLOW RATE _____ 50050 MGD _____ 50050 1000's OF GAL DURING COMPOSITE PERIOD SAMPLER NAME CODE _____

WATER CHEMISTRY LAB NO AQ1909

SAMPLE CONTAINER	TAG COLOR	PRESERVATIVE	LABORATORY MOBILE	LABORATORY REGION	ANALYSES
1 pint glass jar	Purple + Lime	None		✓	Extract organics, Acid and Base neutral Volatile
" " " "	White	"		✓	Metals

CONTACT _____ SAMPLE ☐ YES SPLIT ☒ NO _____

REMARKS Creek Sediment; Approx 1,000 ft downstream from site

EPA 9263 (6-75) GSA HC 78 (6-8)

CHAIN OF CUSTODY RECORD
ENVIRONMENTAL PROTECTION AGENCY – REGION VII

WORK LEADER (PRINT)	NAME OF SURVEY OR ACTIVITY	DATE OF COLLECTION (DAY / MONTH / YEAR)	SHEET 1 of 1

DESCRIPTION OF SHIPMENT

___ PIECE(S) CONSISTING OF ____ BOX(S)

___ ICE CHEST(S); OTHER _____

VOUCHER OR RECEIPT NO.

CONTENTS OF SHIPMENT

LABORATORY SAMPLE NO.	TYPES OF CONTAINERS: CUBITAINER	GLASS JAR	DO BOTTLE	BIO. BOTTLE	LABORATORY SAMPLE NO.	TYPES OF CONTAINERS: CUBITAINER	GLASS JAR	DO BOTTLE	BIO. BOTTLE
	NO. OF CONTAINERS PER LAB NO.					NO. OF CONTAINERS PER LAB NO.			
[illegible]		[illegible]							
[illegible]		[illegible]							
[illegible]		[illegible]							
[illegible]		[illegible]							
[illegible]		[illegible]							
[illegible]		2							
[illegible]		2							

PERSONNEL CUSTODY RECORD

RELINQUISHED BY (SAMPLER)	RECEIVED BY	DATE	TIME	REASON FOR CHANGE OF CUSTODY
[illegible] ☐ SEALED ☐ UNSEALED	[illegible] ☐ SEALED ☐ UNSEALED	[illegible]	[illegible]	[illegible]
RELINQUISHED BY ☐ SEALED ☐ UNSEALED	RECEIVED BY ☐ SEALED ☐ UNSEALED	DATE	TIME	REASON FOR CHANGE OF CUSTODY
RELINQUISHED BY ☐ SEALED ☐ UNSEALED	RECEIVED BY ☐ SEALED ☐ UNSEALED	DATE	TIME	REASON FOR CHANGE OF CUSTODY
RELINQUISHED BY ☐ SEALED ☐ UNSEALED	RECEIVED BY ☐ SEALED ☐ UNSEALED	DATE	TIME	REASON FOR CHANGE OF CUSTODY
RELINQUISHED BY ☐ SEALED ☐ UNSEALED	RECEIVED BY ☐ SEALED ☐ UNSEALED	DATE	TIME	REASON FOR CHANGE OF CUSTODY
RELINQUISHED BY ☐ SEALED ☐ UNSEALED	RECEIVED BY ☐ SEALED ☐ UNSEALED	DATE	TIME	REASON FOR CHANGE OF CUSTODY
RELINQUISHED BY ☐ SEALED ☐ UNSEALED	RECEIVED BY ☐ SEALED ☐ UNSEALED	DATE	TIME	REASON FOR CHANGE OF CUSTODY

FIELD SHEET

ENVIRONMENTAL PROTECTION AGENCY — REGION VII

SURVEILLANCE AND ANALYSIS DIVISION, 25 FUNSTON ROAD, KANSAS CITY, KANSAS 65115

STATION IDENTIFICATION

SURVEY NO _____ SURVEY LEADER Ken Dunn E+E STORET NO _____

DESCRIPTION Kansas National Guard Armory, Kansas City Kansas

GRAB SAMPLE DATA

FLOW	TEMP °C		PH	DO	FECAL COLI	OIL & GREASE	OTHER	OTHER
☐ 00059 (GPM) ☐ 00061 (CFS)	AIR 00020	WATER 00010						

COLLECTION DATE YR 84 MO 8 DAY 15 TIME _____ SAMPLER NAME CODE _____ LAB NO BQ1900

			00400					

COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____

COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____

COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____

COMPOSITE SAMPLE DATA

BEGIN DATE YR _____ MO _____ DAY _____ TIME _____ LAB NO _____

END DATE YR _____ MO _____ DAY _____ TIME _____ EQUIPMENT CODE _____

FLOW RATE _____ 50050 MGD _____ 50052 1000's OF GAL DURING COMPOSITE PERIOD SAMPLER NAME CODE _____

WATER CHEMISTRY LAB NO BQ 1900

SAMPLE CONTAINER	TAG COLOR	PRESERVATIVE	LABORATORY MOBILE	LABORATORY REGION	ANALYSES
1 pt - glass [illegible]	[illegible]	None		✓	Extractable organics [illegible] Vol. Organics
1 pt glass [illegible]	white	"		✓	Metals

CONTACT _____ SAMPLE ☐ YES SPLIT ☒ NO _____

REMARKS 0-24- inches MW-1 background

7 EPA 9263 16 75 GSA-KC 78 2696

FIELD SHEET

ENVIRONMENTAL PROTECTION AGENCY – REGION VII

SURVEILLANCE AND ANALYSIS DIVISION, 25 FUNSTON ROAD, KANSAS CITY, KANSAS 65115

STATION IDENTIFICATION

SURVEY NO _____ SURVEY LEADER Ken Dunn E+E STORET NO _____

DESCRIPTION Kansas National Guard Armory, Kansas City Kansas

GRAB SAMPLE DATA

FLOW	TEMP °C		PH	DO	FECAL COLI	OIL & GREASE	OTHER	OTHER
☐ 00059 (GPM) ☐ 00061 (CFS)	AIR 00020	WATER 00010						

COLLECTION DATE YR 84 MO 8 DAY 15 TIME _____ SAMPLER NAME CODE _____ LAB NO BQ1901

			00400					

COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____

COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____

COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____

COMPOSITE SAMPLE DATA

BEGIN DATE YR _____ MO _____ DAY _____ TIME _____ LAB NO _____

END DATE YR _____ MO _____ DAY _____ TIME _____ EQUIPMENT CODE _____

FLOW RATE _____ 50050 MGD _____ 50052 1000's OF GAL DURING COMPOSITE PERIOD SAMPLER NAME CODE _____

WATER CHEMISTRY LAB NO BQ 1901

SAMPLE CONTAINER	TAG COLOR	PRESERVATIVE	LABORATORY MOBILE	LABORATORY REGION	ANALYSES
[illegible]	Purple + Lime	None		✓	Extractable organics Acid and Base/Neutral Vol. Org.
[illegible]	White	"		✓	Metals

