

APPENDIX E
REGULATORY RECORDS

LDEQ, OCTOBER 19, 1993
LETTER TO KATHY NICHOLS, TIME SAVER STORES, INC.
RE: TERMINATION OF REMEDIATION APPROVAL, TIME SAVER #93



State of Louisiana
Department of Environmental Quality



Edwin W. Edwards
Governor

Kel David Mldboe
Secretary

October 19, 1993

Ms. Kathy Nichols
Time Saver Stores, Inc.
5243 Canal Boulevard
New Orleans, Louisiana 70124

RE: Termination of Remediation Approval
Time Saver #93
200 Live Oak
Metairie, Louisiana 70005
(Jefferson Parish)
Facility UST I.D. #26-009541
Spill Incident #UE-91-03-0228

Dear Ms. Nichols:

We acknowledge receipt and review of your March 26, 1993 Quarterly Groundwater Monitoring report as well as an October 13, 1993 letter requesting the assignment of closure (Termination of Passive Remediation at the above referenced location.

Based on our review of the appropriate quarterly analytical data submitted for this location, your request for site closure (Termination of Passive Remediation) is hereby granted.

Please notify the appropriate agency regarding plugging and abandoning the monitoring wells if such be the case.

Thank you for your assistance in this matter.

Sincerely,

Brenda B. Williams
Bayou Region Coordinator
Underground Storage Tank Division

BBW/stj

c: Bayou Regional Office

Patsy Deaville, Technical Services

OFFICE OF SOLID AND HAZARDOUS WASTE UNDERGROUND STORAGE TANK DIVISION P O BOX 92178 BATON ROUGE, LOUISIANA 70834-2178

TELEPHONE (504) 765-0243 FAX (504) 765-0366



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**LANIER & ASSOCIATES CONSULTING ENGINEERS, OCTOBER 18, 1991
13 POINT SUBSURFACE INVESTIGATION REPORT
TIME SAVER STORE #93, METAIRIE, LOUISIANA**

RECEIVED

OCT 21 1991

**UNDERGROUND STORAGE
TANK DIVISION**

13 POINT SUBSURFACE INVESTIGATION

TIME SAVER STORES, INC.

TIME SAVER STORE #93

METAIRIE, LOUISIANA

PREPARED FOR:

**TIME SAVER STORES, INC.
5243 CANAL BLVD.
NEW ORLEANS, LA 70124**

PREPARED BY:

**LANIER & ASSOCIATES
CONSULTING ENGINEERS, INC.
4101 MAGAZINE ST.
NEW ORLEANS, LA 70115**

OCTOBER 18, 1991

PROJECT NO. 2870

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1.0 INTRODUCTION

Lanier & Associates Consulting Engineers, Inc. performed services relating to a subsurface contamination assessment at Time Saver Store #93 located at 200 Live Oak St. in Metairie, Louisiana. This project was conducted to assess the nature and extent of possible subsurface soil and groundwater petroleum contamination. Because the three underground storage tanks (USTs) at the site failed tightness tests (Appendix E) after a reported inventory loss, Time Saver Stores, Inc. received a request from the Louisiana Department of Environmental Quality - Underground Storage Tank Division to perform a thirteen point contamination assessment at the subject property (Appendix A). 17/91

Lanier & Associates was contracted by Time Saver Stores to design and implement the required state assessment. As Hydrodyne Environmental, Inc. has addressed initial emergency response to this incident (Appendix B), this assessment included identification of underground utility lines, collection of subsurface soil samples, installation of three groundwater monitoring wells, sampling of all subject property monitoring wells, chemical analysis of collected soil and groundwater samples, development of site specific hydrogeologic information, preparation of site location maps, and development of a recommendation for possible corrective action of identified subject property contamination and/or further investigation.

2.0 SUBJECT PROPERTY DESCRIPTION

The Time Saver Store #93 property is currently the location of a retail convenience store and petroleum fuel product outlet. The convenience store structure is located on the southwest corner of the property, and one service pump island is located near the eastern boundary of the property (Appendix C - Figure 1). One underground storage tank bay containing three gasoline storage tanks is located in front of the building near the northern boundary of the property. Surface cover over the physical property consists of concrete driveway and parking areas with small grass areas located east and north of the pump island and behind the store in the southern region of the property.

Underground utility lines located at the site include water lines stormwater drainage lines, a gas line, and sewer lines. These run along the northern and eastern boundary of the property. The water lines are made of plastic. Sewer and stormwater drainage lines are made of concrete, and gas lines are black iron piping.

3.0 BOREHOLE DRILLING, SAMPLING, & ANALYSIS

3.1 Borehole Drilling & Soil Sampling

Lanier & Associates personnel collected two subsurface soil samples from hand-augered boreholes at the property on September 24, 1991 (B-1), and on October 3, 1991 (B-2). The locations of these boreholes are shown on the figure 1 site map in Appendix C.

Borehole B-1 had a total depth of penetration of 3 feet below ground level. Groundwater in this borehole was encountered at two and one-half feet. Borehole B-2 was augered to a depth of 5.5 feet with groundwater encountered at 4 feet below ground level. The various soil types and any evidence of petroleum product contamination encountered within each borehole during drilling were noted and recorded within a field log book. No petroleum product odors were detected during drilling activities at either borehole location.

In addition to these boreholes, several borehole attempts were made in the pump island and tank bay vicinity. The immediate subsurface of this area seems to have a "concrete-like" shell bed. Upon completion of the borehole drilling, one soil sample was collected for chemical analysis from the bottom of each of the boreholes.

All hand-auger equipment was decontaminated between sampling locations using a method consisting of a detergent wash followed by a distilled water rinse. Upon completion of all sampling activities, each borehole was backfilled with dry bentonite pellets which were activated with water to effect a complete seal of the entire borehole column.

3.2 Chemical Analysis of Soil Samples

The soil samples collected at the property were immediately placed into clean glass containers after their collection and stored

within an ice-filled cooler to insure thermal preservation during transport to the analytical laboratory. The samples were delivered to Southern Petroleum Laboratories in St. Rose, Louisiana, where they underwent testing for contained concentrations of benzene, toluene, ethylbenzene, and xylene (BTEX).

The table below is a summary of the findings reported by the analytical laboratory for the submitted borehole samples. All of the test data reported by the laboratory for these samples are presented in detail within Appendix D of this report.

Table 1. Reported Soil BTEX Chemical Analysis Results
(Units are in mg/kg)

<u>Sample Number</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl-Benzene</u>	<u>Xylene</u>	<u>Total BTEX</u>
B-1	ND	0.0034	ND	0.0023	0.0057
B-2	0.1	0.0012	0.012	0.0720	0.1960

The "mg/kg" unit presented in the table is approximately equal to parts per million. The "ND" notation indicates the parameter was tested for but not detected.

4.0 MONITORING WELL INSTALLATION, SAMPLING, & ANALYSIS

4.1 Monitoring Well Installation & Sampling

Under the supervision of Lanier & Associates personnel, three (3) groundwater monitoring wells (MW-3, MW-4, and MW-5) were installed at the site on August 22, 1991. These wells are in addition to two recovery wells (RW-1 & RW-2) installed at the site on July 10,

1991, by Hydrodyne Environmental. As no free-phase product has been detected in RW-1 and RW-2 since their installation in July, they will be referred to as "monitoring wells" throughout the rest of this report. All five monitoring wells were installed by Soil Testing Engineers, Inc. Appendix C - Figure 1 shows the locations of the wells at the site.

Each monitoring well was installed into a borehole drilled down to approximately fifteen feet below ground level using a truck-mounted drill rig. Upon completion of drilling, a monitoring well consisting of four inch PVC riser pipe and 0.010 inch slot screen was constructed within each borehole. The slot screen section of each well was installed over a depth ranging from approximately seven to twelve feet below ground level (Appendix F). The annular space between the well pipe and borehole sidewall was filled with a clean sand filter pack around the well screen, a bentonite plug above the filter pack, and cement from the bentonite plug to the ground surface. Each of the monitoring wells was then completed at grade and finished with a flush-mounted protective metal casing equipped with an internal locking well cap.

During installation of MW-5 in the grassy area behind the store, an asphalt-like material was encountered in the 0 to 4 foot subsurface. This material was black in color and had what appeared to be a lightly viscous brown oil coating on its surface with a trace of hydrocarbon sheen. Due to the hard, brittle nature of the material, several boreholes were abandoned during

well installation in this area. This matter is discussed further in the conclusion section of this report.

The wells were developed with a small electric pump to remove fine grained particles from the well screens and adjacent sand filter pack. Twenty-four hours after development of the wells, stagnant groundwater from each well was purged until dry. Upon recharge, groundwater samples were collected for chemical analysis from the five monitoring wells using a teflon bailer. The bailer was decontaminated between monitoring well locations using a method consisting of a detergent wash, tap water rinse, methanol rinse, and a final distilled water rinse.

4.2 Chemical Analysis of Groundwater Samples

Five groundwater samples collected at the subject property were immediately placed into clean, zero head-space glass vials after their collection, and stored in an ice-filled cooler to insure thermal preservation of the samples during transport to the analytical laboratory. The samples were delivered to Southern Petroleum Laboratories in St. Rose, Louisiana where they were analyzed for contained concentrations of benzene, toluene, ethylbenzene, and xylene (BTEX).

The table presented below is a summary of the findings reported by the analytical laboratory for the submitted groundwater samples. All of the test data reported by the analytical laboratory for

these samples are presented in detail within Appendix D of this report.

**Table 2. Reported Groundwater BTEX Chemical Analysis Results
(Units are in mg/l)**

<u>Sample Number</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl-Benzene</u>	<u>Xylene</u>	<u>Total BTEX</u>
RW-1	0.0490	0.0035	0.0470	0.0370	0.1360
RW-2	2.6000	3.7000	10.0000	21.0000	37.3000
MW-3	0.0510	0.0020	0.0038	0.0037	0.0590
MW-4	0.0010	0.0039	0.0018	0.0040	0.0107
MW-5	0.0005	0.0012	0.0004	0.0019	0.0040

The "mg/l" unit presented in the table above is approximately equal to parts per million.

5.0 GROUNDWATER FLOW DIRECTION & PERMEABILITY DETERMINATION

During the course of groundwater sampling at the property and during subsequent site visits, Lanier personnel performed measurements within the five groundwater monitoring wells which were designed to determine the direction of groundwater flow across the property, and the permeability of the local groundwater bearing subsurface zone. Measurements made within the monitoring wells involved the determination of static groundwater levels using a fiber glass electric measuring tape with an audible alarm. The tape is accurate to 0.01 inches and was decontaminated between monitoring wells. Measured levels within the five monitoring wells were found to be as follows:

Table 3. Static Groundwater Depth Measurements

<u>Date</u>	<u>Monitoring Well Location</u>	<u>Depth (Below Ground Level)</u>
8/29/91	RW-1	1.45 Feet
	RW-2	1.75 Feet
	MW-3	2.70 Feet
	MW-4	3.92 Feet
	MW-5	3.08 Feet
9/25/91	RW-1	1.48 Feet
	RW-2	1.72 Feet
	MW-3	2.72 Feet
	MW-4	3.90 Feet
	MW-5	3.10 Feet
10/18/90	RW-1	1.46 Feet
	RW-2	1.72 Feet
	MW-3	2.74 Feet
	MW-4	3.88 Feet
	MW-5	3.12 Feet

The measured groundwater levels within the five monitoring wells indicated that the flow direction of groundwater across the subject property is somewhat variable, however, averaging of all the measurement data and graphical analysis of the averaged static water level data indicates that groundwater is generally flowing from west to east across the property (Figure 1-Appendix C).

