



Site
Investigation
Report
Review

**SIRR Report
for
Unassigned Uncontrolled Sites**

SIRR ID O95-0001
Site Name KNAPPER OIL, FOREST CITY
City Location Forest City
Site Type Property Audit
County Winnebago

Screening Activity

SITE INFORMATION

Property Owner Doug Knapper
Mailing Address P. O. Box 247
106 Hwy. 69 North
Forest City, IA 50438

Phone: 1-641-585-3706

Location/Legal Description SW 1/4 of NE 1/4 of Sec. 35, T98 N, R24 W
Size Of Property 15,000 sq. ft.
Report Prepared By Heartland Environmental Services, Inc.
Report Submitted By Doug Knapper

Date Report Submitted 08/20/2002
Current Usage Storage

REPORT INFORMATION SUMMARY

I. Summarize the data submitted (no., type, depth of soil borings, surface samples, ground water samples, other sampling conducted, analyses performed, contamination identified, etc.)

Four borings were completed at locations suspected to be near historic petroleum-related operations with the aid of 1988 aerial photographs which depicted the subject property and the location of historic above-ground storage tanks. Soil samples were collected at 1-foot intervals for visual observation and field screened with photoionization detector. Samples exhibiting high screening values were set aside for possible laboratory analyses. Groundwater sample was collected from a boring placed northwest of location of former ASTs. Petroleum compounds were detected in soil and groundwater samples from the boring at the northwest corner of former ASTs.

II. Summarize the site history (past usages, known or suspected contamination pathways such as tanks, S.W. burial, septic tank/tile field, lagoon, land application, etc.)

This history of the site was provided by Doug Knapper, the responsible party. Prior to 1969, the property was owned by the Chicago Rock Island Railroad. It was used in their general operation as a storage and repair facility, including petroleum storage. From 1969 to 1972, Mr. Irv Sierp owned the property. He sold it to Calvin Peterson who owned it until 1986. The Doug Knapper family has owned it since 1986. All petroleum tanks were reportedly removed in 1991. Only ASTs were used on the property.



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The property has a building which is in a state of disrepair and is used for some storage. The city has zoned the area as "residential multi-family optional".

III. Summarize the other relevant information (include what may have been learned or known from sources other than the report itself, such as DNR files)

Waldorf College, Forest City, is interested in purchasing the property.

REVIEW SUMMARY

Contaminant Type Petroleum

I. Summarize your findings and conclusions regarding the contaminants found and their extent and concentrations. Relate those values known criteria such as water quality standards, MCLs, established cleanup levels, background or any other relevant or useful benchmarks used to determine the site's priority.

Benzene, toluene, ethylbenzene and xylenes, TEH as diesel and waste oil were detected in soil in one borehole near the former AST location: Benzene level in soil was 1.73 mg/kg, which exceeded TIER 1 level for benzene for soil leaching to groundwater (0.54 mg/kg) and soil vapor to enclosed space (1.16 mg/kg). It is just below the soil to plastic water line level of 1.8 mg/kg (IAC Chapter 135). The BTEX values are all below LRP statewide standards of 73, 16,000, 7,800 and 160,000 mg/kg, respectively (IAC Chapter 137). It should be noted that TIER 1 and LRP standards are not calculated for identical pathways.

The same contaminants detected in soil were also detected in groundwater in the boring. Benzene was detected at 49.3 ug/L compared to TIER 1 and Land Recycling Program statewide standard of 5 ug/L. TEH-diesel value of 2,970 ug/L exceeded TIER 1 LUST Standard of 1,200 ug/L for groundwater ingestion pathway. The LRP does not have a standard for diesel.

II. Summarize the potential or actual impacts of the contamination. What is known about the neighboring area, i.e., are there residences, businesses, public use areas, etc.? Are there wells in the area that could be potentially impacted? Are there identified contaminant pathways such as water or sewer lines, drain tiles, or fissures? Identify any other use/location issues that deserve consideration in any priority assignment.

