REDACTED VERSION

# SCREENING SITE INSPECTION WORK PLAN

of

LARRY LANDRY DUMP

(LAD985169804)


Prepared By

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Ecology and Environment, Inc.
Region VI


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OF

LARRY LANDRY DUMP

TABLE OF CONTENTS


| Section | Page |
|---|---|
| 1. INTRODUCTION | 1 |
| 1.1 SCREENING SITE INSPECTION OBJECTIVES | 1 |
| 1.2 SITE DESCRIPTION | 1 |
| 2. NON-SAMPLING DATA | 1 |
| 2.1 SOURCE WASTE CHARACTERISTICS | 1 |
| 2.2 GROUND WATER PATHWAY | 2 |
| 2.3 SURFACE WATER PATHWAY | 2 |
| 2.4 SOIL EXPOSURE PATHWAY | 2 |
| 2.5 AIR PATHWAY | 2 |
| 3. SAMPLING DATA | 3 |
| 3.1 EXISTING ANALYTICAL DATA | 3 |
| 3.2 SAMPLING METHODOLOGY | 3 |
| 4. PROJECT MANAGEMENT | 3 |
| 4.1 KEY PERSONNEL | 3 |
| 4.2 LEVEL OF EFFORT | 4 |
| 4.3 COMMUNITY RELATIONS | 4 |

## TABLES


| Table | Title |
|---|---|
| 1 | Proposed Sample Locations and Rationale |
| 2 | Level of Effort Hours |

# 1. INTRODUCTION

The Ecology and Environment, Inc. (E & E) Region VI Field Investigation Team (FIT) was tasked by the U. S. Environmental Protection Agency (EPA) under Technical Directive Document (TDD) F06-9002-14 to develop the Work Plan for the Screening Site Inspection (SSI) of Larry Landry Dump (LAD985169804) in Intracoastal City, Vermilion Parish, Louisiana.

## 1.1 SCREENING SITE INSPECTION OBJECTIVES

The SSI evaluates the potential risks associated with hazardous waste generation, storage and disposal at the site. It expands upon data collected during the Preliminary Assessment (PA) and identifies data gaps. Information obtained during the SSI supports the management decision of whether the site proceeds to the Listing Site Inspection (LSI) or receives the classification of No Further Action under the Superfund Amendments and Reauthorization Act (SARA).

## 1.2 SITE DESCRIPTION

Larry Landry Dump (LLD) is located off Louisiana Highway 333, one mile north of Intracoastal City, Vermilion Parish, Louisiana (Figure 1). The site is located on private land owned by (b) (6) [redacted], who leased part of it to Mr. Larry Landry. Mr. Landry used the land as an open dump for various oil field and solid wastes from offshore drilling rigs. The geographic coordinates are 29°47'52" north latitude and 92°09'03" west longitude (Figure 1).

LLD operated in the early 1980s and ceased operations when the owner proposed raising the rent. LLD utilized three waste piles near salt-stained soils from drilling muds (Figure 2).

LLD operations have accumulated various solid and liquid wastes generated from offshore oil rigs. Previous sampling inspections have revealed high concentrations of salt, oil, grease, barium, cadmium, chromium, lead and zinc. Organic constituents are unknown.

