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CON 12-15
Doc #29015

December 17, 1993

Mr. Bob Drustrup, P.E.
Iowa Department of Natural Resources
Wallace State Office Building
Des Moines, Iowa 50319

Re: INDUSTRIAL SERVICE CORPORATION
CEDAR FALLS, IOWA FACILITY
WORK PLAN

Dear Mr. Drustrup:

Industrial Service Corporation is pleased to submit the Work Plan for the above referenced facility. These plans will be used in the implementation of the work to be performed at ISC facility located at 1128 E. Dunkerton Road, Cedar Falls, Iowa.

We are anxious to move ahead with this project, and would appreciate any input you may have. If you should have any questions or comments or require additional information about this submittal, please contact me at 913/631-3300.

Sincerely,



Brent Nickel
Manager of Geological Programs

BN/ib
enclosures:

c.c.: Ronald D. Deffenbaugh
John Murphy
Bob Lehr
Bud Barker

**INDUSTRIAL SERVICE CORPORATION
CEDAR FALLS, IOWA FACILITY**

**FACILITY INVESTIGATION
WORK PLAN**

PREPARED BY:

**INDUSTRIAL SERVICE CORPORATION
18181 West 53rd Street
Shawnee, Kansas 66203**

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1.0 INTRODUCTION

1.1 Project Description:

Industrial Service Corporation (ISC) will conduct a Facility Investigation (FI) at its recycling facility in Cedar Falls, Iowa. The FI is being conducted in response to the notice of required action received by ISC in a letter dated October 29, 1993 from the Iowa Department of Natural Resources (IDNR). The purpose of the facility investigation is to collect additional data to achieve the following objectives as outlined in the notice of required action.

- To delineate the source(s) of the residual contamination which is causing groundwater contamination.
- To determine the extent of groundwater contamination.

This document represents the Work Plan for the FI. The Work Plan presents a site specific comprehensive approach for conducting the FI.

1.2 Facility Location

The ISC Facility is located in Northeast Iowa. The facility location map (Figure 1) is taken directly from a section of the Cedar Falls Quadrangle U.S.G.S. topographic map. Specifically, the facility is located in the SE $\frac{1}{4}$, SW $\frac{1}{4}$, SW $\frac{1}{4}$ of Section 30, Township 90, North Range 13W, Black Hawk County, Iowa. The street address is 1128 East Dunkerton Road, Cedar Falls, Iowa 50613.

1.3 Present Usage

The facility stores and processes used oil, engine coolants and No. 2 diesel fuel. The diesel fuel is used by the company's truck fleet. The used oil and engine coolants are collected locally, stored on site and are then distributed to industrial users as supplemental fuel or transferred to other ISC facilities for further treatment.

A portion of the site is used for maintenance operations and parking. Maintenance activities and parking for route trucks occur inside the garage. Tanker trucks are parked on the south side of the site. In addition to parking, the building is utilized for the unloading of route trucks. One exterior loading pad is used for loading tanker trucks.

The facility has the capacity to store 275,000 gallons of bulk product in 12 vertical above ground storage tanks. Eight tanks store processed and unprocessed used oil; one stores road oil; one stores engine coolant; one stores waste water; and one stores diesel fuel.

1.4 Site History

The facility was formerly known as Schmithy's Road Oiling. The operating assets were owned by Mr. and Mrs. Schmith. The facility was managed by Mr. Buddy Barker for the Schmith's. Mr. Barker currently is the site manager for ISC. The facility was purchased by Radium Petroleum Company September 13, 1980, and renamed Eagle Oil Company. Since 1980 Radium Petroleum Company has been doing business as ISC.

2.0 INITIAL EVALUATION

2.1 Previous Investigations

Two previous investigations and remedial actions have been completed by ISC. The first investigation pertained to drums of ink and ink discolored soils. The second investigation pertained to underground storage tanks. These investigations were initiated in 1990 and the results and subsequent remedial actions were reported in the "Site Assessment Plan" dated March 7, 1991 and approved by IDNR in a letter dated May 31, 1991.

IDNR conducted an investigation during the month of September and October 1993. The investigation was prompted by the discovery of volatile organic compounds in a private well Southeast of the ISC facility. The investigation included groundwater samples collected at the ISC facility and adjacent property.

2.2 Evaluation of Current Data

After reviewing the investigations discussed in Section 2.1. It has been determined that residual contamination may be causing groundwater contamination. Additional field data will be needed to determine the source and extent of contamination.