There are three residences close to the property. Information from Doug Knapper stated that one residence is 127 feet from property line. The second home is 160 feet and a third is 205 feet away. Other residences are farther away.

The facility and all adjoining properties are provided drinking water by the Forest City Public Water Supply. Three drinking water wells are located at least 0.5 mile northeast of the site. The wells are about 300 feet deep. No plastic water lines are located within 200 feet of the site.

The Winnebago River flows approximately 3,000 feet north and east of the of the site. There are no other creeks or rivers within many miles of the facility.

III. Summarize any other information, knowledge, or reasoning used in determining your recommendation regarding the priority assigned to this site.

Although benzene level in ground water exceeded the MCL and the diesel concentration exceeded the TIER 1 LUST level, there are no nearby receptors. Water supply to the facility, nearby residents and the rest of the Forest City residents are supplied from municipal water. The municipal water supply is from fairly deep wells (>300 feet) located approximately 0.6 miles from the site. The overburden is composed mainly of silty clay from glacial till, approximately 147 feet thick. This would impede downward movement of contaminants. Other private drinking water wells are at least 0.5 miles from the site.



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No further action is recommended under CERCLA and state authority.

PRIORITY LEVEL

Priority Level 3-4

PROGRAM AUTHORITY REFERRAL

Program Authority Referral No Further Action

Other Referral

ISS/Form Completed By Lambert A. Nnadi

Date ISS Completed 11/05/2002

ESS Completed By

Date ESS Completed

Date Completed

Form Reviewed

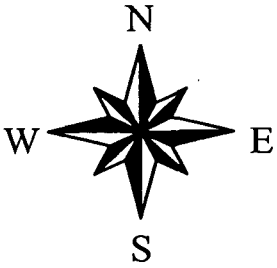
Date Reviewed 12/6/02

A handwritten signature in cursive script that reads "Cal Sundberg".

Knapper Oil , Forest City, Site Location Map



 **Roads95**
Rivers95



Soil & groundwater sample submitted from boring BH1 indicate petroleum levels that exceed Iowa action standards.

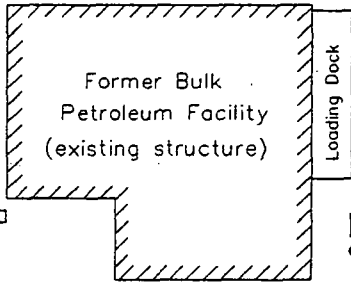
(vacant lot)

FORMER RAILROAD TRACKS



BH3

(residential)



BH2

BH4

Historic Railroad Tanker Fueling Island

South 11th Street

(residential)

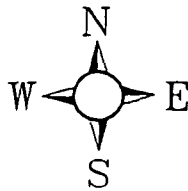
West I Street

(vacant lot)

(commercial)

LEGEND

- Soil Boring Location
- Soil Boring/Temporary Well Location



SCALE

 (1" = 25')