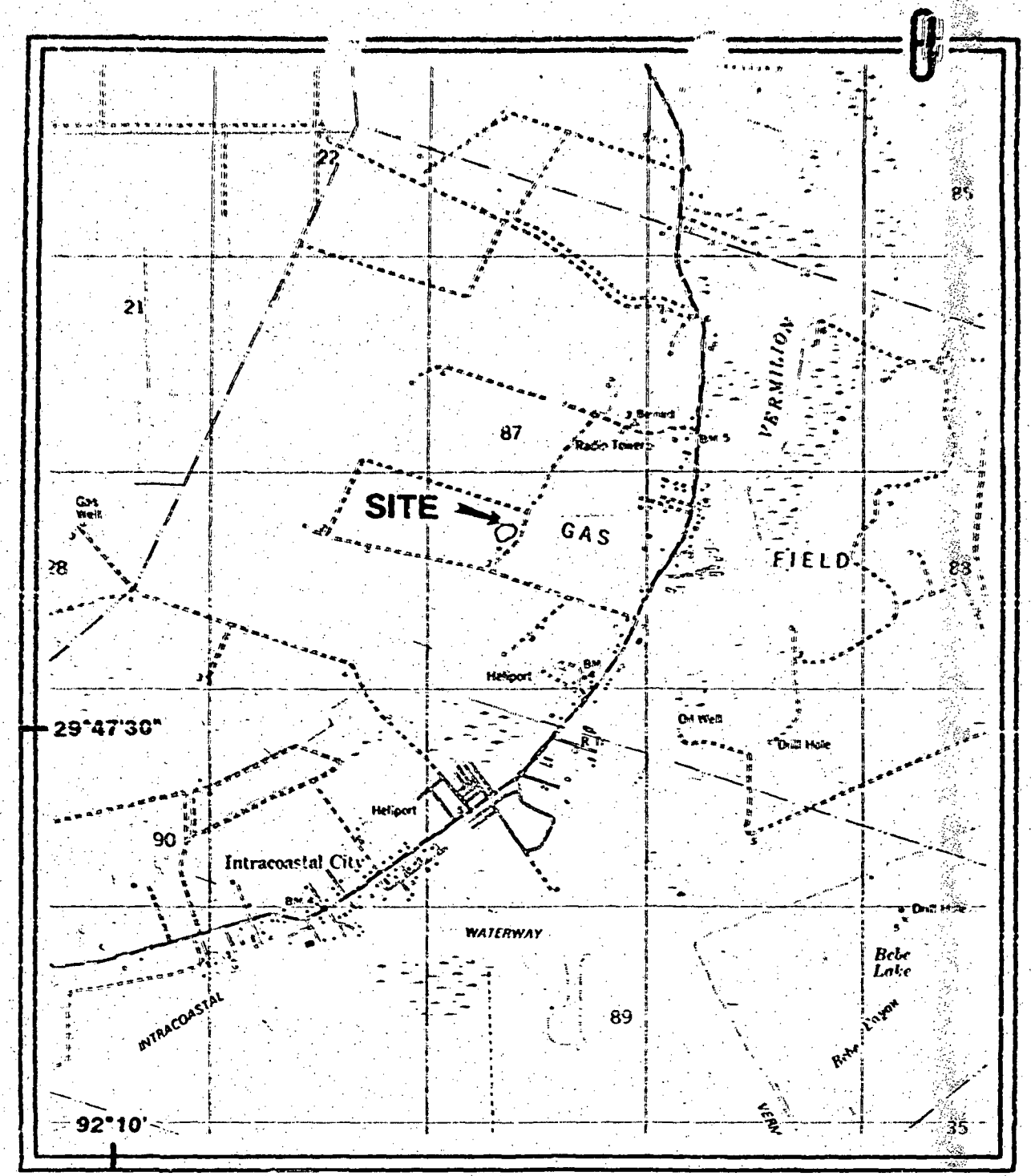
The site operator did not initiate artificial means of containment for the air, ground water or surface water routes. The piles of waste material were disposed directly onto the ground, and containers in which wastes were placed are deteriorating. The extent of involvement of the Louisiana Department of Environmental Quality (LDEQ) is unknown.

# 2. NON-SAMPLING DATA

Non-sampling data pertaining to source waste characteristics, and the ground water, surface water, soil exposure and air pathways are addressed in this section.

## 2.1 SOURCE WASTE CHARACTERISTICS

The property associated with the Larry Landry Dump was inspected. Materials and areas which could be considered potentially hazardous were identified.