3.0 SCOPE OF WORK

ISC will conduct a field investigation to meet the objectives as outlined in Section 1.1. The field investigation will include:

- Surface water sampling and analysis.
- Surface soil sampling and analysis.
- Subsurface water sampling and analysis.
- Surveying.

Field screening of soil and water samples will be used to optimize the field investigation efforts. Soil and water samples will be analyzed using field screening technologies to accelerate the investigation process and determine the necessity of further analysis. All water and soil samples will be collected in accordance with IDNR applicable regulations. All samples will be collected at the locations shown on Figures 2, 3, and 4 assuming access is granted. Locations may change slightly due to physical restrictions such as utilities, roads, etc.. The following is a list of the field screening instruments that will be used:

- Visual inspection
- OVM, OVA OR HNu
- pH meter
- Conductivity Meter

The field activities will allow an assessment of hydrogeology and geology beneath the site and provide additional data to assess the source and extent of contaminants.

3.1 SURFACE WATER SAMPLES

Surface water samples, if available, will be collected at six different locations in the drainage ditches on West Dunkerton Road (see Figure 2). These samples will be collected to determine if the drainage ditch is a conduit for the source of groundwater contamination. These samples will be analyzed using the applicable field screening techniques listed in Section 3.0. If elevated levels (see Table 1) of contaminants are detected a second sample will be collected and sent to Quality Analytical Laboratory, Kansas City, Missouri for analysis. These samples will be analyzed for the target compounds listed in Table 1. Additional samples will also be collected in the direction of higher concentration of target compounds to better define the source of the elevated target compounds.

3.2 SURFACE SOIL SAMPLES

Surface soil samples will be collected at 18 different locations (see Figure 3). These samples will be collected to determine the source of groundwater contamination. These samples will be analyzed using the applicable field screening techniques listed in Section 3.0. If elevated levels (see Table 1) of contaminants are detected a second sample will be collected and sent to Quality Analytical Laboratory, Kansas City, Missouri for analysis. These samples will be analyzed for the target compounds listed in Table 1. Additional samples will also be collected in the direction of higher

concentration of target compounds to better define the source of the elevated target compounds.

3.3 SUBSURFACE WATER SAMPLES

Subsurface water samples will be collected at the 3 existing monitoring wells and the shallow Corwin water well (see Figure 3). These samples will be collected to better define the extent and source of contamination. Fifteen (15) subsurface water samples will also be collected (see Figure 3) to better define the extent and source of contamination. These samples will be collected using a hydro punch. Additional samples will be collected in the direction of higher concentration to better define the source of contamination. Additional samples will also be collected in the direction of the least concentration to better define the extent of contamination. All samples will be analyzed using the applicable field screening techniques listed in Section 3.0. A second set of samples will also be collected at the sample locations identified as the extent of contamination. These samples will be sent to Quality Analytical Laboratory, Kansas City, Missouri and analyzed for the target compounds listed in Table 1.

3.4 SURVEYING ACTIVITIES

Surveying activities will be performed in conjunction with ongoing field activities. The survey data will be collected to identify:

- Soil sample locations
- Water sample locations
- Monitoring well locations and elevations

Surveying will include the location coordinates of the sample locations using a local fixed benchmark. The elevation of the PVC pipe in monitoring wells will be measured using the National Geodetic Vertical Datum.

4.0 REPORTING REQUIREMENTS

The data gathered during the field investigation and preliminary conclusions regarding the source and extent of contamination will be reported to the IDNR. The report will include analyte concentration maps, groundwater elevation maps, soil and water analysis data, survey data and field observations.

5.0 SCHEDULE

This project will be scheduled to be performed within 60 days of IDNR's approval of this Work Plan. Field work is estimated to be completed within 10 days from the start of field activities. The final report will be issued to IDNR 90 days after completion of field activities.