SITE PLAN MAP

Knapper Property
 Forest City, Iowa

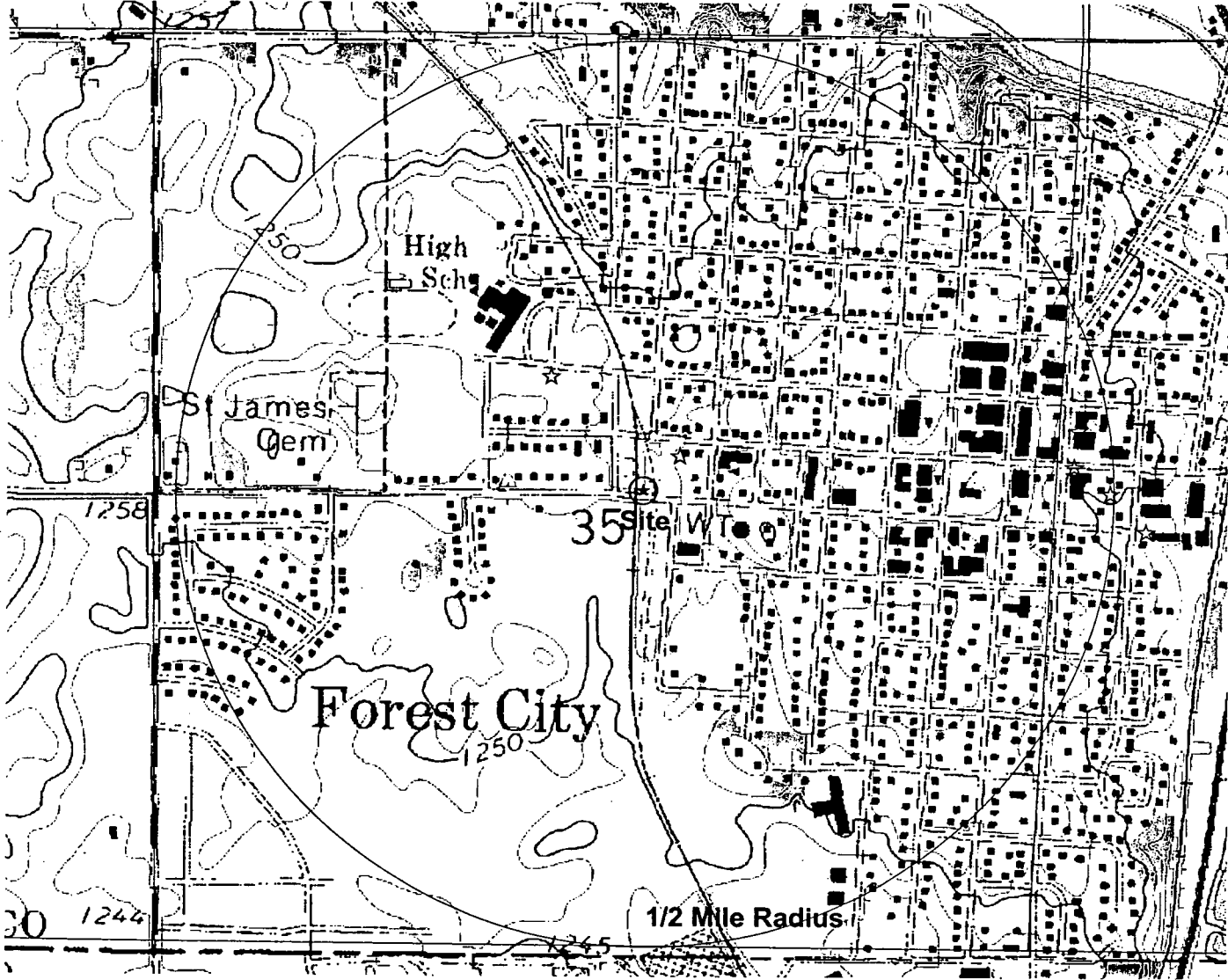
HEARTLAND
 Environmental Services, Inc.