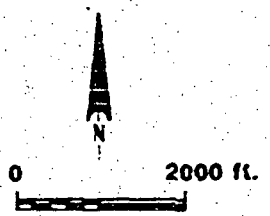




**FIGURE 1**
**SITE LOCATION MAP**
**LARRY LANDRY DUMP**
**INTRACOASTAL CITY, LOUISIANA**
**LAD985169804**

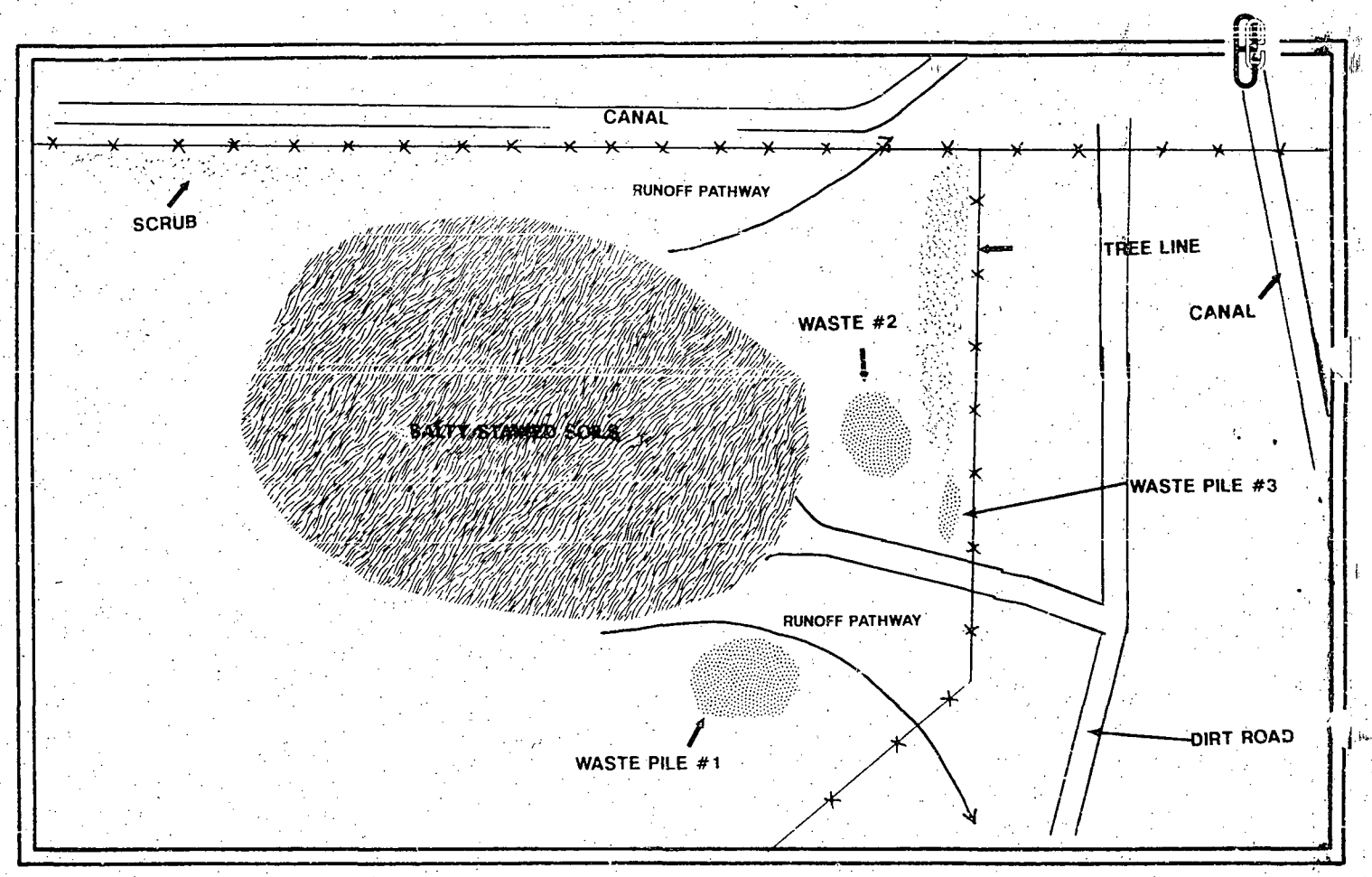



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FIGURE 2
SITE SKETCH
LARRY LANDRY DUMP
INTRACOASTAL CITY, LOUISIANA
LAD985169804

OF THE ORIGINAL.