CONTACT _____ SAMPLE ☐ YES SPLIT ☒ NO _____

REMARKS 24-48 - MW-1 background

7 EPA 9263 16 75 GSA KC 78 1695

FIELD SHEET

ENVIRONMENTAL PROTECTION AGENCY – REGION VII

SURVEILLANCE AND ANALYSIS DIVISION, 25 FUNSTON ROAD, KANSAS CITY, KANSAS 65115

STATION IDENTIFICATION

SURVEY NO _____ SURVEY LEADER Ken Dunn E+E STORET NO _____

DESCRIPTION Kansas National Guard Armory, Kansas City Kansas

GRAB SAMPLE DATA

FLOW	TEMP °C		PH	DO	FECAL COLI	OIL & GREASE	OTHER	OTHER
☐ 00059 (GPM) ☐ 00061 (CFS)	AIR 00020	WATER 00010						

COLLECTION DATE YR 84 8 DAY 16 TIME _____ SAMPLER NAME CODE _____ LAB NO BQ1902

			00400					

COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____

COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____

COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____

COMPOSITE SAMPLE DATA

BEGIN DATE YR _____ MO _____ DAY _____ TIME _____ LAB NO _____

END DATE YR _____ MO _____ DAY _____ TIME _____ EQUIPMENT CODE _____

FLOW RATE _____ 50050 MGD _____ 50052 1000's OF GAL DURING COMPOSITE PERIOD SAMPLER NAME CODE _____

WATER CHEMISTRY LAB NO BQ 1902

SAMPLE CONTAINER	TAG COLOR	PRESERVATIVE	LABORATORY MOBILE	LABORATORY REGION	ANALYSES
[illegible]	Purple + Lime	None		✓	Extractable [illegible] Vol. Org.
[illegible]	White	"		✓	Metals

CONTACT _____ SAMPLE ☐ YES SPLIT ☒ NO _____

REMARKS 24-48- MW-23

7-EPA-9263 16-75 GSA KC 78 3695

FIELD SHEET

ENVIRONMENTAL PROTECTION AGENCY — REGION VII

SURVEILLANCE AND ANALYSIS DIVISION, 25 FUNSTON ROAD, KANSAS CITY, KANSAS 65115

STATION IDENTIFICATION

SURVEY NO _____ SURVEY LEADER Ken Dunn E+E STORET NO _____

DESCRIPTION Kansas National Guard Armory, Kansas City Kansas

GRAB SAMPLE DATA

FLOW	TEMP °C		PH	DO	FECAL COLI	OIL & GREASE	OTHER	OTHER
☐ 00059 (GPM) ☐ 00061 (CFS)	AIR 00020	WATER 00010						

COLLECTION DATE YR 84 MO 8 DAY 16 TIME _____ SAMPLER NAME CODE _____ LAB NO 801903

			00400					

COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____

COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____

COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____

COMPOSITE SAMPLE DATA

BEGIN DATE YR _____ MO _____ DAY _____ TIME _____ LAB NO _____

END DATE YR _____ MO _____ DAY _____ TIME _____ EQUIPMENT CODE _____

FLOW RATE _____ 50050 MGD _____ 50052 1000's OF GAL DURING COMPOSITE PERIOD SAMPLER NAME CODE _____

WATER CHEMISTRY LAB NO 801903

SAMPLE CONTAINER	TAG COLOR	PRESERVATIVE	LABORATORY MOBILE	LABORATORY REGION	ANALYSES
[illegible]	[illegible]	[illegible]		✓	Extractable organics [illegible] Vol. Org.
[illegible]	White	"		✓	Metals

CONTACT _____ SAMPLE ☐ YES SPLIT ☒ NO _____

REMARKS 24-48 inch ~~[illegible]~~ MW-23

7-EPA 9263 16-75 GSA-KC-78 3695

FIELD SHEET

ENVIRONMENTAL PROTECTION AGENCY – REGION VII

SURVEILLANCE AND ANALYSIS DIVISION, 25 FUNSTON ROAD, KANSAS CITY, KANSAS 65115

STATION IDENTIFICATION

SURVEY NO _____ SURVEY LEADER Ken Dunn E+E STORET NO _____

DESCRIPTION Kansas National Guard Armory, Kansas City Kansas

GRAB SAMPLE DATA

FLOW	TEMP °C		PH	DO	FECAL COLI	OIL & GREASE	OTHER	OTHER
☐ 00059 (GPM) ☐ 00061 (CFS)	AIR 00020	WATER 00010						

COLLECTION DATE YR 84 8 DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO BQ1904

			00400					

COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____

COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____

COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____

COMPOSITE SAMPLE DATA

BEGIN DATE YR _____ MO _____ DAY _____ TIME _____ LAB NO _____

END DATE YR _____ MO _____ DAY _____ TIME _____ EQUIPMENT CODE _____

FLOW RATE _____ 50050 MGD _____ 50052 1000's OF GAL DURING COMPOSITE PERIOD SAMPLER NAME CODE _____

WATER CHEMISTRY

LAB NO BQ1904

SAMPLE CONTAINER	TAG COLOR	PRESERVATIVE	LABORATORY MOBILE	LABORATORY REGION	ANALYSES
[illegible]	Purple & Lime	None		✓	Extractable [illegible] Vol. org
[illegible]	White	"		✓	Metals

CONTACT _____ SAMPLE ☐ YES SPLIT ☒ NO _____

REMARKS 0-24 MW-4

Very little sample all loose dirt

7 EPA-9263 10-75 GSA NC 78 3695

FIELD SHEET

ENVIRONMENTAL PROTECTION AGENCY – REGION VII

SURVEILLANCE AND ANALYSIS DIVISION, 25 FUNSTON ROAD, KANSAS CITY, KANSAS 65115

STATION IDENTIFICATION

SURVEY NO _____ SURVEY LEADER Ken Dunn E/E STORET NO _____

DESCRIPTION Kansas National Guard Armory, Kansas City Kansas

GRAB SAMPLE DATA

FLOW	TEMP °C		PH	DO	FECAL COLI	OIL & GREASE	OTHER	OTHER
☐ 00059 (GPM) ☐ 00061 (CFS)	AIR 00020	WATER 00010						
COLLECTION DATE YR 84 MO 8 DAY 17 TIME _____			SAMPLER NAME CODE _____			LAB NO 801905		
			00400					
COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____			SAMPLER NAME CODE _____			LAB NO _____		
COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____			SAMPLER NAME CODE _____			LAB NO _____		
COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____			SAMPLER NAME CODE _____			LAB NO _____		

COMPOSITE SAMPLE DATA

BEGIN DATE YR _____ MO _____ DAY _____ TIME _____ LAB NO _____

END DATE YR _____ MO _____ DAY _____ TIME _____ EQUIPMENT CODE _____

FLOW RATE _____ 50050 MGD _____ 50052 1000's OF GAL DURING COMPOSITE PERIOD SAMPLER NAME CODE _____

WATER CHEMISTRY

LAB NO 801905

SAMPLE CONTAINER	TAG COLOR	PRESERVATIVE	LABORATORY MOBILE	LABORATORY REGION	ANALYSES
[illegible]	Purple + Lime	None		✓	Extractable [illegible] Vol. Org.
[illegible]	White	"		✓	Metals

