

**PHASE I ENVIRONMENTAL SITE
ASSESSMENT REPORT**

**PROPOSED
MANHATTAN BUSINESS PARK
MANHATTAN, KANSAS**

Prepared for:

**City of Manhattan
1101 Poyntz Avenue
Manhattan, Kansas 66502**

Prepared by:

**DPRA Incorporated
200 Research Drive
P.O. Box 727
Manhattan, Kansas 66502**

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DPRA Project Number 3850.000

TABLE OF CONTENTS

	<u>Page</u>
1.0 INTRODUCTION	1
1.1 Scope of Work	1
1.2 Limitations	1
2.0 PROPERTY DESCRIPTION AND SURROUNDING LAND USE	2
2.1 Site location and Description	2
2.2 Surrounding Properties	2
3.0 ENVIRONMENTAL SETTING	5
3.1 Topography	5
3.2 Soils	5
3.3 Geology	5
3.4 Hydrogeology	5
4.0 SITE HISTORY	6
4.1 Previous Environmental Activities and Reports	6
4.2 Interviews	6
4.3 Aerial Photographs	8
4.4 Fire Insurance Maps	8
5.0 REGULATORY REVIEW	9
5.1 U.S. EPA File Review	9
5.2 KDHE File Review	10
6.0 SITE RECONNAISSANCE	11
6.1 Site Description	11
6.2 Stains and Stressed Vegetation	12
6.3 Drums and Chemical Storage	12
6.4 Underground and Aboveground Tanks	13
6.5 Wells	13
6.6 Pits, Ponds, Lagoons, and Sumps	13
6.7 Landfills and Solid Waste Disposal	13
6.8 Polychlorinated Biphenyls (PCBs), Suspected Lead Paint & Piping, Fluorescent Lamps, Asbestos-Containing Material (ACM) ..	13
6.9 Adjacent and Surrounding Properties	14
7.0 CONCLUSIONS	15
8.0 RECOMMENDATIONS	17
9.0 STANDARD OF CARE	18

TABLE OF CONTENTS
(continued)

LIST OF FIGURES

- Figure 1 - Site Location Map
- Figure 2 - Ownership Map

LIST OF APPENDICES

- Appendix A - Photograph Log
- Appendix B - Aerial Photographs
- Appendix C - Regulatory Review Map and Report

1.0 INTRODUCTION

DPRA Incorporated (DPRA) was authorized on December 2, 1996 by the City of Manhattan to conduct a Phase I Environmental Site Assessment (ESA) on property located on Wildcat Creek Road in Manhattan, Kansas, west of the Manhattan Municipal Airport.

The purpose of the Phase I ESA is to review past and current land use for indications of the manufacture, generation, use, storage, and/or disposal of hazardous substances and petroleum at the subject property; evaluate the potential for soil and/or groundwater contamination from on-site or adjacent property activities; and to render an opinion regarding the potential for environmental contamination at the subject property.

1.1 Scope of Work

DPRA provided Phase I ESA services in accordance with ASTM standards, including a site visit, interviews, historical records review, area land use and geological review, and any evidence of recognized environmental conditions/contamination.

1.2 Limitations

As a Phase I ESA, this investigation relies upon observations and recorded evidence to locate potential contamination. Although DPRA has attempted to identify past and present activities which could create environmental liability, subsurface contamination could exist, such as unregistered underground storage tanks. The report provided by DPRA is subject to the following limitations:

- Observations of the subject property were made as indicated. Where observations are limited, DPRA renders no opinion as to the presence of hazardous substances or wastes, or contamination potential.
- DPRA's assessment relies on information provided by state and local agencies and subcontractors. DPRA and its representatives make no representation or warranty as to the accuracy or completeness of any source of information or data obtained from other firms or agencies in performing the subject services and preparing the subject report.
- DPRA did not sample or analyze for the presence of asbestos-containing materials (ACMs), lead, polychlorinated biphenyls (PCBs), or radon. Soil and groundwater samples at the subject property will be obtained at a future date under a separate contract with the City.
- DPRA did not perform a compliance audit to determine compliance of past or present property owners with federal, state, or local laws or regulations.
- DPRA did not conduct a title search for past owners of the subject property.

2.0 PROPERTY DESCRIPTION AND SURROUNDING LAND USE

2.1 Site Location and Description

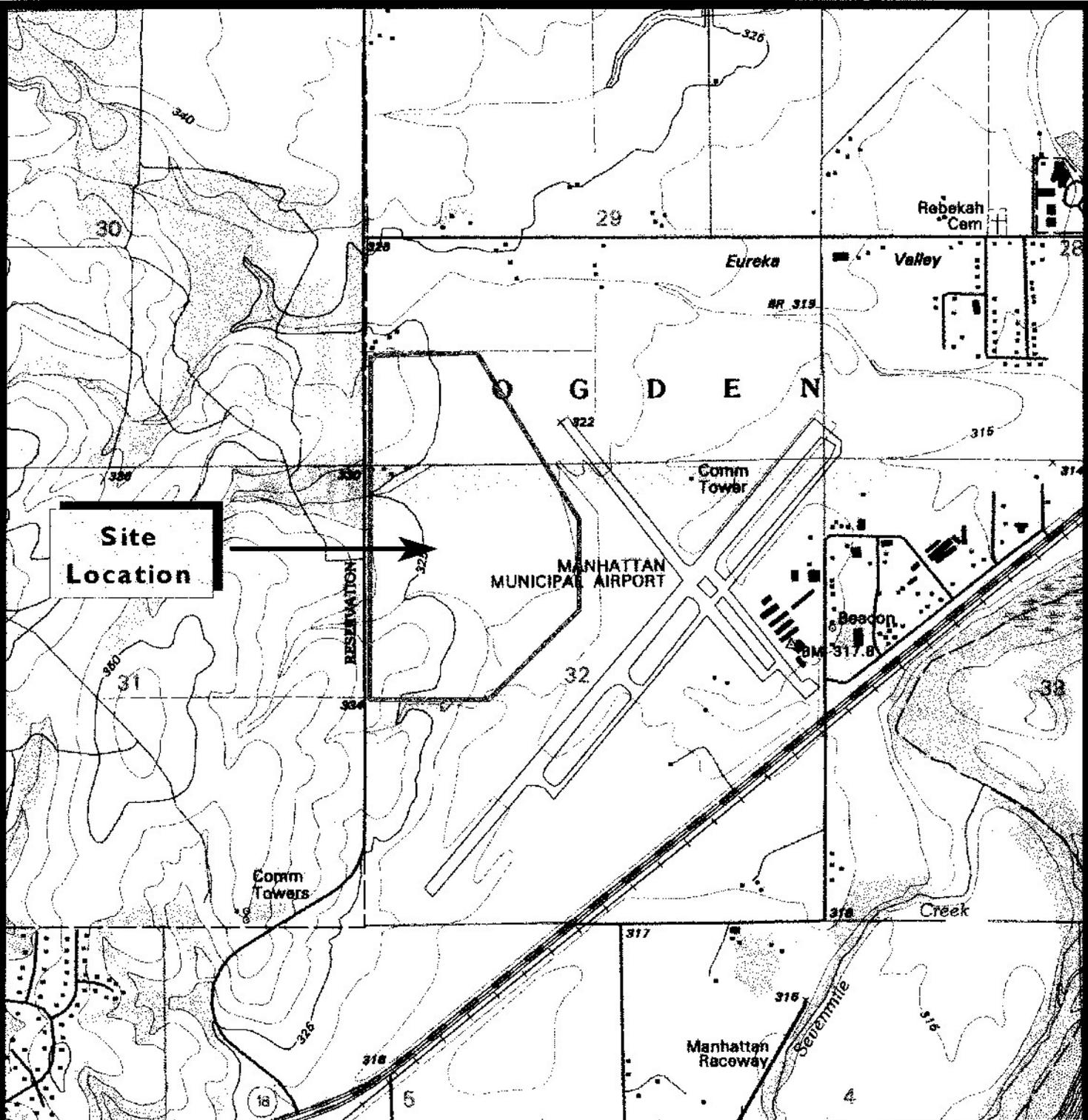
The subject property is located to the north, east, and south of the residence located at 4626 Wildcat Creek Road in Manhattan, Riley County, Kansas, as shown in Figures 1 and 2. It is comprised of property owned by three parties, totaling 191.41 acres of land (Riley County Property Ownership map).

The Charles Hughes property, totaling approximately 116 acres, is comprised of parcel 11 (located in the south half of the southwest quarter section of Section 29, Township 10, Range 7 East) and parcel 2 (located in the north half of the northwest quarter section of Section 32, Township 10, Range 7 East). The David Hughes property is the residence at 4626 Wildcat Creek Road and is situated on a 10 acre tract in parcels 11 and 2. Lastly, the Margaret Belter property is located in parcel 3 which is in the south half of the northwest quarter section of Section 32, Township 10, Range 7 East (65.33 acres). See Figure 2.

Photographs, taken during the visual survey, are included in Appendix A. Future plans for the subject property include the development of a business park.

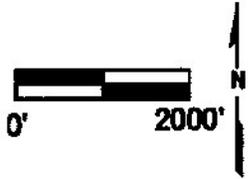
2.2 Surrounding Properties

The area to the north of the subject property consists of agricultural property. The area to the east of the subject property is occupied by the Manhattan Municipal Airport. West of the subject property is the Fort Riley military reservation (U.S. Army). Finally, south of the subject property is private property that consists of a residential dwelling and uncultivated land.



**FIGURE 1
SITE LOCATION MAP**

Phase I ESA-Proposed
Manhattan Business Park Site
 Wildcat Creek Road



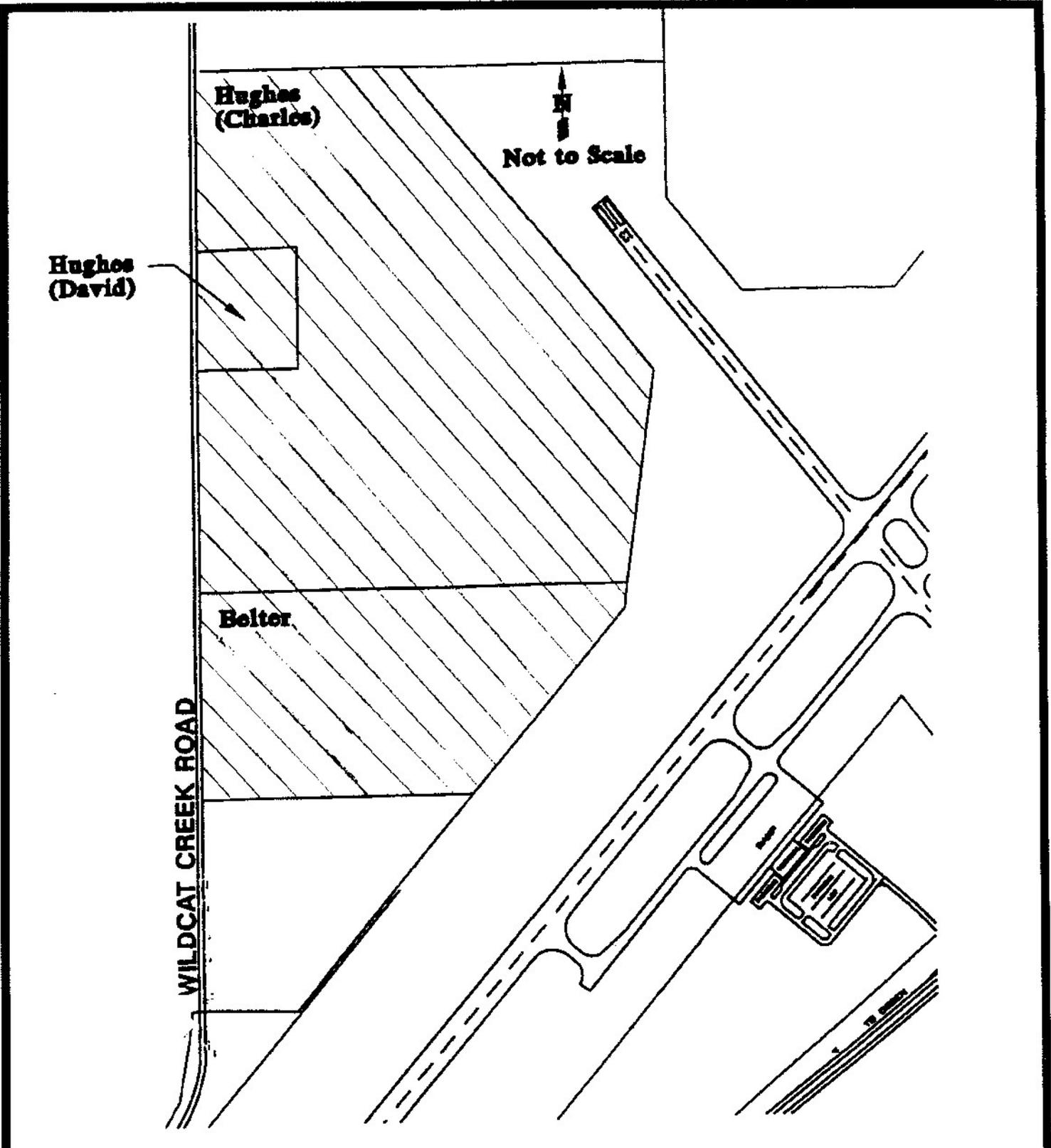


FIGURE 2
OWNERSHIP MAP

Phase I ESA-Proposed
ASHA Distributing Inc. Site
Levee Drive
Manhattan, Kansas



Project No. 3850.000

3.0 ENVIRONMENTAL SETTING

3.1 Topography

The estimated elevation of Manhattan, Riley County, Kansas is approximately 1,100 feet above mean sea level (msl). Observations made during the site visit indicate that the site topography is sloping and that surface water flows west to east towards the Manhattan Municipal Airport. There is a waterway between parcels 11 and 2 that flows east through the Charles Hughes property to the Manhattan Municipal Airport property.