## 2.2 GROUND WATER PATHWAY

The facility is situated over the Chicot aquifer system, which consists of thick sand and gravel deposits which dip and thicken southward from southern Vernon Parish. The Chicot aquifer thins to the west as it continues into Texas. It thickens to the east, where it is overlain by alluvium from the Atchafalaya and Mississippi Rivers, making the Chicot and Atchafalaya aquifers hydraulically connected.

The Chicot aquifer is the main source of drinking water in southwest Louisiana and is divided into two units: the upper sand and the lower sand. The upper sand ranges from 100 to 250 feet in thickness. The Vermilion River recharges the Chicot aquifer near Bancker, five miles north of the site.

LLD is situated over 200 feet of clay, under which lies 150 feet of freshwater sand (the Abbeville Unit).

The nearest well, owned by (b) (6) [redacted] is located 2,200 feet east of the site, at a depth of approximately 500 feet. (b) (6) [redacted] uses her well water for domestic purposes and purchases her own drinking water. Previous well surveys indicated at least two additional wells within a one mile radius of the site.

## 2.3 SURFACE WATER PATHWAY

The on-site reconnaissance inspection delineated the primary overland runoff pathways from the site (Figure 2). Potentially contaminated on-site soil areas are drained by these pathways. Potential contaminants from the site could enter surface water from any direction. The drainage would flow into a north-south ditch that parallels the access road. The drainage ditch empties into an east-west ditch that flows into the Vermilion River 1/2 mile downstream. The next five miles of the 15 mile stream segment are in the Vermilion River, and the final nine miles are in Vermilion Bay. The Vermilion River is designated for primary and secondary recreation and for propagation of fish and wildlife. Potential sensitive environments affected by the in-water segment include wetlands (estuarine) and habitats used by the Peregrine Falcon and the Atlantic Ridley Turtle.

## 2.4 SOIL EXPOSURE PATHWAY

There is no on-site residential population and no known exposure to residents on-site via contact with hazardous substances. A locked gate blocks the access road to the site and "No Trespassing" signs are posted.

## 2.5 AIR PATHWAY

Evidence from on-site sampling indicates high concentrations of inorganic constituents such as barium, cadmium, chromium, lead and zinc. The gaseous and particulate mobility potentials of these contaminants are low.

## 3. SAMPLING DATA

The existing analytical data and sampling methodology are addressed in this section.

### 3.1 EXISTING ANALYTICAL DATA

Existing information consists of the PA prepared by the FIT. The FIT reconnaissance inspection (Photographs 1 through 5) was conducted on November 12, 1990 by FIT members Marcus A. Pinzel, Michael Mitchell and Kurt Soutendijk. During the inspection, the FIT met with (b) (6) [redacted] representative, Mr. Jim Jones.

(b) (6) [redacted] a concerned citizen, and Mr. Paul Conzelmann of SUBRA Laboratories in New Iberia, Louisiana, conducted a sampling inspection at the site in 1984.

### 3.2 SAMPLING METHODOLOGY

The pathways of concern are ground water, surface water and the on-site migratory routes. Preliminary existing information indicates a potential for contaminant migration via these three pathways. The FIT proposes the collection of five ground water samples, 10 soil samples, three surface water samples and one FIT derived waste sample, including background, blank and duplicates (Figure 3) (Table 1). Of the five ground water samples, four will be shallow water samples collected with the Geoprobe. Of the 10 soil samples, four will be collected with the Geoprobe. The samples will be analyzed by the Contract Laboratory Program (CLP) for TCL inorganic compounds. The on-site samples will be used to identify contaminated source areas which may be contributing to off-site migration. The proposed sampling date is the week of December 9, 1990.

