- No SAP/QAPP protocol
- grab samples are illegal.

Phase I and II Environmental Assessment

**Assessment of the property at
1323 Lee Boulevard,
Richland, Washington
for Sam Volpentest**

July 8, 1994

Technico Environmental Services
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(509) 582-7447 ☎ (509) 586-7363
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TECHNICO

Environmental Services, Inc.

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July 8, 1994
Technico Project No. **T13**

Sam Volpentest
Prudential NOW Realty
214 Torbett, Suite A
Richland, WA 99352

Subject: Phase I and II Site Assessment of the property owned by Sam Volpentest and located at 1323 Lee Boulevard in Richland, Washington.

Dear Mr. Volpentest,

Enclosed you will find the July 8, 1994 Phase I and II Site Assessment report on the land located at 1323 Lee Boulevard in Richland, Washington.

Sincerely,

John A. Zillich
Technico Environmental Services, Inc.

Executive Summary

Technico conducted a Phase I and II Environmental Assessment of the property (currently a vacant lot) located at 1323 Lee Boulevard, Richland, Washington. The lot was formerly owned by Standard Oil and used as a gas station and training facility. The objectives were: determine the potential for adverse environmental impacts to the subject property from past or present uses of the site and/or immediately adjacent properties; and also determine whether those impacts, if any, may have consequences for Mr. Volpentest or the future property owner. It is our understanding the site is being sold to be developed as a car wash.

The more important findings of the site assessment were:

- It appears that when this service station was demolished, they did a very good job of removing all of the tanks and any associated contaminated soils. However, there are gasoline and BTEX compounds in the groundwater which are above MTCA Method A Cleanup Levels (Table 1). There are immediate and interim status report requirements for notification to the Department of Ecology (DOE). These requirements have been met.
- Legally, the owner has 90 days to clean up the site and if clean within 90 days, no report is necessary. If the area is not clean after 90 days, a site characterization report needs to be filed with DOE. DOE may issue an order to require the owner to clean up the facility. If the owner does not clean up the facility in a timely manner, DOE has legal authority to clean the groundwater and charge the owner up to three times the cost.
- The present and future owner should be aware of a host of groundwater contamination incidents involving petroleum surrounding this property. But offsite petroleum contamination does not appear to be impacting the site, and the onsite contamination appears to have come from the sites' former use as a gas station.
- Non-petroleum contamination has also been detected near this property. Tetrachloroethylene has been detected in the groundwater at the New City Cleaners and in groundwater monitoring wells just south of the New City Cleaners property line on the Richland School District property. There is also substantial contamination of the City of Richland's well field on Wellsian Way associated with tetrachloroethylene. Sampling results from the subject property indicate that this property is not a source of any of this contamination, nor would they be brought into any legal action associated with the well field contamination.
- This property can be developed, however, regulatory and liability issues associated with onsite petroleum products in the water need to be resolved so this property can be transferred to a new owner without the new owner assuming any liability for pre-existing conditions.

Phase I and II Environmental Assessment

In accordance with the authorization provided from Mr. Volpentest, Technico has conducted a Phase I and II Environmental Assessment of the property located at 1323 Lee Boulevard in Richland, Washington. It is Technico's understanding the site is being sold and will be developed as a car wash. Gasoline or diesel fuel is not intended for sale with the future use. The objectives of the assessment were to:

1. **Determine the potential for adverse environmental impacts to the subject property from past or present uses of the site and/or immediately adjacent properties.**
2. **Determine whether those impacts, if any, may have consequences for the future property owner(s).**

During the environmental assessment, Technico spent time on the site sampling soils and groundwater. Technico conducted interviews and gathered information from the current and past owners and the last person known to operate the facility as a gas station. Technico staff also contacted government departments and agencies, reviewed files and lists, researched sources of historic information, and viewed readily available maps and aerial photographs. A title search was not part of the scope of work. The findings and conclusions of Technico's assessment are presented on the pages following.

Site Description

Subject Property

The subject property parcel number is 1-1198-302-0402-001, belonging to Sam R. and Mary Volpentest. The legal description is listed as Plat of Richland, Block 402, Lot 1. The land use code states it is a vacant commercial property of 24,567 square feet.

Adjacent Properties

Figure 1 is a 1992 aerial photo showing the lot at the southeast corner of Lee and Stevens in Richland, Washington. Figure 2 outlines lots in the area and shows the property in yellow. Figure 3 is an aerial photo from 1952. Figure 3a is an aerial photo from 1952 also showing the modifications made in 1963. This site is in a highly developed area with Albertson's across Lee Boulevard to the north of the site. On the northwest corner of Lee and Stevens, a former motor car agency and service station was converted to shop buildings for the Richland School District. New City Cleaners on Stevens Drive is just to the north of the Richland School District property, which is across Lee Boulevard from the subject site. Steven Drive turns into Gillespie as it crosses Lee Boulevard. On the southwest corner of Lee and Stevens, there is an ARCO gas station and P&K Auto, which is a towing service and body shop. To the southeast of the corner of Railroad Street and Gillespie, what was formerly Head Mechanical Plumbing, Inc. is now George A. Grant, Inc. a general contracting firm. Immediately adjacent to the subject property to the east is the law offices of Houger, Miller & Stein, PSC, and to the east of the lawyers is the Exxon service station shown at 1315 Lee Boulevard on Figure 1. The property known as 603 Goethals Drive is occupied by a restaurant called Jose's Mexican Food.

Historic Land Use

It is not known exactly how long this property was used as service station. Figure 3 clearly shows the facility in use in 1952. There is a permit on file to Standard Stations, Inc. which allowed installation of an additional gasoline tank in May 1960. Modifications to the station were made in 1963. The facility, which faced Lee Boulevard, was last used as a gas station in 1968. From 1968 to sometime in 1972, Standard Oil used the building as a training facility for new employees. The facility appears to have been vacant from 1972 to 1976. The station was torn down in February 1976. Mr. Dick Worth, a local realtor, listed the property for sale in 1976 and verifies that the property was vacant at that time. Since 1976 the lot has occasionally been used for a Christmas tree sales lot but has had no other uses.

Mr. W.H. McGee, last person to operate the facility as a gas station, noted gasoline was the only fuel sold from the facility, and that his memory was that all the gasoline storage tanks were underground storage tanks between the fuel island and Gillespie Avenue. The author originally felt that the tanks were located between sampling points 1 and 2 as indicated on Figure 4. Later on in the investigation, Mr. McGee was able to find an old photograph and determined the station number was #8944. This enabled Chevron to find a remodeling blueprint for renovations done in 1963. This print (Figure 3a) showed the tanks to be in the extreme northwest corner of the site. There was a waste oil tank and a heating oil tank behind the station. Both tanks were underground tanks and were located at sampling point 6 as indicated on Figure 4. There were no floor drains in the service bays that could have been a source of contamination. Mr. McGee did state that there were gravel bases underneath the fueling islands and that it was common practice to empty fuel from the lines and nozzles into these gravel areas during any pump repair. Mr. McGee also stated there was a flood in the area at one time and all the fill pipes for the fuel storage tanks were submerged during high water.