Project No
 WAL-01

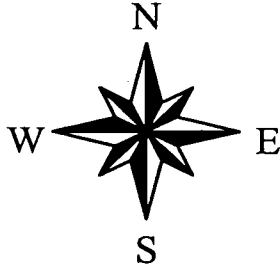
Drawing No
 WAL-01

Revised
 7/25/02

Knapper Oil Site - Municipal Water Supply

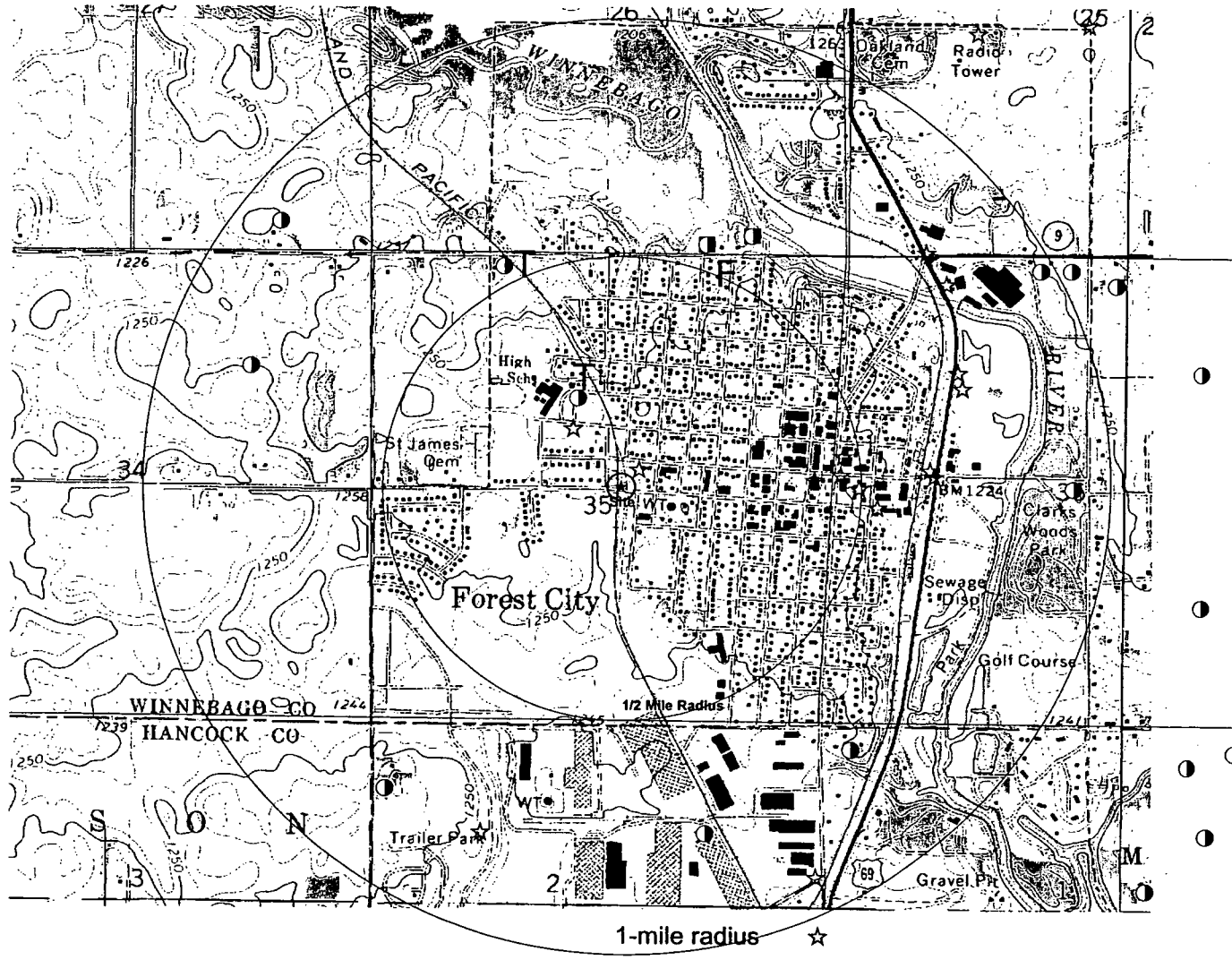


- Plss95
- ☆ LUST sites
- Municipal wells
- Pvtperm.shp

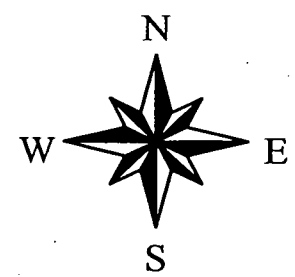


0.3 0 0.3 0.6 Miles

Knapper Oil Site - Well Locations



- Geoutm
- Plss95
- ☆ LUST sites
- Municipal wells
- Pvtperm.shp



PRE-CERCLIS SCREENING ASSESSMENT CHECKLIST/DECISION FORM

This checklist can assist the site investigator during the Pre-CERCLIS screening. It will be used to determine whether further steps in the site investigation process are required under CERCLA. Use additional sheets, if necessary.