CONTACT _____ SAMPLE ☐ YES SPLIT ☒ NO _____

REMARKS ~~2 [illegible] MW 4~~ 0"-24" MW-2

~~[illegible]~~

7 EPA 9263 10 75

GPO 878 3695

FIELD SHEET
ENVIRONMENTAL PROTECTION AGENCY — REGION VII
SURVEILLANCE AND ANALYSIS DIVISION, 25 FUNSTON ROAD, KANSAS CITY, KANSAS 65115

STATION IDENTIFICATION

SURVEY NO _____ SURVEY LEADER Ken Dunn E+E STORET NO _____

DESCRIPTION Kansas National Guard Armory, Kansas City Kansas

GRAB SAMPLE DATA

FLOW	TEMP °C		PH	DO	FECAL COLI	OIL & GREASE	OTHER	OTHER
☐ 00059 (GPM) ☐ 00061 (CFS)	AIR 00020	WATER 00010						

COLLECTION DATE YR 84 MO 8 DAY 17 TIME _____ SAMPLER NAME CODE _____ LAB NO BQ1906

			00400					

COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____

COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____

COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____

COMPOSITE SAMPLE DATA

BEGIN DATE YR _____ MO _____ DAY _____ TIME _____ LAB NO _____

END DATE YR _____ MO _____ DAY _____ TIME _____ EQUIPMENT CODE _____

FLOW RATE _____ 50050 MGD _____ 50052 1000's OF GAL DURING COMPOSITE PERIOD SAMPLER NAME CODE _____

WATER CHEMISTRY LAB NO BQ 1906

SAMPLE CONTAINER	TAG COLOR	PRESERVATIVE	LABORATORY MOBILE	LABORATORY REGION	ANALYSES
[illegible]	Purple + Lime	None		✓	Extractable [illegible] Acid and [illegible] Vol. Org.
1 pint glass jar	White	"		✓	Metals

CONTACT _____ SAMPLE ☐ YES SPLIT ☒ NO _____

REMARKS MW-2 ~~[illegible]~~ 24"-48" ~~[illegible]~~

7-EPA 9263 16 75 GSA MC 78 3695

CHAIN OF CUSTODY RECORD
ENVIRONMENTAL PROTECTION AGENCY – REGION VII

WORK LEADER (PRINT)	NAME OF SURVEY OR ACTIVITY	DATE OF COLLECTION (DAY / MONTH / YEAR)	SHEET / of /

DESCRIPTION OF SHIPMENT

___ PIECE(S) CONSISTING OF ___ BOX(S)

___ ICE CHEST(S); OTHER _____

VOUCHER OR RECEIPT NO.

CONTENTS OF SHIPMENT

LABORATORY SAMPLE NO.	TYPES OF CONTAINERS: CUBITAINER	GLASS JAR	DO BOTTLE	BIO. BOTTLE	LABORATORY SAMPLE NO.	TYPES OF CONTAINERS: CUBITAINER	GLASS JAR	DO BOTTLE	BIO. BOTTLE
	NO. OF CONTAINERS PER LAB NO.					NO. OF CONTAINERS PER LAB NO.			

PERSONNEL CUSTODY RECORD

RELINQUISHED BY (SAMPLER)	RECEIVED BY	DATE	TIME	REASON FOR CHANGE OF CUSTODY
☐ SEALED UNSEALED ☐	☐ SEALED UNSEALED ☐			
RELINQUISHED BY	RECEIVED BY	DATE	TIME	REASON FOR CHANGE OF CUSTODY
☐ SEALED UNSEALED ☐	☐ SEALED UNSEALED ☐			
RELINQUISHED BY	RECEIVED BY	DATE	TIME	REASON FOR CHANGE OF CUSTODY
☐ SEALED UNSEALED ☐	☐ SEALED UNSEALED ☐			
RELINQUISHED BY	RECEIVED BY	DATE	TIME	REASON FOR CHANGE OF CUSTODY
☐ SEALED UNSEALED ☐	☐ SEALED UNSEALED ☐			
RELINQUISHED BY	RECEIVED BY	DATE	TIME	REASON FOR CHANGE OF CUSTODY
☐ SEALED UNSEALED ☐	☐ SEALED UNSEALED ☐			
RELINQUISHED BY	RECEIVED BY	DATE	TIME	REASON FOR CHANGE OF CUSTODY
☐ SEALED UNSEALED ☐	☐ SEALED UNSEALED ☐			
RELINQUISHED BY	RECEIVED BY	DATE	TIME	REASON FOR CHANGE OF CUSTODY
☐ SEALED UNSEALED ☐	☐ SEALED UNSEALED ☐			

FIELD SHEET

ENVIRONMENTAL PROTECTION AGENCY – REGION VII

SURVEILLANCE AND ANALYSIS DIVISION, 25 FUNSTON ROAD, KANSAS CITY, KANSAS 65115

STATION IDENTIFICATION

SURVEY NO _____ SURVEY LEADER Ken Dunn E&E STORET NO _____

DESCRIPTION Kansas National Guard Armory, Kansas City, Kansas

GRAB SAMPLE DATA

FLOW	TEMP °C		PH	DO	FECAL COLI	OIL & GREASE	OTHER	OTHER
☐ 00059 (GPM) ☐ 00061 (CFS)	AIR 00020	WATER 00010						

COLLECTION DATE YR 84 MO 8 DAY 22 TIME _____ SAMPLER NAME CODE _____ LAB NO BQ1907

			00400					

COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____

COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____

COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____

COMPOSITE SAMPLE DATA

BEGIN DATE YR _____ MO _____ DAY _____ TIME _____ LAB NO _____

END DATE YR _____ MO _____ DAY _____ TIME _____ EQUIPMENT CODE _____

FLOW RATE _____ (50050) MGD _____ (50052) 1000's OF GAL DURING COMPOSITE PERIOD SAMPLER NAME CODE _____

WATER CHEMISTRY

LAB NO BQ1907

SAMPLE CONTAINER	TAG COLOR	PRESERVATIVE	LABORATORY MOBILE	LABORATORY REGION	ANALYSES
1/2 gal Poly Jug	Purple	ICE		✓	Extractable Organics Pest & Herbicides
2-40 ml VOA	Lime	ICE		✓	Volatile Organics
1 qt. cubitainer	White	HNO_3		✓	Metals

SAMPLE ☐ YES

SPLIT ☒ NO

GSA-KC-78-2695

FIELD SHEET

ENVIRONMENTAL PROTECTION AGENCY — REGION VII

SURVEILLANCE AND ANALYSIS DIVISION, 25 FUNSTON ROAD, KANSAS CITY, KANSAS 65115

STATION IDENTIFICATION

SURVEY NO _____ SURVEY LEADER Ken Dunn F&E STORET NO _____

DESCRIPTION Kansas National Guard Armory, Kansas City, Kansas

GRAB SAMPLE DATA

FLOW	TEMP °C AIR	TEMP °C WATER	PH	DO	FECAL COLI	OIL & GREASE	OTHER	OTHER
☐ 00059 (GPM) ☐ 00061 (CFS)	00020	00010						

COLLECTION DATE YR 84 8 DAY 22 TIME _____ SAMPLER NAME CODE _____ LAB NO BQ1908

			00400					

COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____

COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____

COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____

COMPOSITE SAMPLE DATA

BEGIN DATE YR _____ MO _____ DAY _____ TIME _____ LAB NO _____

END DATE YR _____ MO _____ DAY _____ TIME _____ EQUIPMENT CODE _____

FLOW RATE _____ (50050) MGD _____ (50052) 1000 x OF GAL DURING COMPOSITE PERIOD SAMPLER NAME CODE _____

WATER CHEMISTRY LAB NO BQ1908

SAMPLE CONTAINER	TAG COLOR	PRESERVATIVE	LABORATORY MOBILE	LABORATORY REGION	ANALYSES
1/2 gal Amber Jug	Purple	ICE		✓	Extractable Organics Acid and Base Neutrals
2-40 ml VOA	Lime	ICE		✓	Volatile Organics
1 qt. cubitainer	White	HNO_3		✓	Metals