Site Inspection

Given the site history described in the historic land use section, a Phase II site inspection was conducted to determine if any of the old fuel tanks remained in place; if there was soil contamination in the areas of the tanks or fuel dispensing islands; and if there was groundwater contamination.

Figure 3 is the aerial photo depicting the facility when in use as a gas service station. Figure 4 is the same photo, marked up to show sampling locations used in the Phase II investigation. A backhoe was used to excavate all areas where tanks and fuel islands were located according to the McGee interview and aerial photo. All of these areas had been excavated previously and filled with concrete debris supposedly from the demolition of the building and the fueling islands. There were no gas tanks in place, but there was evidence of old fuel lines onsite and bases for the fueling islands as indicated on the aerial photos which indicated excavations were made in the proper locations.

Analytical results for onsite soils are provided as Appendix 1. The lab results indicate there were no gasoline, diesel, or waste oil contaminants in any of the soil samples taken at any of the sampling locations. Analytical results for onsite groundwater are summarized in Table 1 with the lab sheets provided as Appendix 2.

Sampling locations 5, 7, and 8 all are near former fuel islands and have gasoline and BTEX compounds above the Model Toxics Control Act (MTCA) Cleanup Levels, see Table 1 below. Sampling location 16 near the former fuel storage tanks location also has gasoline and BTEX compounds above cleanup levels.

Table 1. Onsite Groundwater Results

Anatek								
	HCID			TPH-G	BTEX by EPA 602			
Location	Gasoline	Diesel	Waste Oil	Gasoline	Benzene	Toluene	Ethyl-benzene	Total Xylenes
GWW1	<1.0	<2.5	<10.0					
GWW5	Detected	<2.5	<10.0		0.010	0.003	0.177	0.326
GWW6				<1.0	<0.005	<0.005	<0.005	<0.015
GWW7				1.8	<0.001	<0.005	0.014	0.017
GWW8				38.8	0.024	0.017	0.218	0.418
T13 GWI 5				14.0	0.018	0.046	0.250	0.838
T13 GWI 10				<1.0	<0.005	<0.005	<0.005	<0.015
T13 GWI 11				<1.0	<0.005	<0.005	<0.005	<0.015
T13 GWI 12				<1.0	<0.005	<0.005	0.009	0.028
T13 GWI 13					0.004	<0.005	0.009	<0.005
T13 GWI 17					0.002	<0.005	0.013	<0.005
T13 GWI 19					0.003	<0.001	0.025	0.006
T13 GWI 14					<0.001	<0.005	<0.005	<0.015
T13 GWI 15					<0.001	<0.005	<0.005	<0.005
T13 GWI 16				15.5	0.601	0.062	0.210	0.608
MTCA Cleanup Levels for Groundwater				1.0	0.005	0.040	0.030	0.020
Anatek Detection Limits for BTEX					0.001	0.005	0.005	0.015

Note: GWW1-8 samples were dipped from open excavations made with a backhoe. GWI samples were all obtained from Geoprobe groundwater implants screened approximately 1 to 1.5′ below the surface of the groundwater. A peristaltic pump was used to obtain the samples.

Nearby Properties of Significance

Figure 1 numerically lists the known sites with potential for impacting this property.

Site 1. New City Cleaners.

This property formerly contained underground storage tanks for dry cleaning solvents and bunker "C" heating oil. When the tanks were removed in 1992, it was discovered that there was contamination by dry cleaning solvents in the soil. The soil contained a maximum of 2,120 mg/Kg of tetrachloroethylene compared to a MTCA Method A Cleanup Level of 0.5 mg/Kg. Groundwater obtained from a pit excavated in the solvent area contained 23,200 µg/l compared to a MTCA Method A Groundwater Cleanup Level of 5.0 µg/l. These soils remain onsite and no groundwater monitoring wells have been installed on this property.

Site 2. Richland School District Maintenance Building.

This building was formerly a motor car agency and service station. When the tanks were removed, there was moderate contamination associated with a waste oil tank, minor contamination associated with gasoline, and substantial contamination associated with two tanks containing diesel and bunker oil respectively. I was told by the site investigator that there was free product in the excavation of the diesel and bunker oil tanks. Five monitoring wells were installed on the property and monitoring conducted in these wells from October 1991 through March 1992.

Figure 5 shows the location of the sources. Figure 6 shows the location of the monitoring wells. Monitoring Well A at the north boundary of the property immediately adjacent to New City Cleaners show tricholoroethylene at 12 µg/l compared to MTCA Cleanup levels of 5 µg/l. This well also contained tetrachloroethylene concentrations of 1400 to 1900 µg/l compared to MTCA Cleanup Levels of 5 µg/l. The only other well having concentrations of dry cleaning solvents of chlorinated solvents in excess of MTCA Cleanup levels was Well E which contained 11 to 25 µg/l of tetrachloroethylene. Wells B, C, and D contained no chlorinated solvents and none of the wells contained any detectable petroleum hydrocarbon products.

The conclusions of the site investigator were as follows:

"Our visual examination of the completed excavation sidewalls (of the tank excavations) reveal small pockets of bunker oil remaining in the capillary zone and at the groundwater surface. We conclude the small observed amounts of bunker oil present a minimal environmental risk and total removal of small amounts of bunker oil requires excessive

expenditures. Our groundwater monitoring program found no detectable bunker oil, either the dissolved aqueous phase or the groundwater surface. All other petroleum contaminated soils were removed for treatment and disposal."

Site 3. L&L Exxon.

In September of 1989, some repair work was done on the tanks at the Exxon Service Station located at 1315 Lee Boulevard. In the process of this work, soil and groundwater contamination was detected at the northeast corner of the lot. A soil sample from the vicinity of the tanks indicated the results shown in Table 2 with all of the lighter gas compounds being in excess of the required cleanup levels.

Table 2. - Site 3
L&L Exxon Station Soil results
compared to required cleanup levels.

BTEX Compound	Groundwater Results (µg/l)	Required Cleanup Level (µg/l)
Benzene	28,000	5.0
Toluene	200	40.0
Ethylbenzene	59	30.0
Xylenes	390	20.0

An unknown but rather substantial amount of soil was removed from the site for ultimate treatment at the Richland landfill. A sample of the groundwater at this time indicated the groundwater contained the constituents shown in Table 3 with benzene being clearly in excess of the required MTCA Method A Cleanup Level. Some groundwater sampling pipes were installed at the facility but I have been unable to obtain any historic sample results from these points.

Table 3. - Site 3
L&L Exxon Station Groundwater results compared to required cleanup levels.