## 4. PROJECT MANAGEMENT

Key personnel, level of effort hours and community relations are addressed in this section.

### 4.1 KEY PERSONNEL

The FIT Team Leader for this investigation is Marcus A. Pinzel. The team leader's responsibilities include assuring site access, overseeing all on-site and off-site activities and documenting and managing all samples collected.

The Site Safety Officer (SSO) is Kurt Soutendijk. The SSO is responsible for developing and implementing the health and safety protocol for the site inspection. Three additional FIT members will assist with sampling, sample documentation, packaging and decontamination procedures.

The EPA Region VI Project Officer for this investigation is Bartolome J. Cannellas.

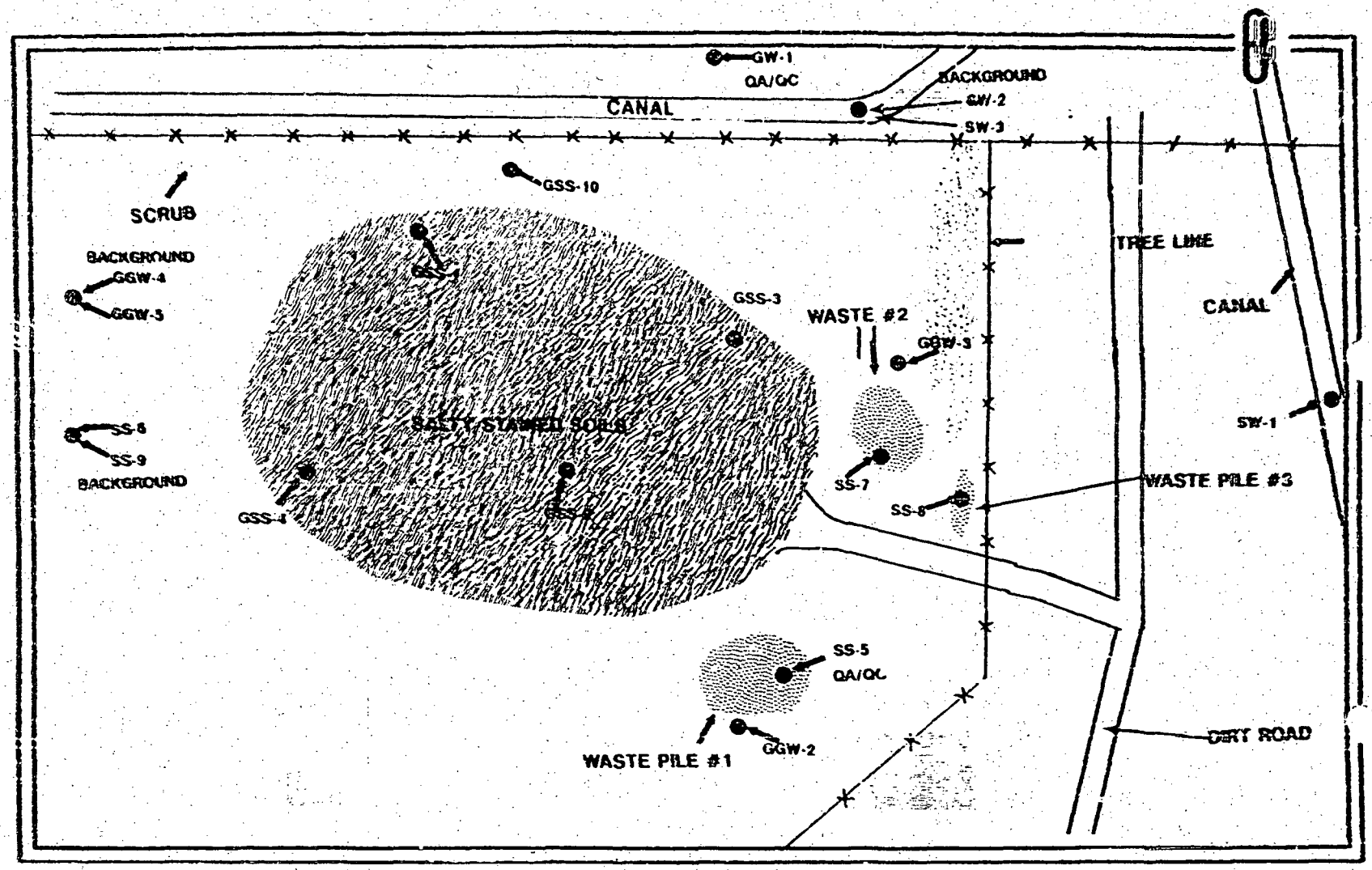


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FIGURE 3

SAMPLE LOCATIONS
LARRY LANDRY DUMP
INTRACOASTAL CITY, LOUISIANA
LAD985169804

TABLE 1

PROPOSED SAMPLE LOCATIONS AND RATIONALE

| Sample No. | Sample Type | Sample Location | HRS Rationale |
|---|---|---|---|
| GSS-1 | Soil: 3 feet bgl | North salt stain | Ground water pathway |
| GSS-2 | Soil: 3 feet bgl | South salt stain | Ground water pathway |
| GSS-3 | Soil: 3 feet bgl | East salt stain | Ground water pathway |
| GSS-4 | Soil: 3 feet bgl | West salt stain | Ground water pathway |
| SS-5 | Soil: 0-6" interval | South pile | Surface water pathway (QA/QC) |
| SS-6 | Soil: Dup of SS-9 | Same as SS-9 | Surface water pathway |
| SS-7 | Soil: 0-6" interval | North pile | Surface water pathway |
| SS-8 | Soil: 0-6" interval | Fence pile | Surface water pathway |
| SS-9 | Soil: 0-6" interval (bkgd) | Far west | Surface water pathway |
| GSS-10 | Soil: 3 feet bgl | North canal | Ground water pathway |