TABLE 1

FIELD SCREENING	
VISUAL INSPECTION	<u>ACTION LEVEL</u> Soil or Water discoloration, oil sheen
OVM, OVA OR HNM	1 ppm above background levels
pH METER	0 - 5 pH units 10 - 13 pH units
CONDUCTIVITY METER	20% above background

TABLE 1 (continued)

LABORATORY ANALYSIS

PARAMETER	TARGET COMPOUND DETECTION LIMIT		METHOD
	WATER	SOIL	
ACETONE	2 ppb	25 ppb	SW 8260
BENZENE			
BROMODICHLOROMETHANE			
BROMOFORM			
2-BUTANONE			
CARBON DISULFIDE			
CARBON TETRACHLORIDE			
CHLOROBENZENE			
CHLOROETHANE			
CHLOROFORM			
CHLOROMETHANE			
DIBROMOCHLOROMETHANE			
1,1 - DICHLOROETHANE			
1,2 - DICHLOROETHANE			
1,1 - DICHLOROETHENE			
1,2 -DICHLOROETHENE (TOTAL)			
1,2 - DICHLOROPROPANE			
Cis 1,3 - DICHLOROPRPOENE			
TRANS 1,3 - DICHLOROPROPENE			
ETHYLBENZENE			
2 - HEXANONE			
METHYLENE CHLORIDE			
4-METHYL-2-PENTANONE			
STYRENE			
1,1,2,2-TRETRACHLOROETHANE			
TETRACHLOROETHENE			
TOLUENE			
1,1,1 - TRICHLOROETHANE			
1,1,2 - TRICHLOROETHANE			
TRICHLOROETHENE			
VINYL ACETATE			
VINYL CHLORIDE			
TOTAL XYLENES			