CONTACT _____ SAMPLE ☐ YES SPLIT ☒ NO _____

REMARKS MW-3

7-EPA-9263 16 75 G-A KC 78 1695

CHAIN OF CUSTODY RECORD
ENVIRONMENTAL PROTECTION AGENCY – REGION VII

WORK LEADER (PRINT)	NAME OF SURVEY OR ACTIVITY	DATE OF COLLECTION (DAY / MONTH / YEAR)	SHEET ___ of ___

DESCRIPTION OF SHIPMENT

___ PIECE(S) CONSISTING OF ___ BOX(S)

___ ICE CHEST(S); OTHER _____

VOUCHER OR RECEIPT NO.

CONTENTS OF SHIPMENT

LABORATORY SAMPLE NO.	TYPES OF CONTAINERS: CUBITAINER	GLASS JAR	DO BOTTLE	BIO. BOTTLE	LABORATORY SAMPLE NO.	TYPES OF CONTAINERS: CUBITAINER	GLASS JAR	DO BOTTLE	BIO. BOTTLE
	NO. OF CONTAINERS PER LAB NO.					NO. OF CONTAINERS PER LAB NO.			

PERSONNEL CUSTODY RECORD

RELINQUISHED BY (SAMPLER)	RECEIVED BY	DATE	TIME	REASON FOR CHANGE OF CUSTODY
☐ SEALED ☐ UNSEALED	☐ SEALED ☐ UNSEALED			
RELINQUISHED BY	RECEIVED BY	DATE	TIME	REASON FOR CHANGE OF CUSTODY
☐ SEALED ☐ UNSEALED	☐ SEALED ☐ UNSEALED			
RELINQUISHED BY	RECEIVED BY	DATE	TIME	REASON FOR CHANGE OF CUSTODY
☐ SEALED ☐ UNSEALED	☐ SEALED ☐ UNSEALED			
RELINQUISHED BY	RECEIVED BY	DATE	TIME	REASON FOR CHANGE OF CUSTODY
☐ SEALED ☐ UNSEALED	☐ SEALED ☐ UNSEALED			
RELINQUISHED BY	RECEIVED BY	DATE	TIME	REASON FOR CHANGE OF CUSTODY
☐ SEALED ☐ UNSEALED	☐ SEALED ☐ UNSEALED			
RELINQUISHED BY	RECEIVED BY	DATE	TIME	REASON FOR CHANGE OF CUSTODY
☐ SEALED ☐ UNSEALED	☐ SEALED ☐ UNSEALED			

FIELD SHEET

ENVIRONMENTAL PROTECTION AGENCY — REGION VII

SURVEILLANCE AND ANALYSIS DIVISION, 25 FUNSTON ROAD, KANSAS CITY, KANSAS 65115

STATION IDENTIFICATION

SURVEY NO _____ SURVEY LEADER Ken Dunn STORET NO _____

DESCRIPTION National Guard Armory Site, K.C. KS

GRAB SAMPLE DATA

FLOW	TEMP °C AIR	TEMP °C WATER	PH	DO	FECAL COLI	OIL & GREASE	OTHER	OTHER
☐ 00059 (GPM) ☐ 00061 (CFS)	00020	00010						
COLLECTION DATE YR 85 MO 4 DAY 5 TIME _____ SAMPLER NAME CODE _____ LAB NO _____								
		-	00400					
COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____								
COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____								
COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____								

COMPOSITE SAMPLE DATA

BEGIN DATE YR _____ MO _____ DAY _____ TIME _____ LAB NO AKJX2001

END DATE YR _____ MO _____ DAY _____ TIME _____ EQUIPMENT CODE _____

FLOW RATE _____ (50050) MGD _____ (50057) 1000's OF GAL DURING COMPOSITE PERIOD SAMPLER NAME CODE _____

WATER CHEMISTRY

LAB NO AKJX2001

SAMPLE CONTAINER	TAG COLOR	PRESERVATIVE	LABORATORY MOBILE	LABORATORY REGION	ANALYSES
unfiltered 1 gt cubic	white	HNO3			Metals 1+2
Filtered 1 gt. cubic	white	HNO3			Metals 1+2
DOA vials	Green	—			Volatiles
2-80 oz amber jugs	Purple	—			Acids Base/Neutrals

CONTACT _____ SAMPLE ☐ YES SPLIT ☒ NO _____

REMARKS _____

MW #1

FIELD SHEET

ENVIRONMENTAL PROTECTION AGENCY — REGION VII •
SURVEILLANCE AND ANALYSIS DIVISION, 25 FUNSTON ROAD, KANSAS CITY, KANSAS 65115

STATION IDENTIFICATION

SURVEY NO _____ SURVEY LEADER Ken Dunn STORET NO _____

DESCRIPTION National Guard Armory, KC, KS

GRAB SAMPLE DATA

FLOW	TEMP °C		PH	DO	FECAL COLI	OIL & GREASE	OTHER	OTHER
☐ 00059 (GPM) ☐ 00061 (CFS)	AIR 00020	WATER 00010						
COLLECTION DATE YR 85 MO 4 DAY 5 TIME _____						SAMPLER NAME CODE _____	LAB NO _____	
			00400					
COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____						SAMPLER NAME CODE _____	LAB NO _____	
COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____						SAMPLER NAME CODE _____	LAB NO _____	
COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____						SAMPLER NAME CODE _____	LAB NO _____	

COMPOSITE SAMPLE DATA

BEGIN DATE YR _____ MO _____ DAY _____ TIME _____ LAB NO * AKJX2002

END DATE YR _____ MO _____ DAY _____ TIME _____ EQUIPMENT CODE _____

FLOW RATE _____ (50050) MGD _____ (50052) 1000's OF GAL DURING COMPOSITE PERIOD SAMPLER NAME CODE _____

WATER CHEMISTRY

LAB NO _____

SAMPLE CONTAINER	TAG COLOR	PRESERVATIVE	LABORATORY MOBILE	LABORATORY REGION	ANALYSES
unfiltered 1 qt. cubic	White	HNO3			Metals Task 1+2
filtered 1 qt. cubic	White	"			Metals Task 1+2
VOA vials	Green	—			Volatiles
2-80 oz amber jugs	Purple	—			Acids + Base/Neutrals