Checklist Preparer: Lambert A. Nnadi 11-05-2002
 (Name/Title) (Date)
 900 E. Grand Avenue 515-281-4117
 (Address) (Phone)
 Lambert.nnadi@dnr.state.ia.us
 (E-mail Address)

Site Name: Knapper Oil

Previous Names (if any):

Site Location: Intersection of West I Street and South 11th Street
 (Street)
 Forest City IA 50438
 (City) (ST) (Zip)

Latitude: 43.2647 **Longitude:** 93.7389

Compare the following checklist. If "yes" is marked, please explain below.

	YES	NO
1. Does the site already appear in CERCLIS?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Is the release from products that are part of the structure of, and result in exposure within, residential buildings or businesses or community structures?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Does the site consist of a release of a naturally occurring substance in its unaltered form, or altered solely through naturally occurring processes or phenomena, from a location where it is naturally found?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Is the release into a public or private drinking water supply due to deterioration of the system through ordinary use?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Is some other program actively involved with the site (i.e., another Federal, State, or Tribal program)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Are the hazardous substances potentially released at the site regulated under a statutory exclusion (i.e., petroleum, natural gas, natural gas liquids, synthetic gas usable for fuel, normal application of fertilizer, release located in a workplace, naturally occurring, or regulated by the NRC, UMTRCA, or OSHA)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7. Are the hazardous substances potentially released at the site excluded by policy considerations (e.g., deferral to RCRA Corrective Action)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8. Is there sufficient documentation that clearly demonstrates that there is no potential for a release that could cause adverse environmental or human health impacts (e.g., comprehensive remedial investigation equivalent data showing no release above ARARs, completed removal action, documentation showing that no hazardous substance release have occurred, EPA approved risk assessment completed)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Please explain all "yes" answer(s), attach additional sheets if necessary:

6) The contaminants involved are petroleum products which are excluded from CERCLA action.

- Site Determination:**
- Enter the site into CERCLIS. Further assessment is recommended (Explain below).
 - The site is not recommended for placement into CERCLIS (Explain below).
 - Further assessment is recommended under PRE-CERCLA (Explain below).

DECISION/DISCUSSION/RATIONALE:
The nearest receptors are the Municipal wells situated approximately 0.6 miles north of the site. These wells are at least 300 feet deep, in bedrock aquifer, and are unlikely to be impacted by the contaminants. The Winnebago River flows approximately 3000 feet north and east of the site. Impact to the river from the site is also unlikely.

Regional EPA Reviewer:

Print Name/Signature Date

State Agency/Tribe:

Cal Lindenberg *Cal Lindenberg* *12/6/02*

Print Name/Signature Date



REGION VII U.S. EPA SUPERFUND

NO DISCOVERY DATE

PRE-CERCLIS INITIATION FORM

NPL Status = O-NOT A VALID SITE OR INCIDENT

Site Name:Knapper Oil, Forest City

Address:S. 11th Street & W. I Street

County Name: Winnebago

City, State, Zip: Forest City, IA 50438

State ID (if one exists):095-0001

Congressional District: 4

NPL Status: = Not a Valid Site or Incident

Federal Facility? Yes No

Section: C-(SACR) Site Assessment/Cost Recovery Branch L-(EFLR) Enfr/Fund Lead RV Branch F-(FFSE) Federal Facilities/Special Emphasis Brnach
 M-(MOKS) MO/KS remedial Branch I-(IANE) IA/NE Remedial Branch O-(ER&R) Emergency Response & RV Branch

List Site Alias Name (s):

Directions to Site: Take US Hwy. 69 N to Forest City until you get to J Street. Proceed west on J Street until you get to S/. 11th Street. Go south one block till reach West I Street. The facilit is at the northeast corner of the intersection of I and 11th Street.