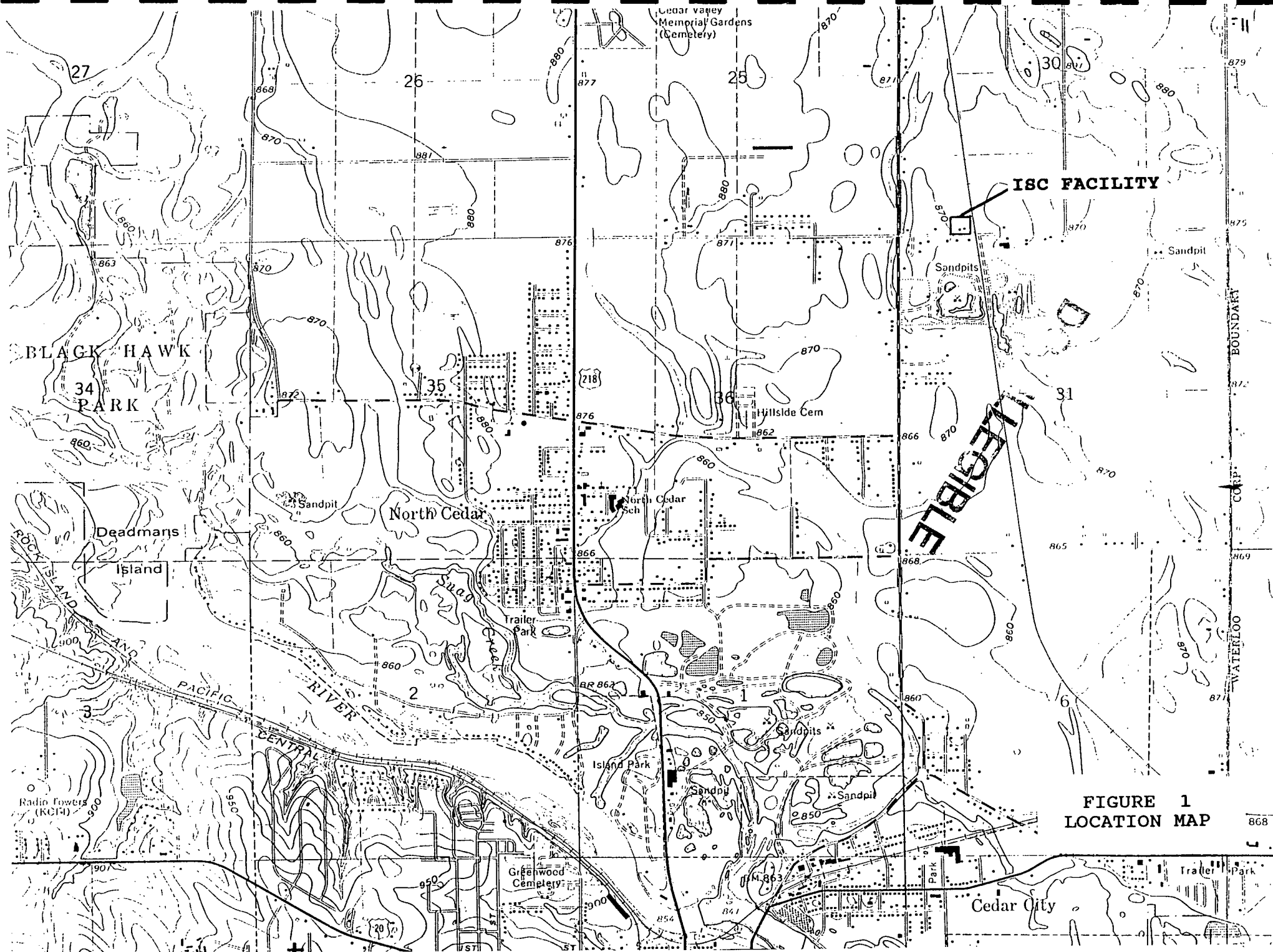
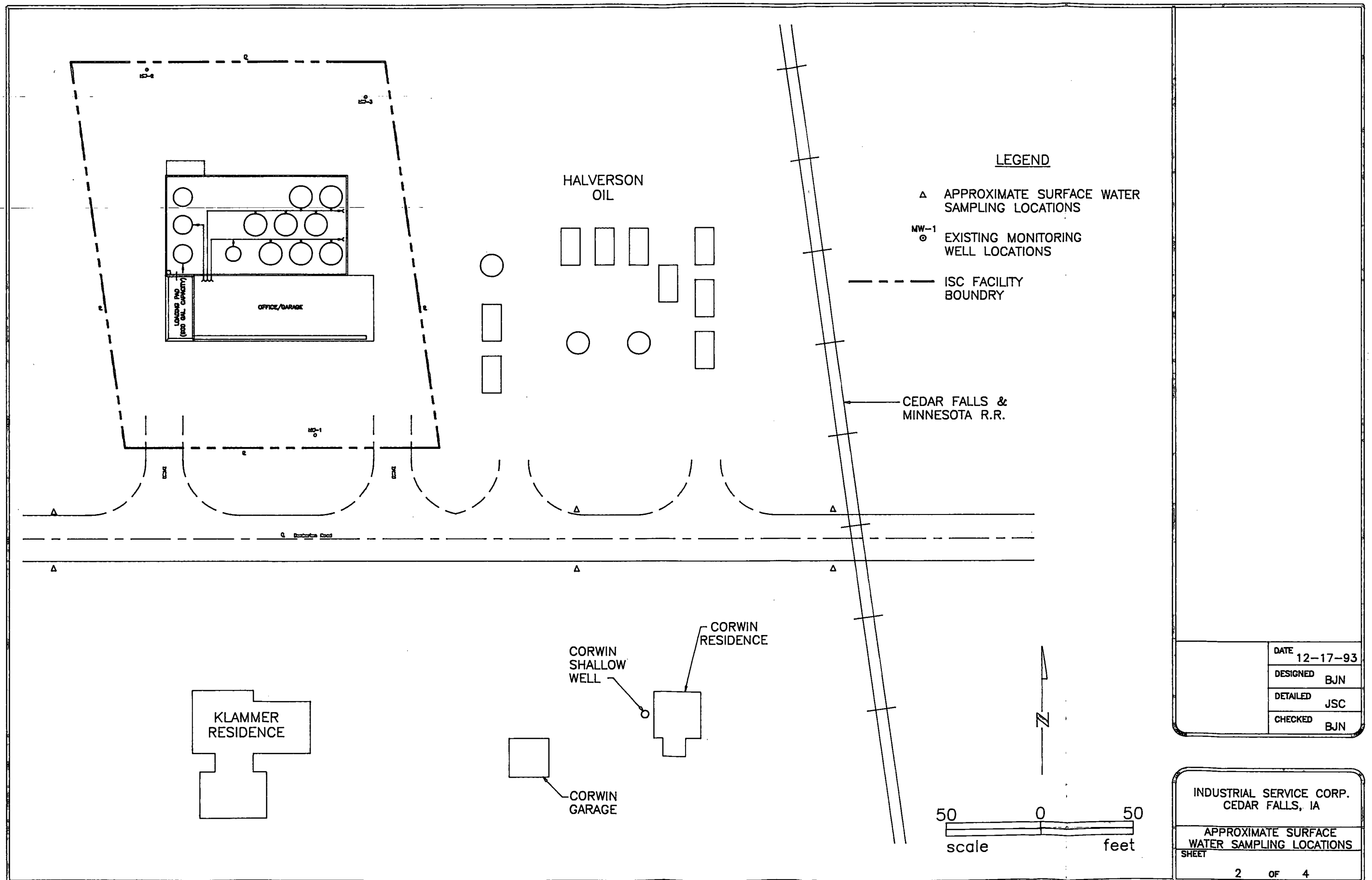
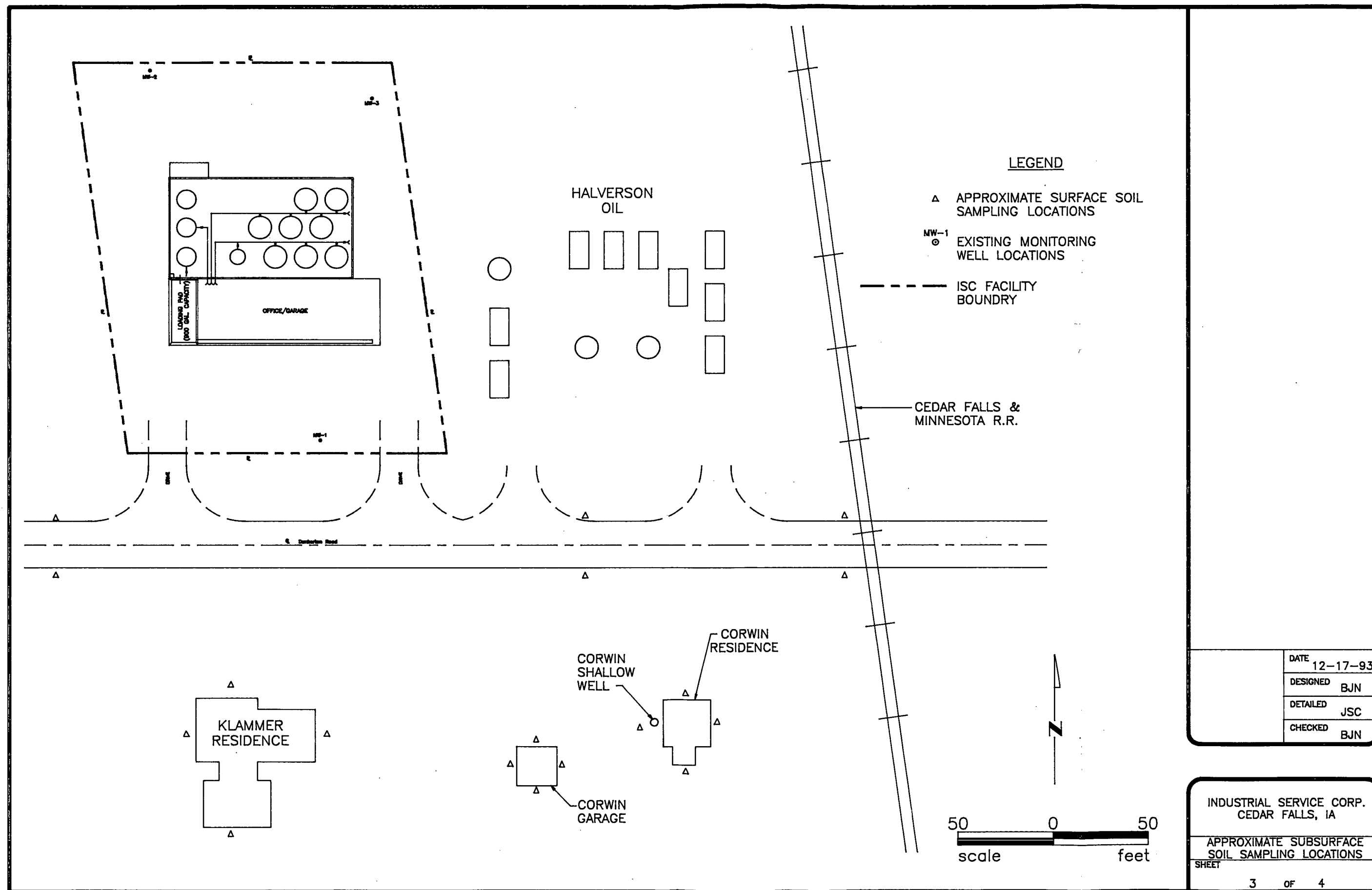


FIGURE 1
LOCATION MAP







DATE	12-17-93
DESIGNED	BJN
DETAILED	JSC
CHECKED	BJN