3.2 Soils

The U.S. Department of Agriculture, Soil Conservation Service, Soil Survey of Riley County, Kansas reports the general soil association at the subject property is almost evenly divided between Smolan Silt Loam on the western portion of the subject property and Reading Silt Loam on the eastern portion of the subject property. Typically these loams consist of deep, nearly level soils. The profile of the surface layer is grayish-brown silt loam about ten inches thick. The next layer is mixed grayish-brown silt loam about eight inches thick. Very pale brown silt loam with a few thin strata of dark gray silty loam is present. Grayish brown silt loam is at a depth of 56 to 62 inches.

These soils are well-drained and moderately permeable. The slope is generally one to eight percent for the Smolan Silt Loam and zero to one percent for the Reading Silt Loam.

3.3 Geology

According to the U.S. Department of Agriculture, Soil Survey of Riley County, Kansas, the underlying bedrock of the area includes alternating strata of consolidated sandstone shale and limestone of Permian age. The bedrock is known to occur at the surface to 35 feet below ground surface and varies in thickness across Riley County. The Kansas River Valley is comprised of clay, silt, sand, and gravel. The deposits are referred to as terrace deposits and alluvium.

3.4 Hydrogeology

Based on surface topography, the groundwater flow direction on site and in the vicinity of the subject property appears to be from the west-northwest to the east-southeast toward the Kansas River. According to Charles Hughes, the depth to groundwater is 15 feet below ground surface. He had 12 to 15 borings drilled in 1969 to locate groundwater for irrigation wells. All the borings were drilled to approximately 90 feet where the aquifer would only produce 60 gallons per minute which was not sufficient for irrigation. Two drinking water wells are located on the 10-acre residential tract.

4.0 SITE HISTORY

DPRA reviewed available historical records and interviewed city, county, and state officials to document past land uses of the subject property and the surrounding area. Based on the review of aerial photographs and information obtained from interviews and previous reports, it appears the subject property has been used for solely for agricultural purposes.

4.1 Previous Environmental Activities and Reports

On October 14, 1994, DPRA submitted a Phase I ESA on the Charles Hughes property (parcels 11 and 2 of the subject property). Not included within the scope of that report was the 10 acre residential tract and parcel 3 (65.33 acres). Because of its proximity to the subject property, findings from the Charles Hughes property Phase I ESA are included in this report.

4.2 Interviews

DPRA reviewed ownership information provided by the client. Ownership title to parcels 11 and 2 (except the 10 acre residential tract that lies in both parcels) is currently held by Dr. Charles W. Hughes, D.D.S., of Manhattan, Kansas. Ownership title to the 10 acre residential tract is currently held by David T. and Gail E. Hughes. Ownership title to parcel 3 (65.33 acres) is currently held by E. Margaret and Walter G. Belter.

DPRA interviewed the following persons regarding land use of the subject property and the areas adjacent to it.

- **Charles Hughes** has owned most of parcels 11 and 2 since 1987. Dr. Hughes indicated that the land has been utilized solely as agricultural property. To his knowledge no structures have existed on the property nor has the property ever been used for purposes other than farming. His property is presently being farmed by his son, David Hughes. A portion of the property is presently cultivated in non-tillable wheat; crop residue is present in the remaining portions. Dr. Hughes indicated that he has no knowledge of environmental hazards on the subject property or surrounding area.
- **David Hughes** owns the 10-acre residential tract in parcels 11 and 2. Mr. Hughes has owned this tract since 1993 and has farmed the Charles Hughes property for approximately 25 years. According to Mr. Hughes, the structures on his tract are used primarily as a residential dwelling and for farming purposes. The only livestock on the property are three horses. The out-buildings and sheds are used for the storage of farm implements. To his knowledge, his tract of land and the property surrounding it, have been used solely for agricultural purposes and he has no knowledge of environmental hazards on the subject property or surrounding area. A more detailed description of Mr. Hughes property and its structures are found in Section 6.0.

- **E. Margaret Belter**, who presently resides in Rockville, Maryland, is the owner of parcel 3 (65.33 areas). Mrs. Belter said that her father, Roy A. Seaton bought the property in 1930. She and her siblings inherited it when he died in 1970. She bought the property from her siblings in 1992. To her knowledge, it has never been used for any purpose other than crop farming (wheat, sorghum, and soybeans). There has not been any structures on the property nor has the property been used for livestock.
- **William Kauer** farms parcel 3 (65.33 acres) for the present owners, E. Margaret and Walter G. Belter. Mr. Kauer has farmed the Belter property since about 1963. The western portion of the property is cultivated in winter wheat. Crop residue is present in the eastern portion of the property, but it is usually cultivated in soybean and sorghum. Mr. Kauer does not use any pesticides unless it is necessary (Sevin was used a few years ago for some cinch bugs). He uses a combination of herbicides (Atrazine, Treflan, Sceptor and Command) for control of weeds. To his knowledge there have been no structures on the property. He does not store any herbicides or pesticides, any farm machinery, or any fuel on the property. He has no knowledge of environmental hazards on the subject property or surrounding area.
- **Mrs. Delbert Stadel** and her husband are the owners of the property adjacent (north) to Charles Hughes property. The Stadel's have been in this area all of their lives. To Mrs. Stadel's knowledge, the area, including both her property and Hughes property has been used for solely for agriculture, and is not aware of any environmental hazards which may currently exist or previously existed on the subject property or surrounding area.
- **Cameron Davis** works in Division of Public Works at Fort Riley. He says the U.S. Army uses the property on the west side of Wildcat Creek Road for military exercises, such as field maneuvers and bivouacs. The Army does not store equipment or supplies on this property which is adjacent (west) to subject property.
- **Ken Black** is the manager of the Manhattan Municipal Airport which is located adjacent (east) to the subject property. Mr. Black says that the airport has three underground fuel tanks, one 12500 gallon tank and two 2500 gallon tanks. They are owned by NRG Lubricants and leased to the Kansas Air Center (also see Section 5.2). There are no underground fuel distribution pipelines at the airport. Mr. Black said there have been environmental accidents, including a fuel spill (30 gallons) in 1994; although these accidents may be of little concern to the subject property because the airport is downgradient (also see Section 5.2). The airport property directly adjacent to the subject property is leased to Jon Howe who farms it.
- **Chuck Tannehill** is the Assistant Fire Chief for the City of Manhattan. He states that there have been no environmental concerns reported to the city for the subject property. With respect to adjacent properties, there have been two releases of fuel at the Manhattan Municipal Airport terminal which is approximately one-half mile southeast of the subject property. Both releases were contained on concrete paving and removed using sand.

4.3 Aerial Photographs

DPRA reviewed six historical aerial photographs for the subject property and its surrounding area. Copies of these aerial photographs are found in Appendix B. The 1939 aerial photograph depicts the subject property to be similar to that of today. The previously mentioned waterway between parcels 11 and 2 (see Section 3.1) and the residential dwelling on the 10 acre tract are present. All surrounding areas appear to be agricultural land. The municipal airport is not present in this photograph. The 1950 photograph is much the same as the 1939 photograph. The subject property and its surrounding areas appear to be used as agricultural land. The runway for the municipal airport is evident in this photograph. The 1962, 1982, 1986, and 1995 aerial photographs are all similar with minor changes to the subject property (mostly agricultural crop patterns) and expansion of the airport facilities.

No indication of discolored soil, stressed vegetation, or evidence of debris or dumping was apparent on the subject or adjacent property in the aerial photographs.

4.4 Fire Insurance Maps

A review by DPRA of Sanborne fire insurance maps at Farrell Library, Kansas State University, revealed the area of the subject property was not mapped.

5.0 REGULATORY REVIEW

DPRA requested information regarding verified or potential hazardous waste sites at or near the subject property from the U.S. Environmental Protection Agency (U.S. EPA) and the Kansas Department of Health and Environment (KDHE). This information was collected for DPRA by Environmental Search, Inc. (ESI), on December 9, 1996. The search radius distances, as identified on the first page of the Environmental Screening Report, were performed in accordance with ASTM guidelines. The regulatory information, including the date of the last update for each database searched, is included in Appendix C. The following discussion summarizes the findings.

5.1 U.S. EPA File Review

A review of the U.S. EPA Facility Index System (FINDS) included the following listings:

- Emissions and compliance data on air pollution for sites identified in the AIRS Facility System (AFS);
- Sites which the EPA is investigating for release or threatened release of hazardous substances (CERCLIS);
- Plant site information on facilities that use or produce chemicals reported under the Toxic Substances Control Act (TSCA) contained in the Chemical in Commerce Information System (CICIS);
- Civil judicial cases filed on the EPA's behalf by the Department of Justice (Civil Enforcement Docket Summary);
- Permit Compliance System (PCS) used for tracking permit, compliance, and enforcement status for the National Pollutant Discharge Elimination System (NPDES);
- Facilities that generate, store, transport, treat, or dispose of hazardous waste (RCRIS TSD and Generators);
- Registered pesticide producing establishments (SSTS and FATES); and
- Toxics Release Inventory System (TRIS) used to inventory information regarding routine storage, use, and emissions of toxic chemicals by manufacturers.

The subject property was not identified on any of the federal database lists. The ESI file review identified no NPL, NFRAP, ERNS, AFS, CICIS, DOCKET/CDETS, FTTS/NCDB, PCS, RCRIS TSDs, RCRIS Generators, NPDES, SSTS, and TRIS sites in the area of the subject property.

5.2 KDHE File Review

A review of the KDHE files included the following listings:

- Underground Storage Tank (UST) Sites;
- Leaking Underground Storage Tank (LUST) Sites;
- Spills (Emergency Release Reports) Sites;
- Permitted Solid Waste Sites; and
- Hazardous Waste Sites.

The subject property was not identified on any of the state database lists.

ESI reported that there were no registered USTs within one-half mile of the subject property. However, ESI identified thirteen unlocatable registered USTs. These USTs are listed as unlocatable due to incomplete address, an inaccurate address, or a street address which could not be accurately geocoded. DPRA was able to determine that these USTs are/were located at more than one-half mile southeast and southwest of the subject property; and therefore, the tanks are of minimal concern for causing groundwater contamination beneath the subject property. A copy of this report is included in Appendix C.

ESI reported that there no LUST sites located within one-half mile of the subject property. However, ESI identified three unlocatable LUST sites. These LUST sites are listed as unlocatable due to incomplete address, an inaccurate address, or a street address which could not be accurately geocoded. DPRA was able to determine that one of these LUST sites was located at least one-half mile from the subject property at the Manhattan Municipal Airport. This site was reported on April 13, 1993 on a tank owned by NRG Lubricants. According to KDHE, the site is closed because the levels of contamination at the site do not exceed cleanup levels set by the State. Another site at the Municipal Airport was reported on August 31, 1993 on a tank owned by FAA. This site is also considered closed by KDHE because the levels of contamination at the site do not exceed cleanup levels set by the State. The third site listed on the ESI report as an unlocatable site, was determined to be more than one-half mile from the subject property; therefore, these sites distance and direction from the subject property, they are of minimal concern for causing groundwater contamination beneath the subject property. A copy of this report is included in Appendix C.

ESI identified one unlocatable SPILLS site. This spill was reported on May 9, 1991 when a hose transferring motor vehicle fuel slipped out of the filler opening. Approximately 20 gallons of fuel was released in the ground, none of which was recovered. However, because of the site is located downgradient of the subject property, there is minimal concern for causing groundwater contamination beneath the subject property.

ESI file review identified no solid waste sites nor any hazardous waste sites in the area of the subject property.

6.0 SITE RECONNAISSANCE

On December 9, 1996, DPRA representative Zena Lee observed the subject and surrounding properties. DPRA observed the subject property for potential environmental hazards associated with the following:

- stained soil or paving,
- stressed vegetation,
- drums or other hazardous material containers,
- UST fill or vent pipes,
- water wells,
- pits, ponds, lagoons or sumps,
- landfills and solid waste disposal,
- polychlorinated biphenyls (PCBs),
- asbestos-containing material (ACM),
- lead paint and piping,
- fluorescent lamps, or
- other visible evidence of contamination.

Ms. Lee was accompanied by Jerry Petty, the City of Manhattan Director of Public Works and by David Hughes, property owner of the 10 acre tract, who identified the property boundaries.

6.1 Site Description

The subject property is located north, east, and south of the residential dwelling at 4626 Wildcat Creek Road in Manhattan, Kansas. The subject property is comprised of the following (as described from north to south):

- The Charles Hughes property (approximately 116.48 acres) is located in parcel 11 of Section 29 and parcel 2 of Section 32, Township 10, Range 7 East. The north portion of this property is currently cultivated in non-tillable wheat. There is crop residue in the south portion of the property, but it is usually cultivated in soybeans.
- The David Hughes residence at 4626 Wildcat Creek Road is situated on a 10-acre tract in parcels 11 and 2. This residence is occupied by one residential dwelling, a garage, one large metal shed, a cinder block shed, several wood storage sheds of various sizes, two metal granaries, and one open horse shed.
- The Belter property (approximately 65.33 acres) is located in parcel 3 of Section 32, Township 10, Range 7 East. The west portion of the property is currently cultivated in winter wheat. Crop residue is present in the east portion, but it is usually cultivated in sorghum.

Utilities observed include electric power lines supplying the residence at 4626 Wildcat Creek Road. There is one electrical transformer mounted on one electric utility pole located on the subject property (Charles Hughes property), north of the residence. There was no evidence of spillage or leakage on the transformer casing, utility pole or surrounding area. Transformers constructed prior to 1980 may contain PCBs.

A photographic log of DPRA's site visit is included in Appendix A.