After completion of the static groundwater measurements, rising

head permeability tests were performed within Monitoring Wells MW-2 and MW-3. Accurate permeability data for Monitoring Well MW-1 could not be collected due to the fact that very rapid recharge was encountered within this well and thus a detailed recharge rate could not be measured. The rising head permeability tests were accomplished by withdrawing a portion of the groundwater contained within each monitoring well, followed by measurement of the recharging water level using a fiberglass tape at intervals of one minute for a total period of 20 minutes. This data was used to calculate rising head ratios which were then combined with physical well size information in a mathematical equation designed to determine the permeability of the saturated zone. The table presented below is a summary of the permeability values calculated for each saturation zone surrounding the two subject property monitoring wells tested.

Table 4. Calculated Monitoring Well Permeability Values

<u>Monitoring Well Location</u>	<u>Calculated Zone Permeability</u>
MW-2	1.63 x 10 ⁻⁵ cm/sec or 3.21 x 10 ⁻⁵ ft/min
MW-3	1.41 x 10 ⁻⁴ cm/sec or 2.78 x 10 ⁻⁴ ft/min

Using the above noted values, the approximate average saturated zone permeability for the entire subject property is calculated to

be approximately 1.55×10^{-4} ft/min which would translate into an average movement of approximately 0.05 feet per day or 18.25 feet per year based upon an actual groundwater flow velocity calculation for the subject property saturated zone.

6.0 DISCUSSION & CONCLUSIONS

Based upon the observations and chemical analysis results presented in this report, it is concluded that groundwater in the vicinity of RW-2 has moderate petroleum product contamination. Only trace to slight contamination exists in the vicinity of RW-1, MW-3, MW-4, and MW-5 and also in soil samples B-1 and B-2.

The existence of moderate contamination in the groundwater sample collected from RW-2 suggests that the source of the detected contamination was leakage of petroleum fuel product from one or more of the underground tanks located within the tank bay or from the underground product delivery pipelines. This conclusion is confirmed by the tank and line tests performed by Southern Tank Testers on July 3 and 15, 1991. Inventory records indicate some product loss (Appendix G). An initial reported inventory loss of 1200 gallons on July 3, 1991, has since been reconciled to be a loss of approximately 400 gallons. This 400 gallon inventory records loss is unexplained.

Based upon the findings and conclusions presented in this report, Lanier recommends further extensive sampling across the site with

particular emphasis on the grassy area in the rear of the store. If necessary, off-site soil sampling will also be done. Several samples will also be collected from this area for physical analysis of soils (i.e. permeability sieve and grain-size analysis). No conclusion can be drawn about this area at this time. Additional monitoring wells may also be necessary to fully understand the nature and extent of any potential contaminant plume(s) existing at the Time Saver Store #93 property.

The conclusions provided in this report are based solely upon the information and data presented in this document. This report has been prepared in accordance with generally accepted environmental consulting practices and no warranty, expressed or implied, is made as to the professional advice provided under the terms of the contract agreement for this project and included in this report.

Appendix A

Louisiana Dept. of Environmental Quality

13 Point Assessment Request Letter

July 11, 1991

Rec'd 7/22/91



State of Louisiana

Department of Environmental Quality



BUDDY ROEMER
Governor

PAUL TEMPLET
Secretary

Rec'd 7/22/91

July 11, 1991

CERTIFIED MAIL # 065 595 775
RETURN RECEIPT REQUESTED

Kathy Nichols
Time Saver Stores, Inc
5213 Canal Blvd.
New Orleans, LA 70121

Post-It™ brand fax transmittal memo 7671		# of pages > 2
To ALAN	From FRANK M	
Co.	Co. TIME SAVER	
Dept.	Phone #	
Fax #	Fax #	

RE: Request for Assessment
Time Saver Store #93
200 Live Oak
Metairie, Louisiana
(Jefferson Parish)
Facility USF I.D. #26-909611
Incident = CE-91-3-0228

Dear Ms. Nichols:

This is to confirm receipt of your verbal report on July 8, 1991 and May 1991 contamination investigation regarding a leak from an underground storage tank at the above referenced facility. Thank you for bringing this matter to our attention.

Within twenty (20) days following release confirmation, you must submit a report in triplicate summarizing initial containment steps taken to bring the situation under control. At a minimum, this report shall address the steps taken to:

1. Prevent further releases to the environment.
2. Monitor and mitigate fire and safety hazards posed by vapors and/or free product that may have migrated into the surface environment.
3. Remedy hazards posed to the unlined well.
4. Survey all areas likely to have been contaminated by the release.
5. Determine the presence of free product plume in the subsurface and the presence of free product plume in the well.

UNDERGROUND STORAGE TANK DIVISION P.O. BOX 44274 BATON ROUGE, LOUISIANA 70804

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- 6) Submit the name of the Response Action Contractor chosen, and an assessment plan with a cost estimate to perform the work.

Within sixty (60) days following DEQ approval of the plan, you must submit an investigation report in triplicate, detailing the extent of subsurface contamination resulting from this incident. At a minimum, the investigation report shall include the following:

- 1) Site diagram indicating all underground fixtures, piping, or other utility structures;
- 2) Specific designation as to location and material(s) of construction for all potable water supply lines at the site;
- 3) Delineation of the horizontal and vertical extent of the free-phased and dissolved hydrocarbons in soils and groundwater by soil exploration;
- 4) Installation of groundwater monitoring wells immediately outside of the confirmed zone of contamination, defining both up-gradient and down-gradient boundary conditions;
- 5) A determination of groundwater elevations, direction and velocity of flow from at least three (3) of the monitoring wells;
- 6) A diagram showing the location of all boreholes and/or wells existing at the site;
- 7) A diagram indicating potentiometric lines;
- 8) Results of laboratory analyses from all existing and new wells where free-phased product was not observed. The following methods shall be used for soil samples taken from borings and the dissolved constituents in groundwater:

PARAMETER	DEQ ANALYSIS METHOD	ANALYTICAL PROCEDURE
Gasoline	NIEM IIR-gasoline	Solid Waste 816-Method 8020 California Department of Health Services Method
Diesel	IIR-diesel	California Department of Health Services Method
Used Oil	IIR-oil, motor oil and Grease volatile organic Hydrocarbons	Solid Waste 816-Method 1811 301-A Standard-Methods Solid Waste 816-Method 4210

- 9) Driller's logs from all boreholes and wells installed. For wells this should include the well construction information;
- 10) Provide results of tank and line tightness tests and reconciled inventory records for the prior ninety (90) days;
- 11) The type of free-phased product recovery system used;
- 12) The disposition and quantity of all recovered free-phased product, contaminated groundwater and soil; and
- 13) If necessary a plan of additional investigation activities to determine off-site contamination must be included unless an alternate investigation plan is agreed upon by the Department.

In order for this work to qualify for reimbursement under the Louisiana Motor Fuels Underground Tank Trust, you must select a Contractor from the attached state approved Response Action contractors list to perform the above-referenced investigation or any corrective action that might be necessary. However, actions taken to abate an immediate hazard may be performed by a Response Action Contractor without obtaining cost estimates in advance. This may include, but not be limited to, free product recovery, vapor abatement, or the removal of highly saturated soils. The Underground Storage Tank Division, however, shall be notified concerning these activities and will take all possible steps to oversee such activities in an effort to avoid cost overruns.

If it appears that the investigation reports cannot be submitted within the requested sixty (60) days after approval of the assessment plan, please indicate in writing the reasons for the delay.

Following receipt of the reports, you will be contacted by Division personnel regarding the final disposition of this matter. If corrective action is indicated, you will be placed on a time schedule for submittal of a corrective action plan, and for continued monitoring and reporting.

EST 1.0. 210-009511
Page four of

Thank you for your cooperation. If you have any questions, please call Brenda B. Williams at (301) 638-5313.

Sincerely,

Frank L. Dautriel /BBW/ms

Frank L. Dautriel
Enforcement Program Manager
Underground Storage Tank Division

FLD/BBW/stj

cc: Southeast Regional Office

Enclosures

Appendix B

**Incident Letter Report
Hydrodyne Environmental, Inc.**

HYDRODYNE
ENVIRONMENTAL, INC.
CONSULTANTS • DESIGNERS

August 1, 1991

Mr. Frank Dautriel
Enforcement Director
Underground Storage Tank Division
Louisiana Department of Environmental Quality
P.O. Box 44274
Baton Rouge, LA 70804

RE: Request For Assessment
Time Saver Store #93
200 Live Oak St.
Metairie, Louisiana
(Jefferson Parish)
Facility UST I.D. #26-009541
Incident # UE-91-3-0228

Dear Mr. Dautriel:

On behalf of Time Saver Stores, Inc., and in response to your request letter of July 11, 1991, Hydrodyne Environmental, Inc. is reporting on the above referenced incident.

On July 3, 1991, Mr. Frank Massara of Time Saver Stores called Hydrodyne about this incident. It seems that there was a possibility of leakage from an unleaded gasoline-containing UST in the store's tank bay. On July 2, the unleaded lines had been tested and passed. On July 3, however, the regular unleaded tank was tested using both the overfill and underfill methods and failed.

Mr. Massara had previously this day notified your office of this leakage possibility. During a site visit by Mr. Massara on July 3, no visible evidence of petroleum product was detected. Also on this day, fuel product within the tank was removed by a transport truck (Petron). The Jefferson Parish Fire Department was informed of the situation and a vapor investigation was performed. Ms. Kathy Nichols of Time Saver Stores visited the site on July 4 and, also, saw no evidence of contamination.

On July 8, Ms. Nichols and Richard Murphy of Hydrodyne met on site and made arrangements for the installation of two (2) recovery wells at the site, rather than the one (1) requested by Ms. Brenda Williams due to the extent of possible contamination.

This is the site of a previous unrelated subsurface contamination investigation that Hydrodyne performed for Time Saver in April and May of this year. Report copies were sent to your office on May 27.

Mr. Frank Dautriol
August 1, 1991
Page 2

Site visits by Hydrodyne on July 3, 4, and 5, were arranged to closely monitor the situation. No fuel vapors in area storm drains were detected.

One July 10, the Premium unleaded and the unleaded Plus systems were tightness tested using the overfilled method; both systems failed.

Also on July 10, the two recovery wells were installed; one immediately east and one immediately west of the tank bay (see attached site map). The wells were drilled under the supervision of Hydrodyne personnel to a depth of 15 feet. Static water level at the wells is 2 feet below ground level.

The wells were developed by hand-bailing on visits July 11, 12, and 13, and were inspected on these days and then once a day for the following sixteen days, July 14 - 31. Slight petroleum odors were detected in MW-1 on July 13, and then in MW-2 on July 15. There is, at this point, no free-phase product flowing into the wells and still only slight or mild petroleum odors detectable from the wells.