BTEX Compound	Groundwater Results (µg/l)	Required Cleanup Level (µg/l)
Benzene	18,000	5.0
Toluene	26	40.0
Ethylbenzene	2.1	30.0
Xylenes	14	20.0

Site 4. George A. Grant, Inc.

This specific site contained underground storage tanks for petroleum products. Soil contamination was present. Contaminated soils were removed down to groundwater and transported for treatment to the Richland landfill. A sample of the groundwater at the facility at the time of excavation is given in Table 4.1 and 4.2. This site contains petroleum hydrocarbon products and 1, 2-Dichloroethane above the MTCA Method A Cleanup Levels. The owner has installed a pump-and-treat system to remediate this groundwater and continues to treat the groundwater on a routine basis.

Table 4.1 - Site 4
George Grant Groundwater results compared to required cleanup levels.

Compound	Groundwater Results (µg/l)	Required Cleanup Level (µg/l)
Benzene	610	5.0
Toluene	520	40.0
Ethylbenzene	<7.5	30.0
Xylenes	450	20.0
WTPH-Gas	2600	1000.0

Table 4.2 - Site 4
George Grant Groundwater results compared to required cleanup levels for Solvents

Solvents Compound	Groundwater Results (µg/l)	Required Cleanup Level (µg/l)
1,1,1-Trichloroethane	60	200
1, 2-Dichloroethane	7.8	5.0
Tetrachloroethylene	0.79	5.0

Site 5 George A. Grant, Inc.

Site 5 contained an underground storage tank for petroleum products. Contaminated soils were encountered and removed and at the time of the excavation, 54 mg/l of diesel was observed in the groundwater but analysis revealed no TPH-Gas or BTEX compounds. Groundwater at this site is not in excess of MTCA Cleanup Levels.

Table 5- Site 6
George Grant Groundwater results compared to required cleanup levels.

Compound	Groundwater Results (µg/l)	Required Cleanup Level (µg/l)
Benzene	non detected	5.0
Toluene	non detected	40.0
Ethylbenzene	non detected	30.0
Xylenes	non detected	20.0
WTPH-Gas	6900	1000.0
1,1,1-Trichloroethane	0.56	200.0
Trichloroethylene	1.5	5.0

Site 6 **George A. Grant, Inc.**

This site contained two tanks in the same excavation. Contaminated soils were removed down to groundwater. Table 5 indicates the sample results at these sites compared to required cleanup levels. The gasoline content of the groundwater is in excess of MTCA Cleanup Levels.

Site 7 **Wellsian Way Well Field.**

The Wellsian Way Well Field is a significant environmental contamination problem for the City of Richland, and subsequently the person or persons responsible for the tetrachloroethylene contamination reported in this water supply. The water supply was routinely used until August of 1992 before drinking water standards were violated. Increasing concentrations of tetrachloroethylene in this drinking water prompted the City of Richland to discontinue its use. However, with recent growth, it appears the City will have to institute reuse of this well field. Mr. Roger Wright, City Environmental Engineer, is investigating treatment options to remove tetrachloroethylene from these waters. A study done by Chen-Northern for the City in 1993 indicated that the groundwater flow was approximately north to south as indicated on Figure 8.

Chen-Northern sampled the wells indicated on Figure 8 and the tetrachloroethylene concentrations are shown on the figure. The source of the tetrachloroethylene concentration has not been determined to date.

Groundwater Conditions

Previous to this work, two other groundwater investigations have been done in this vicinity. Both investigations were done while the City of Richland was using its well field and probably drawing down groundwater towards the field (see Figure 7). Indications from the US Bank report (see acknowledgment section for references) are that the groundwater moved in an easterly direction. It may have been flowing in a south-easterly direction since solvents from the New City Cleaners were noted in Wells A and E at the Richland School District Maintenance Building (see Figure 4b).

A study done for the City of Richland indicates that groundwaters in the well field area apparently moved north to south (see acknowledgment section for references). No one has suggested an east to west flow in this area. However, this author's observations of actual well levels in the area in 1994 after city pumping has ceased indicate there is very little fall to the groundwater gradient, but that the flow may be from the southwest to northeast (see Figure 4b).

Groundwater is at about 348 feet Mean Sea Level (MSL) or about eight feet (8') above the Columbia River's normal pool elevation of 340 feet MSL.

Significance of Findings for Future or Current Site Owners

Onsite Findings

It appears that when this service station was demolished, they did a very good job of removing all of the tanks and any associated contaminated soils. There are two areas of concern associated with the groundwater. One is beneath what formerly was the northeast fueling island. The second is at the northwest corner of the property near the former location of the underground storage tanks. There are gasoline and BTEX compounds in the groundwater above MTCA Method A Cleanup Levels (see Table 1).

Offsite Findings

Tetrachloroethylene has been detected in the groundwater at the New City Cleaners and in groundwater monitoring wells just south of the New City Cleaners property line on the Richland School District property. There is a substantial contamination problem of the City of Richland's well field on Wellsian Way associated with tetrachloroethene. Sampling results from the subject property indicate that this property is not a source of any of this contamination, nor would they be brought into any legal action associated with the well field contamination.

Recommendations

The Model Toxics Control Act (MTCA) determines what must be done relative to a release from an underground storage tank. Requirements are laid out in WAC 173-341-450 "Releases from Underground Storage Tanks". This material is provided as Appendix 4 to this report. These regulations require a report to DOE which has been taken care of in our letter of notification to Mr. John Whitfield. Our interim actions have determined that there is no free product in any of the groundwater, nor are there any hazardous vapors in the surrounding sewers adjacent to this lot. There is no immediate threat from this release. There are additional reporting requirements which call for a status report within 20 days after the initial notification of a release. A copy of this report is being provided to DOE to fulfill our status report requirement. An additional site characterization report is due within 90 days. The elements required in the site characterization report are listed under WAC 173-304-405 (4) (b). Some groundwater monitoring wells will need to be installed to fulfill requirements associated with the site characterization report. In addition, a remedial investigation feasibility study will need to be conducted because of the requirement in WAC 173-340-405 (5) (a) (i). This information needs to be sent to Chevron, Washington State Department of Ecology, and the prospective buyer so whatever needs to be done can be done to allow the development of this property.

Agency Information

Pertinent local and state regulatory agencies were contacted to obtain information on previous land use, structures, underground storage tanks, groundwater use and occurrences, and hazardous substance uses or releases at or near the site. Agencies contacted included:

- **Benton County Assessor's Office**
- **City of Richland Planning Department**
- **Washington State Department of Ecology**

Technico's findings from contact with the above agencies are presented below.

Benton County Assessor's Office

The County Assessor's office was contacted and the parcel number of the subject property is 1-1198-302-0402-001, belonging to Sam R. and Mary Volpentest. The legal description is listed as Plat of Richland, Block 402, Lot 1 and is subject to easements and restrictions of records. The land use code stated it was a vacant commercial property of 24,567 square feet.