6.2 Stains and Stressed Vegetation

DPRA observed stained vegetation or soil on the David Hughes property near the storage shed. According to David Hughes, the stains and stressed vegetation is due the use of a weed killer in the area (Prametol mixed with diesel fuel or Roundup). The size of the stained area was approximately 3 feet by 4 feet. Mr. Hughes said that it is fairly common practice around farms to use Prametol or Roundup for weed control and that he has used it in several places throughout the property. The remaining crop fields located on the subject property appeared unstressed. Visual inspection of these fields revealed no evidence of stained soil or contamination.

6.3 Drums and Chemical Storage

On the David Hughes property, DPRA observed several trash drums and agricultural chemicals. The storage shed east of the house contained bags of agricultural herbicides. More agricultural chemicals were found in the metal granaries. All these chemicals were stored on concrete floors and DPRA did not observe any spillage of chemical product. In the metal building where the farm machinery is stored, there were several five-gallon containers of used oil and hydraulic fluid stored on a concrete floor. DPRA did not observe any significant amount of spillage or release. According to David Hughes, the oil and hydraulic fluids were from routine maintenance of his farm equipment.

DPRA also observed an oil spill on the east side of the cinder block shed. David Hughes said that this spill was due to an uncovered 55-gallon drum that stored used oil. Rain water accumulation in the drum caused the oil to overflow which created the spill. DPRA observed the spill to flow from the drum onto a concrete pad and into the adjacent soil. The amount of oil spilled is unknown.

No other drums or chemicals were observed on the remaining portions of the subject property.

6.4 Underground and Aboveground Tanks

DPRA observed no evidence of USTs such as vent or fill pipes. One 250-gallon aboveground tank containing diesel fuel was present on the David Hughes property. Because of the use of a weed killer previously mentioned in Section 6.2, DPRA could not observe any evidence of fuel spillage. DPRA also observed a 500-gallon propane tank northeast of the house. This tank supplied fuel to heat the house. No other tanks were observed on the subject property.

6.5 Wells

DPRA observed the presence of two drinking water wells on the David Hughes property. According to David Hughes there is also a septic system on his property that runs east of the house.

6.6 Pits, Ponds, Lagoons, and Sumps

DPRA observed no pits, ponds, lagoons, or sumps on the subject property. A water-way that runs from west to east is located between parcels 11 and 2 of the Charles Hughes property. This water-way drains into the Municipal Airport property east of the subject property. Also observed, during the site reconnaissance, were two contour terrace drain pipes on the Charles Hughes property. According to David Hughes, who farms the Charles Hughes property, these pipes drain rain water collected on the contour terrace to below the terrace into the water-way.

6.7 Landfills and Solid Waste Disposal

DPRA observed no evidence of landfills or dumping on the subject property. As typical of farm property, there were several areas of discarded equipment and appliances. One area was on the south side of the wood storage shed. Another area was noted on the Charles Hughes property east of the David Hughes' 10- acre tract.

6.8 Polychlorinated Biphenyls (PCBs), Suspected Lead Paint & Piping, Fluorescent Lamps, Asbestos-Containing Material (ACM)

DPRA observed one pad-mounted electrical transformer on the Charles Hughes property. Transformers constructed prior to 1980 may contain PCBs. However, no stains were apparent on the transformer or on the surface below. Therefore, the transformer is of limited concern for contamination to the subject property.

Observations regarding suspected lead paint and piping, fluorescent lighting, or ACM were limited to the buildings on David Hughes property. Although DPRA did not sample or analyze for the presence of lead or ACM, due to the age of the residence, which is approximately 75 years old, the presence of such materials is likely. No buildings were present on the remaining properties

6.9 Adjacent and Surrounding Properties

The subject property is located in a agricultural area. The property to the north of the subject property is owned by Delbert Stadel and Lee Stadel. This property is residential and agricultural. The property to the east is owned by the City of Manhattan and is comprised of the Municipal Airport. The city land directly east of the subject property is currently leased to a local farmer. The property to the south of the subject property is owned by L.E. Redfield. DPRA was unable to contact the owners of this property. The residence located on this property appears unoccupied. The property itself does not appear to be cultivated. The property to the west of the subject property is owned by the U.S. Army at Fort Riley. It is undeveloped property and, according to Cameron Davis (Fort Riley Division of Public Works), it is used primarily for military maneuvers and bivouacs.

7.0 CONCLUSIONS

DPRA has investigated visible site conditions, historical and public records as part of a Phase I Environmental Site Assessment, in accordance with the scope of work described in Section 1.1 of this report, in order to render an opinion regarding existing or potential environmental contamination at property located north, east, and south of 4626 Wildcat Creek Road in Manhattan, Kansas.

Based on a review of aerial photographs, previous reports, and information obtained from interviews with city, county, and state officials, it appears the subject property has been used solely for agricultural purposes. The surrounding properties include agricultural land, Fort Riley, and the Municipal Airport. The uses of these properties pose minimal concern of contamination to the subject property. Although pesticides and herbicides are used in farm management, DPRA observed no evidence of mismanagement of these chemicals on the subject property.

The regulatory review of the U.S. Environmental Protection Agency (EPA) and the Kansas Department of Health and Environment files identified no regulated sites located within a one-mile radius of the subject property. The sites listed as unlocatable in the regulatory review, and addressed in Section 5.2, were determined to be located within a one-mile radius; however, these sites are of limited concern for contamination to the subject property due to their downgradient position from the subject property.

With the exception of the water-way and the contour terrace drains on the Charles Hughes property, DPRA observed no pits, ponds, lagoons, or sumps on the subject property. Because the water-way and contour terrace drains are used for surface water run-off, there is minimal concern for contamination.

On the David Hughes property, DPRA observed one 55-gallon drum of used oil that had overflowed onto a concrete pad and the adjacent soil. DPRA concludes that the lateral extent of this release is limited to the area surrounding the concrete pad; however, the vertical extent of soil contamination and the impact to groundwater is unknown.

DPRA observed 5-gallon containers of used oil and hydraulic fluid from the maintenance of farm machinery. Several bags of agricultural chemicals were also observed stored in several of the sheds on the David Hughes property. One 250-gallon aboveground diesel fuel storage tank was observed on the subject property. While the above observations are related to typical farm activities, DPRA observed no mismanagement or evidence of releases where these materials were stored.

One pad-mounted transformer was observed on the Charles Hughes property. The transformer was mounted on an electrical utility pole. No stains were observed on the transformers or on the grassy surface below. Therefore, the transformer poses a limited concern for PCB-contamination to the subject property.

Observations regarding suspected lead paint and piping, fluorescent lighting, or ACM was limited to the David Hughes property. Because of the age of the residence (approximately 75 years old), there is a potential for lead paint and piping, or ACM on the property.

8.0 RECOMMENDATIONS

Based upon the information compiled and observations made as part of this Phase I Environmental Site Assessment, DPRA makes the following recommendations.

- With respect to the David Hughes farm, the 55-gallon drum of used oil should be covered to prevent overflow and a sorbent material should be used to clean up the oil that has spilled onto the concrete pad. The used sorbent material should be properly disposed. The soil contaminated by the flow of used oil from the spill should be removed and properly disposed. Consideration should be given to performing a subsurface investigation in this area of concern during the scheduled drilling in January 1997 to determine the vertical extent of observed soil contamination.
- Should the future intended use of the David Hughes residence become commercial, it is recommended that the buildings on the property be inspected for the presence of ACM and lead by a certified inspector. If it should be the case that the buildings on the property are demolished, then prior to building demolition, all asbestos materials should be properly abated.

9.0 STANDARD OF CARE

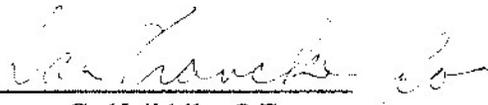
The recommendations contained in this report represent our professional opinions. These opinions were arrived at in accordance with currently accepted geologic, hydrogeologic, and engineering practices at this time and location. Other than this, no warranty is implied or intended. If variations from the findings are found in the future, DPRA should be contacted to provide a supplemental assessment.

Written by:



Zenia Lee
Environmental Analyst

Reviewed by:



Steven C. Heikkila, P.E.
Manager, Environmental Site Assessments

Dated:

December 16, 1996

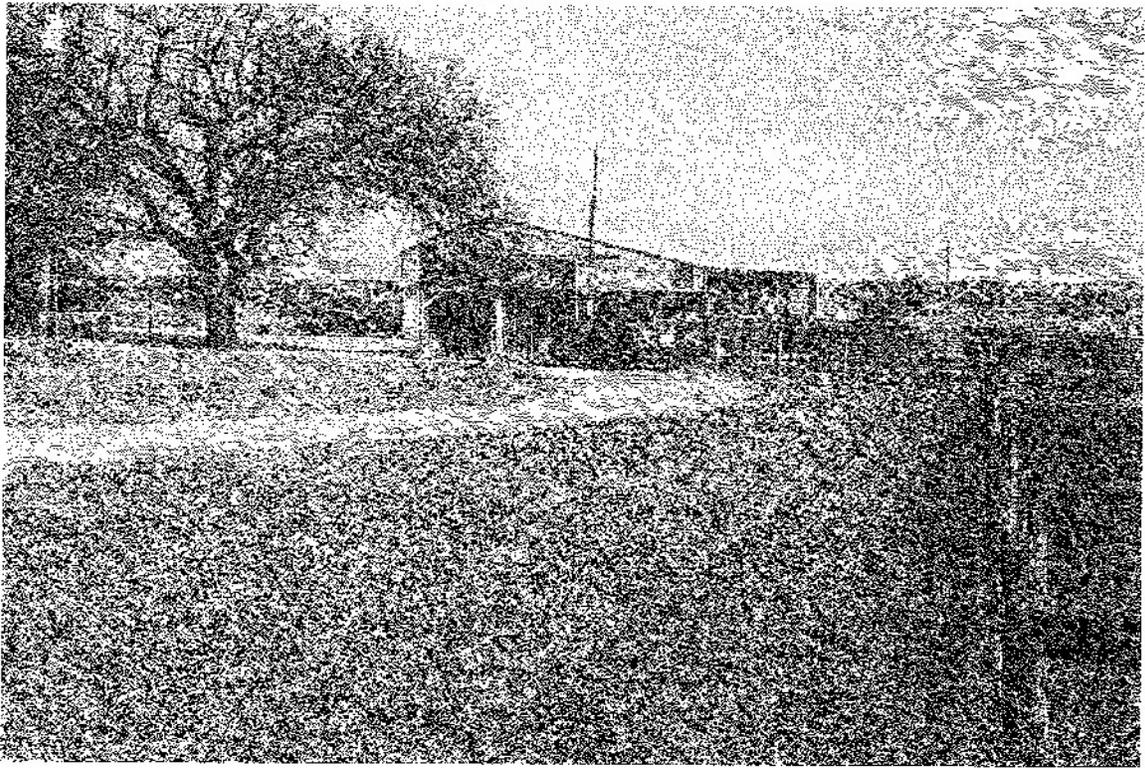
APPENDIX A
PHOTOGRAPHIC LOG

PHOTOGRAPHIC DESCRIPTIONS

The following photographs were taken at the subject property on December 9, 1996.

Photograph Number	Photograph Description
1	David Hughes Property. This photograph was taken from the Wildcat Creek Road, looking to the east. The buildings in this photographs are typical farm buildings. The large metal shed stores farm machinery. Also in view is an open horse shed and a metal granary. The building in the far left with a carport is an old chicken house; it is currently being used as a storage shed.
2	David Hughes Property. This is a photograph of the oil spill on the east side of the cinder block shed. The oil is from the 55-gallon drum on the right side of the photograph. According to David Hughes, the spill occurred when rainwater collected in the uncovered drum that stored the used oil causing it to overflow. The oil flows over the concrete pad into the soil on the south side of the building.
3	David Hughes Property. This photograph was taken behind the garage looking to the east. Note the aboveground tank that contains diesel fuel. The shed in the background contains some packages/containers of weed killer. The shed is also surrounded by trash, discarded containers and miscellaneous items. On the right side of the above ground tank is an area of distressed vegetation due to the use of a weed killer.
4	Charles Hughes Property. This photograph was taken on the water-way that divides parcels 11 and 2. The view is to the north. The buildings in the background is the Lee Stadel residence that is adjacent to the Charles Hughes property.
5	Charles Hughes Property. This photograph was taken on the water-way that divides parcels 11 and 2. The view is to the south. The field of winter wheat in the background is the Belter property that is adjacent to the Charles Hughes property.
6	Charles Hughes Property. This photograph was taken on the water-way that divides parcels 11 and 2. The view is to the west. The buildings in the background is the David Hughes residence.
7	Elizabeth Belter Property. This photograph was taken from Wildcat Creek Road, looking southeast. The crop in the field is winter wheat. The building in the left background is the Manhattan Municipal Airport.
8	Elizabeth Belter Property. This photograph was taken from Wildcat Creek Road, looking northeast. The crop in the field is winter wheat. The buildings in the background are the Manhattan Municipal Airport facility.