Time Saver Stores, Inc. will notify your office of their response action contractor for this incident as soon as they make their decision on this.

Hydrodyne will continue to closely monitor this incident and will assist Time Saver Stores in keeping your office informed of any changes in the situation. Please let us know if there is any additional information you need at this point or any further steps which should be taken.

Sincerely,

HYDRODYNE ENVIRONMENTAL, INC.



Alan Dyer
Assistant Project Manager

Attachment: Site Map

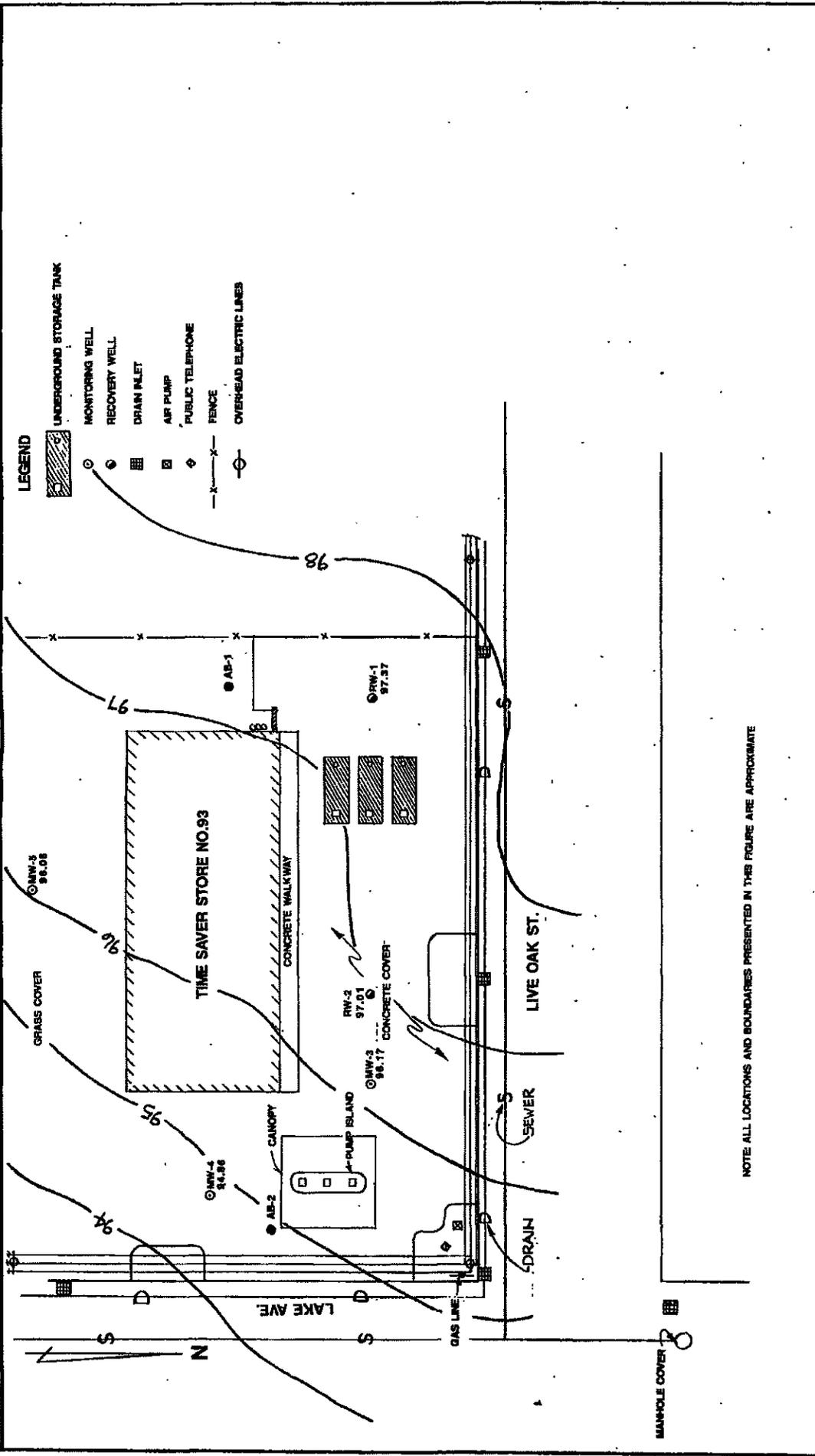
cc: Ms. Kathy Nichols
Time Saver Stores, Inc.

Mr. Frank Massara
Time Saver Stores, Inc.

Appendix C

**Site Location and
Potentiometric Map**

AF 45711A



NOTE: ALL LOCATIONS AND BOUNDARIES PRESENTED IN THIS FIGURE ARE APPROXIMATE

LANIER & ASSOCIATES
CONSULTING ENGINEERS
INCORPORATED
NEW ORLEANS, LA MOBILE, AL NEDERLAND, TX

DATE: 11/15/81
SCALE: 1/4" = 1'-0"
DRAWN BY: A.D.
CHECKED BY: J.V.
APPROVED BY: J.S.
JOB NO.: 93-01

TIME SAVER STORE NO. 93 LOUISIANA
METAIRIE

SITE LOCATION & SAMPLING MAP
200 LIVE OAK STREET

THIS DESIGN AND DRAWING IS THE PROPERTY OF LANIER & ASSOCIATES, INC. AND IS TO BE USED ONLY FOR THE PROJECT AND SITE SPECIFICALLY IDENTIFIED HEREIN. NO PART OF THIS DRAWING OR ANY INFORMATION CONTAINED HEREIN IS TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN CONSENT OF LANIER & ASSOCIATES, INC. OTHERWISE, PENALTIES WILL BE ENFORCED.

Appendix D

**Reported Chemical Analysis Results
For Collected Soil & Groundwater Samples**



NEW ORLEANS AREA LABORATORY
 1000 RIVERBEND BLVD, SUITE F
 ST ROSE, LOUISIANA 70087
 (504) 467-5503

Certificate of Analysis No. U0924404

TIME SAVER
 5243 CANAL BLVD.
 NEW ORLEANS, LA. 70124

ATTN: KATHY NICHOLS

10-02-91

Project No:
 Project: TIME SAVER #93
 Site: 200 LIVE OAK, METAIRIE
 Sample No: RW-1
 Sample of: WATER
 Sampled by: LANIER & ASSOCIATES
 Sample Date: 9-23-91
 Date Received: 9-24-91

A N A L Y T I C A L R E S U L T S

PARAMETER	RESULTS	MDL*
Benzene	0.049 mg/l	0.0002 mg/l
Toluene	0.0035 mg/l	0.0002 mg/l
Ethylbenzene	0.047 mg/l	0.0002 mg/l
Xylenes	0.037 mg/l	0.0002 mg/l
Method-5030/8020 [SW846]		

BTEX ANALYZED BY : W. AUCOIN DATE/TIME: 10-1-91, 1:37 PM

Notes: * Method Detection Limit ND = Not Detected. NA = Not Analyzed.

QUALITY ASSURANCE: This analysis was performed in accordance with EPA guidelines for analysis and quality control.

SPL, Incorporated


 I.R. DeLeon



ENVIRONMENTAL LABORATORIES

NEW ORLEANS AREA LABORATORY
1000 RIVERBEND BLVD., SUITE F
ST ROSE, LOUISIANA 70087
(504) 467-5503

Certificate of Analysis No. U0924405

TIME SAVER
5243 CANAL BLVD.
NEW ORLEANS, LA. 70124

ATTN: KATHY NICHOLS

10-02-91

Project No:
Project: TIME SAVER #93
Site: 200 LIVE OAK, METAIRIE
Sample No: RW-2
Sample of: WATER
Sampled by: LANIER & ASSOCIATES
Sample Date: 9-23-91
Date Received: 9-24-91

ANALYTICAL RESULTS

PARAMETER	RESULTS	MDL*
Benzene	2.6 mg/l	0.0002 mg/l
Toluene	3.7 mg/l	0.0002 mg/l
Ethylbenzene	10 mg/l	0.0002 mg/l
Xylenes	21 mg/l	0.0002 mg/l
Method-602 [40 CFR Ch.1]		

BTEX ANALYZED BY : R. PORCHE

DATE/TIME: 9-25-91, 2:02 PM

Notes: * Method Detection Limit ND = Not Detected. NA = Not Analyzed.

QUALITY ASSURANCE: This analysis was performed in accordance with EPA guidelines for analysis and quality control.

SPL, Incorporated

I.R. DeLeon



NEW ORLEANS AREA LABORATORY
 1000 RIVERBEND BLVD., SUITE F
 ST. ROSE, LOUISIANA 70087
 (504) 487-5503

Certificate of Analysis No. U0925410

TIME SAVER
 5243 CANAL BLV.
 NEW ORLEANS, LA. 70124

ATTN: KATHY NICHOLS

10-02-91

Project No: 2870
 Project: TIME SAVER #93
 Site: 200 LIVE OAK, METAIRIE
 Sample No: B-1
 Sample of: SOIL
 Sampled by: LANIER & ASSOCIATES
 Sample Date: 9-24-91
 Date Received: 9-25-91

A N A L Y T I C A L R E S U L T S

PARAMETER	RESULTS	MDL*
Benzene	ND mg/kg	0.0002 mg/kg
Toluene	0.0034 mg/kg	0.0002 mg/kg
Ethylbenzene	ND mg/kg	0.0002 mg/kg
Xylenes	0.0023 mg/kg	0.0002 mg/kg
Method-5030/8020 [SW846]		

BTEX ANALYZED BY : W. AUCOIN

DATE/TIME: 9-29-91, 1:07 PM

Notes: * Method Detection Limit ND = Not Detected. NA = Not Analyzed.

QUALITY ASSURANCE: This analysis was performed in accordance with EPA guidelines for analysis and quality control.

SPL, Incorporated


 I.R. DeLeon



NEW ORLEANS AREA LABORATORY
 1000 RIVERBEND BLVD., SUITE F
 ST. ROSE, LOUISIANA 70087
 (504) 467-5503

Certificate of Analysis No. U1003572

TIME SAVER STORES, INC.
 5243 CANAL BLVD.
 NEW ORLEANS, LA 70124

KATHY NICHOLS

10-08-91

Project: STORE #93
 Site: 200 LIVE OAK
 Sample No: B-2
 Sample of: SOIL
 Sampled by: A. DYER
 Sample Date: 10-3-91
 Date Received: 10-03-91

A N A L Y T I C A L R E S U L T S

PARAMETER	RESULTS	MDL*
Benzene	.1 mg/kg	0.0002 mg/kg
Toluene	.012 mg/kg	0.0002 mg/kg
Ethylbenzene	.012 mg/kg	0.0002 mg/kg
Xylenes	.072 mg/kg	0.0002 mg/kg
Method-5030/8020 [SW846]		

BTEX ANALYZED BY : R. PORCHE

DATE/TIME: 10-6-91

Notes: * Method Detection Limit ND = Not Detected. NA = Not Analyzed.

QUALITY ASSURANCE: This analysis was performed in accordance with EPA guidelines for analysis and quality control.