CONTACT _____ SAMPLE ☐ YES SPLIT ☒ NO _____

REMARKS _____

MW #3

7-EPA-9263 (6-75) GSA-MC-78-36

FIELD SHEET

ENVIRONMENTAL PROTECTION AGENCY — REGION VII •
SURVEILLANCE AND ANALYSIS DIVISION, 25 FUNSTON ROAD, KANSAS CITY, KANSAS 65115

STATION IDENTIFICATION

SURVEY NO _____ SURVEY LEADER Ken Dann STORET NO _____

DESCRIPTION National Guard Armory site, KC, KS

GRAB SAMPLE DATA

FLOW	TEMP °C AIR 00020	TEMP °C WATER 00010	PH	DO	FECAL COLI	OIL & GREASE	OTHER	OTHER
☐ 00059 (GPM) ☐ 00061 (CFS)								
COLLECTION DATE YR 85 MO 4 DAY 5 TIME _____ SAMPLER NAME CODE _____ LAB NO _____								
			00400					
COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____								
COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____								
COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____								

COMPOSITE SAMPLE DATA

BEGIN DATE YR _____ MO _____ DAY _____ TIME _____ LAB NO AKJX2007

END DATE YR _____ MO _____ DAY _____ TIME _____ EQUIPMENT CODE _____

FLOW RATE _____ (50050) MGD _____ (50052) 1000's OF GAL DURING COMPOSITE PERIOD SAMPLER NAME CODE _____

WATER CHEMISTRY

LAB NO _____

SAMPLE CONTAINER	TAG COLOR	PRESERVATIVE	LABORATORY MOBILE	LABORATORY REGION	ANALYSES
VOA vials	Green	—			Field Blank

CONTACT _____ SAMPLE ☐ YES SPLIT ☐ NO _____

REMARKS _____

Field Blank

FIELD SHEET

ENVIRONMENTAL PROTECTION AGENCY — REGION VII •
SURVEILLANCE AND ANALYSIS DIVISION, 25 FUNSTON ROAD, KANSAS CITY, KANSAS 65115

STATION IDENTIFICATION

SURVEY NO _____ SURVEY LEADER Ken Dunn STORET NO _____

DESCRIPTION National Guard Armory K.C., KS

GRAB SAMPLE DATA

FLOW	TEMP °C AIR 00020	TEMP °C WATER 00010	PH	DO	FECAL COLI	OIL & GREASE	OTHER	OTHER
☐ 00059 (GPM) ☐ 00061 (CFS)								
COLLECTION DATE YR 85 MO 4 DAY 5 TIME _____ SAMPLER NAME CODE _____ LAB NO _____								
			00400					
COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____								
COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____								
COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____								

COMPOSITE SAMPLE DATA

BEGIN DATE YR _____ MO _____ DAY _____ TIME _____ LAB NO AKJA2004

END DATE YR _____ MO _____ DAY _____ TIME _____ EQUIPMENT CODE _____

FLOW RATE _____ 50050 MGD _____ 50052 1000's OF GAL DURING COMPOSITE PERIOD SAMPLER NAME CODE _____

WATER CHEMISTRY

LAB NO _____

SAMPLE CONTAINER	TAG COLOR	PRESERVATIVE	LABORATORY MOBILE	LABORATORY REGION	ANALYSES
~~1gt cubie~~ Filtered	~~white~~	~~HNO3~~			~~Metals Table 1+2~~
1gt cubie unfiltered	"	"			Metals " Table 1+2
VOA vials	green	—			Volatile organics
2-80 oz amber jugs	purple	—			Acids + bas[illegible]

CONTACT _____ SAMPLE ☐ YES SPLIT ☒ NO _____

REMARKS _____

leachate

FIELD SHEET

ENVIRONMENTAL PROTECTION AGENCY — REGION VII •
SURVEILLANCE AND ANALYSIS DIVISION, 25 FUNSTON ROAD, KANSAS CITY, KANSAS 65115

STATION IDENTIFICATION

SURVEY NO _____ SURVEY LEADER Ken Dunn STORET NO _____

DESCRIPTION National Guard Armory KC, KS

GRAB SAMPLE DATA

FLOW	TEMP °C AIR	TEMP °C WATER	PH	DO	FECAL COLI	OIL & GREASE	OTHER	OTHER
☐ 00059 (GPM) ☐ 00061 (CFS)	00020	00010						
COLLECTION DATE YR 85 MO 4 DAY 5 TIME _____ SAMPLER NAME CODE _____ LAB NO _____								
			00400	-				
COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____								
COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____								
COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____								

COMPOSITE SAMPLE DATA

BEGIN DATE YR _____ MO _____ DAY _____ TIME _____ LAB NO AKJX2005

END DATE YR _____ MO _____ DAY _____ TIME _____ EQUIPMENT CODE _____

FLOW RATE _____ (50050) MGD _____ (50052) 1000's OF GAL DURING COMPOSITE PERIOD SAMPLER NAME CODE _____

WATER CHEMISTRY

LAB NO _____

SAMPLE CONTAINER	TAG COLOR	PRESERVATIVE	LABORATORY MOBILE	LABORATORY REGION	ANALYSES
VOA set	Green	—			Volatile Organics

CONTACT _____ SAMPLE ☐ YES SPLIT ☒ NO

REMARKS _____

NW 4

FIELD SHEET

ENVIRONMENTAL PROTECTION AGENCY — REGION VII •
SURVEILLANCE AND ANALYSIS DIVISION, 25 FUNSTON ROAD, KANSAS CITY, KANSAS 65115

STATION IDENTIFICATION

SURVEY NO _____ SURVEY LEADER Ken Dunn STORET NO _____

DESCRIPTION National Guard Armory

GRAB SAMPLE DATA

FLOW	TEMP °C AIR	TEMP °C WATER	PH	DO	FECAL COLI	OIL & GREASE	OTHER	OTHER
☐ 00059 (GPM) ☐ 00061 (CFS)	00020	00010						
COLLECTION DATE YR 85 MO 4 DAY 5 TIME _____ SAMPLER NAME CODE _____ LAB NO _____								
			00400					
COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____								
COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____								
COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____ SAMPLER NAME CODE _____ LAB NO _____								

COMPOSITE SAMPLE DATA

BEGIN DATE YR _____ MO _____ DAY _____ TIME _____ LAB NO AX5X2006

END DATE YR _____ MO _____ DAY _____ TIME _____ EQUIPMENT CODE _____

FLOW RATE _____ 50050 MGD _____ 50052 1000's OF GAL DURING COMPOSITE PERIOD SAMPLER NAME CODE _____

WATER CHEMISTRY

LAB NO _____

SAMPLE CONTAINER	TAG COLOR	PRESERVATIVE	LABORATORY MOBILE	LABORATORY REGION	ANALYSES
VOA Set	Green	—			Volatile Organics

CONTACT _____ SAMPLE ☐ YES SPLIT ☒ NO _____

REMARKS _____

MW 2

7-EPA-9263 (8-75) GSA-KC-78-36

FIELD SHEET

ENVIRONMENTAL PROTECTION AGENCY — REGION VII •
SURVEILLANCE AND ANALYSIS DIVISION, 25 FUNSTON ROAD, KANSAS CITY, KANSAS 65115