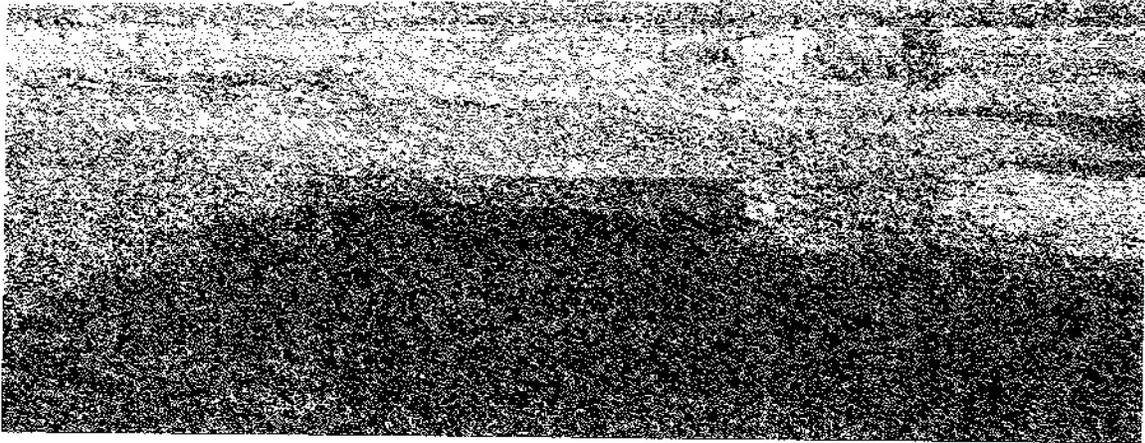
PHOTOGRAPH 1



PHOTOGRAPH 2



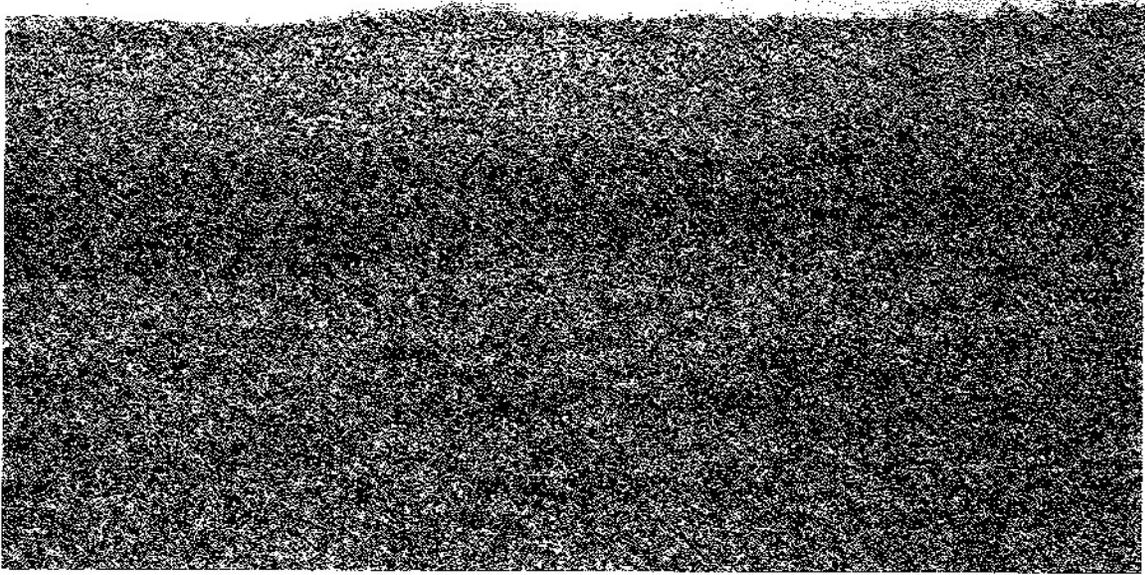
PHOTOGRAPH 3



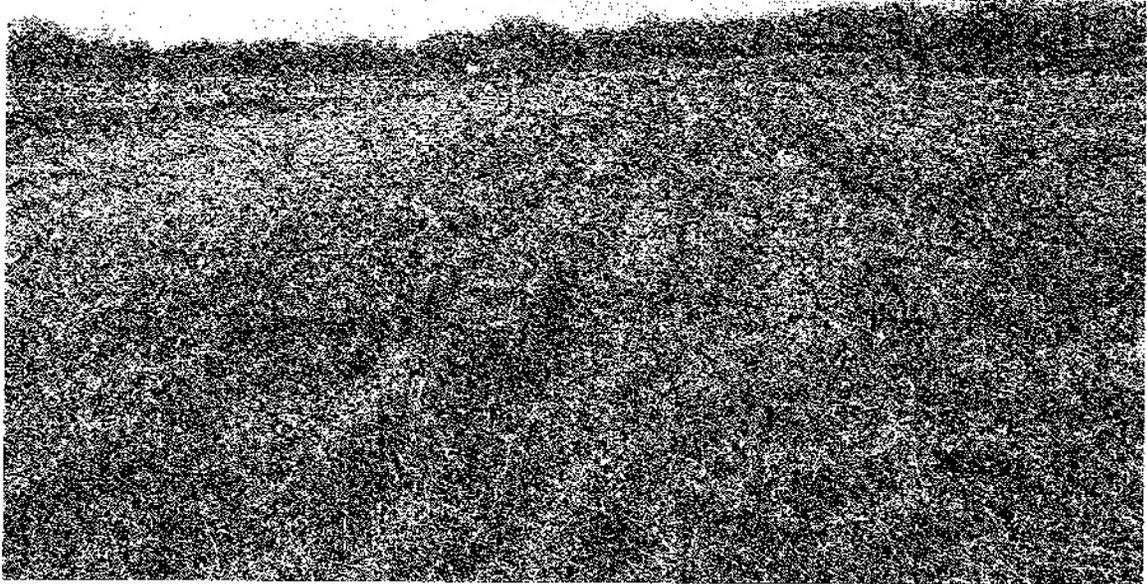
PHOTOGRAPH 4



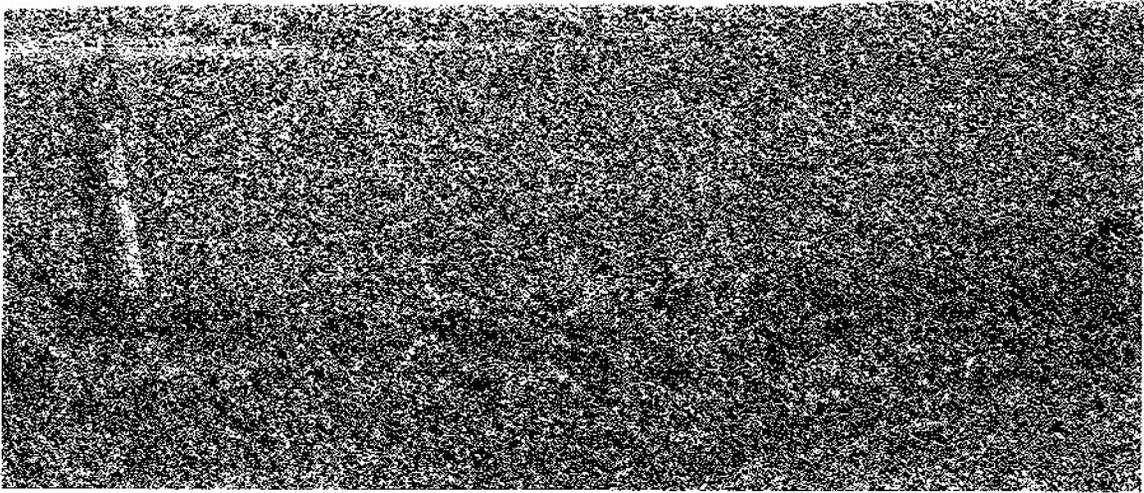
PHOTOGRAPH 5



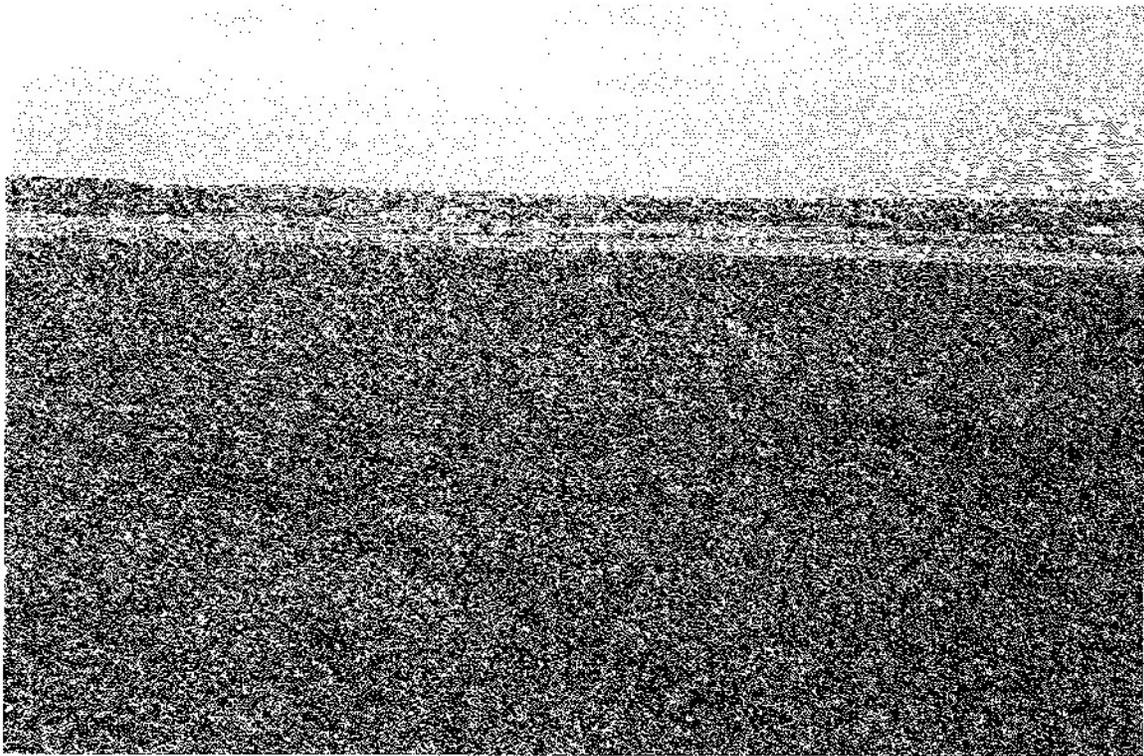
PHOTOGRAPH 6



PHOTOGRAPH 7

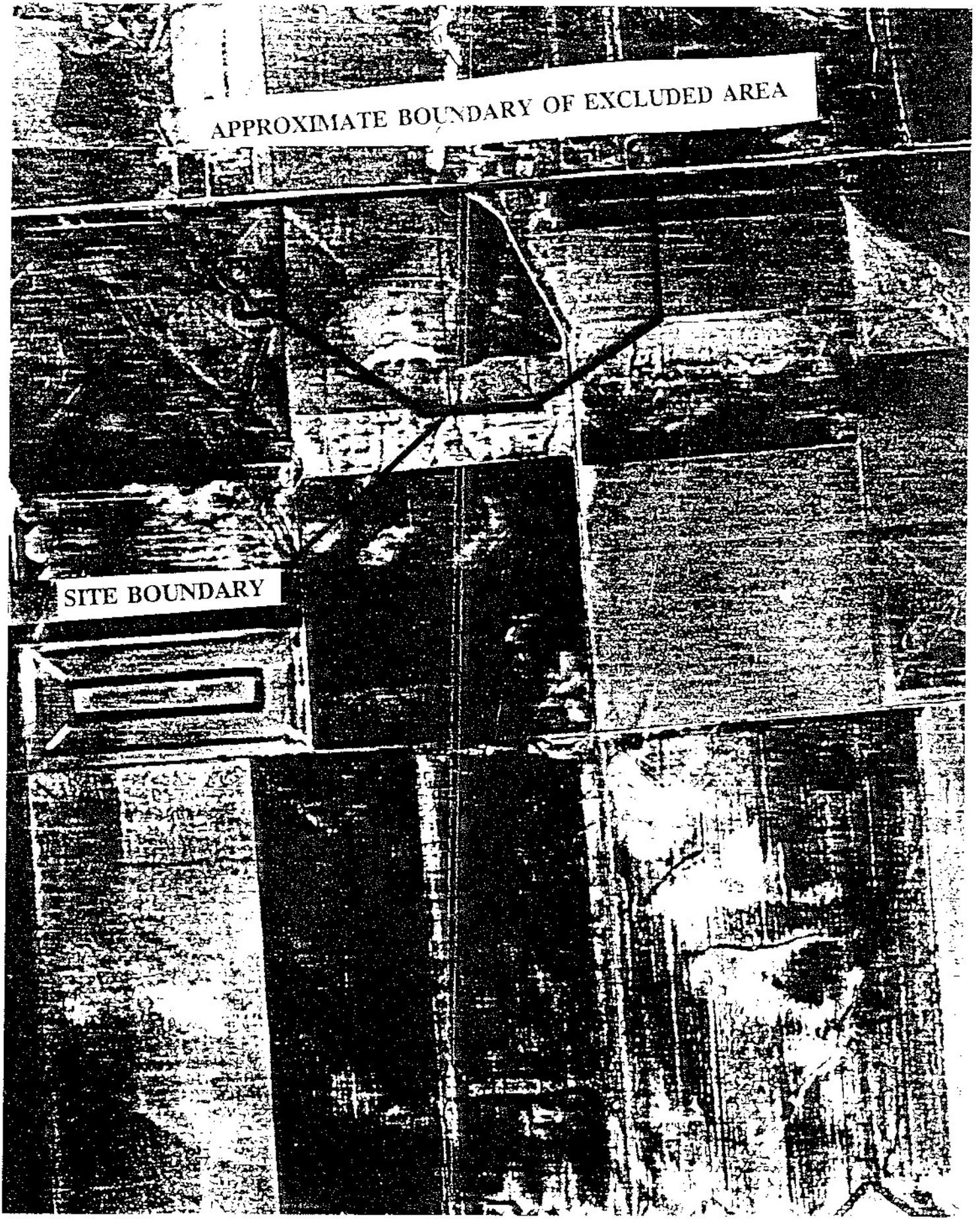


PHOTOGRAPH 8



APPENDIX B
AERIAL PHOTOGRAPHS

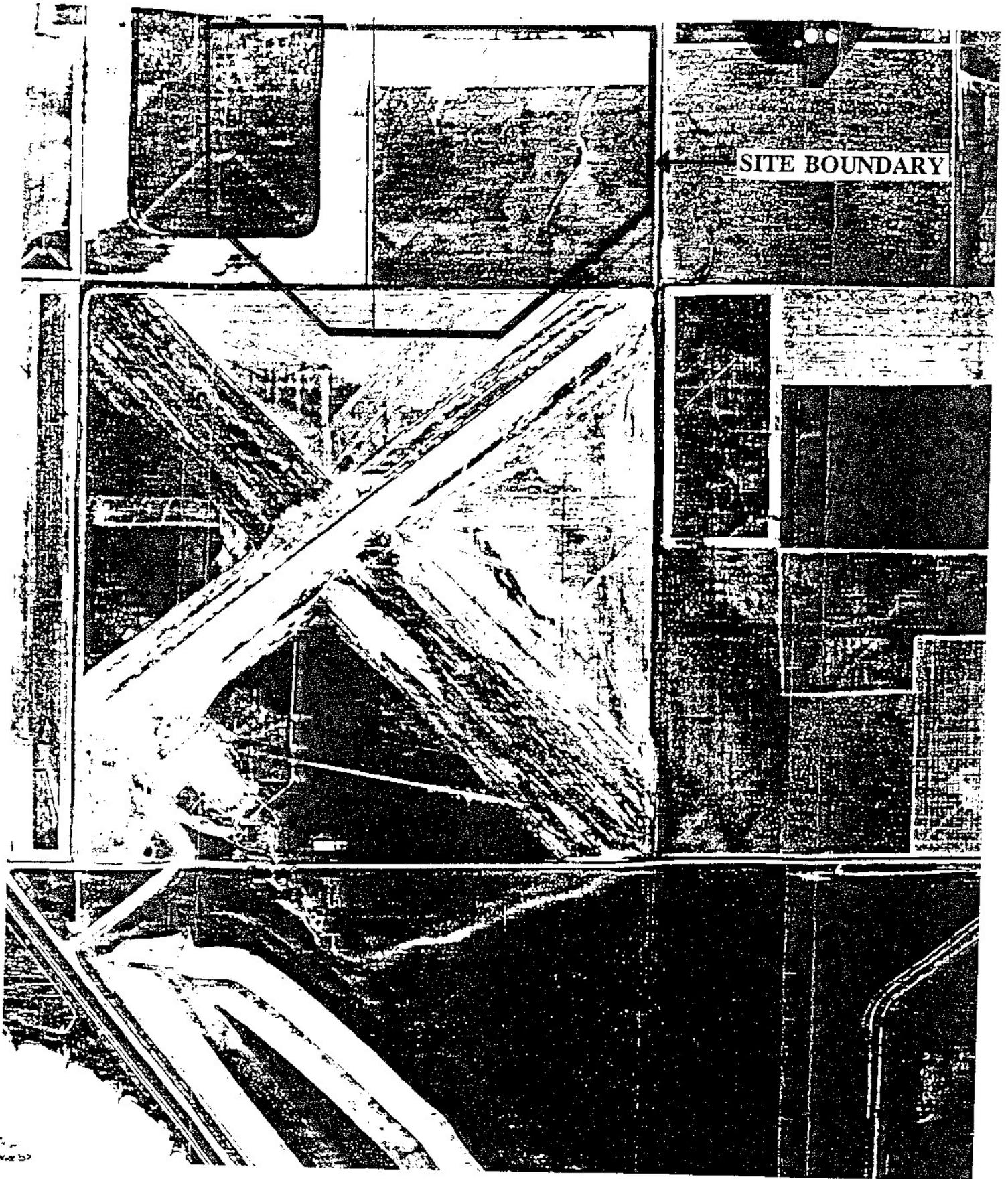
AERIAL PHOTOGRAPH - 1939



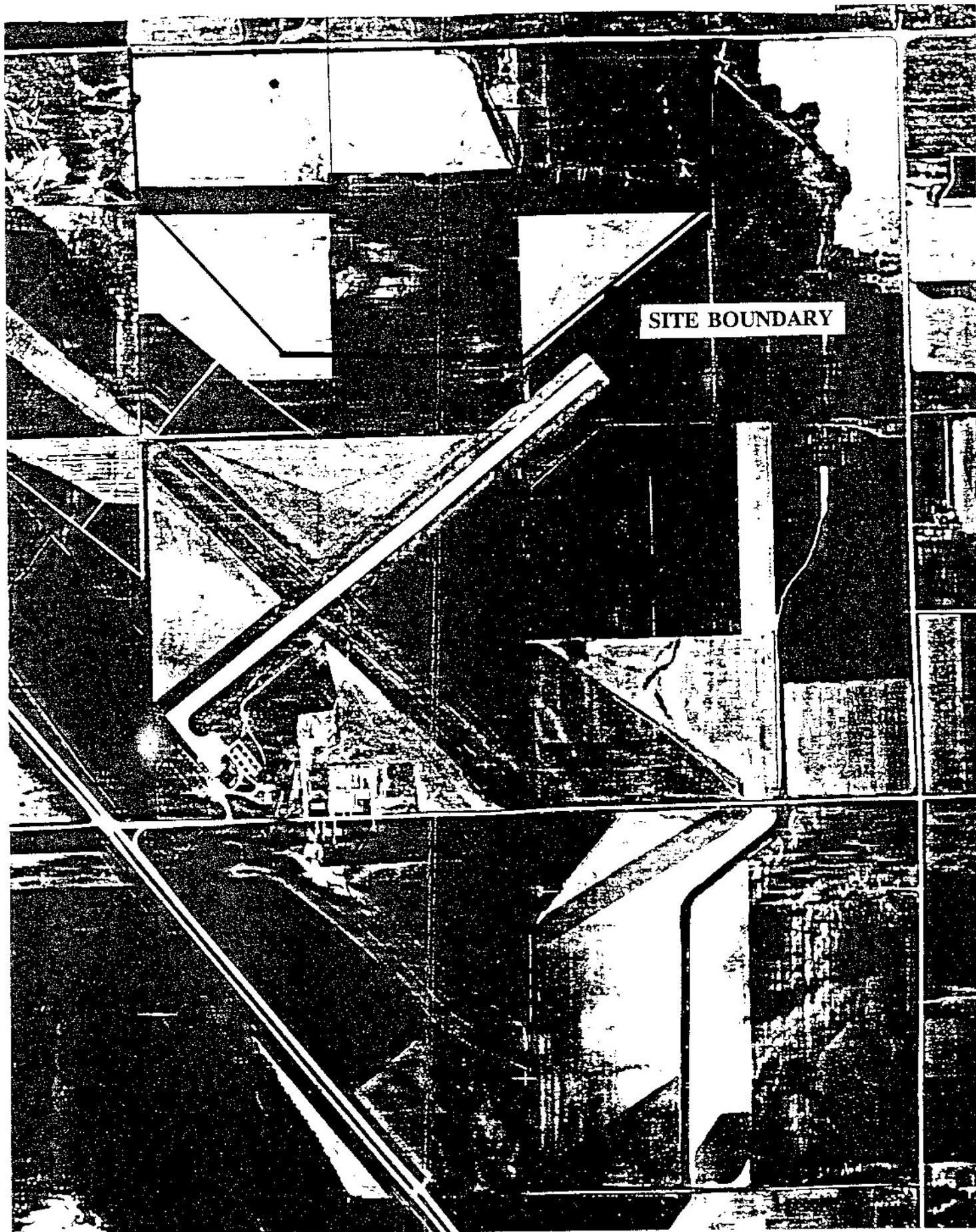
APPROXIMATE BOUNDARY OF EXCLUDED AREA

SITE BOUNDARY

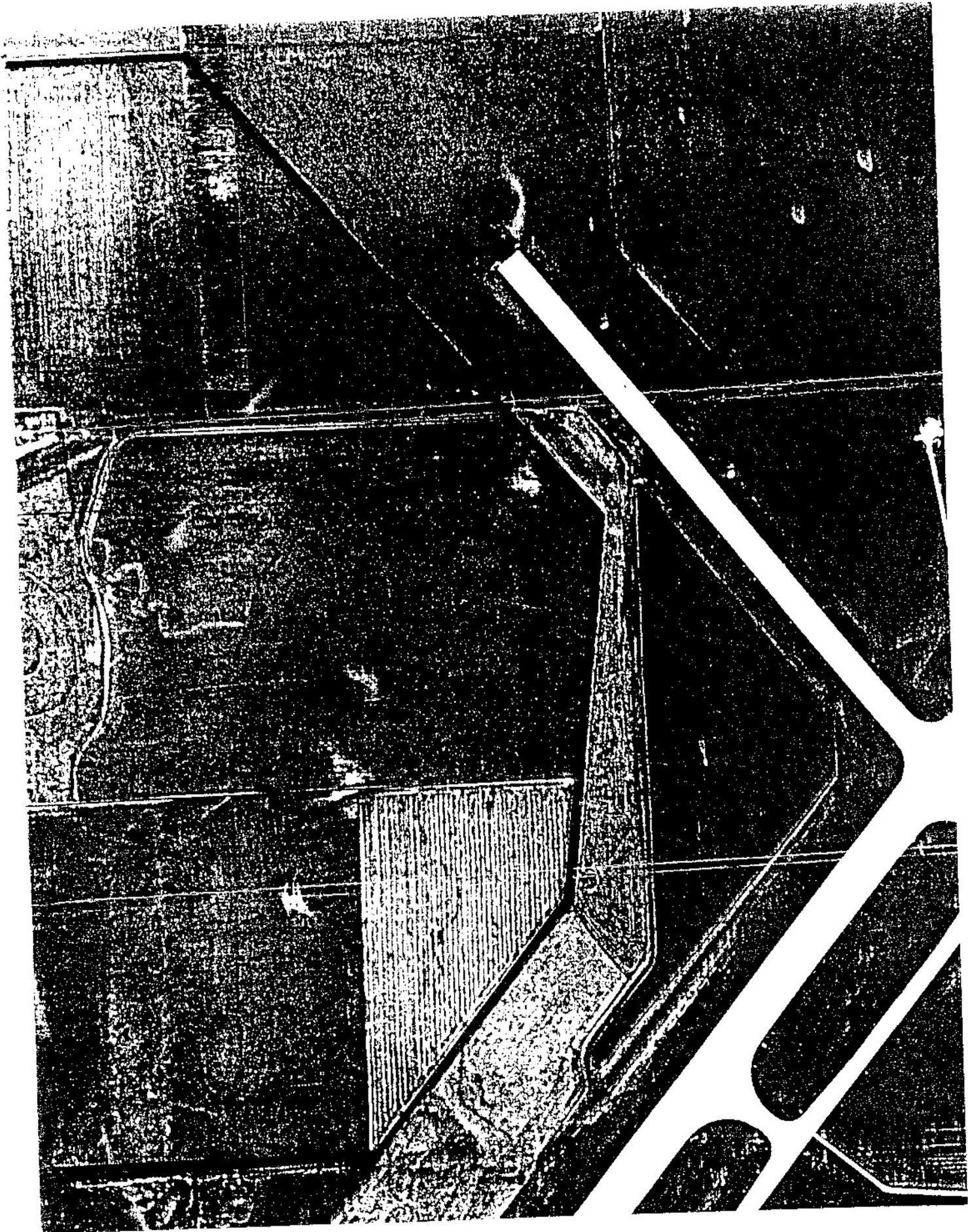
AERIAL PHOTOGRAPH - 1950



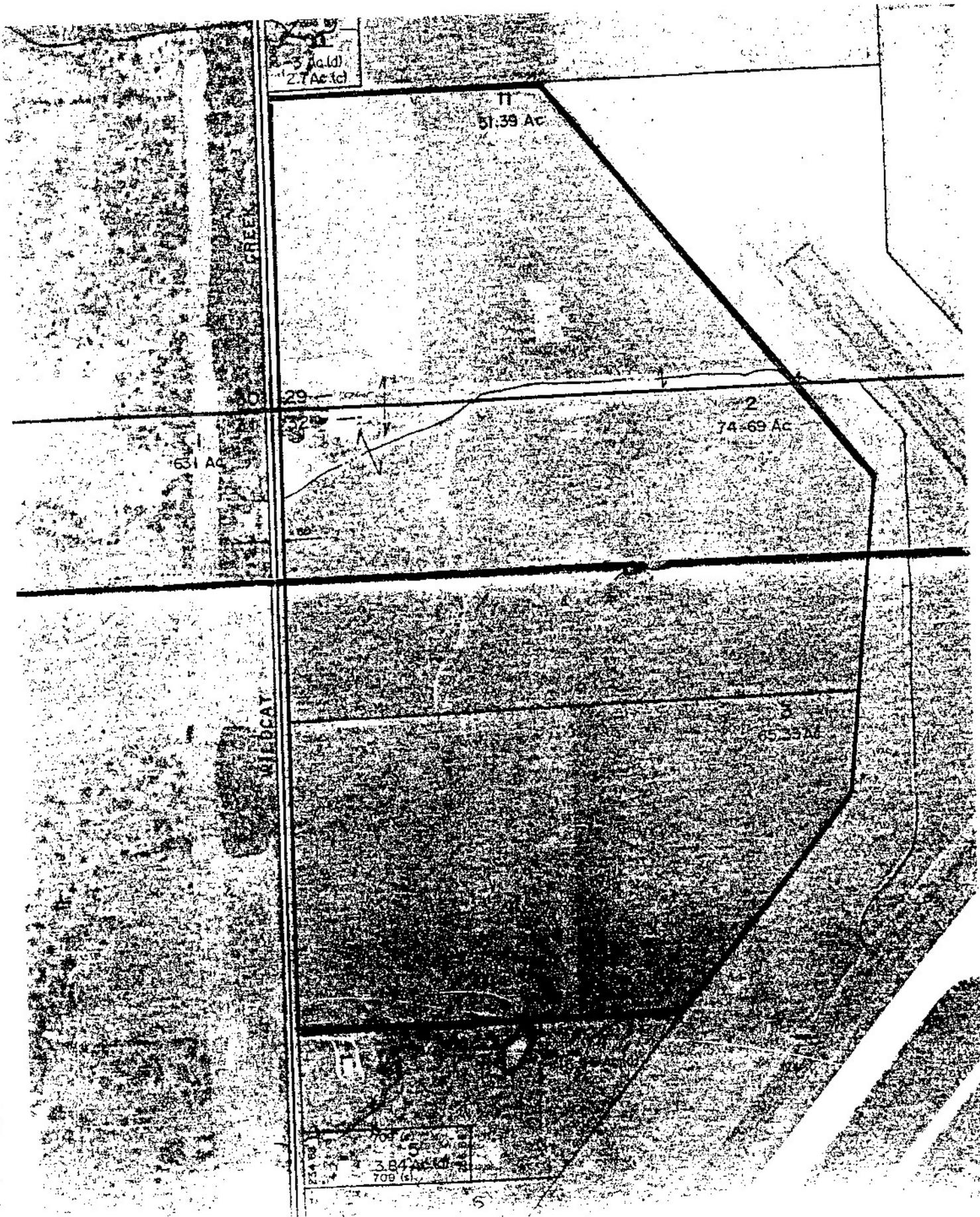
AERIAL PHOTOGRAPH - 1962



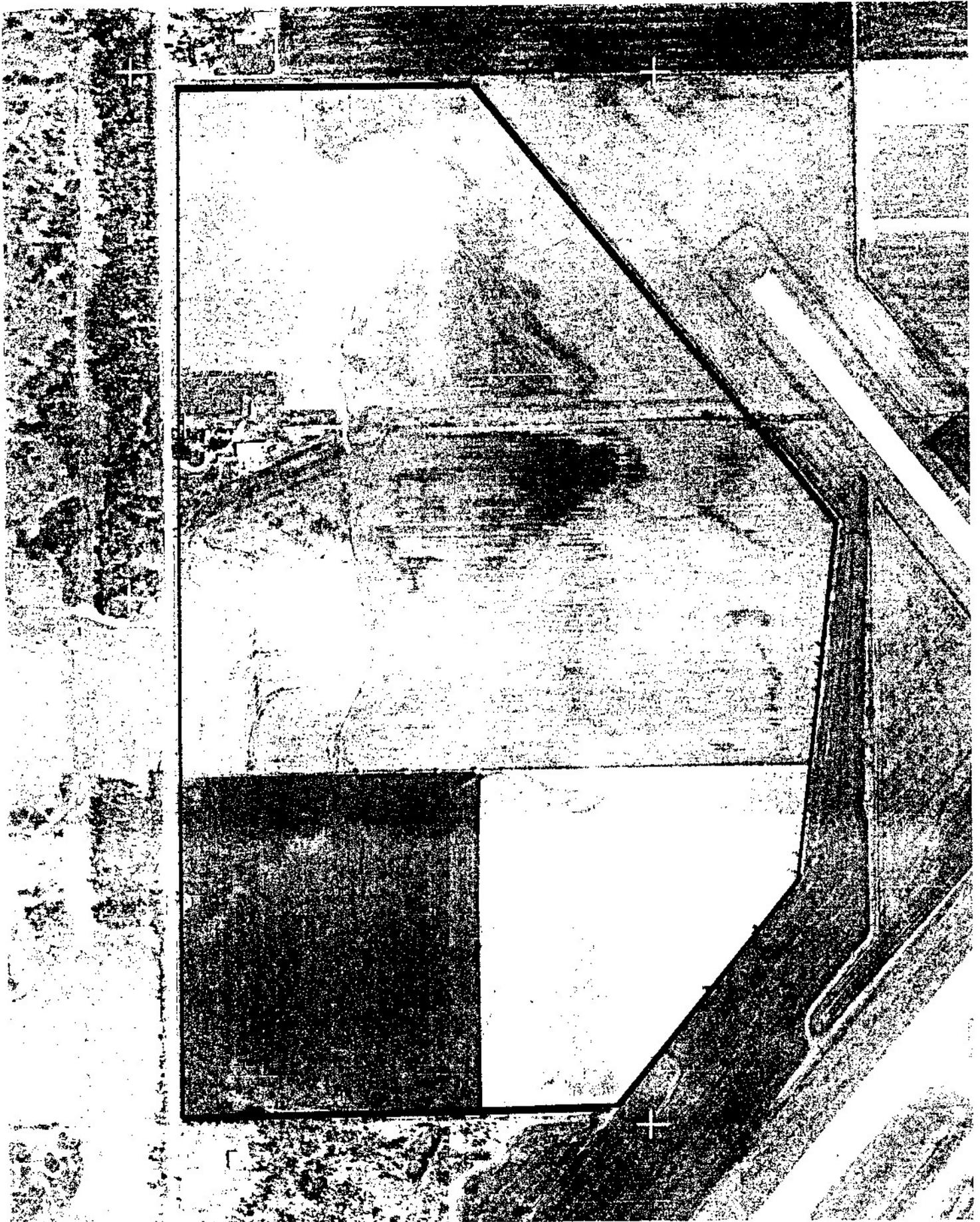
AERIAL PHOTOGRAPH - 1982



AERIAL PHOTOGRAPH - 1986



AERIAL PHOTOGRAPH - 1995



APPENDIX C
REGULATORY REVIEW MAP AND REPORT

Environmental Screening Report

Proposed Manhattan Business Park
Wildcat Creek Road
Manhattan, KS 66517
N39°8'43" W96°40'42"

Data and search criteria (ASTM) for this report:

<u>Federal Data</u>	Distance (miles)	Project Site (√)	Sites <u>Located</u>	Sites <u>Unlocatable</u>
FINDS	XRef only			
NPL	1.0		0	0
CERCLIS	0.5		0	0
NFRAP	0.5		0	0
RODS	XRef only			
RCRIS TSDs	1.0		0	0
RCRIS Generators	0.25		0	0
ERNS Spills	Site only		0	0
<u>KS Data</u>	Distance (miles)	Project Site (√)	Sites <u>Located</u>	Sites <u>Unlocatable</u>
UST	0.25		0	13
LUST	0.5		0	3
SPILLS	Site only		0	1
SOLID WASTE	0.5		0	0
HAZARDOUS	1.0		0	0

Located sites were accurately geocoded and determined to fall within the specified search range.

Sites may be unlocatable due to an incomplete address, an inaccurate address, or a street address which could not be accurately geocoded. Nevertheless, these sites have been determined to be in the general area by either City, Zip, or County boundaries.