Standard Oil Company of California purchased the lot November 7, 1959 from the United States of America acting as a housing and home finance administrator. Petroleum Facilities, a Delaware corporation, located at One Sansome Street in San Francisco, California, received the property through a quit claim deed from Standard Oil Company on June 2, 1960. It is assumed to have been owned by them until February 1, 1976 when Standard Oil of California received the property through a quit claim deed. There was no money exchanged for the property transfers until Mr. Robert Mollerus bought the property on August 3, 1977. There is a quit claim deed on record for August 8, 1991 between Sam and Mary Volpentest, William Volpentest and Robert Mollerus. A title search has not been done on this property.

City of Richland Planning Department

The City of Richland Planning Department was contacted for zoning information. It is zoned as C3 - General Business, and the zoning is consistent with the existing and intended use of the lot. It is in Flood Zone C3, which assumes there would have to be a catastrophe for the water level to reach that elevation. The site is listed on the Federal Emergency Management Agency Map (FEMA) on panels 53-55-33-0010 which was updated March 1, 1984.

Washington State Department of Ecology (W-DOE)

The W-DOE Toxics Cleanup Program Site Information Report (October 1993) for confirmed and suspected contaminated sites lists the Wellsian Way Well Field and New City Cleaners as sites. This report lists non-petroleum type sites. **W-DOE information on petroleum underground storage tanks has not been received as of this writing.** There are no known RCRA sites that would influence the subject property.

A list of businesses near the Volpentest property that generate hazardous wastes (HWG), have underground storage tanks (UST's), leaking underground storage tanks (LUST's), or have taken actions as part of the Toxics Cleanup Program are listed in Table 6.

Table 6
Nearby business locations with possible impact upon subject property

Business Name	Richland Location	HWG	UST	LUST	TCP
Atomic Body Shop	520 Wellsian Way	X			
Cronk Automotive	90-B Wellsian Way	X			
Flying J	780 Stevens Drive		X		
George Grant, Inc.	500 Wellsian Way	X			
Glass Nook	526 Wellsian		X		
L&L Exxon	1315 Lee Boulevard		X		
Motoring Services	418 Wellhouse Loop	X			
New City Cleaners	747 Stevens Drive	X	X	X	X
Richland City Wells	Wellsian/ Wellhouse				X
Richland High School	930 Long Avenue				
Richland Operations	825 Jadwin			X	
Richland School District Motor Shop	701 Stevens				X
Riverside Dental	750 Geo. Wash. Way			X	
US Bank Facility	701 Stevens Drive			X	X

Limitations

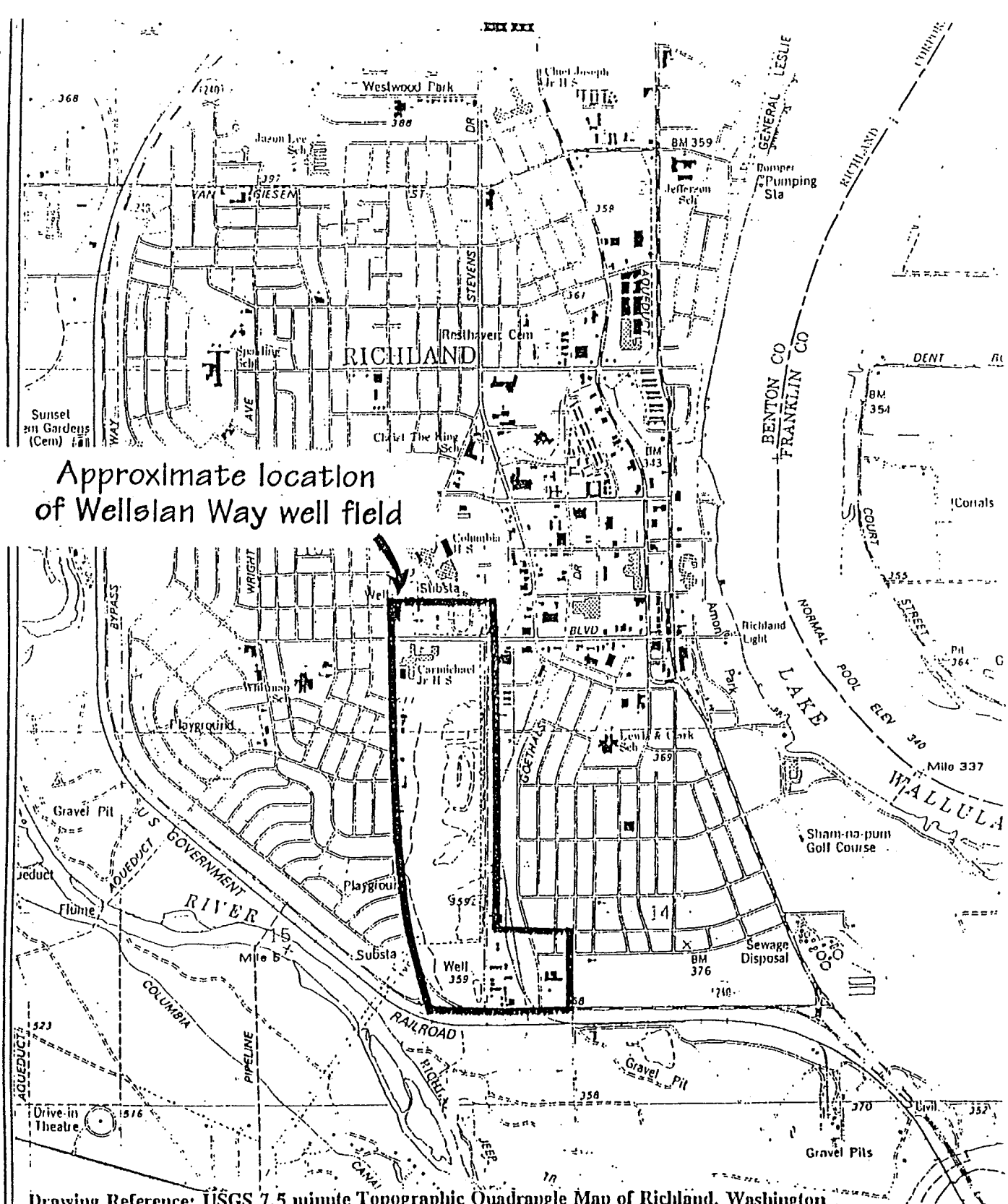
The purpose of an environmental assessment is to reasonably evaluate the potential for or actual impact of past practices on a given site area. In performing an environmental assessment, it is understood that a balance must be struck between a reasonable inquiry into the environmental issues and an exhaustive analysis of each conceivable issue of potential concern.

No investigation is thorough enough to exclude the presence of hazardous materials at a given site. If hazardous conditions have not been identified during the assessment, such a finding should not be construed as a guarantee of the absence of such materials on the site, but rather as the result of the research conducted on readily available information performed within the scope, timeframe, and cost of the assessment.