SPL, Incorporated


 I.R. DeLeon



NEW ORLEANS AREA LABORATORY
 1000 RIVERBEND BLVD., SUITE F
 ST. ROSE, LOUISIANA 70087
 (504) 467-5503

Certificate of Analysis No. U0905020

TIME SAVER
 5243 CANAL BLVD.
 NEW ORLEANS, LA 70124

KATHY NICHOLS

09-11-91

Project: STORE #93
 Site: 200 LIVE OAK, METAIRIE
 Sample No: MW-3
 Sample of: WATER
 Sampled by: A. DYER
 Sample Date: 9-4-91
 Date Received: 09-05-91

ANALYTICAL RESULTS

PARAMETER	RESULTS	MDL*
Benzene	51 ug/l	0.2 ug/l
Toluene	2.0 ug/l	0.2 ug/l
Ethylbenzene	3.8 ug/l	0.2 ug/l
Xylenes	3.7 ug/l	0.2 ug/l
Method-5030/8020 [SW846]		

BTEX ANALYZED BY : W. AUCOIN DATE/TIME: 9-9-91, 4:15 PM

Notes: * Method Detection Limit ND = Not Detected. NA = Not Analyzed.

QUALITY ASSURANCE: This analysis was performed in accordance with EPA guidelines for analysis and quality control.

SPL, Incorporated


 I.R. DeLeon



NEW ORLEANS AREA LABORATORY
 1000 RIVERBEND BLVD., SUITE F
 ST. ROSE, LOUISIANA 70087
 (504) 487-9503

Certificate of Analysis No. U0905021

TIME SAVER
 5243 CANAL BLVD.
 NEW ORLEANS, LA 70124

KATHY NICHOLS

09-11-91

Project: STORE #93
 Site: 200 LIVE OAK, METAIRIE
 Sample No: MW-4
 Sample of: WATER
 Sampled by: A. DYER
 Sample Date: 9-4-91
 Date Received: 09-05-91

ANALYTICAL RESULTS

PARAMETER	RESULTS	MDL*
Benzene	1.0 ug/l	0.2 ug/l
Toluene	3.9 ug/l	0.2 ug/l
Ethylbenzene	1.8 ug/l	0.2 ug/l
Xylenes	4.0 ug/l	0.2 ug/l
Method-5030/8020 [SW846]		

all

BTEX ANALYZED BY : W. AUCOIN DATE/TIME: 9-9-91, 4:45 PM

Notes: * Method Detection Limit ND = Not Detected. NA = Not Analyzed.

QUALITY ASSURANCE: This analysis was performed in accordance with EPA guidelines for analysis and quality control.

SPL, Incorporated


 I.R. DeLeon



NEW ORLEANS AREA LABORATORY
 1000 RIVERBEND BLVD., SUITE F
 ST. ROSE, LOUISIANA 70087
 (504) 487-5503

Certificate of Analysis No. U0905022

TIME SAVER
 5243 CANAL BLVD.
 NEW ORLEANS, LA 70124

KATHY NICHOLS

09-11-91

Project: STORE #93
 Site: 200 LIVE OAK, METAIRIE
 Sample No: MW-5
 Sample of: WATER
 Sampled by: A. DYER
 Sample Date: 9-4-91
 Date Received: 09-05-91

ANALYTICAL RESULTS

PARAMETER	RESULTS	MDL*
Benzene	0.5 ug/l	0.2 ug/l
Toluene	1.2 ug/l	0.2 ug/l
Ethylbenzene	0.4 ug/l	0.2 ug/l
Xylenes	1.9 ug/l	0.2 ug/l
Method-5030/8020 [SW846]		

BTEX ANALYZED BY : W. AUCOIN DATE/TIME: 9-9-91, 5:14 PM

Notes: * Method Detection Limit ND = Not Detected. NA = Not Analyzed.

QUALITY ASSURANCE: This analysis was performed in accordance with EPA guidelines for analysis and quality control.

SPL, Incorporated


 I.R. DeLeon



ENVIRONMENTAL LABORATORIES

NEW ORLEANS AREA LABORATORY
1000 RIVERBEND BLVD., SUITE F
ST. ROSE, LOUISIANA 70087
(504) 487-5503

**** SPL QUALITY CONTROL REPORT ****
BETX MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

SPL Sample ID: U0906043
Matrix: WATER

Reported on: 09-10-91
Analyzed on: 09-09-91
Analyst: W. AUCOIN

This sample was randomly selected for use in the SPL quality control program. The results are as follows:

---- SPIKE ANALYSIS ----

Compound	Blank Value ug/l	Spike Added ug/l	Original Sample Concentration ug/l	MS Concentration ug/l	MS % Rec #	QC Limits Range
BENZENE	0.3	50	ND	59	118	39-150
TOLUENE	1.3	50	1	60	118	46-148
ETHYLBENZENE	0.3	50	ND	48	96	32-160
m+p-XYLENE	1.0	100	1	114	113	32-160
o-XYLENE	0.4	50	ND	60	120	32-160

---- SPIKE DUPLICATE ANALYSIS ----

Compound	Spike Added ug/l	MSD Concentration ug/l	MSD % Rec #	% RPD #	QC LIMITS	
					RPD Limit	Rec. Range
BENZENE	50	58	116	2	20	39-150
TOLUENE	50	58	114	3	20	46-148
ETHYLBENZENE	50	50	100	4	20	32-160
m+p-XYLENE	100	117	116	3	20	32-160
o-XYLENE	50	59	118	2	20	32-160

SPL, Incorporated


Trish Poirrier, QC Officer

Appendix E

Tank & Line Tightness Test Results

Southern Tank Testers

DE 0

CERTIFICATE OF PRECISION LEAK TEST

Southern Tank Testers has tested and certifies

the following:

Certificate # 44411-A

DATE: 07/03/91 CERTEIFIED TESTER: Jamie Courville # LA0002

LOCATION: Time Saver #93 200 Live Oak St. Metairie, La.

LINES	PROG.	TANK	TEST	Failed (Overfilled)	Failed (Underfilled)
1. Tank #1	Unl.		.393		
2. Tank #1	Unl.		.112		
3. _____	_____		_____		
4. _____	_____		_____		
5. _____	_____		_____		
6. _____	_____		_____		

HORNBER EZY-CHEK II
TANK TIGHTNESS TESTING

Southern Tank Testers

P.O. BOX 2317
PARKS, LA 70082

OR: (516) 845-4406


CERTIFIED TECHNICIAN

CERTIFICATE OF PRECISION LEAK TEST

Southern Tank Testers has tested and certifies the following: Certification # 44413

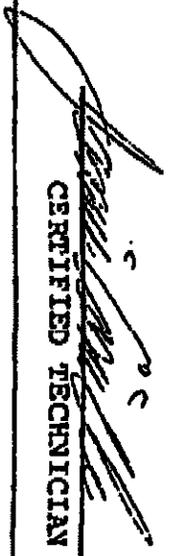
DATE: 7/15/91
LOCATION: Time Saver #93 (200 Live Oak St. Metairie, La.)
CERTIFIED TESTER: Jamie Courville # IAC02

LINE#	PROD.	TANK TEST	Result
1. Tank #2	Sup.	.487	Failed (✓)
2. Tank #3	Plus	.403	Failed (✓)
3.			
4.			
5.			
6.			

HORNER EZY-CHEK II
TANK TIGHTNESS TESTING

Southern Tank Testers

P.O. BOX 2377
PAINES LA 70046
ON: (510) 845 4406


CERTIFIED TECHNICIAN

CERTIFICATE OF PRECISION LEAK TEST

Southern Tank Testers has tested and certifies the following:

Certification #
44413L

DATE: 7/15/91

CERTIFIED TESTER: Jamie Courville # 1A002

LOCATION: Time Saver #93 (200 Live Oak St. Metairie, La.)

LINE	PROD.	TRST	Passed
Line #1	Sup.	.003	_____
Line #2	Plus	.000	_____
Line #3			_____
Line #4			_____
Line #5			_____
Line #6			_____

Southern Tank Testers

P.O. BOX 2387
Metairie, La. 70002

OR: (504) 845-4406

HORNER EZY-CHEK II
LINE TIGHTNESS TESTING


CERTIFIED TECHNICIAN

Appendix F

**Monitoring Well Boring Logs
and As-Built Diagrams**

SOIL BORING FIELD LOG

Project: Monitor Wells
Time Saver #93
 Client: _____

Boring No. NW-3
 Sheet 1 of 1

File: 91-100
 Date: 8-22-91
 Tech.: C. Brown
 Driller: L. George

FIELD DATA		BORING ADVANCE METHOD:	
GROUND WATER LEVELS	Depth (feet)	STANDARD PENETRATION TEST (BLOWS/FOOT) or PENETROMETER (P) (TONS/SQ. FT)	SAMPLING
			Auger: <u>0' - 6'</u> Wash: <u>6' - 16'</u>
▽			Rig: <u>200 Buggy</u> METHOD OF BACKFILLING: <u>Monitor Well</u>
	5		Gray Sand w/shell (6" Sand, 4" Shell) w/1" shell at top Gas Odor
	10		Gray Silty Clay w/organic traces w/3" peat layer and w/shell
	15		Gray Sandy Clay
			Bottom at 16'

SYMBOLS:

STANDARD PENETRATION TEST (40 LB. HAMMER - 50" FALL)

UNDISTURBED SAMPLE 3" DIA. SHELBY TUBE

NO RECOVERY

FREE WATER FIRST ENCOUNTERED

WATER LEVEL AFTER 15 mins. at 1.5' (PRIOR TO WASH BORING)

WATER LEVEL AFTER

Sirata Boundaries May Not Be Exact.



Compressive Strength From Unconfined Compression Test Unless Noted Otherwise.

Note: Visual Classifications Only

SOIL BORING FIELD LOG

Project: Monitor Wells
Time Saver #93
 Client: _____

Boring No. NW- 4
 Sheet 1 of 1

File: 91-100
 Date: 8-22-91
 Tech.: C. Brown
 Driller: L. George

FIELD DATA		BORING ADVANCE METHOD:	
GROUND WATER LEVELS	Depth (feet)	STD. PENETRATION TEST (BLOWS/FOOT) or PENETROMETER (P) (TONS/SQ. FT)	METHOD OF BACKFILLING:
	5		Rig: <u>200 Buggy</u>
	10	Gray Silty Clay	Auger: _____
	15	w/sand	Wash: <u>0' - 15'</u>
		Bottom at 15'	
		Note: No samples were taken as per client's request. Classifications based on cuttings	

SYMBOLS:

- STANDARD PENETRATION TEST
140 LB. HAMMER-30" FALL
- UNDISTURBED SAMPLE
3" DIA. SHELBY TUBE
- NO RECOVERY

- FREE WATER FIRST ENCOUNTERED
- WATER LEVEL AFTER (PRIOR TO WASH BORING)
- WATER LEVEL AFTER

Note: Visual Classifications Only

Strata Boundaries
May Not Be Exact.



Compressive Strength From Unconfined
Compression Test Unless Noted Otherwise.