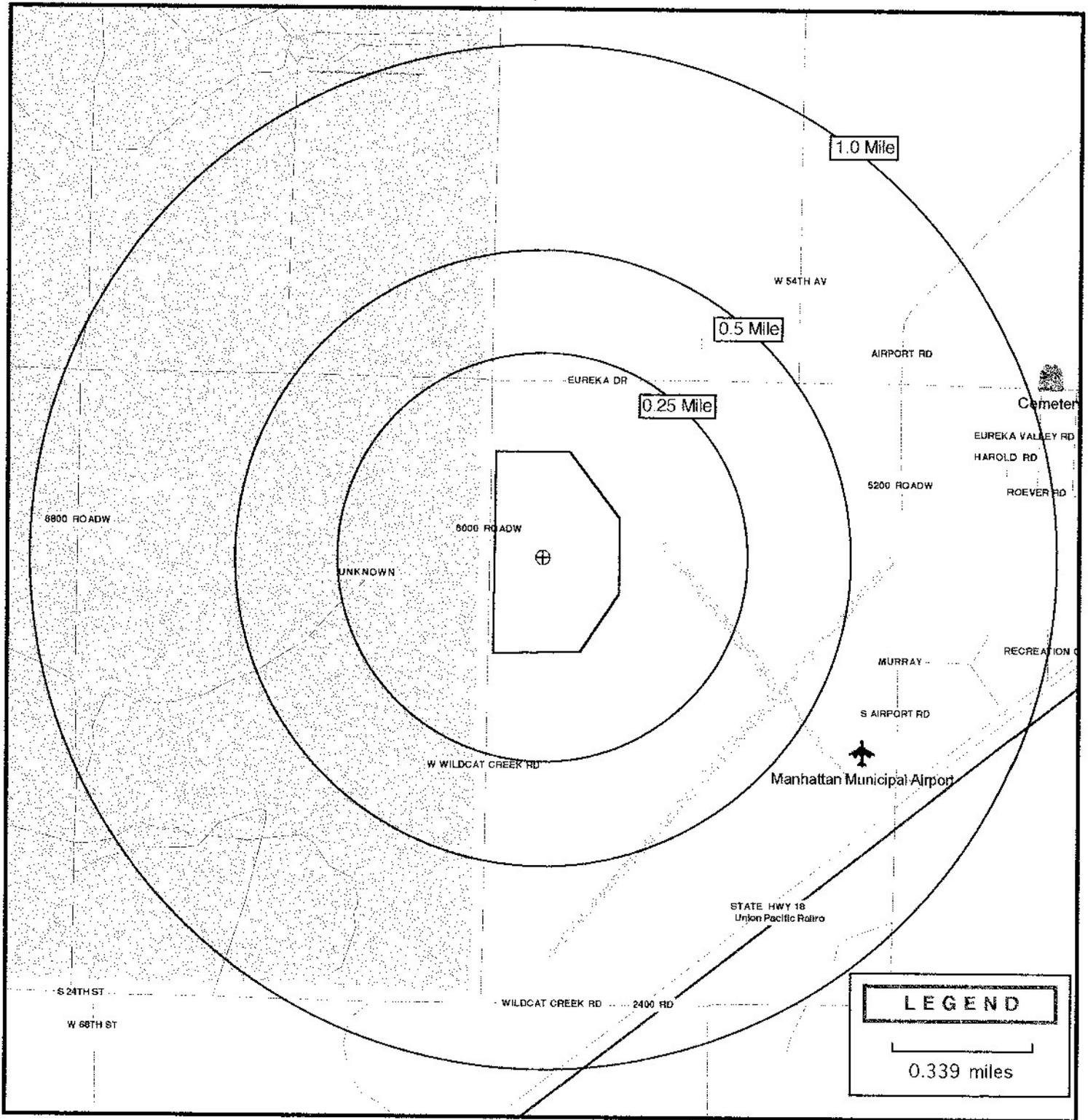
Disclaimer: This Report consists of a computer review of government data bases reflecting environmental records maintained by the government. These records may contain errors of fact, omissions of information, or the records may be incorrectly filed or coded so that a review of the data bases does not recover information relevant to the review. Environmental Search is not responsible for the accuracy, completeness or currentness of the governmental data bases reviewed. Environmental Search does not assume any responsibility for the user's reliance on this report or for its use for any purpose. Environmental Search's responsibility is limited to a review of the records properly entered into the governmental data bases searched. Any liability of Environmental Search of any error or omission is limited to the amount paid for the Environmental Search services involved.

Date Prepared:
December 9, 1996

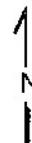
TABLE OF CONTENTS

STREET DETAIL MAP	1
FINDS SUMMARY	2
NPL SUMMARY	3
CERCLIS SUMMARY	4
NFRAP SUMMARY	5
RODS SUMMARY	6
RCRIS TSD SUMMARY	7
RCRIS GENERATORS SUMMARY	8
ERNS SUMMARY	9
KANSAS UST SUMMARY	10
UST SITES - UNLOCATABLE	
U01890 TOWN PUMP	11
U04602 KERSHAW READY-MIX CONCRETE	12
U08842 SOUTHWESTERN BELL TELE CO	13
U09077 CITY OFFICES	14
U09150 BLUEVILLE NURSERY	14
U09155 FARMERS CO-OP ASSN.	15
U19784 STEIN LEASE & RENTAL INC-AIRPORT	16
U24528 BLUEVILLE NURSERY, INC	16
U26264 MOORMAN MFG CO-MANHATTAN DIV	17
U26365 ROBERT BUCHANAN	17
U26649 KANSAS DEPT OF TRANSPORTATION	18
U27519 FAA-MHK RCAG	19
U28475 MOORMAN FEED COMPANY	19
KANSAS LUST SUMMARY	20
LUST SITES - UNLOCATABLE	