Environmental conditions may exist at the site that cannot be identified by visual observation. Where subsurface work was performed, our professional opinions are based in part on interpretation of data from discrete sampling locations that may not represent actual conditions at unsampled locations.

Except where there is express concern of our client, or where specific environmental contaminants have been previously reported by others, naturally-occurring toxic substances, potential environmental contaminants inside buildings, or contaminant concentrations that are not of current environmental concern may not be reflected in this document.

Figures



Drawing Reference: USGS 7.5 minute Topographic Quadrangle Map of Richland, Washington

Scale

0 4000

Feet

CHEN-NORTHERN, INC.

FIGURE 7
SITE LOCATION MAP
WELLSIAN WAY WELL FIELD
RICHLAND, WASHINGTON

DRAWN BY: m.b.	CHECKED BY: d.u.	PROJECT NO. 192-2104-3	DATE: 5/93	FIGURE NO:

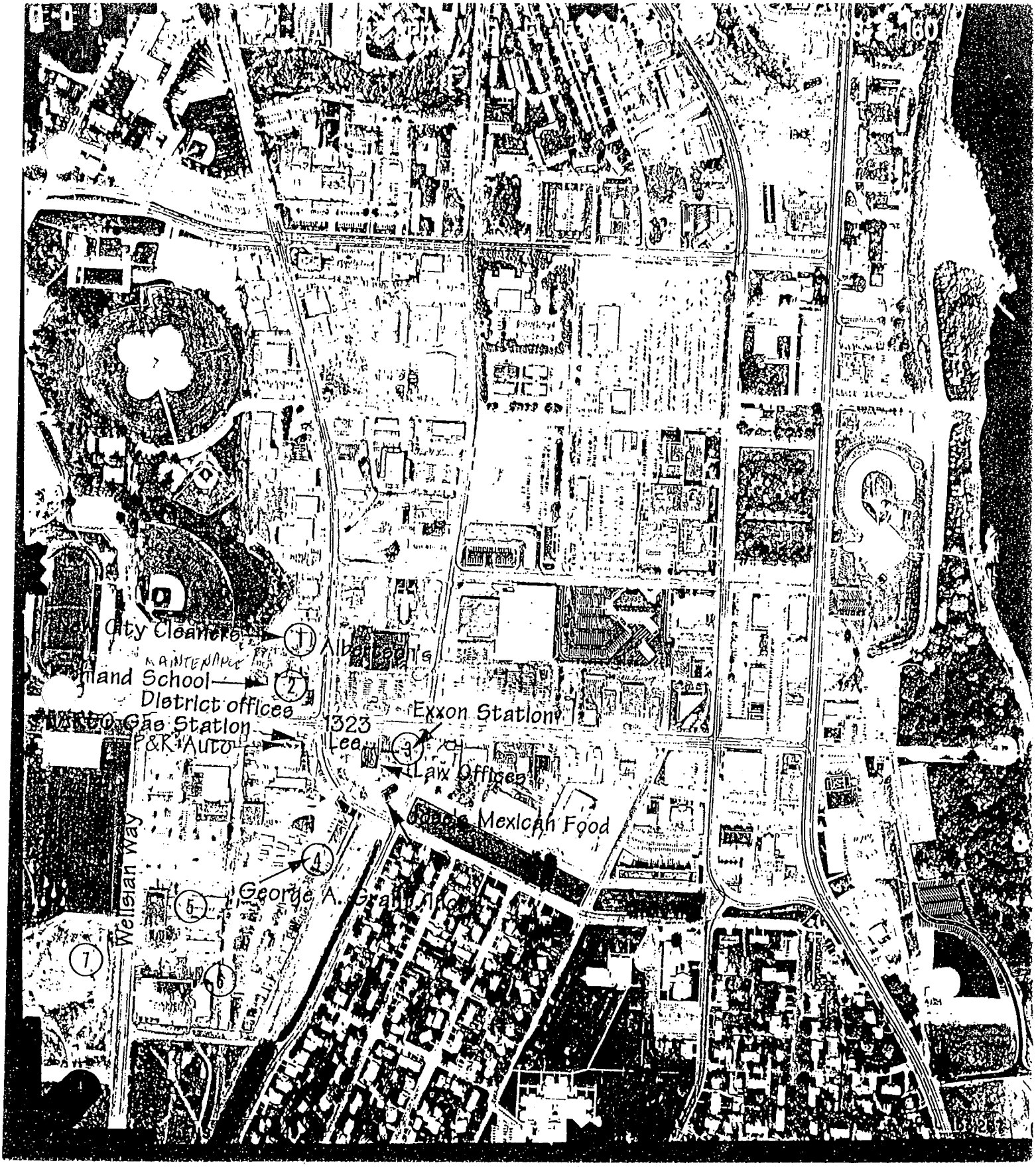


Figure 1
1323 Lee Boulevard
with nearby properties of significance

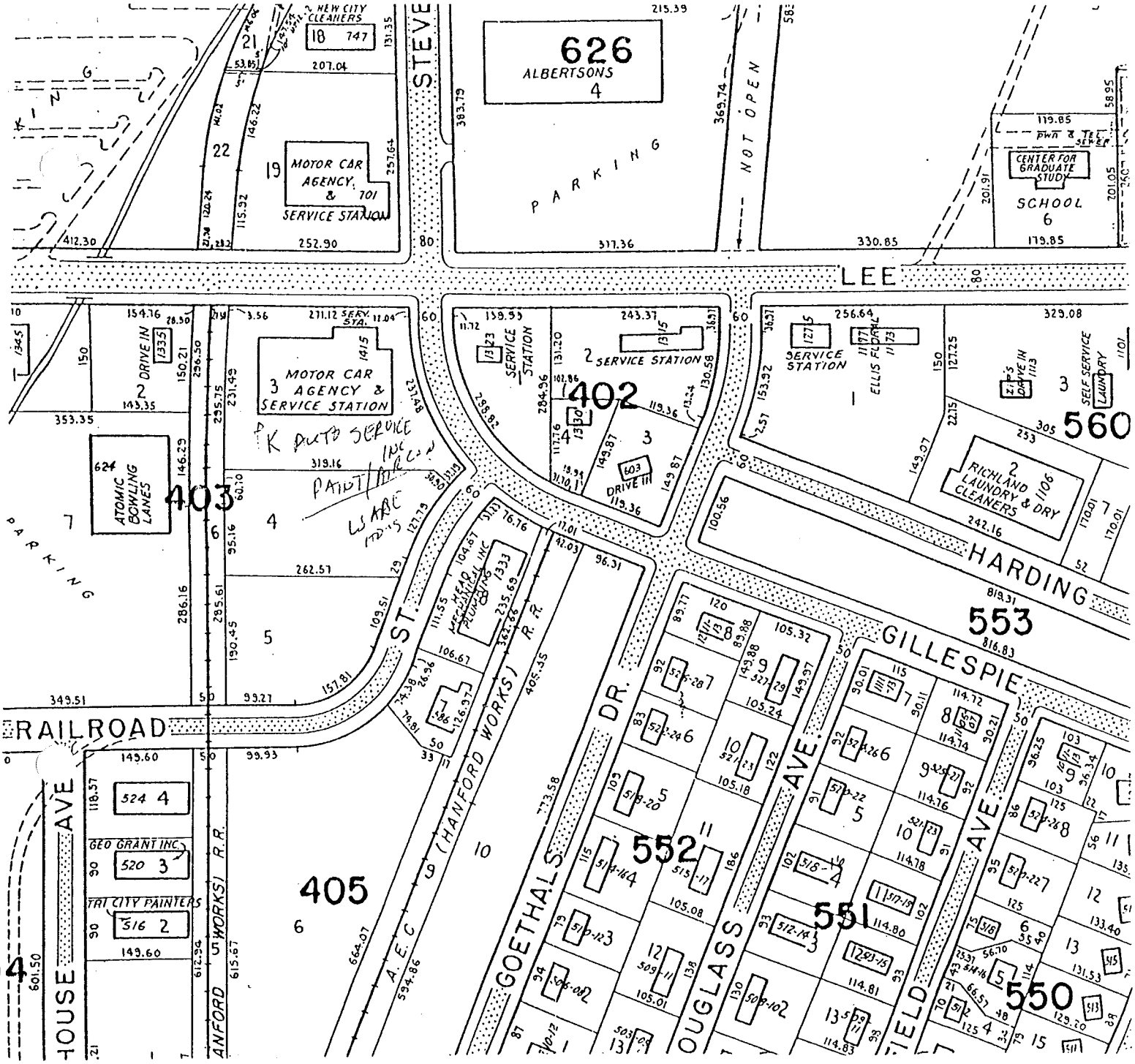
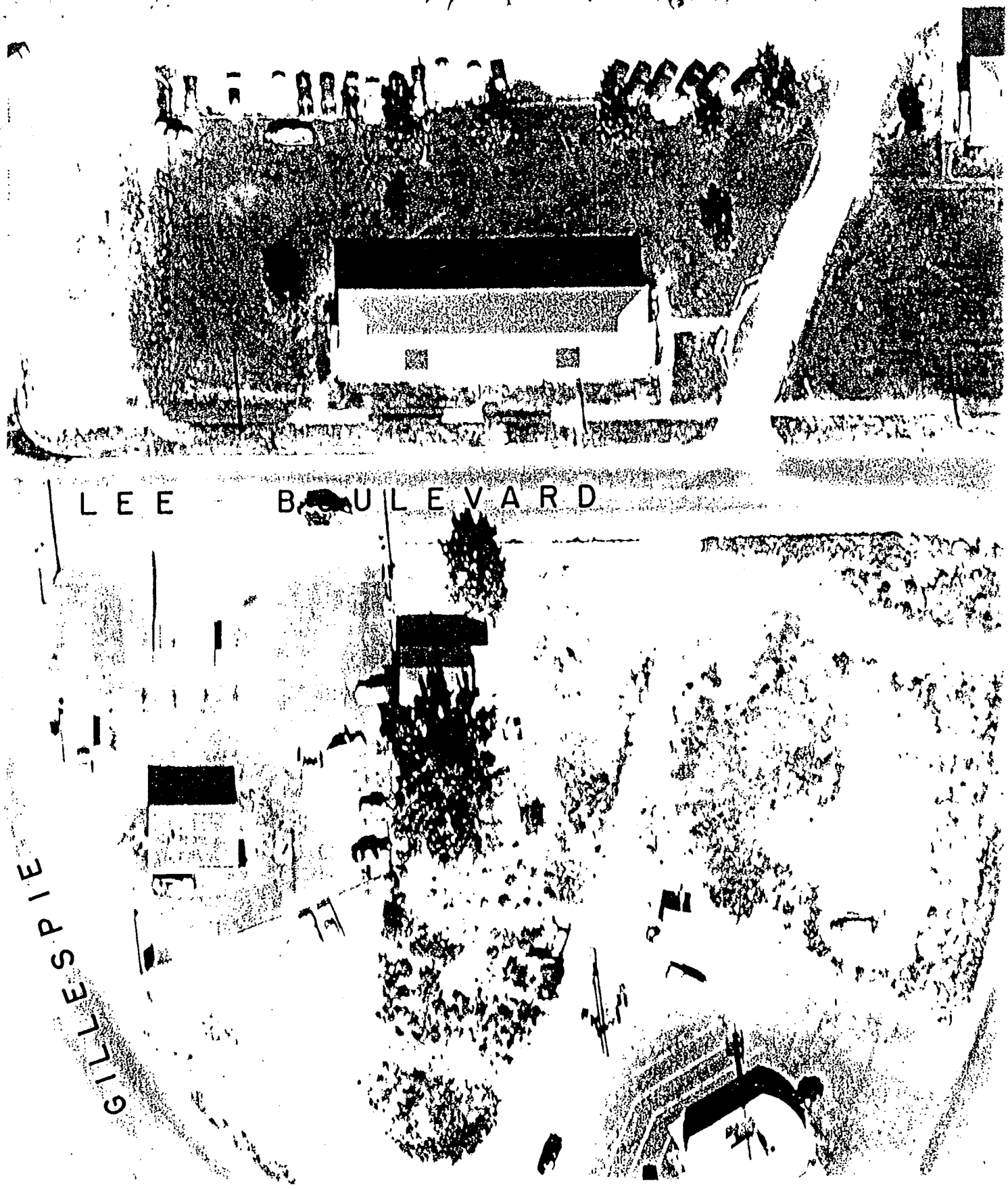


Figure 2
Surrounding lots (subject property highlighted)



Scale: 1 " = 50'

0' 25' 50'