SOIL BORING FIELD LOG

Project: Monitor Wells
Time Saver #93
 Client: _____

Boring No. NW-5
 Sheet 1 of 1

File: 91-100
 Date: 8-22-91
 Tech.: C. Brown
 Driller: L. George

FIELD DATA		BORING ADVANCE METHOD:	
GROUND WATER LEVELS	Depth (feet)	STD. PENETRATION TEST (BLOWS/FOOT) BY PENETROMETER (P) (TONS/SQ. FT.)	Rig: <u>200 Buggy</u>
		Auger Sample	METHOD OF BACKFILLING: <u>Monitor Well</u>
			Auger: <u>0' - 12'</u>
			Wash: <u>12' - 16'</u>
	5	Auger Sample	Tan Sand w/asphalt and peat
	10		Gray Clay w/peat & roots becoming tan becoming gray
▽	15		Gray Silty Clay
			Bottom at 16'

SYMBOLS:

- STANDARD PENETRATION TEST 140 LB. HAMMER - 30" FALL
- UNDISTURBED SAMPLE 3" DIA. SHELBY TUBE
- NO RECOVERY

- FREE WATER FIRST ENCOUNTERED
- WATER LEVEL AFTER (PRIOR TO WASH BORING)
- WATER LEVEL AFTER

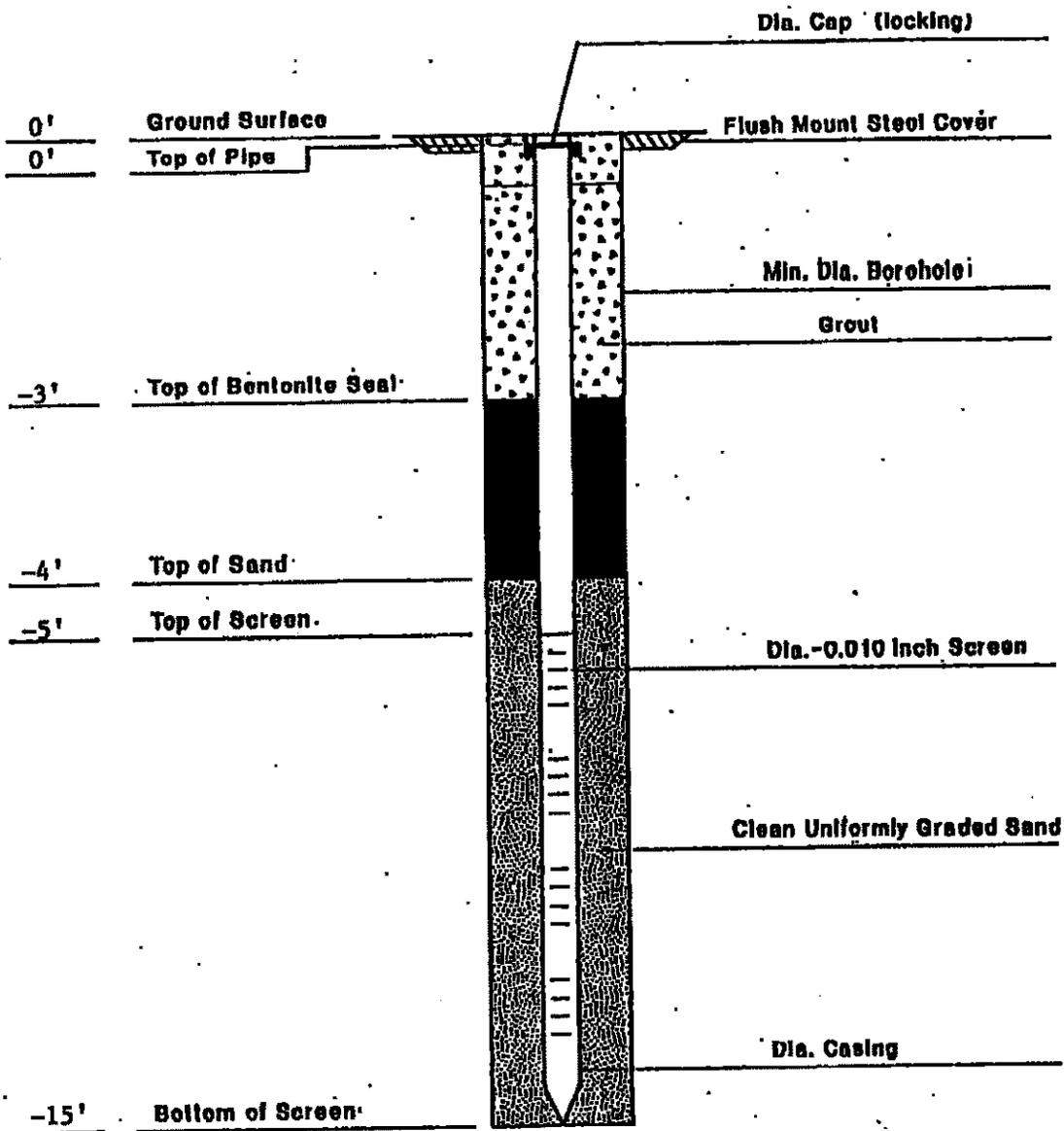
Note: Visual Classifications Only

Strata Boundaries May Not Be Exact.



Compressive Strength From Unconfined Compression Test Unless Noted Otherwise.

SOIL TESTING ENGINEERS, INC.

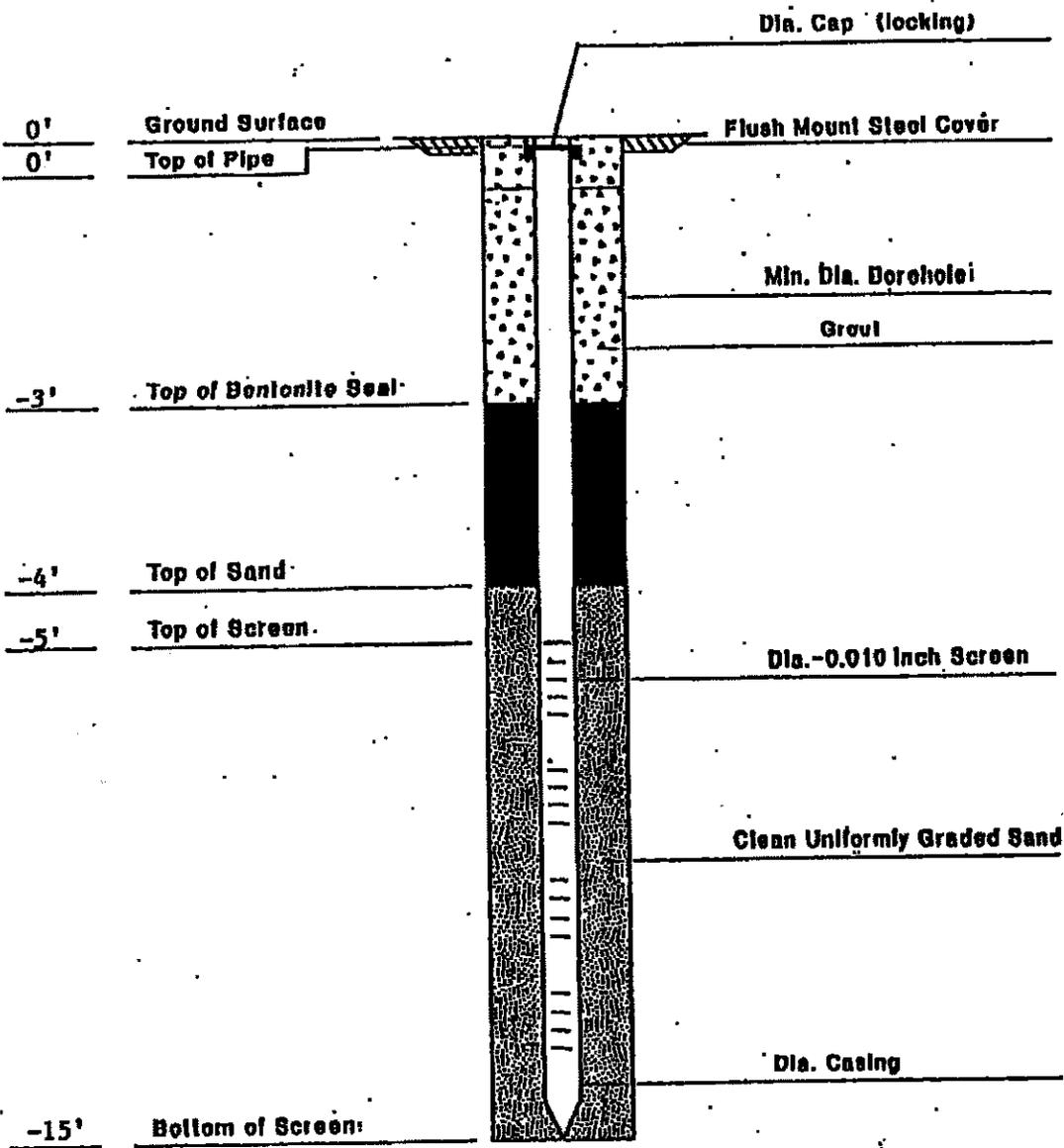


NOT TO SCALE

MONITORING WELL NO. NW-3

JOB NO. 91-100

SOIL TESTING ENGINEERS, INC.