STATION IDENTIFICATION

SURVEY NO _____ SURVEY LEADER Ken Dunn STORET NO _____

DESCRIPTION Kansas National Guard Armory KC, KS

GRAB SAMPLE DATA

FLOW	TEMP °C		PH	DO	FECAL COLI	OIL & GREASE	OTHER	OTHER
☐ 00059 (GPM) ☐ 00061 (CFS)	AIR 00020	WATER 00010						
COLLECTION DATE YR 85 MO 4 DAY 5 TIME _____			SAMPLER NAME CODE _____			LAB NO _____		
			00400					
COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____			SAMPLER NAME CODE _____			LAB NO _____		
COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____			SAMPLER NAME CODE _____			LAB NO _____		
COLLECTION DATE YR _____ MO _____ DAY _____ TIME _____			SAMPLER NAME CODE _____			LAB NO _____		

COMPOSITE SAMPLE DATA

BEGIN DATE YR _____ MO _____ DAY _____ TIME _____ LAB NO AK5X2007

END DATE YR _____ MO _____ DAY _____ TIME _____ EQUIPMENT CODE _____

FLOW RATE _____ (50050) MGD _____ (50052) 1000's OF GAL DURING COMPOSITE PERIOD SAMPLER NAME CODE _____

WATER CHEMISTRY

LAB NO _____

SAMPLE CONTAINER	TAG COLOR	PRESERVATIVE	LABORATORY MOBILE	LABORATORY REGION	ANALYSES
1 gable qt	White	HNO3			unfiltered Metals Task 1+2

CONTACT _____ SAMPLE ☐ YES SPLIT ☒ NO

REMARKS _____

M W 4 unfiltered

APPENDIX D

HAZARD RANKING SYSTEM (HRS) FORM

Facility name: Kansas National Guard Armory

Location: 18th and Ridge St. Kansas City, Kansas

EPA Region: VII

Person(s) in charge of the facility: Kansas National Guard leases the property from the city of Kansas City, Kansas.

Name of Reviewer: Ken Dunn Date: 11/19/84

General description of the facility:

(For example: landfill, surface impoundment, pile, container; types of hazardous substances; location of the facility; contamination route of major concern; types of information needed for rating; agency action, etc.)

The site is the location of a landfill that operated from the late 1940's to 1963. The landfill was closed in 1963 and was capped with local soil. From 1953 to 1963 the Owens Corning Fiberglass Co., K.C.K., dumped their process wastes at the landfill. The hazardous substances of concern are heavy metals and phenols. The major pathways of concern are ground and surface water. The landfill is located in a residential area of Kansas City, Kansas.

Scores: S_M =7.19 (S_{gw} =9.54 S_{sw} =7.97 S_a = 0)

S_{FE} = NA

S_{DC} = 12.5

FIGURE 1
HRS COVER SHEET

Ground Water Route Work Sheet					
Rating Factor	Assigned Value (Circle One)	Multi-plier	Score	Max. Score	Ref. (Section)
1 Observed Release	0 45	1		45	3.1
If observed release is given a score of 45, proceed to line 4. If observed release is given a score of 0, proceed to line 2.					
2 Route Characteristics					3.2
Depth to Aquifer of Concern	0 1 2 (3)	2	6	6	
Net Precipitation	0 (1) 2 3	1	1	3	
Permeability of the Unsaturated Zone	0 1 (2) 3	1	2	3	
Physical State	0 1 2 (3)	1	3	3	
Total Route Characteristics Score			12	15	
3 Containment	0 1 2 (3)	1	3	3	3.3
4 Waste Characteristics					3.4
Toxicity/Persistence	0 3 6 9 12 15 (18)	1	18	18	
Hazardous Waste Quantity	0 (1) 2 3 4 5 6 7 (8)	1	1	8	
Total Waste Characteristics Score			19	26	
5 Targets					3.5
Ground Water Use	(0) 1 2 3	3	0	9	
Distance to Nearest Well/Population Served	0 4 6 (8) 10 / 12 16 18 20 / 24 30 32 35 40	1	8	40	
Total Targets Score			8	49	
6 If line 1 is 45, multiply 1 x 4 x 5 / If line 1 is 0, multiply 2 x 3 x 4 x 5			5472	57,330	
7 Divide line 6 by 57,330 and multiply by 100		S_{gw} = 9.54			

FIGURE 2
GROUND WATER ROUTE WORK SHEET

Surface Water Route Work Sheet					
Rating Factor	Assigned Value (Circle One)	Multi-plier	Score	Max. Score	Ref. (Section)
1 Observed Release	0 45	1	45	45	4.1
If observed release is given a value of 45, proceed to line 4. If observed release is given a value of 0, proceed to line 2.					
2 Route Characteristics					4.2
Facility Slope and Intervening Terrain	0 1 2 3	1	3	3	
1-yr. 24-hr. Rainfall	0 1 2 3	1	2	3	
Distance to Nearest Surface Water	0 1 2 3	2	6	6	
Physical State	0 1 2 3	1	3	3	
	Total Route Characteristics Score		14	15	
3 Containment	0 1 2 3	1	3	3	4.3
4 Waste Characteristics					4.4
Toxicity/Persistence	0 3 6 9 12 15 18	1	18	18	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1	1	8	
	Total Waste Characteristics Score		19	26	
5 Targets					4.5
Surface Water Use	0 1 2 3	3	6	9	
Distance to a Sensitive Environment	0 1 2 3	2	0	6	
Population Served/Distance to Water Intake Downstream	0 4 6 8 10 12 16 18 20 24 30 32 35 40	1	0	40	
	Total Targets Score		6	55	
6 If line 1 is 45, multiply 1 x 4 x 5 If line 1 is 0, multiply 2 x 3 x 4 x 5			5130	64,350	
7 Divide line 6 by 64,350 and multiply by 100		S_{sw} = 7.97			

FIGURE 7
SURFACE WATER ROUTE WORK SHEET

Air Route Work Sheet NA					
Rating Factor	Assigned Value (Circle One)	Multi-plier	Score	Max. Score	Ref. (Section)
1 Observed Release	0 45	1		45	5.1
Date and Location:					
Sampling Protocol:					
If line 1 is 0, the S_a = 0. Enter on line 5. If line 1 is 45, then proceed to line 2.					
2 Waste Characteristics					5.2
Reactivity and Incompatibility	0 1 2 3	1		3	
Toxicity	0 1 2 3	3		9	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1		8	
	Total Waste Characteristics Score			20	
3 Targets					5.3
Population Within 4-Mile Radius	0 9 12 15 18 21 24 27 30	1		30	
Distance to Sensitive Environment	0 1 2 3	2		6	
Land Use	0 1 2 3	1		3	
	Total Targets Score			39	
4 Multiply 1 x 2 x 3				35.100	
5 Divide line 4 by 35.100 and multiply by 100		S_a =			

FIGURE 9
AIR ROUTE WORK SHEET

	S	S^2
Groundwater Route Score (S_{gw})	9.54	91.01
Surface Water Route Score (S_{sw})	7.97	63.55
Air Route Score (S_a)	0	0
$S_{gw}^2 + S_{sw}^2 + S_a^2$		154.56
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2}$		12.43
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2} / 1.73 = S_M =$		7.19