Site Description: Former railroad storage facility. Currently, there is only one dilapidated building on-site. This building is used for "rough" storage.

Site Size: 15,000

Site Dimension: Acres Square Feet Square Miles Miles

Site Type (Choose all that apply - for every main category chosen in bold at least one sub-category must be selected; if more than one main and sub category is selected indicate which is primary):

USGS Quadrant: Forest City, IA USGS Hydro Unit:

Primary designation:

Latitude: 43. 2647 Longitude: 93.7389 (Decimal Degree format)

MP-Manufacturing/Processing/Maintenance - Applicable sub-categories:

Lat/Long Accuracy: Seconds Miles Feet Degrees Minutes Kilometers Meters

CA-Chemicals and allied products CG-Coal gasification CP-Coke production

Lat/Long Source: EPA Region 7 EPIC Regulated Entity Private Geograph SNAP Other Other Fed Agency Contractor EPA HQ

EP-Electric power generation and distribution.

EE-Electronic/electrical equipment FT-Fabrics/textiles LW-Lumber and wood products/pulp and paper WP-Lumber and wood products/wood preserving/treatment MF-Metal fabrication/finishing/coating and allied industries OR-Oil and gas refining OP-Ordnance production PR-Plastics and rubber products PM-Primary metals/mineral processing RA-Radioactive products T A-Tanneries TS-Trucks/ships/trains/aircraft and related components

Owner Bank/Loan Company Indian Lands Operator County Owned Other Type District Owned Private (choose 1): Federally Owned Mixed Ownership Former Federally Owned or Operated State Owned Government Owned/Contractor Operated Trustee, Federal Privately Owned/Government Operated Trustee, State Property Defaulted Back to Government Municipality

MI-Mining - Applicable sub-categories

CO-Coal ME-Metals NM-Non-metal minerals OG-Oil and Gas

Operational Status: Active Inactive Unknown

WM-Waste Management - Applicable sub-categories

CL-Co-disposal landfill (municipal and industrial) ID-Illegal disposal/open dump IF-Industrial waste facility (non-generator) IL-Industrial waste landfill MD-Mine tailings disposal ML-Municipal solid waste landfill RW-Radioactive waste treatment, storage, disposal (non-generator)

Incident Type: Non-Oil Spill Oil Spill Unknown

Non-NPL Status (Choose one):

Protect: Yes No Not a Valid Site or Incident Not a Valid Site or Incident: NRC Lead Not a Valid Site or Incident: RCRA Lead Not a Valid Site or Incident: State Lead Not a Valid Site or Incident: Tribal Lead

OT-Other - Applicable sub-categories

AG-Agricultural (e.g., grain elevator) CS-Contaminated sediment site with no identifiable source DC-Dust control GP-Ground water plume site with no identifiable source MO-Military/Other Ordinance PS-Product storage/distribution RD-Research, development, and testing facility RC-Retail/commercial SE-Spill or other one-time event TP-Transportation (e.g., railroad yards, airport, barge docking, site) TW-Treatment works/septic tanks/other sewage treatment

Add Action: OU 00 PRE-CERCLIS SCREENING Planned Complete: / /

Actual Complete: / /

Lead code (choose one): F-EPA Fund Financed FF - Federal Facility S - State, Fund Financed

SCAP Note:

Add below Action (if No Further Action):