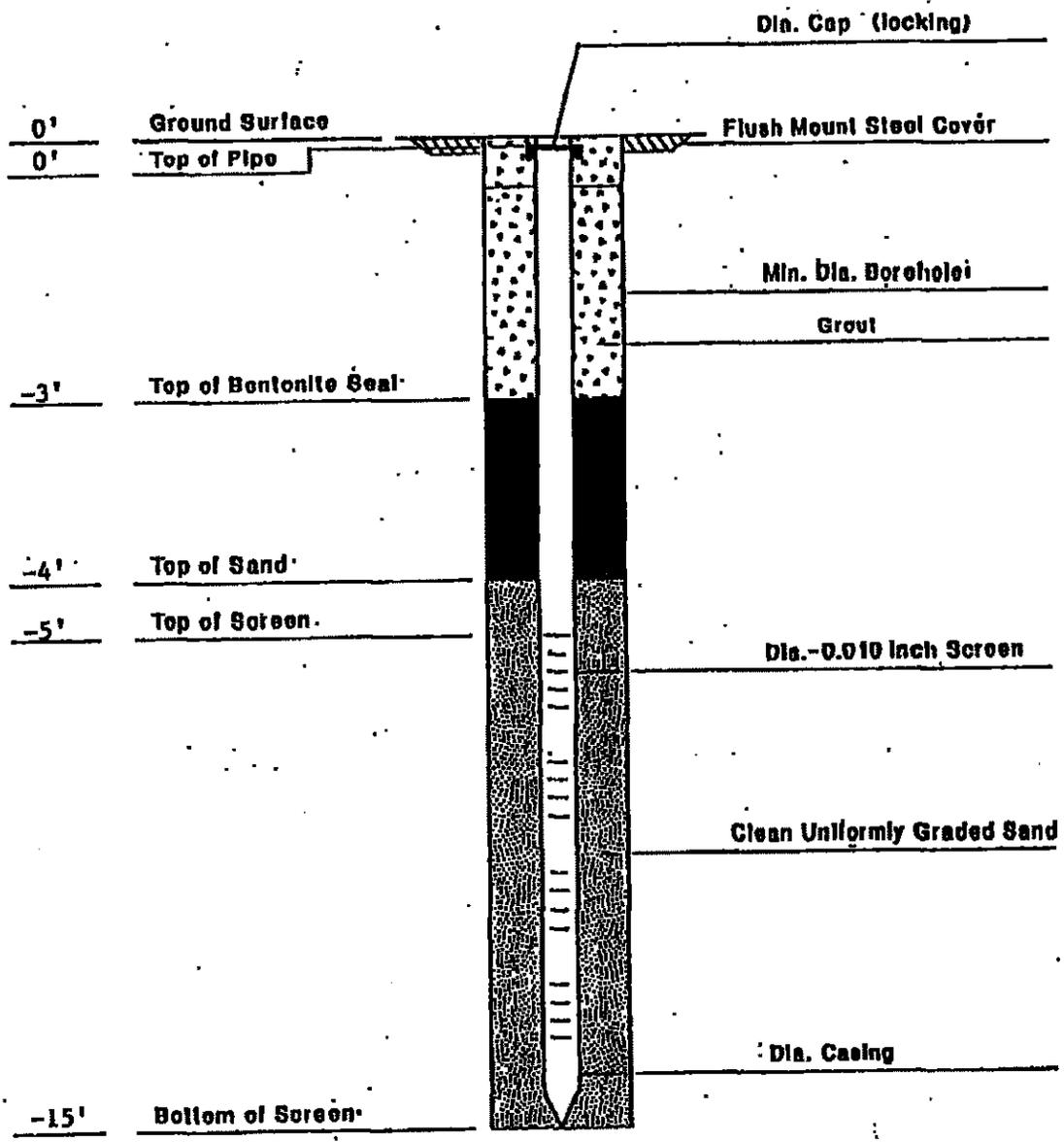


NOT TO SCALE

MONITORING WELL NO. NW- 4

JOB NO. 91-100


 SOIL TESTING ENGINEERS, INC.



NOT TO SCALE

MONITORING WELL NO. NW-5

JOB NO. 91-100

SOIL TESTING ENGINEERS, INC.

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
 WATER RESOURCES SECTION
 WATER WELL REGISTRATION SHORT FORM (DOTD-GW-1S)

PLEASE PRINT IN INK OR TYPE WHEN COMPLETING THIS FORM

1. USE OF WELL (Check Appropriate Box)
 DOMESTIC RIG SUPPLY MONITORING HEAT PUMP SUPPLY
 HEAT PUMP HOLE ABANDONED PILOT HOLE OTHER _____
 (Please Specify)
2. WELL OWNER Time Saver Stores, Inc. PHONE (504 486-7221)
3. ADDRESS 5243 Canal Blvd. New Orleans, LA 70124

4. OWNER'S WELL NUMBER OR NAME (if any) MH-3
5. DATE COMPLETED 8-22-91 DEPTH OF HOLE 16 FT. DEPTH OF WELL 13 FT.
 MEASURED ON 8-22-91 (Date)
6. STATIC WATER LEVEL 1.5 FT. BELOW GROUND SURFACE LENGTH 5 FT
 SLOT SIZE .010 LENGTH 10 FT.
7. CASING 4 IN. STEEL OR PVC SCH. 40 PUMP-DOWN OR GRAVITY
 8. SCREEN 4 IN. STEEL OR PVC SCH. 40 METHOD METHOD METHOD
9. CEMENTED FROM 3 FT. TO GROUND SURFACE. USING _____
 WELL IS NEAR, Metairie, LA (Town or City)
10. LOCATION OF WELL: PARISH Jefferson

APPROXIMATELY 1/2 MILES FROM Pontchartrain Blvd. east of Live Oak
 (corner of Live Oak & Lake St.) (Crossroads, Railroad, Any Landmark, etc.)

(Please draw sketch on back of Original)

11. REMARKS: See Attached Map

12. DRILLER'S LOG (Description and color of cuttings, such as shale, sand, etc., in feet)

FROM	TO	DESCRIPTION	FROM	TO	DESCRIPTION
0	4	Gray Sand			
4	12	Gray Silty Clay			
12	16	Gray Sandy Clay			

13. FOR HEAT PUMP HOLES ONLY: AVG DEPTH _____ FT., NUMBER OF HOLES _____
 TUBING MATERIAL PVC. PE. PB. OTHER _____

14. ABANDONMENT INFORMATION: DOES THE NEW WELL REPLACE AN EXISTING WELL? YES NO

(REV 11/85)

OWNER'S COPY

Soil Testing Engineers, Inc.
 Name of Water Well Contractor

LICENSE NUMBER WWC-212

Authorized Signature [Signature] Date 7-3-91

MAIL ORIGINAL TO:

LOUISIANA DEPARTMENT OF
 TRANSPORTATION AND DEVELOPMENT
 ATTN: CHIEF - WATER RESOURCES SECTION
 P.O. BOX 94245
 BATON ROUGE, LA 70804-9245
 (504) 379-1434

FOR OFFICE USE ONLY

STATE 22 PARISH _____ LOCAL WELL NO _____

IDENTIFICATION NUMBER 3001050900724

OWNERS NAME _____

WELL DEPTH _____ FT.

Use of Well _____

Date Completed _____

OWNER'S NO _____

Geologic Unit _____

CONTRACTOR'S NAME _____

SECTION 123

TOWNSHIP 128

RANGE 11E

SOLE DEPTH _____

ELEV _____

GRID NO _____

Inspected By _____

Date _____

Remarks _____

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
WATER RESOURCES SECTION
WATER WELL REGISTRATION SHORT FORM (DOTD-GW-1S)

PLEASE PRINT IN INK OR TYPE WHEN COMPLETING THIS FORM

- USE OF WELL (Check Appropriate Box)
 - DOMESTIC
 - RIG SUPPLY
 - MONITORING
 - HEAT PUMP SUPPLY
 - HEAT PUMP HOLE
 - ABANDONED PILOT HOLE
 - OTHER _____ (Please Specify)
- WELL OWNER **Time Saver Stores, Inc.** PHONE **504 486-7221**
- ADDRESS **5243 Canal Blvd. New Orleans, LA 70124**
- OWNER'S WELL NUMBER OR NAME (if any) **NW-4**
- DATE COMPLETED **8-22-91** DEPTH OF HOLE **15** FT., DEPTH OF WELL **15** FT.
- STATIC WATER LEVEL _____ FT. BELOW GROUND SURFACE MEASURED ON _____ (Date)
- CASING **4** IN STEEL OR PVC SCH. **40** LENGTH **3** FT.
- SCREEN **4** IN STEEL OR PVC SCH. **40** SLOT SIZE **.010** LENGTH **10** FT.
- CEMENTED FROM **3** FT. TO GROUND SURFACE, USING PUMP DOWN OR GRAVITY METHOD
- LOCATION OF WELL: PARISH **Jefferson** WELL IS NEAR **Metairie, LA** (Town or City)
- APPROXIMATELY **1/2** MILES FROM **Pontchartrain Blvd. east of Live Oak** (Crossroads, Railroad, Any Landmark, etc.)
(corner of Live Oak & Lake St.) (Please draw sketch on back of Original)

See Attached Map

- REMARKS
 * Boring washed from ground surface see NW-3 for water elevation
- DRILLER'S LOG (Description and color of cuttings, such as shale, sand, etc. in feet)

FROM	TO	DESCRIPTION	FROM	TO	DESCRIPTION
0	15	Gray Silty Clay w/sand			

- FOR HEAT PUMP HOLES ONLY: AVG DEPTH _____ FT., NUMBER OF HOLES _____
- TUBING MATERIAL PVC. PE. PB. OTHER _____
- ABANDONMENT INFORMATION: DOES THE NEW WELL REPLACE AN EXISTING WELL? YES NO

(REV. 11/85)

OWNER'S COPY

Soil Testing Engineers, Inc.
 Name of Water Well Contractor

LICENSE NUMBER **WWC-212**

Authorized Signature *[Signature]* DATE **8-2-91**

MAIL ORIGINAL TO:
 LOUISIANA DEPARTMENT OF
 TRANSPORTATION AND DEVELOPMENT
 ATTN: CHIEF - WATER RESOURCES SECTION
 P.O. BOX 94245
 BATON ROUGE, LA 70804-9245
 (504) 379-1434

FOR OFFICE USE ONLY

STATE **22** PARISH _____ LOCAL WELL NO _____

IDENTIFICATION NUMBER **3001050900724**
 OWNER'S NAME _____

WELL DEPTH _____ FT. Use of Well **EE**
 Date Completed _____ MO _____ YR _____

OWNER'S NO _____ Geologic Unit _____

CONTRACTOR'S NAME _____

SECTION **123** TOWNSHIP **128** RANGE **11E**

HOLE DEPTH _____ GLEV **0004** QUAD NO **190D**

Inspected By _____
 Date _____
 Remarks _____

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
WATER RESOURCES SECTION
WATER WELL REGISTRATION SHORT FORM (DOTD-GW-1S)

PLEASE PRINT IN INK OR TYPE WHEN COMPLETING THIS FORM

- USE OF WELL (Check Appropriate Box)
 - DOMESTIC
 - RIG SUPPLY
 - MONITORING
 - HEAT PUMP SUPPLY
 - HEAT PUMP HOLE
 - ABANDONED PILOT HOLE
 - OTHER
- WELL OWNER Time Saver Stores, Inc. PHONE (504 486-1221) (Please Specify)
- ADDRESS 5243 Canal Blvd. New Orleans, LA 70124
- OWNER'S WELL NUMBER OR NAME (if any) NW-5
- DATE COMPLETED 8-22-91 DEPTH OF HOLE 16 FT., DEPTH OF WELL 15 FT.
- STATIC WATER LEVEL 4 FT. BELOW GROUND SURFACE MEASURED ON (Date)
- CASING 4 IN STEEL OR PVC SCH. 40 LENGTH 5 FT.
- SCREEN 4 IN STEEL OR PVC SCH. 40 SLOT SIZE .010 LENGTH 10 FT.
- CEMENTED FROM 3 FT. TO GROUND SURFACE, USING PUMP-DOWN OR GRAVITY METHOD
- LOCATION OF WELL: PARISH Jefferson WELL IS NEAR Metairie, LA (Town or City)

APPROXIMATELY 1/2 MILES FROM Pontchartrain Blvd. east of Live Oak
 (Corner of Live Oak & Lake St.)
 (Crossroads, Railroad, Any Landmark, etc.)