FIGURE 10
WORKSHEET FOR COMPUTING S_M

Fire and Explosion Work Sheet NA					
Rating Factor	Assigned Value (Circle One)	Multi-plier	Score	Max. Score	Ref. (Section)
1 Containment	1 3	1		3	7.1
2 Waste Characteristics					7.2
Direct Evidence	0 3	1		3	
Ignitability	0 1 2 3	1		3	
Reactivity	0 1 2 3	1		3	
Incompatibility	0 1 2 3	1		3	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1		8	
Total Waste Characteristics Score				20	
3 Targets					7.3
Distance to Nearest Population	0 1 2 3 4 5	1		5	
Distance to Nearest Building	0 1 2 3	1		3	
Distance to Sensitive Environment	0 1 2 3	1		3	
Land Use	0 1 2 3	1		3	
Population Within 2-Mile Radius	0 1 2 3 4 5	1		5	
Buildings Within 2-Mile Radius	0 1 2 3 4 5	1		5	
Total Targets Score				24	
4 Multiply 1 x 2 x 3				1,440	
5 Divide line 4 by 1,440 and multiply by 100		S_{FE} =			

FIGURE 11
FIRE AND EXPLOSION WORK SHEET

Direct Contact Work Sheet					
Rating Factor	Assigned Value (Circle One)	Multi-plier	Score	Max. Score	Ref. (Section)
1 Observed Incident	0 45	1	0	45	8.1
If line 1 is 45, proceed to line 4 If line 1 is 0, proceed to line 2					
2 Accessibility	0 1 2 3	1	3	3	8.2
3 Containment	0 15	1	15	15	8.3
4 Waste Characteristics Toxicity	0 1 2 3	5	15	15	8.4
5 Targets					8.5
Population Within a 1-Mile Radius	0 1 2 3 4 5	4	4	20	
Distance to a Critical Habitat	0 1 2 3	4	0	12	
Total Targets Score			4	32	
6 If line 1 is 45, multiply 1 x 4 x 5 If line 1 is 0, multiply 2 x 3 x 4 x 5			2700	21,600	
7 Divide line 6 by 21,600 and multiply by 100		S_{DC} = 12.5			

FIGURE 12
DIRECT CONTACT WORK SHEET

August 16, 1982

FIT QUALITY ASSURANCE TEAM

DOCUMENTATION RECORDS
FOR
HAZARD RANKING SYSTEM

INSTRUCTIONS: As briefly as possible summarize the information you used to assign the score for each factor (e.g., "Waste quantity = 4,230 drums plus 800 cubic yards of sludges"). The source of information should be provided for each entry and should be a bibliographic-type reference. Include the location of the document.

FACILITY NAME: Kansas National Guard Armory

LOCATION: 18th & Ridge St., Kansas City, Kansas

DATE SCORED: November 20, 1985

PERSON SCORING: Ken Dunn

PRIMARY SOURCE(S) OF INFORMATION (e.g., EPA region, state, FIT, etc.):

EPA Region VII files.
E&E Preliminary Assessment and Site Investigation forms.
Personnel contacts at site.

FACTORS NOT SCORED DUE TO INSUFFICIENT INFORMATION:

a) Local useage of groundwater needs further study
b) Waste quantity needs to be researched
c) Need background groundwater data to verify groundwater release

COMMENTS OR QUALIFICATIONS:

Air route and fire hazard were not scored.

GROUND WATER ROUTE

1. OBSERVED RELEASE

Contaminants detected (5 maximum):

Background data not available. Monitoring wells go thru the landfill or are downgradient.

Rationale for attributing the contaminants to the facility:

* * *

2. ROUTE CHARACTERISTICS

Depth to Aquifer of Concern

Name/description of aquifer(s) of concern:

Kansas River alluvium--silty clay (p.2-8, Ref.1)
Pennsylvanian-age limestone (Argentine?)(p.5-1, Ref.1)

Depth(s) from the ground surface to the highest seasonal level of the saturated zone [water table(s)] of the aquifer of concern:

Approximately 3-5 feet.

(p.5-1, Ref.1)

Depth from the ground surface to the lowest point of waste disposal/ storage:

30-40 feet; 33 feet of fill encountered in monitoring well #1

(p.2-8, Ref.1)

Net Precipitation

Mean annual or seasonal precipitation (list months for seasonal):

36 inches

Mean annual lake or seasonal evaporation (list months for seasonal):

43 inches

Net Precipitation (subtract the above figures):

-7 inches (Ref. 2)

Permeability of Unsaturated Zone

Soil type in unsaturated zone:

Variable: Soil Type is a mixture of fill materials, predominantly cinderfill and local soils. (p. 2-8, Ref.1)

Permeability associated with soil type:

Variable: low for clayey soil to high for cinderfill

Physical State

Physical state of substances at time of disposal (or at present time for generated gases):

Solid, liquid and sludge (p. 2-3, Ref.1)

* * *

3. CONTAINMENT

Containment

Method(s) of waste or leachate containment evaluated:

There is no liner in the landfill. There is a runoff control system that prevents surface ponding and excessive erosion of the landfill slopes.

(Ref. 3,4,5)

Method with highest score:

No liner.

4. WASTE CHARACTERISTICS

Toxicity and Persistence

Compound(s) evaluated:

Metal sludges
Solvents
Phenolic Resins

(p. 2-3, Ref.1)

Compound with highest score:

Metal Sludges

(Ref. 2)

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility, excluding those with a containment score of 0 (Give a reasonable estimate even if quantity is above maximum):

Basis of estimating and/or computing waste quantity:

* * *

5. TARGETS

Ground Water Use

Use(s) of aquifer(s) of concern within a 3-mile radius of the facility:

Unknown; some local useage of spring water may occur.

Distance to Nearest Well

Location of nearest well drawing from aquifer of concern or occupied building not served by a public water supply:

Unknown; five 60-100 feet deep industrial wells are located 1 1/2 miles south of site and draw from Kansas River alluvium.

Distance to above well or building:

Population Served by Ground Water Wells Within a 3-Mile Radius

Identified water-supply well(s) drawing from aquifer(s) of concern within a 3-mile radius and populations served by each:

Unknown; all residents receive city supplied drinking water or bottled water. (p. 6-2, Ref.1)

Computation of land area irrigated by supply well(s) drawing from aquifer(s) of concern within a 3-mile radius, and conversion to population (1.5 people per acre):

Unknown; one irrigation well, 35 feet deep, is located approximately 3 miles east of site (p. 6-2, Ref.1)

Total population served by ground water within a 3-mile radius:

Unknown.

SURFACE WATER ROUTE

1. OBSERVED RELEASE

Contaminants detected in surface water at the facility or downhill from it (5 maximum):

4-methyl phenol-1500 ppb; Lead-3400 ppb; Mercury-1.8 ppb; Phenol-140 ppb; Cadmium 65 ppb

(p.3-2/3-3 Ref. 1)

Rationale for attributing the contaminants to the facility:

Leachate from landfill was observed by Kansas State Health and Wyandotte County Health officials entering a ravine that flows into the Kansas River approximately 1 mile south of the site, in 1958, (Ref.3,6) and sampled in 1984 (Ref. 1)

* * *

2. ROUTE CHARACTERISTICS

Facility Slope and Intervening Terrain

Average slope of facility in percent:

Approximately 15 to 20%

(Ref. 4,5,7)

Name/description of nearest downslope surface water:

Nearest downslope surface water is a unnamed intermittent stream that is approximately 500 ft. downgradient from the landfill.