N

Figure 3
1952 Aerial photo

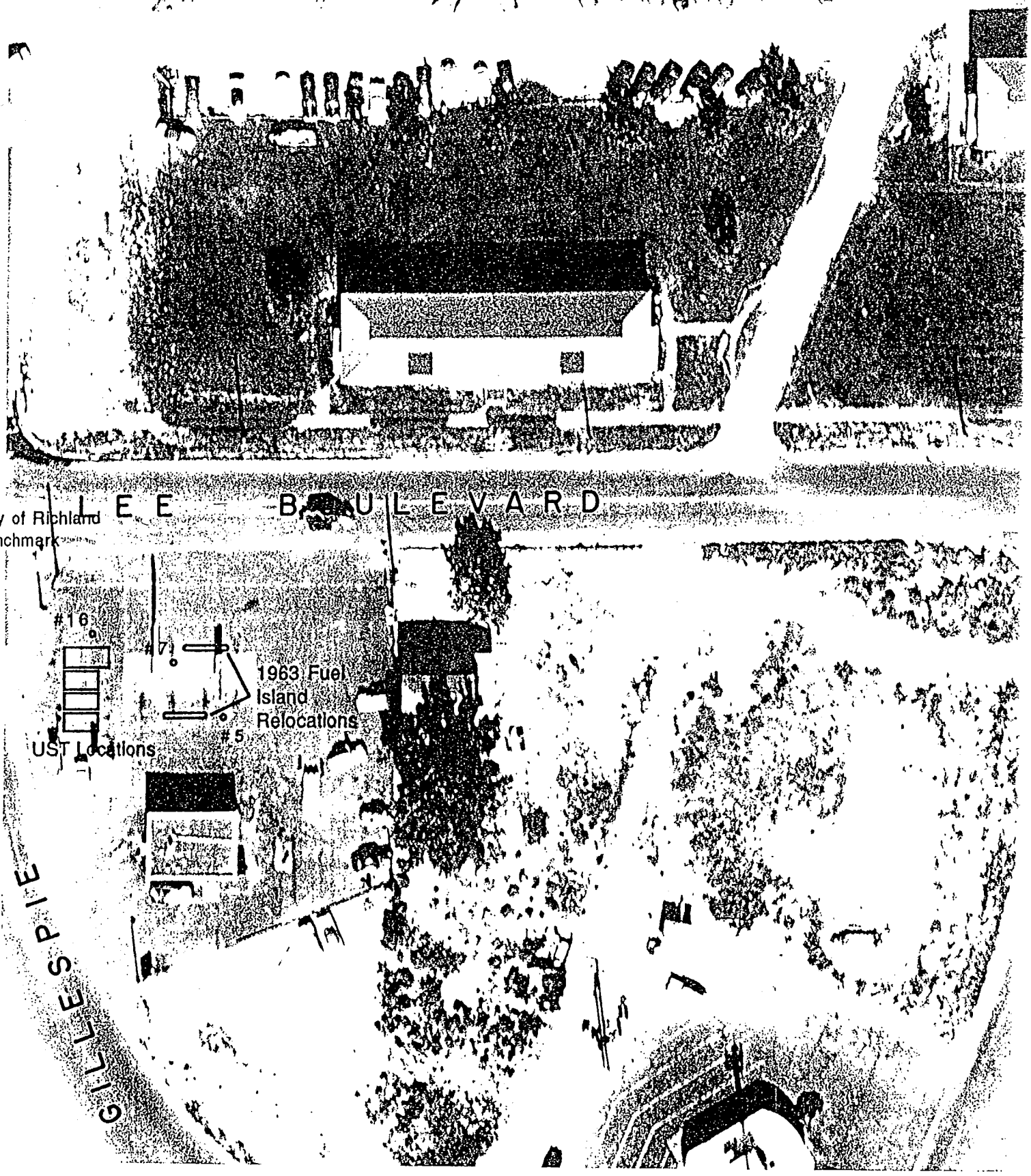


Figure 3a

1952 Aerial photo with 1963 modifications

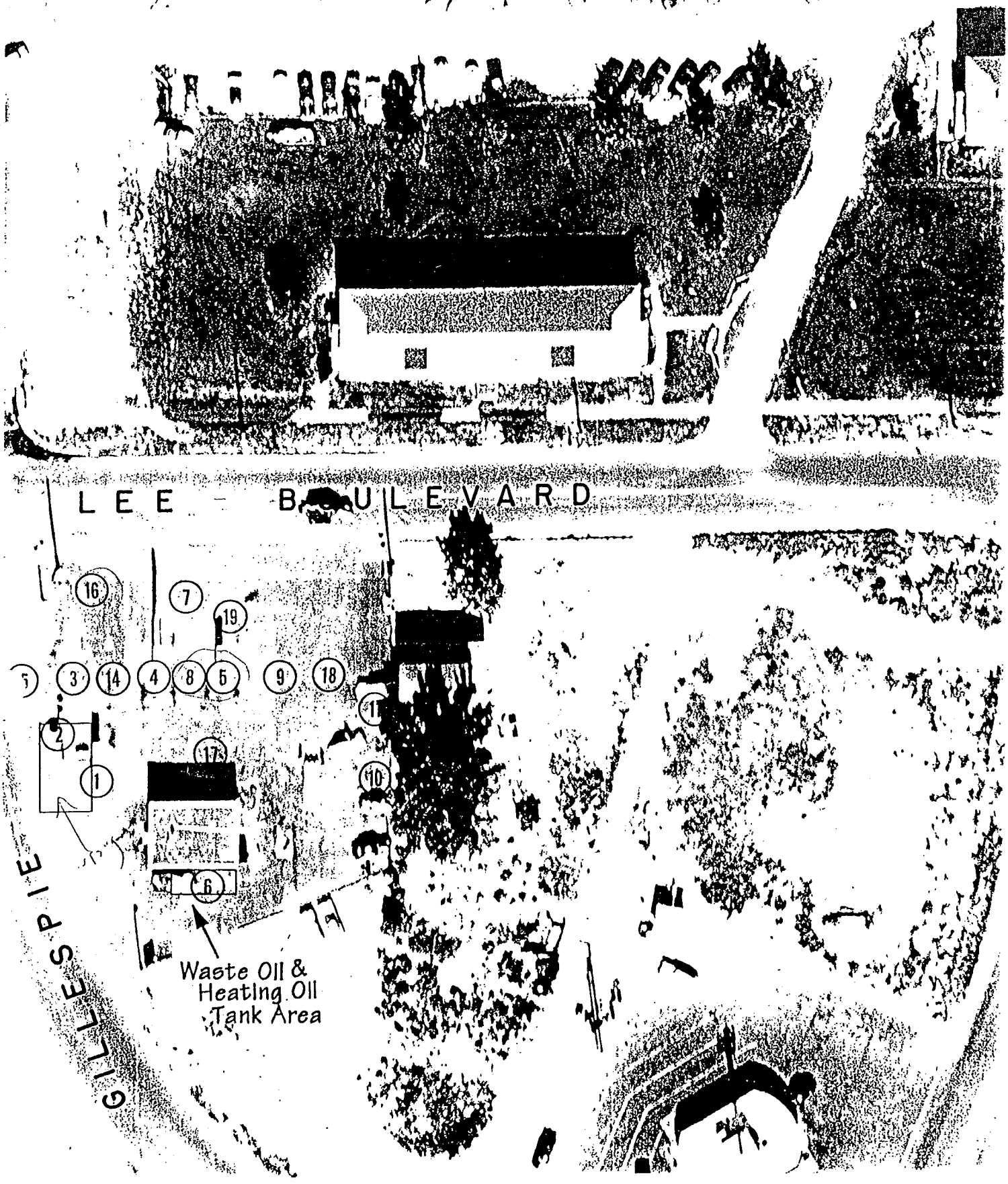
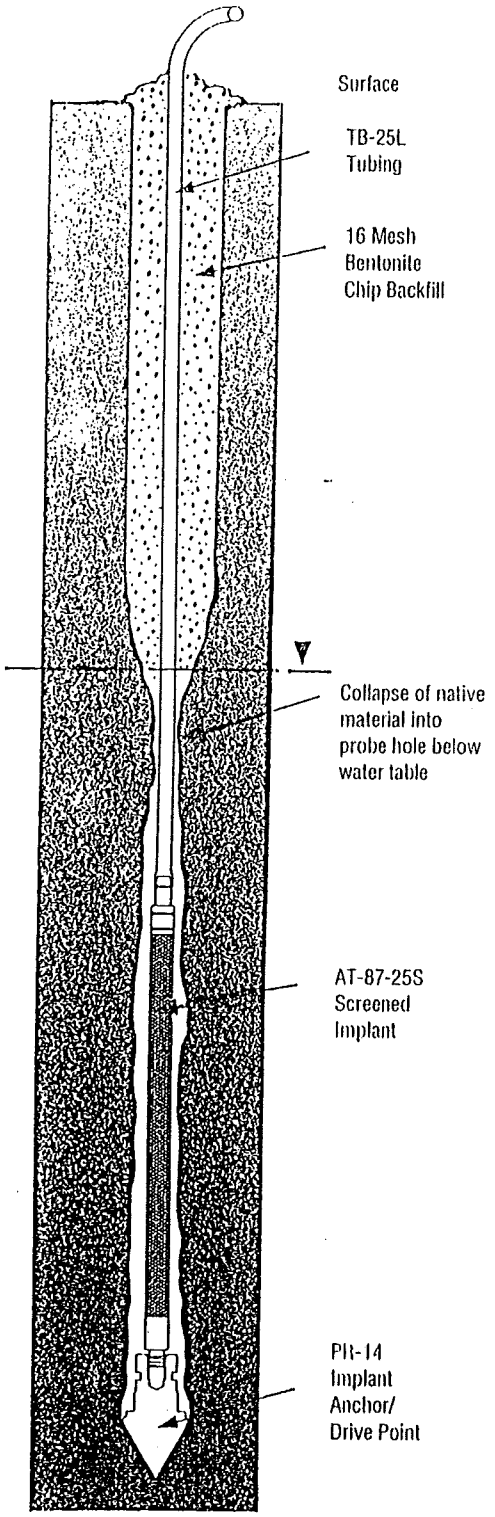