U508100076 LARSON CONSTRUCTION, MANHATTAN	21
U508100777 NRG LUBRICANTS, MANHATTAN	21
U508100826 FAA, MANHATTAN, MHK RCAG	21
KANSAS SPILLS SUMMARY	22
SPILLS SITES - UNLOCATABLE	
910509511626 SPICER AIRCRAFT, INC.	23
KANSAS SOLID WASTE SUMMARY	24
KANSAS HAZARDOUS WASTE SUMMARY	25

Proposed Manhattan Business Park Wildcat Creek Road Manhattan, KS 66517



Radii expanded from project site boundary.



FINDS SUMMARY

The Facility Index System data is a computerized inventory of over 600,000 facilities regulated by the EPA, with cross-references to the following program office data bases:

AFS (AIRS Facility System)

replaces the former Compliance Data System (CDS), the National Emission Data System (NEDS), and the Storage and Retrieval of Aerometric Data (SAROAD). Contains emissions and compliance data on air pollution.

CERCLIS (CERCLA Information System)

contains information on hazardous waste sites regulated by Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

CICIS (Chemicals In Commerce Information System)

contains an inventory of chemicals regulated under TSCA.

DOCKET/CDETS (Enforcement Docket System/Consent Decree Tracking System)

tracks civil judicial cases against environmental polluters.

FTTS/NCDB (FIFRA & TSCA Tracking System/National Compliance Data Base)

supports implementation of the Federal Insecticide, Fungicide & Rodenticide Control Act (FIFRA) and the Toxic Substances Control Act (TSCA).

PCS (Permit Compliance System)

contains data on National Pollutant Discharge Elimination System (NPDES)

RCRIS (Resource Conservation and Recovery Act Information System)

supports the RCRA program through the tracking of events and activities related to generators, transporters and TSDs (treatment, storage, disposal).