OU 00 Lead: EP PRE-CERCLIS ARCHIVE Actual Complete: / /

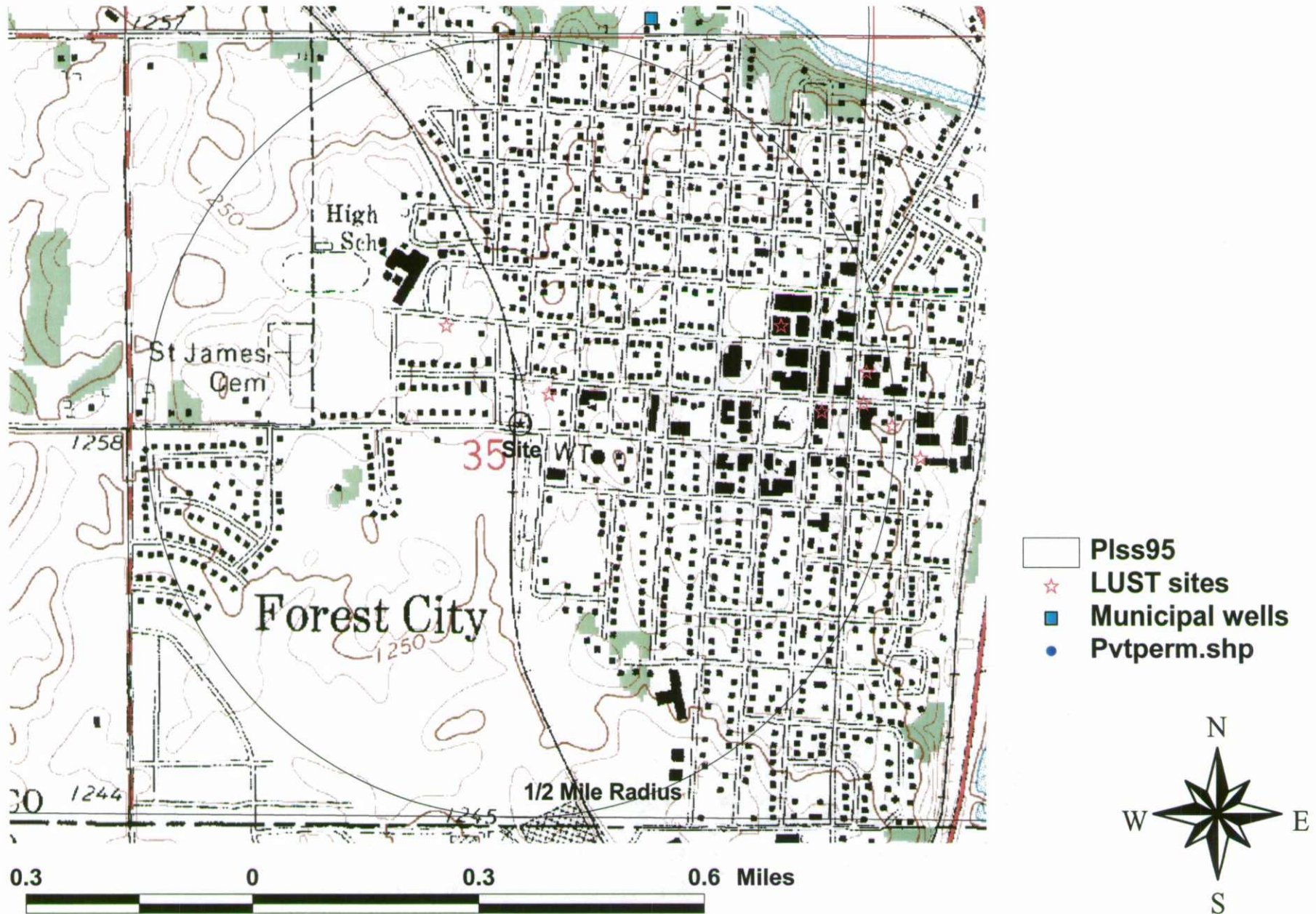
Comment: Site or Action

Signatures: State: [Signature] Date: 12/6/02 RPM/OSC/SAM: Date: / /

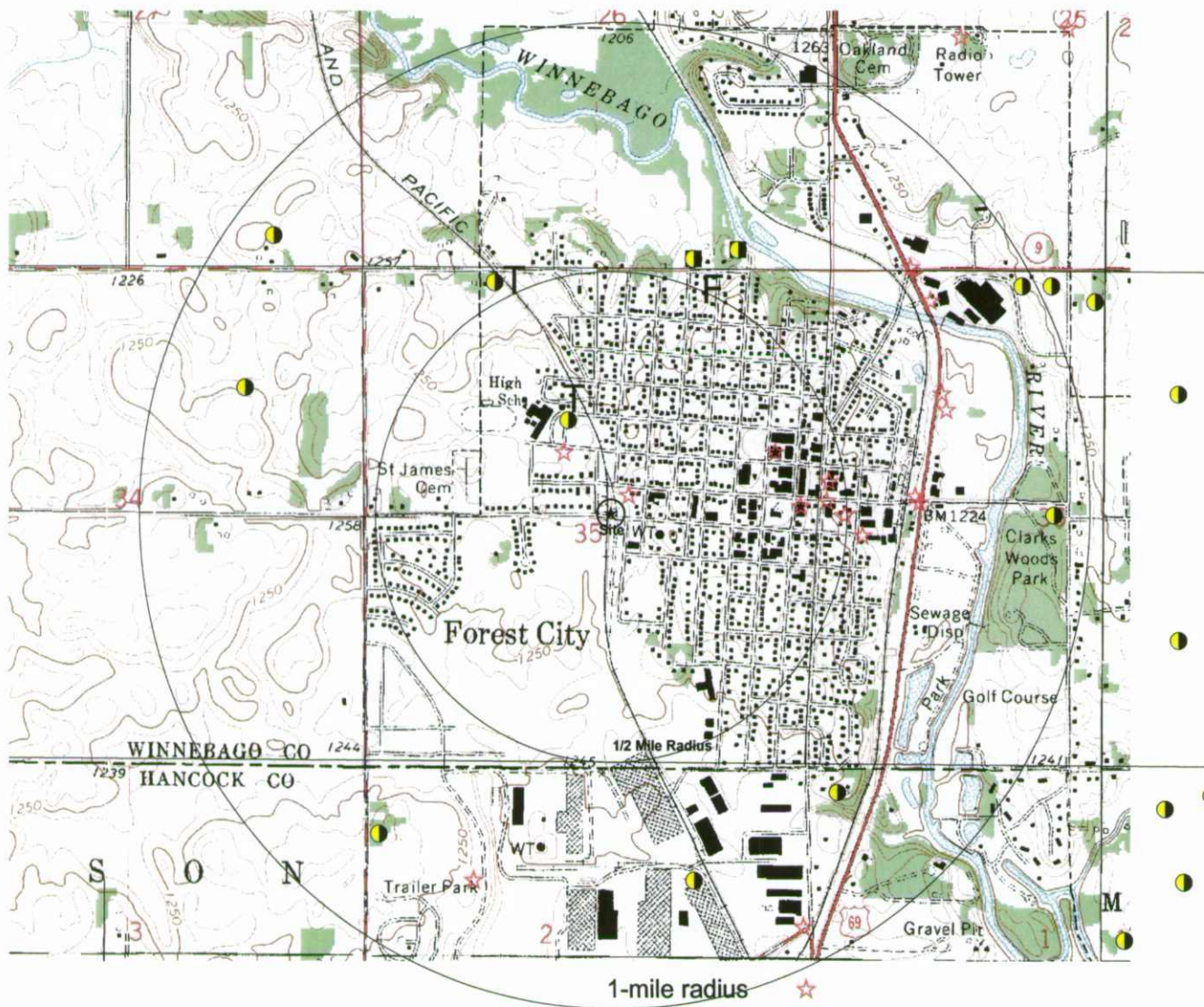
Knapper Oil , Forest City, Site Location Map








Knapper Oil Site - Municipal Water Supply



Knapper Oil Site - Well Locations



-  Geoutm
-  Plss95
-  LUST sites
-  Municipal wells
-  Pvtperm.shp