(Please draw sketch on back of Original)

See Attached Map

- REMARKS: * Water encountered at 12', static level not established, see NW-3
- DRILLER'S LOG (Description and color of cuttings, such as shale, sand, etc. in feet)

FROM	TO	DESCRIPTION	FROM	TO	DESCRIPTION
0	4	Tan Sand			
4	10	Gray Clay w/peat			
10	10	Gray Silty Clay			

- FOR HEAT PUMP HOLES ONLY: AVG DEPTH _____ FT., NUMBER OF HOLES _____
 TUBING MATERIAL PVC, PE, PB, OTHER _____
- ABANDONMENT INFORMATION DOES THE NEW WELL REPLACE AN EXISTING WELL? YES NO

(REV 11/85)

OWNER'S COPY

Soil Testing Engineers, Inc.
 Name of Water Well Contractor

LICENSE NUMBER WWC-212

Authorized Signature [Signature] Date 8-3-91

MAIL ORIGINAL TO:
 LOUISIANA DEPARTMENT OF
 TRANSPORTATION AND DEVELOPMENT
 ATTN: CHIEF - WATER RESOURCES SECTION
 P.O. BOX 94245
 BATON ROUGE, LA 70804-9245
 (504) 379-1434

FOR OFFICE USE ONLY

STATE 22 PARISH _____ LOCAL WELL NO _____

IDENTIFICATION NUMBER 3001050900724
 OWNERS NAME _____

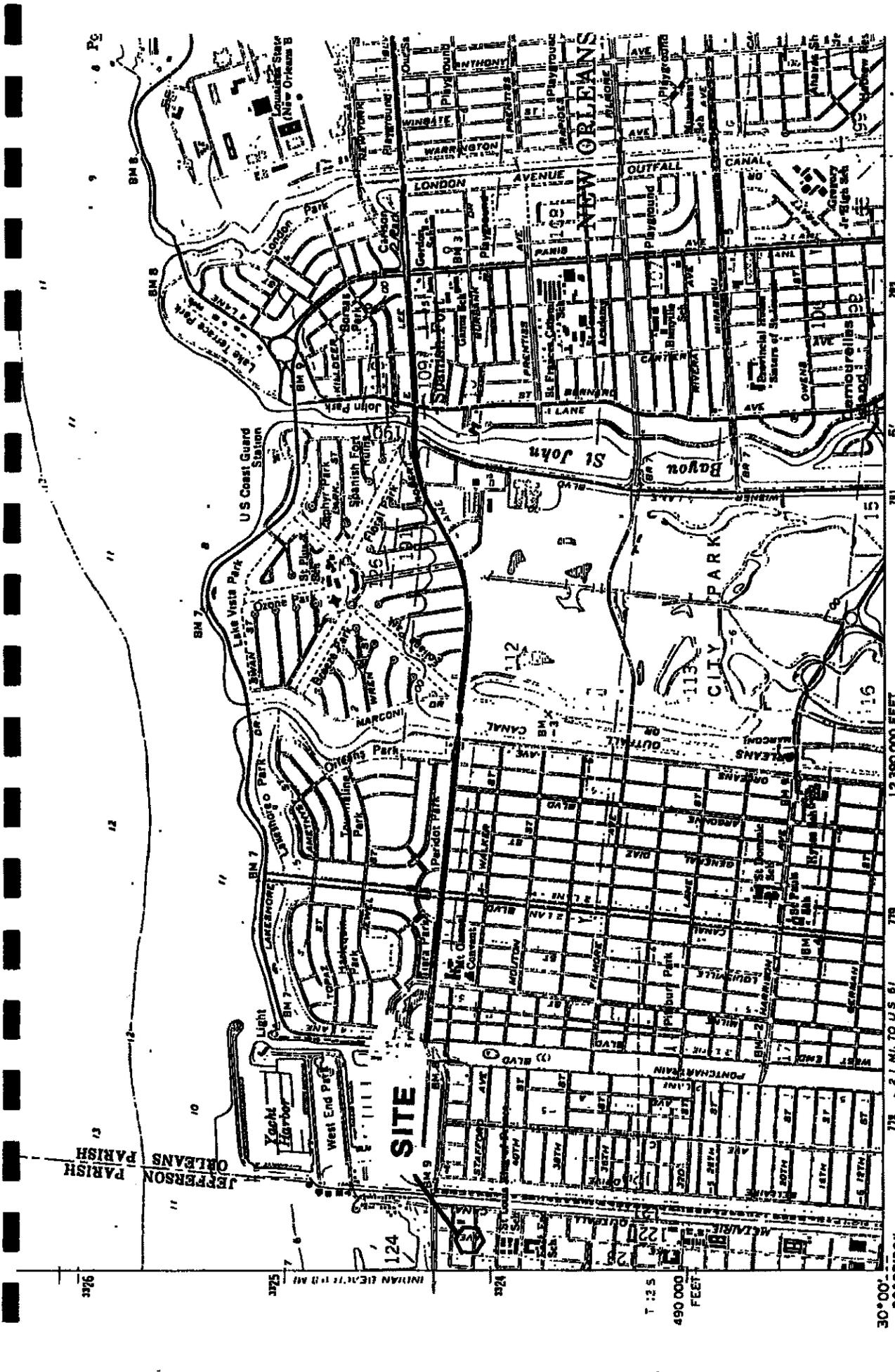
WELL DEPTH _____ FL _____ Use of Well _____
 NO _____ YR _____

OWNERS NO _____ Geologic Unit _____

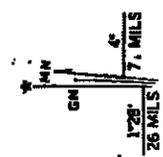
CONTRACTOR'S NAME _____
 SECTION 123 TOWNSHIP 128 RANGE 118

HOLE DEPTH _____ ELEV 0004 CLAD NO 1900

Inspected By _____
 Date _____
 Remarks _____



USGS QUAD MAP
 Spanish Fort, La.
 1965
 rev. 1972 1979



Mapped, edited, and published by the Geological Survey
 Control by USGS and USC&GS
 Planimetry by photogrammetric methods from aerial photographs
 taken 1964. Topography by planetable surveys 1965
 Supersedes map dated 1951
 Selected hydrographic data compiled from USC&GS Charts

NEW ORLEANS
 90°07'30"
 30°00'

490 000
 FEET

12 390 000 FEET

Appendix G

Underground Tank Inventory Records

11-8
DATE: 11-8

ONE: 1

51-11
N RUP-

3 15

3 15

11-8

EEK-NUMBER 13
QUARTER NUMBER 2
TIME SAYER, INC.
WEEK ENDING DATE 07/01/90
RUN DATE 07/05/90
RUN TIME 13:56:36

STORE N NUMBER	LOCATION ADDRESS	PROD CODE	CURRENT GALS	ONE WEEK AGO	TWO WEEKS AGO	THREE WEEKS AGO	FOUR WEEKS AGO	FIVE WEEKS AGO	GIP GALS	---YEAR-DATE---		PRIOR-YEAR GALS	PCY
										CURRENT-YEAR PCT.	---YEAR-DATE---		
1	77 3605 CAUSEWAY BLVD. METAIRIE, LA. 70002	UNL UN+2 REG	93.6 62.3 0.0	486.0 135.8 0.0	211.8 250.8 0.0	206.2 91.2 0.0	859.7 50.1 0.0	51.6 13.9 0.0	2162.8 891.6 0.0	2338.6 231.7 0.0	75 23 0.0	4385.4 2524.9 0.0	1.31 8.95 0.00
		PRE	92.9 40.2	46.1 18.3	32.6 4.7	77.3 51.2	3.1 3.1	53.3 57.3	569.5 292.2	383.3 277.6	31 98	2853.8 2213.2	2.11 12.03
	STORE TOTAL		186.6	886.2	66.9	625.9	806.6	62.9	3916.1	3231.2	57	11977.3	2.22
1	83 2355 METAIRIE RD. METAIRIE, LA. 70001	UNL UN+2 REG	39.9 111.7 0.0	16.6 83.0 0.0	8.8 96.5 0.0	211.2 42.5 0.0	18.0 77.3 0.0	75.7 58.8 0.0	600.2 86.1 0.0	578.0 247.4 0.0	81 91 0.0	2153.0 1494.7 0.0	2.89 23.40 0.00
		PRE	37.5	88.6	118.2	135.1	67.7	189.6	889.7	928.3	2.02	1648.7	5.94
	STORE TOTAL		199.0	184.0	206.6	388.8	8.4	206.5	375.6	595.7	61	5296.4	6.31
1	85 3526 I-10 SERV. RD. METAIRIE, LA. 70001	UNL UN+2 REG	140.9 44.8 0.0	187.1 117.3 0.0	40.5 145.5 0.0	92.5 94.7 0.0	109.8 94.7 0.0	127.0 152.5 0.0	1021.0 178.4 0.0	859.1 125.0 0.0	57 33 0.0	3141.5 2183.5 0.0	2.20 22.58 0.00
		PRE	136.6	98.1	164.6	19.7	106.5	85.0	421.0	332.7	53	1939.2	2.83
	STORE TOTAL		322.3	402.5	72.1	72.7	98.0	59.5	1820.4	1316.8	52	2264.0	3.08
1	93 200 LIVE OAK ST. METAIRIE, LA. 70005	UNL UN+2 REG	211.3 80.8 0.0	30.5 6.3 0.0	63.0 5.8 0.0	105.6 7.2 0.0	21.6 21.6 0.0	62.2 49.2 0.0	1135.1 244.4 0.0	941.5 205.3 0.0	81 54 0.0	2715.6 1383.6 0.0	2.32 19.17 0.00
		PRE	109.5	74.4	5.5	113.2	21.2	296.0	235.2	107.7	18	1270.6	2.02
	STORE TOTAL		661.6	50.2	51.6	226.0	13.7	169.9	1614.7	1039.1	48	5369.6	2.48
1	100 2200 ROBERT E LEE NEW ORLEANS, LA. 70122	UNL UN+2 REG	106.4 2.5 0.0	87.2 21.9 0.0	92.3 0.0 0.0	59.0 4.9 0.0	288.9 35.6 0.0	7.6 98.4 0.0	370.0 142.7 0.0	442.3 136.6 0.0	55 72 0.0	2839.7 3324.6 0.0	3.41 49.98 0.00
		PRE	88.2	26.2	74.0	65.7	14.1	22.5	7.1	153.3	58	1924.7	6.82
	STORE TOTAL		40.7	138.3	18.5	129.6	310.4	113.3	459.6	152.4	12	7889.0	6.07
1	103 10833 CHEF HERTEUR HWY. NEW ORLEANS, LA. 70127	UNL UN+2 REG	359.2 120.9 0.0	134.7 108.2 0.0	310.3 80.2 0.0	200.1 324.3 0.0	4.6 238.1 0.0	77.1 46.7 0.0	1317.5 290.0 0.0	1390.6 136.4 0.0	1.22 58 0.0	3527.0 3916.3 0.0	4.34 45.12 0.00
		PRE	121.6	15.5	7.1	5	45.8	48.8	205.2	130.0	36	2647.1	11.52
	STORE TOTAL		601.7	42.0	397.6	524.9	288.5	79.2	1812.7	1397.0	81	10092.4	7.11
1	103 1227 VETERANS HWY. KENNER, LA. 70062	UNL UNL PRE	2.8 65.0 9.8	31.3 48.3 33.7	82.2 66.9 54.1	8.1 133.4 65.8	33.5 94.1 12.3	20.6 108.2 59.8	118.7 265.3 131.2	270.7 222.0 110.9	1.62 37 59	1798.6 2056.2 2092.4	13.69 3.56 13.48
	STORE TOTAL		72.6	22.7	183.2	59.6	77.1	188.6	695.2	633.6	60	5937.2	6.41