SSTS (Section Seven Tracking System)

evolved from the FIFRA and TSCA Enforcement System (FATES), tracks the registration of all pesticide producing establishments.

TRIS (Toxic Chemical Release Inventory System)

contains data collected under Section 313 of the Superfund Amendments and Reauthorization Act (SARA) of 1986.

Last Update: Environmental Search has on-line access to the FINDS system.
Search Range: FINDS is used solely as a cross-check for sites identified through other data sources since it is not the Data Base of Record for any programmatic office.

NPL SUMMARY

The National Priorities List data is a list of the nation's most serious hazardous waste sites falling under CERCLA regulations. These are the sites EPA targets for remedial actions: the study, design, and construction of long-term and often very expensive actions aimed at permanently remedying the situation.

Last Update: June 1996

NPL Searched to 1.0 Mile

Sites <u>Located</u>	Sites <u>Unlocatable</u>
0	0

Located sites were accurately geocoded and determined to fall within the specified search range.

Sites may be unlocatable due to an incomplete address, an inaccurate address, or a street address which could not be accurately geocoded. Nevertheless, these sites have been determined to be in the general area by either City, Zip, or County boundaries.

CERCLIS SUMMARY

The CERCLA Information System data is an inventory of potentially hazardous waste sites that have been reported to the Environmental Protection Agency by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

As of February 1995, approximately 25,000 CERCLIS sites designated "No Further Remedial Action Planned" (NFRAP) were removed. NFRAP sites may be sites where, following an initial investigation, no contamination was found, contamination was removed quickly without need for the site to be placed on the NPL, or the contamination was not serious enough to require Federal Superfund Action or NPL consideration.

Last Update: June 1996

CERCLIS Searched to 0.5 Mile

Sites <u>Located</u>	Sites <u>Unlocatable</u>
0	0

Located sites were accurately geocoded and determined to fall within the specified search range.

Sites may be unlocatable due to an incomplete address, an inaccurate address, or a street address which could not be accurately geocoded. Nevertheless, these sites have been determined to be in the general area by either City, Zip, or County boundaries.

NFRAP SUMMARY

The No Further Remedial Action Planned (NFRAP) data is a collection of sites removed from CERCLIS where, following an initial investigation, no contamination was found, contamination was removed quickly without the need for the site to be placed on the National Priorities List, or the contamination was not serious enough to require Federal Superfund Action. NFRAP sites have been investigated by EPA and the States, and EPA plans no further Federal Action. Some of the sites were removed because States or potentially responsible parties are already cleaning them up.

Last Update: June 1996

NFRAP Searched to 0.5 Mile

Sites	Sites
<u>Located</u>	<u>Unlocatable</u>
0	0

Located sites were accurately geocoded and determined to fall within the specified search range.

Sites may be unlocatable due to an incomplete address, an inaccurate address, or a street address which could not be accurately geocoded. Nevertheless, these sites have been determined to be in the general area by either City, Zip, or County boundaries.

RODS SUMMARY

The Records of Decision System (RODS) data is obtained from the EPA Office of Emergency and Remedial Response. It contains the text of the signed Superfund Records of Decision. The function of RODS is to serve as an information base for similar site conditions and to promote national consistency between Records of Decision.

The RODS data merely provides additional information on existing Superfund sites (NPL or CERCLIS), and are not identified separately on the map. All RODS sites in this report will correspond to previously identified NPL or CERCLIS sites.

Last Update: 1994

Sites matching NPL, CERCLIS, or NFRAP previously identified: 0

RCRIS TSD SUMMARY

RCRA Treatment, Storage, or Disposal Facility data is obtained from the RCRA Information System (RCRIS). RCRIS contains data compiled for the Resource Conservation and Recovery Act and the Hazardous and Solid Waste Amendments (HSWA) of 1984. Notification of Regulated Waste Activity, EPA Form 8700-12 was the initial instrument for collecting the data. The file was updated with information compiled from the Application for a Hazardous Waste Permit-Part A, EPA Form 8700-23. TSD sites are defined in 40 CFR 260.10 as any facility which treats, stores, or disposes of RCRA regulated hazardous waste. Compliance Monitoring and Enforcement (CME) data (formerly tracked in RAATS and CMEL) available to the public excludes enforcement sensitive data defined as: (1) Enforcement records representing referrals to the Department of Justice or State Attorney General; (2) Evaluations which identify violations and no written notice or formal enforcement action has been taken; (3) Evaluations which do not identify violations (and may still be under review).

Last Update: June 1996

RCRIS TSDs Searched to 1.0 Mile

Sites <u>Located</u>	Sites <u>Unlocatable</u>
0	0

Located sites were accurately geocoded and determined to fall within the specified search range.

Sites may be unlocatable due to an incomplete address, an inaccurate address, or a street address which could not be accurately geocoded. Nevertheless, these sites have been determined to be in the general area by either City, Zip, or County boundaries.

RCRIS GENERATORS SUMMARY

RCRA Generator Facility data is obtained from the RCRA Information System (RCRIS). RCRIS contains data compiled for the Resource Conservation and Recovery Act and the Hazardous and Solid Waste Amendments (HSWA) of 1984. Notification of Regulated Waste Activity, EPA Form 8700-12 was the initial instrument for collecting the data. The file was updated with information compiled from the Application for a Hazardous Waste Permit-Part A, EPA Form 8700-23. TSD sites are defined in 40 CFR 260.10 as any facility which treats, stores, or disposes of RCRA regulated hazardous waste. Compliance Monitoring and Enforcement (CME) data (formerly tracked in RAATS and CMEL) available to the public excludes enforcement sensitive data defined as: (1) Enforcement records representing referrals to the Department of Justice or State Attorney General; (2) Evaluations which identify violations and no written notice or formal enforcement action has been taken; (3) Evaluations which do not identify violations (and may still be under review).

Generators are categorized as follows:

FRGs (Fully Regulated Generators) generate at least 1,000 kilograms of hazardous waste, or at least 1 kilogram of acutely hazardous waste per month.
(formerly known as Large Quantity Generators or LQGs)

SQGs (Small Quantity Generators) generate more than 100 but less than 1,000 kilograms of hazardous waste, or less than 1 kilogram of acutely hazardous waste per month.

Conditionally Exempt SQGs generate less than 100 kilograms of hazardous waste and less than 1 kilogram of acutely hazardous waste per month. These sites are "conditionally exempt" from full regulation under Subtitle C of RCRA.

Unknown RCRA Handlers are facilities in RCRIS that are not designated as a TSD, Generator, or Transporter.

Last Update: June 1996

RCRIS Generators Searched to 0.25 Mile

Sites <u>Located</u>	Sites <u>Unlocatable</u>
0	0

Located sites were accurately geocoded and determined to fall within the specified search range.

Sites may be unlocatable due to an incomplete address, an inaccurate address, or a street address which could not be accurately geocoded. Nevertheless, these sites have been determined to be in the general area by either City, Zip, or County boundaries.

ERNS SUMMARY

The Emergency Response Notification System (ERNS) is a national computer database and retrieval system that is used to store information on releases of oil and hazardous substances. ERNS provides a mechanism for documenting and verifying incident notification information as initially reported. ERNS is operational in all ten U.S. Environmental Protection Agency (EPA) Regions and is supported by the U.S. Coast Guard (USCG). It provides a direct source of easily-accessible data that can be used to analyze spills and to support emergency planning efforts by Federal, State, and local governments. ERNS also supports the release notification requirements of the following legislative and regulatory requirements:

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended — Section 103

Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) — Section 304

The Federal Water Pollution Control Act (also known as the Clean Water Act) — Section 311

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) — Sections 300.51 and 300.65

Data Dates: January 1990 - December 1995

ERNS Spills Searched to Site only

Sites <u>Located</u>	Sites <u>Unlocatable</u>
0	0

Located sites were accurately geocoded and determined to fall within the specified search range.

Sites may be unlocatable due to an incomplete address, an inaccurate address, or a street address which could not be accurately geocoded. Nevertheless, these sites have been determined to be in the general area by either City, Zip, or County boundaries.

KANSAS UST SUMMARY

Registered Underground Storage Tank data is obtained from the Kansas Department of Health and Environment. This information includes facility, owner and tank information as submitted on the registration forms. While this data may not accurately reflect the current condition of the site, it does represent the most accurate description of the site that is readily available.

Last Update: January 1996 (latest available as of 3/96)

UST Searched to 0.25 Mile

Sites <u>Located</u>	Sites <u>Unlocatable</u>
0	13

Located sites were accurately geocoded and determined to fall within the specified search range.

Sites may be unlocatable due to an incomplete address, an inaccurate address, or a street address which could not be accurately geocoded. Nevertheless, these sites have been determined to be in the general area by either City, Zip, or County boundaries.

UST SITES - UNLOCATABLE

SITE NUMBER: U01890

SITE NAME: TOWN PUMP
ADDRESS: - (indefinite address)
MANHATTAN, KS 66502

CONTACT:

OWNER NAME: TOWN PUMP ATTN: JANICE K. BALDWIN
ADDRESS: P.O. BOX 1846
SALINA, KS 67402-1846

NUMBER OF UST ACTIVE: 0 INACTIVE: 2

TANK # 001 is permanently out of use with a capacity of 10000 gallons and was installed in 1981.
This tank is constructed of steel and contains gasoline.
Its internal protection is unknown its external protection is unknown.
There is galvanized steel piping.
and was removed on .

TANK # 002 is permanently out of use with a capacity of 10000 gallons and was installed in 1981.
This tank is constructed of steel and contains gasoline.
Its internal protection is unknown its external protection is unknown.
There is galvanized steel piping.
and was removed on .

UST SITES - UNLOCATABLE

SITE NUMBER: U04602

SITE NAME: KERSHAW READY-MIX CONCRETE
ADDRESS: INDIAN RESERV OR TRUST LAND (indefinite address)
MANHATTAN, KS 66502

CONTACT: RON GASTON 913-776-8811

OWNER NAME: KERSHAW READY-MIX CONCRETE & SAN
ADDRESS: PO BOX 668
MANHATTAN, KS 66502

NUMBER OF UST ACTIVE: 0 INACTIVE: 4

TANK # 001 is permanently out of use with a capacity of 12000 gallons and was installed in 1979.
This tank is constructed of steel and contains diesel.
It has internal unknown protection and external paint.
There is galvanized steel piping.
and was removed on 001900.

TANK # 002 is permanently out of use with a capacity of 12000 gallons and was installed in 1981.
This tank is constructed of steel and contains diesel.
It has internal unknown protection and external paint.
There is galvanized steel piping.
and was removed on .

TANK # 003 is permanently out of use with a capacity of 10000 gallons and was installed in 1986.
This tank is constructed of steel and contains diesel.
It has no internal protection and external cathodic protection.
There is fiberglass reinforced plastic piping.
and was removed on 081992.

TANK # 004 is permanently out of use with a capacity of 1000 gallons and was installed in 1986.
This tank is constructed of steel and contains gasoline.
It has no internal protection and external cathodic protection.
There is fiberglass reinforced plastic piping.
and was removed on 081992.

UST SITES - UNLOCATABLE

SITE NUMBER: U08842

SITE NAME: SOUTHWESTERN BELL TELE CO
ADDRESS: MANHATTAN JUNCTION (indefinite address)
MANHATTAN, KS 66502

CONTACT: ROGER MAUGHMER 913-537-5230

OWNER NAME: SOUTHWESTERN BELL TELE % MR. MCI
ADDRESS: 823 QUINCY, ROOM 202
TOPEKA, KS 66612

NUMBER OF UST ACTIVE: 0 INACTIVE: 1

TANK # 001 is permanently out of use with a capacity of 3000 gallons and was installed in 1968. This tank is constructed of steel and contains diesel. It has internal unknown protection and external paint. There is unknown piping. and was removed on 081990.

TANK # 001 is currently in use with a capacity of 300 gallons and an unknown installation date. This tank is constructed of and contains diesel. Its internal protection is unknownits external protection is unknown. There is unknown piping.

TANK # 002 is currently in use with a capacity of 300 gallons and an unknown installation date. This tank is constructed of and contains diesel. Its internal protection is unknownits external protection is unknown. There is unknown piping.

UST SITES - UNLOCATABLE

SITE NUMBER: U09077

SITE NAME: CITY OFFICES
ADDRESS: K-18 SW AIRPORT (ambiguous intersection)
MANHATTAN, KS 66502

CONTACT: A J JIM THOMAS 913-537-0056

OWNER NAME: MANHATTAN, CITY OF
ADDRESS: 1101 POYNTZ AVE
MANHATTAN, KS 66502

NUMBER OF UST ACTIVE: 0 INACTIVE: 1

TANK # 001 is permanently out of use with a capacity of 500 gallons and was installed in 1971.
This tank is constructed of unknown material and contains diesel.
It has internal unknown protection and external unknown protection.
There is unknown piping.
and was removed on 101990.

SITE NUMBER: U09150

SITE NAME: BLUEVILLE NURSERY
ADDRESS: ROUTE 1 (indefinite address)
MANHATTAN, KS 66502

CONTACT: FARMERS COOP ASSN 913-539-6464

OWNER NAME: FARMERS COOP ASSN - (MANHATTAN)
ADDRESS: P.O. BOX 1045
MANHATTAN, KS 66502

NUMBER OF UST ACTIVE: 1 INACTIVE: 0

TANK # 001 is currently in use with a capacity of 1000 gallons and was installed in 1966.
This tank is constructed of steel and contains gasoline.
It has no internal protection and external paint.
There is galvanized steel piping.

UST SITES - UNLOCATABLE

SITE NUMBER: U09155

SITE NAME: FARMERS CO-OP ASSN.
ADDRESS: MANHATTAN AIRPORT (indefinite address)
MANHATTAN, KS 66502

CONTACT: FARMERS COOP ASSN 913-539-7623

OWNER NAME: FARMERS COOP ASSN - (MANHATTAN)
ADDRESS: P.O. BOX 1045
MANHATTAN, KS 66502

NUMBER OF UST ACTIVE: 3 INACTIVE: 2

TANK # 001 is permanently out of use with a capacity of 2500 gallons and was installed in 1961.
This tank is constructed of steel and contains gasoline.
It has no internal protection and external paint.
There is galvanized steel piping.
and was removed on 041993.