(Ref.7)

Average slope of terrain between facility and above-cited surface water body in percent:

Approximately 20%

(Ref.7)

Is the facility located either totally or partially in surface water?

No.

Is the facility completely surrounded by areas of higher elevation?

No.

(Ref.7)

1-Year 24-Hour Rainfall in Inches

2.8 to 3.0 inches

(Ref.2)

Distance to Nearest Downslope Surface Water

Approximately 500 ft.

(Ref.7)

Physical State of Waste

Liquid, sludge

See groundwater.

3. CONTAINMENT

Containment

Method(s) of waste or leachate containment evaluated:

See groundwater; leachate entering surface water.

Method with highest score:

See groundwater.

4. WASTE CHARACTERISTICS

Toxicity and Persistence

Compounds(s) evaluated

See groundwater.

Compound with highest score:

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility, excluding those with a containment score of 0 (Give a reasonable estimate even if quantity is above maximum):

See groundwater.

Basis of estimating and/or computing waste quantity:

* * *

5. TARGETS

Surface Water Use

Use(s) of surface water within 3 miles downstream of the hazardous substance:

The unnamed intermittent stream flows into the Kansas River approximately 1.5 miles downstream from the site. The Kansas River is used for irrigation, recreation and drinking water.

(Ref.1,7)

Is there tidal influence?

No.

Distance to a Sensitive Environment

Distance to 5-acre (minimum) coastal wetland, if 2 miles or less:

N/A

Distance to 5-acre (minimum) fresh-water wetland, if 1 mile or less:

N/A

Distance to critical habitat of an endangered species or national wildlife refuge, if 1 mile or less:

N/A

Population Served by Surface Water

Location(s) of water-supply intake(s) within 3 miles (free-flowing bodies) or 1 mile (static water bodies) downstream of the hazardous substance and population served by each intake:

None.

(Ref. 8)

Computation of land area irrigated by above-cited intake(s) and conversion to population (1.5 people per acre):

None

Total population served:

None

Name/description of nearest of above water bodies:

Kansas River

Distance to above-cited intakes, measured in stream miles.

None

AIR ROUTE

N/A

1. OBSERVED RELEASE

Contaminants detected:

None measured; no odors observed.

Date and location of detection of contaminants:

Methods used to detect the contaminants:

Rationale for attributing the contaminants to the site:

* * *

2. WASTE CHARACTERISTICS

<u>Reactivity and Incompatibility</u>

Most reactive compound:

Most incompatible pair of compounds:

Toxicity

Most toxic compound:

Hazardous Waste Quantity

Total quantity of hazardous waste:

Basis of estimating and/or computing waste quantity:

* * *

3. TARGETS

Population Within 4-Mile Radius

Circle radius used, give population, and indicate how determined:

0 to 4 mi 0 to 1 mi 0 to 1/2 mi 0 to 1/4 mi

Distance to a Sensitive Environment

Distance to 5-acre (minimum) coastal wetland, if 2 miles or less:

Distance to 5-acre (minimum) fresh-water wetland, if 1 mile or less:

Distance to critical habitat of an endangered species, if 1 mile or less:

Land Use

Distance to commercial/industrial area, if 1 mile or less:

Distance to national or state park, forest, or wildlife reserve, if 2 miles or less:

Distance to residential area, if 2 miles or less:

Distance to agricultural land in production within past 5 years, if 1 mile or less:

Distance to prime agricultural land in production within past 5 years, if 2 miles or less:

Is a historic or landmark site (National Register or Historic Places and National Natural Landmarks) within the view of the site?

FIRE AND EXPLOSION

1. CONTAINMENT

Hazardous substances present:

Type of containment, if applicable:

* * *

2. WASTE CHARACTERISTICS

Direct Evidence

Type of instrument and measurements:

Ignitability

Compound used:

Reactivity

Most reactive compound:

Incompatibility

Most incompatible pair of compounds:

* * *

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility:

Basis of estimating and/or computing waste quantity:

* * *

3 TARGETS

Distance to Nearest Population

Distance to Nearest Building

Distance to Sensitive Environment

Distance to wetlands:

Distance to critical habitat:

Land Use

Distance to commercial/industrial area, if 1 mile or less:

Distance to national or state park, forest, or wildlife reserve, if 2 miles or less:

Distance to residential area, if 2 miles or less:

Distance to agricultural land in production within past 5 years, if 1 mile or less:

Distance to prime agricultural land in production within past 5 yearss, if 2 miles or less:

Is a historic or landmark site (National Register or Historic Places and National Natural Landmarks) within the view of the site?

Population Within 2-Mile Radius

Buildings Within 2-Mile Radius

DIRECT CONTACT

1. OBSERVED INCIDENT

Date, location, and pertinent details of incident:

None.

* * *

2. ACCESSIBILITY

Describe type of barrier(s):

There is no barrier to landfill. The top surface is covered by local soils and cinderfill plus 1-1 1/2 feet of gravel. The sides of the landfill are covered with local soils and cinderfill, and are covered with a grass vegetation. Leachate is present at surface.

(Ref.1)

* * *

3. CONTAINMENT

Type of containment, if applicable:

The cover of the landfill is less than 2 feet in some areas. Leachate is present.

(Ref.7)

* * *

4. WASTE CHARACTERISTICS

<u>Toxicity</u>

Compounds evaluated:

Metal sludges
Solvents
Phenolic resins

Compound with highest score:

Metal sludges

* * *

5. TARGETS

Population within one-mile radius

3,001 - 10,000 The site is located within a heavily populated urban residential area.

(Ref. 1,3,7)

Distance to critical habitat (of endangered species)

None known.

REFERENCES

1. Final Report, Site Inspection, Kansas National Guard Armory, October, 1985, Ecology & Environment, Inc. in FIT file # R-07-8303-12B.

2. Uncontrolled Hazardous Waste Site Ranking System, Users Manual, The Mitre Corporation, 1982.

3. Preliminary Assessment Report for the Kansas National Guard Armory, Kansas City, Kansas - Gary Kepko, Ecology and Environment, Inc., April 25, 1983.

4. Interview with Sargent Liestman, Shop Chief Kansas National Guard Armory, Kansas City, Kansas, May 29, 1984.

5. Interview with Sargenty Liley, Kansas National Guard Armory, Kansas City, Kansas, June 18, 1984.

6. Letter from N.J. Burris District Engineer, Div. of Sanitation, Kansas State Board of Health, Topeka, Kansas, to Nellie G. Walker, M.D. Director, Kansas City--Wyandotte County Health Dept., Kansas City, Kansas, July 11, 1985.

7. Trip Report and well logs from installation of monitoring wells at the Kansas National Guard Armory Site by E&E/FIT August,

8. Phone interview with Kansas City, Kansas Engineering Dept., January 3, 1985.