| GW-1 | Ground water: Stock well 500 feet bgl | Well | Ground water pathway (QA/QC) |
| GGW-2 | Ground water: 8-10' bgl | Geo south | Ground water pathway |
| GGW-3 | Ground water: 8-10' bgl | Geo north | Ground water pathway |
| GGW-4 | Ground water: 8-10' bgl (bkgd) | Geo far west | Ground water pathway |
| GGW-5 | Ground water: duplicate of GGW-4 | Same as GGW-4 | Ground water pathway |
| SW-1 | Surface water | Down canal | Surface water pathway |
| SW-2 | Surface water (bkgd) | Up canal | Surface water pathway |
| SW-3 | Surface water: duplicate of SW-2 | Same as SW-2 | Surface water pathway |
| TB-1 | Trip Blank | | |

## 4.2 LEVEL OF EFFORT

The level of effort (LOE) hours required for this inspection are listed in Table 2.

## 4.3 COMMUNITY RELATIONS

Persons requesting site information will be instructed to submit a Freedom of Information Act Request to: Freedom of Information Officer, U.S. EPA Region VI, 1445 Ross Avenue, Dallas, Texas 75202-2733. Reporters will be instructed to contact the Office of External Affairs at 214/655-2200.

TABLE 2

LEVEL OF EFFORT HOURS

| Labor Task | Estimated LOE Hours |
|---|---|
| SSI Work Plan Preparation | 32 |
| Off-Site Data Collection | 16 |
| Site Safety Plan Preparation | 10 |
| Obtain Access/On-Site Reconnaissance | 16 |
| Mobilization | 10 |
| Travel | 30 |
| Sampling | 160 |
| Demobilization/Travel | 30 |
| Follow-Up Data Collection | 16 |
| Sample Data Validation | 60 |
| Preparation of SSI Report and HRS PreScore | 120 |
| Plus 10% Contingency | |
| TOTAL EFFORT | 550 |

Samples Required

10 Low Concentration Soil Samples
5 Low Concentration Ground Water Samples
3 Low Concentration Surface Water Samples
1 Trip Blank
19 Total Samples