TANK # 002 is currently in use with a capacity of 2500 gallons and was installed in 1961.
This tank is constructed of steel and contains gasoline.
It has no internal protection and external paint.
There is galvanized steel piping.

TANK # 003 is currently in use with a capacity of 2500 gallons and was installed in 1961.
This tank is constructed of steel and contains gasoline.
It has no internal protection and external paint.
There is galvanized steel piping.

TANK # 004 is currently in use with a capacity of 10000 gallons and was installed in 1969.
This tank is constructed of steel and contains "other".
It has no internal protection and external paint.
There is galvanized steel piping.

TANK # 005 is permanently out of use with a capacity of 1000 gallons and was installed in 1966.
This tank is constructed of steel and its contents are unknown.
It has no internal protection and external paint.
There is galvanized steel piping.
This tank was filled.

UST SITES - UNLOCATABLE

SITE NUMBER: U19784

SITE NAME: STEIN LEASE & RENTAL INC-AIRPORT
ADDRESS: MUNICIPAL AIRPORT (indefinite address)
MANHATTAN, KS 66502

CONTACT: ROYAL CARLSON 913-539-0261

OWNER NAME: STEIN LEASE & RENTAL INC
ADDRESS: 3230 ARNOLD RD
SALINA, KS 67401

NUMBER OF UST ACTIVE: 0 INACTIVE: 1

TANK # 001 is permanently out of use with a capacity of 10000 gallons and was installed in 1974.
This tank is constructed of steel and contains gasoline.
It has internal unknown protection and external unknown protection.
There is galvanized steel piping.
and was removed on 101990.

SITE NUMBER: U24528

SITE NAME: BLUEVILLE NURSERY, INC
ADDRESS: RT 1, BOX 177 (indefinite address)
MANHATTAN, KS 66502

CONTACT: DARRELL WESTERVELT 913-539-2671

OWNER NAME: BLUEVILLE NURSERY, INC
ADDRESS: ROUTE 31, BOX 177
MANHATTAN, KS 66502

NUMBER OF UST ACTIVE: 1 INACTIVE: 0

TANK # 001 is currently in use with a capacity of 1000 gallons and an unknown installation date.
This tank is constructed of steel and contains "other".
It has internal unknown protection and external unknown protection.
There is bare steel piping.

UST SITES - UNLOCATABLE

SITE NUMBER: U26264

SITE NAME: MOORMAN MFG CO-MANHATTAN DIV
ADDRESS: (indefinite address)
MANHATTAN, KS 66502

CONTACT: KENNETH R HARRIS 913-776-4531

OWNER NAME: MOORMAN MFG COMPANY
ADDRESS: 1000 N 30TH ST
QUINCY, IL 62301

NUMBER OF UST ACTIVE: 0 INACTIVE: 1

TANK # 001 is permanently out of use with a capacity of 1000 gallons and was installed in 1978.
This tank is constructed of steel and contains diesel.
It has no internal protection and no external protection.
There is galvanized steel piping.
and was removed on 061988 with gallons remaining.

SITE NUMBER: U26365

SITE NAME: ROBERT BUCHANAN
ADDRESS: (indefinite address)
MANHATTAN, KS 66502

CONTACT: ROBERT BUCHANAN 913-539-7616

OWNER NAME: OPPY, MIKE
ADDRESS: 3001 ANDERSON
MANHATTAN, KS 66502

NUMBER OF UST ACTIVE: 0 INACTIVE: 1

TANK # 001 is permanently out of use with a capacity of 2000 gallons and was installed in 1966.
This tank is constructed of steel and contains gasoline.
It has internal unknown protection and external unknown protection.
There is galvanized steel piping.
and was removed on 081989.

UST SITES - UNLOCATABLE

SITE NUMBER: U26649

SITE NAME: KANSAS DEPT OF TRANSPORTATION
ADDRESS: - (indefinite address)
MANHATTAN, KS 66502

CONTACT: ROBERT FLEMING 913-539-4821

OWNER NAME: TRANSPORTATION, DEPARTMENT OF
ADDRESS: ROOM 856W-DOCKING ST OFFICE BLDG
TOPEKA, KS 66612

NUMBER OF UST ACTIVE: 0 INACTIVE: 3

TANK # 001 is permanently out of use with a capacity of 1000 gallons and was installed in 1965.
This tank is constructed of steel and contains diesel.
It has internal unknown protection and external unknown protection.
There is galvanized steel piping.
and was removed on 081993.

TANK # 002 is permanently out of use with a capacity of 560 gallons and was installed in 1965.
This tank is constructed of steel and contains gasoline.
It has internal unknown protection and external unknown protection.
There is galvanized steel piping.
and was removed on 101990.

TANK # 003 is permanently out of use with a capacity of 560 gallons and was installed in 1965.
This tank is constructed of steel and contains used oil.
It has internal unknown protection and external unknown protection.
There is galvanized steel piping.
and was removed on 081989 with gallons remaining.

UST SITES - UNLOCATABLE

SITE NUMBER: U27519

SITE NAME: FAA-MHK RCAG
ADDRESS: RR (indefinite address)
MANHATTAN, KS 66502

CONTACT: KENNETH BAKER 913-827-6406

OWNER NAME: FEDERAL AVIATION ADMIN %EGGERT
ADDRESS: 1801 AIRPORT ROAD, ROOM 105
WICHITA, KS 67209

NUMBER OF UST ACTIVE: 0 INACTIVE: 1

TANK # 001 is permanently out of use with a capacity of 515 gallons and was installed in 1971.
This tank is constructed of steel and contains diesel.
It has no internal protection and external paint.
There is galvanized steel piping.
and was removed on 081993.

SITE NUMBER: U28475

SITE NAME: MOORMAN FEED COMPANY
ADDRESS: RR 5 (indefinite address)
MANHATTAN, KS

CONTACT:

OWNER NAME: MOORMAN FEED COMPANY
ADDRESS: RR 5
MANHATTAN, KS

NUMBER OF UST ACTIVE: 0 INACTIVE: 1

TANK # 001 is permanently out of use with a capacity of 1000 gallons and was installed in 1983.
This tank is constructed of steel and contains gasoline.
It has no internal protection and external unknown protection.
There is unknown piping.
and was removed on .

KANSAS LUST SUMMARY

Leaking Underground Storage Tank data is obtained from the Kansas Department of Health and Environment. This information includes facility location, date reported and status. While this data may not accurately reflect the current condition of the site, it does represent the most accurate description of the site that is readily available.

Last Update: January 1996 (latest available as of 3/96)

LUST Searched to 0.5 Mile

Sites <u>Located</u>	Sites <u>Unlocatable</u>
0	3

Located sites were accurately geocoded and determined to fall within the specified search range.

Sites may be unlocatable due to an incomplete address, an inaccurate address, or a street address which could not be accurately geocoded. Nevertheless, these sites have been determined to be in the general area by either City, Zip, or County boundaries.

LUST SITES - UNLOCATABLE

SITE NUMBER: U508100076

SITE NAME: LARSON CONSTRUCTION, MANHATTAN
ADDRESS: (indefinite address)
MANHATTAN, KS 66502

DATE REPORTED: 12/21/89
STATUS: CLOSED - According to the data available, levels of contamination at the site do not exceed cleanup levels set by the state.

SITE NUMBER: U508100777

SITE NAME: NRG LUBRICANTS, MANHATTAN
ADDRESS: MANHATTAN AIRPORT (indefinite address)
MANHATTAN, KS 66502

DATE REPORTED: 04/13/93
STATUS: CLOSED - According to the data available, levels of contamination at the site do not exceed cleanup levels set by the state.

SITE NUMBER: U508100826

SITE NAME: FAA, MANHATTAN, MHK RCAG
ADDRESS: RURAL ROUTE (indefinite address)
MANHATTAN, KS 66502

DATE REPORTED: 08/31/93
STATUS: CLOSED - According to the data available, levels of contamination at the site do not exceed cleanup levels set by the state.

KANSAS SPILLS SUMMARY

Emergency Release Reports (Spills) data is obtained from the Kansas Department of Health and Environment. This information includes spill location, date reported and status. While this data may not accurately reflect the current condition of the site, it does represent the most accurate description of the site that is readily available.

Last Update: February 1996

SPILLS Searched to Site only

Sites <u>Located</u>	Sites <u>Unlocatable</u>
0	1

Located sites were accurately geocoded and determined to fall within the specified search range.

Sites may be unlocatable due to an incomplete address, an inaccurate address, or a street address which could not be accurately geocoded. Nevertheless, these sites have been determined to be in the general area by either City, Zip, or County boundaries.

SPILLS SITES - UNLOCATABLE

SITE NUMBER: 910509511626

SITE NAME: SPICER AIRCRAFT, INC.
ADDRESS: MUNICIPAL AIRPORT (indefinite address)
MANHATTAN, KS

CONTACT: JIM 9135373277

SPILLERS ADDRESS: MANHATTAN MUNICIPAL AIR.

DATE SPILLED: 05/09/91 DISCOVERED: 05/09/91
DATE CLOSED:

SPILL TYPE: MOTOR VEHICLE
DESCRIPTION: 20 GALLONS OF FUEL (0 RECOVERED)
TANKER OPERATOR WAS TRANSFERRING FUEL BETWEEN APRT. AND
TANKER. HOSE SLIPPED OUT OF FILLER OPEINING AND ALLOWED APPROX.
20 GAL OF JP4 TO SPILL ONTO THE GROUND. THE FUEL WAS BEING
TRANSFERRED IN AN EFFORT TO FIX A LEAKY VALVE, ON
THE BELLY OF THE SEMI TRAILER.

MEDIA AFFECTED: SOIL
WATERWAYS AFFECTED: UNKNOWN
INVESTIGATED BY: KDHE
CLEAN-UP METHODS:
COMMENTS:

KANSAS SOLID WASTE SUMMARY

Permitted Solid Waste data is obtained from the Kansas Department of Health Environment Bulletin 4.10. This information includes facility location and permit numbers as submitted on the registration forms. While this data may not accurately reflect the current condition of the site, it does represent the most accurate description of the site that is readily available.

Last Update: April 1994

SOLID WASTE Searched to 0.5 Mile

Sites <u>Located</u>	Sites <u>Unlocatable</u>
0	0

Located sites were accurately geocoded and determined to fall within the specified search range.

Sites may be unlocatable due to an incomplete address, an inaccurate address, or a street address which could not be accurately geocoded. Nevertheless, these sites have been determined to be in the general area by either City, Zip, or County boundaries.

KANSAS HAZARDOUS WASTE SUMMARY

Contaminated Sites data is obtained from the Kansas Department of Health and Environment. The Bureau of Environmental Remediation is charged with coordinating the investigatory and remedial activities at sites in Kansas where contamination has been detected or is suspected. Identified sites in Kansas are investigated by one of the bureaus of the Division of Environment or the Kansas Corporation Commission (KCC), depending on the nature of the suspected or known contamination and the industry or responsible party involved. While this data may not accurately reflect the current condition of the site, it does represent the most accurate description of the site that is readily available.

Last Update: 1996

HAZARDOUS Searched to 1.0 Mile

Sites <u>Located</u>	Sites <u>Unlocatable</u>
0	0

Located sites were accurately geocoded and determined to fall within the specified search range.

Sites may be unlocatable due to an incomplete address, an inaccurate address, or a street address which could not be accurately geocoded. Nevertheless, these sites have been determined to be in the general area by either City, Zip, or County boundaries.

**Proposed Manhattan Business Park
Wildcat Creek Road
Manhattan, KS 66517**

Name & Address List

UST SITES - UNLOCATABLE

U01890
TOWN PUMP
-
MANHATTAN, KS 66502

U04602
KERSHAW READY-MIX CONCRETE
INDIAN RESERV OR TRUST LAND
MANHATTAN, KS 66502

U08842
SOUTHWESTERN BELL TELE CO
MANHATTAN JUNCTION
MANHATTAN, KS 66502

U09077
CITY OFFICES
K-18 SW AIRPORT
MANHATTAN, KS 66502

U09150
BLUEVILLE NURSERY
ROUTE 1
MANHATTAN, KS 66502

U09155
FARMERS CO-OP ASSN.
MANHATTAN AIRPORT
MANHATTAN, KS 66502

U19784
STEIN LEASE & RENTAL INC-AIRPORT
MUNICIPAL AIRPORT
MANHATTAN, KS 66502

U24528
BLUEVILLE NURSERY, INC
RT 1, BOX 177
MANHATTAN, KS 66502

U26264
MOORMAN MFG CO-MANHATTAN DIV

MANHATTAN, KS 66502

U26365
ROBERT BUCHANAN

MANHATTAN, KS 66502

U26649
KANSAS DEPT OF TRANSPORTATION
-
MANHATTAN, KS 66502

U27519
FAA-MHK RCAG
RR
MANHATTAN, KS 66502

U28475
MOORMAN FEED COMPANY
RR 5
MANHATTAN, KS

LUST SITES - UNLOCATABLE

U508100076
LARSON CONSTRUCTION,
MANHATTAN

MANHATTAN, KS 66502

U508100777
NRG LUBRICANTS, MANHATTAN
MANHATTAN AIRPORT
MANHATTAN, KS 66502

U508100826
FAA, MANHATTAN, MHK RCAG
RURAL ROUTE
MANHATTAN, KS 66502

**Proposed Manhattan Business Park
Wildcat Creek Road
Manhattan, KS 66517**

Name & Address List

SPILLS SITES - UNLOCATABLE

910509511626
SPICER AIRCRAFT, INC.
MUNICIPAL AIRPORT
MANHATTAN, KS