see p 01 cont

WBSO	WEEK-NUMBER	WARTER NUMBER	TIME SAVER, INC.	WEEK ENDING DATE	07/29/90	ONE WEEK AGO	TWO WEEKS AGO	THREE WEEKS AGO	FOUR WEEKS AGO	FIVE WEEKS AGO	6TD	CURRENT-YEAR	10-DATE	PRIOR-YEAR	PAGE	
						PROD CODE					GALS	GALS	PCT.	GALS	3	
	ONE1	1	EASTBANK													
	STORE	LOCATION														
	N	NUMBER	ADDRESS													
1	77	3605 CAUSEWAY BLVD.				UNL	312.7	310.3	112.5	93.6	686.0	623.0	2961.6	.83	5316.5	1.38
		METAIRIE, LA. 70002				UN+2	246.9	351.3	306.0	8.5	42.3	285.7	517.4	.44	2887.1	6.75
						REG	.0	.0	.0	.0	.0	.0	.0	.00	.0	.00
						PRE	168.0	15.8	110.2	226.8	92.9	67.4	450.7	.31	3280.1	2.11
						DSL	21.6	65.7	72.3	60.3	40.2	75.3	202.3	.64	2291.9	10.51
		STORE TOTAL					706.0	611.7	234.0	182.9	184.6	900.8	4132.0	.64	13775.6	2.19
1	83	2355 METAIRIE RD.				UNL	2.7	25.3	444.4	437.3	39.9	14.6	512.5	.67	2472.5	2.73
		METAIRIE, LA. 70001				UN+2	182.0	230.0	392.3	461.4	111.7	83.0	226.3	.70	1779.0	17.20
						REG	.0	.0	.0	.0	.0	.0	.0	.00	.0	.00
						PRE	97.8	8.0	74.5	60.8	47.4	86.4	851.0	1.43	1725.1	4.99
		STORE TOTAL					282.5	313.3	22.4	86.1	199.0	184.0	30.9	.33	6026.6	3.98
1	85	3528 I-10 SERV. RD.				UNL	396.6	316.1	75.0	166.3	140.9	187.1	323.8	.69	3954.8	2.40
		METAIRIE, LA. 70001				UN+2	63.7	20.6	137.9	119.2	44.8	117.3	65.6	.44	2465.0	16.52
						REG	.0	.0	.0	.0	.0	.0	.0	.00	.0	.00
						PRE	102.0	202.9	51.1	129.1	136.6	98.1	22.9	.42	2363.3	3.02
		STORE TOTAL					562.3	496.6	154.0	416.6	322.3	366.5	1683.3	.58	8283.1	3.22
1	93	200 LIVE OAK ST.				UNL	30.4	47.7	105.3	82.9	271.3	30.5	266.3	.90	3121.9	2.20
		METAIRIE, LA. 70005				UN+2	140.2	109.1	33.2	47.3	80.8	6.3	65.2	.37	1435.2	7.24
						REG	.0	.0	.0	.0	.0	.0	.0	.00	.0	.00
						PRE	73.8	.7	15.1	21.0	109.5	74.4	109.2	.32	1634.9	2.21
		STORE TOTAL					183.6	157.5	143.4	54.4	661.6	111.9	1151.0	.47	6192.0	2.39
1	100	2200 ROBERT E. LEE				UNL	120.8	2.0	2.5	196.3	106.4	82.2	76.0	.58	2862.3	3.20
		NEW ORLEANS, LA. 70122				UN+2	10.6	55.4	119.4	121.6	2.5	24.9	175.0	.18	3464.8	39.70
						REG	.0	.0	.0	.0	.0	.0	.0	.00	.0	.00
						PRE	6.9	21.2	129.0	116.7	68.2	24.2	273.8	.36	2148.8	6.74
		STORE TOTAL					124.5	36.2	250.9	434.6	40.7	138.3	524.8	.47	8455.9	5.76
1	101	10833 CHEF HENRIEUR HWY.				UNL	219.2	21.6	47.5	183.7	359.2	136.7	448.8	1.37	4146.8	4.06
		NEW ORLEANS, LA. 70127				UN+2	160.7	142.4	203.2	41.9	120.9	108.2	316.0	1.09	4272.3	35.31
						REG	.0	.0	.0	.0	.0	.0	.0	.00	.0	.00
						PRE	17.1	63.6	23.3	.8	121.6	15.5	56.6	.17	3384.4	12.78
		STORE TOTAL					397.0	100.4	242.4	161.0	601.7	42.0	635.0	1.02	11803.5	6.90
1	103	1227 VETERANS HWY.				UNL+	16.1	105.0	80.8	31.8	2.8	37.3	39.9	1.55	1998.9	13.10
		KENNER, LA. 70062				UNL	46.9	110.1	240.3	105.1	65.0	48.3	194.4	.56	2333.6	3.31
						PRE	23.1	39.9	11.2	20.6	9.8	33.7	15.0	.57	2279.8	12.52
		STORE TOTAL					39.9	175.2	170.7	52.7	72.0	22.7	233.3	.72	4612.3	6.36

**JEFFERSON PARISH, AUGUST 21, 1992
RELEASE NOTIFICATION FORM TO LDEQ**

RELEASE NOTIFICATION FORM

INCIDENT NUMBER UE-92-03-0201

NOTIFICATION INFORMATION

RECEIVED BY: Keith Hall
 DATE: 8/21/92
 TIME: 4:00pm

REPORTED BY: Kathy Rubin / Marnie Winter
 ADDRESS: 1221 Elmwood Pk Blvd., Suite 703
Harahan, La.
 TELEPHONE: (504) 736-6440

DATE DISCOVERED 8/20/92

DATE CONFIRMED _____

- GASOLINE
- OIL
- DIESEL
- HAZARDOUS SUBSTANCE
- OTHER _____

- SPILL
- OVERFILL
- TANK LEAK
- PIPING LEAK
- DISPENSER LEAK
- OTHER _____

QUANTITY RELEASED _____ GALLONS

FACILITY INFORMATION

FACILITY ID# _____
 NAME: Dept. of Drainage
 ADDRESS: 4201 Avron, Pump Sta. #2
Metairie, La.
 PARISH: Jefferson
 CONTACT PERSON: Marnie Winter
 TELEPHONE: (504) 736-6440

OWNER NAME: Jefferson Parish
 ADDRESS: _____

 TELEPHONE: () _____

RELEASE STATUS

- Assessment Required
- Remediation Complete
- Pending Further Information
- Date: _____
- Comments: _____
- Method: _____

INCIDENT DESCRIPTION

Kathy Rubin of Jefferson Parish called to report that a 10K gallon diesel tank at the facility failed a tightness test. CDM is the RAC. Riedel Peterson is going to pump out the tank

LDEQ, FEBRUARY 1, 1996
STATE OF LOUISIANA UST CLOSURE/ASSESSMENT FORM

RECEIVED

STATE OF LOUISIANA

RECEIVED

3875108

UNDERGROUND STORAGE TANK CLOSURE/ASSESSMENT FORM

Please complete and return within sixty (60) days after UST system closure or change-in-service

Return to: UNDERGROUND STORAGE LDEQ - UST DIVISION, Operations (504) 765-0243, F. O. Box 52178, Baton Rouge, LA 70894-2178

DEQ Facility Number: 26-013731, GDM-METAIRIE, LA
DEQ Owner ID Number: 00579700

I. OWNERSHIP OF TANKS
IF OWNER'S ADDRESS CHANGED, PLEASE CHECK
Jefferson Parish Department of Drainage
OWNER NAME (CORPORATION/INDIVIDUAL, ETC.)
1221 Elmwood Park Blvd., Suite 908
MAILING ADDRESS
Harahan LA 70123
CITY STATE ZIP
Jefferson
PARISH/COUNTY
504 736-6732
TELEPHONE (INCLUDE AREA CODE)
Ross W. Ketchum
NAME OF CONTACT PERSON

II. LOCATION OF TANKS
IF SAME AS SECTION I, PLEASE CHECK
Lake Villa Drainage Pump Station
FACILITY NAME OR COMPANY SITE IDENTIFIER
4201 Avron Blvd.
STREET ADDRESS (P. O. BOX NOT ACCEPTABLE)
Metairie LA 70002
CITY STATE ZIP
Jefferson
PARISH
504 736-6732
TELEPHONE (INCLUDE AREA CODE)
Ross W. Ketchum
CONTACT PERSON AT THIS LOCATION

III. TANK INFORMATION (Attach Continuation Sheets If Necessary)

DEQ ASSIGNED TANK NUMBERS	PRODUCT LAST STORED IN TANK	SIZE OF TANK (GALLONS)	CHOOSE ONE PER TANK 1 = Removed 2 = Closed-in-Place 3 = Change-in-Service 4 = Removed & Replaced	TANK PROPERLY LABELED?		HIGHEST LEL OR OXYGEN READING ¹		DATE OF CLOSURE OR CHANGE-IN-SERVICE
				CIRCLE	Y	Y	Oxygen	
39773	Diesel	10,000	1	(Y)	N	0	21.9	11/9/94
39774	Diesel	10,600	1	(Y)	N	0	21.9	11/10/94
				Y	N			/ /
				Y	N			/ /
				Y	N			/ /

1 - Indicate the non-regulated substance to be stored in the tank. 3 - Highest reading recorded just before tank removed from excavation.
2 - A registration form addressing the replacement tank must be completed. 4 - Lower Explosive Limit

IV. TANK A. Date cleaned 11/09/94 D. Date disposed/recycled 11/14/94 C. Name of disposal site/recycling site Goldin Industries	V. TANK SLUDGES A. Date disposed/recycled / / B. Volume removed cu/yds C. Name of disposal site	VI. TANK WATERS/WASHWATERS A. Date disposed/recycled 9/29/94 B. Volume removed 1872 gals C. Name of disposal/recycling site Goldin Industries
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VII. CONTAMINATED SOIL (IF APPLICABLE) A. Date removed 2/21/95 B. Volume of soil removed 168 cu/yds C. Name of disposal site Kelvin Landfill	VIII. CONTAMINATED GROUNDWATER (IF APPLICABLE) A. Date removed 9/29/94 B. Volume of groundwater removed 800 gals C. Name of disposal site/recycler Goldin Industries
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IX. CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

MARNIE WINTER PRINT OR TYPE OWNER'S NAME
Marnie Winters OWNER'S SIGNATURE
7-17-95 DATE

Philip M. Kelly, Jr. PRINT OR TYPE NAME OF CERTIFIED WORKER
Philip M. Kelly, Jr. SIGNATURE OF CERTIFIED UST WORKER
C-0218 CERTIFICATE NO.
4/21/95 DATE

FORMS THAT DO NOT INCLUDE THE OWNER'S AND UST WORKER'S SIGNATURES WILL BE REJECTED.

LDEQ RESPONSE - DO NOT WRITE BELOW THIS LINE

UST system removed from database; no further action required.
 UST system removed from database; additional information required.

Reviewer's Signature: Lisa A. Robichaux Telephone No. (504) 522-6206 Date: 01/23/96
Signature of LDEQ Representative: Harold H. [Signature] Date: 2/1/96 Supervisor Initials: [Signature] 2/1/96