Figure 4
Tank and Sampling locations

Figure 4a. Schematic Illustration of a Geoprobe Screened Implant



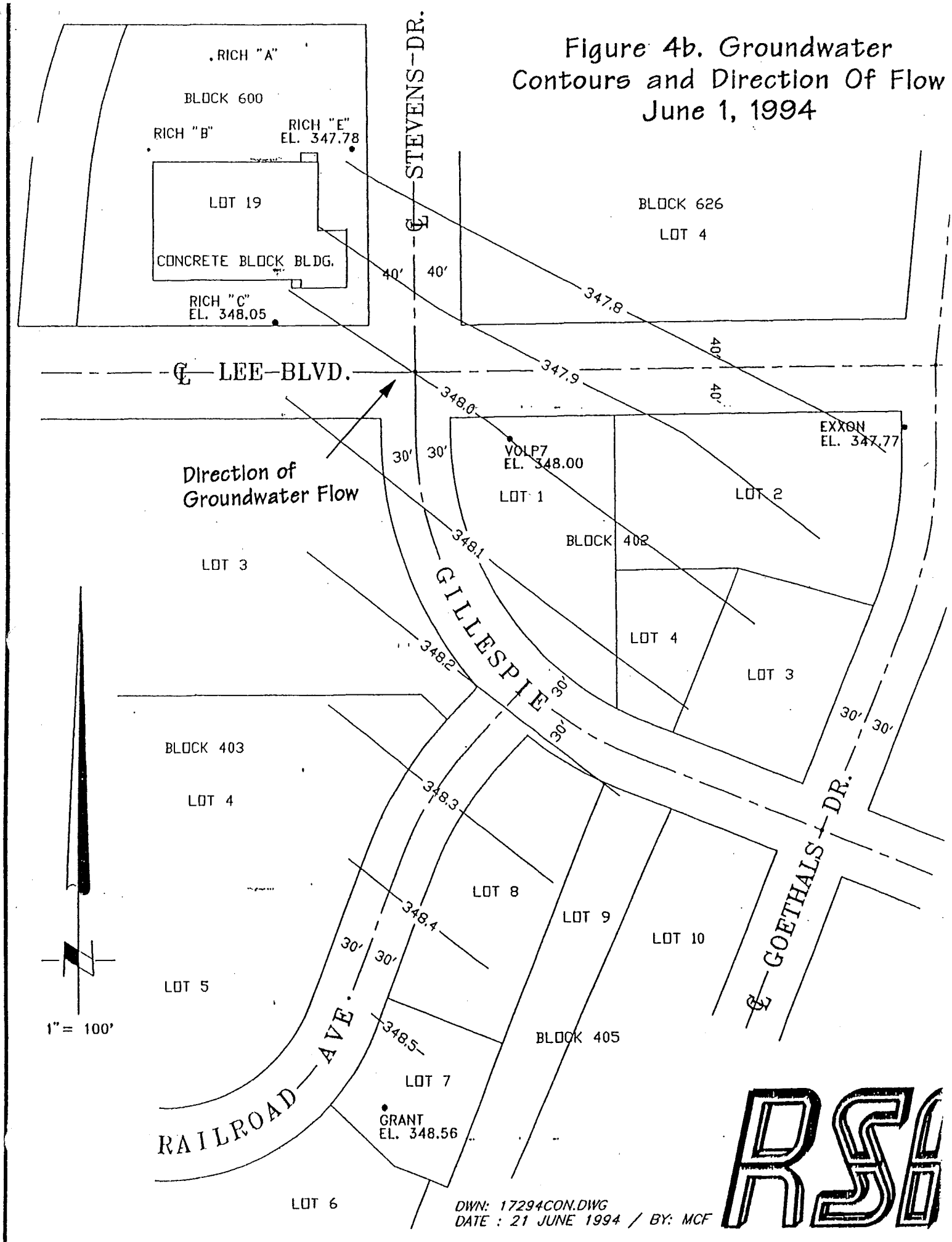


Figure 4b. Groundwater Contours and Direction Of Flow June 1, 1994
RICH "A"
BLOCK 600
RICH "B"
RICH "E" EL. 347.78
LOT 19
CONCRETE BLOCK BLDG.
RICH "C" EL. 348.05
℄ STEVENS DR.
BLOCK 626
LOT 4
40'
347.8
℄ LEE BLVD.
347.9
348.0
Direction of Groundwater Flow
EXXON EL. 347.77
VOLP7 EL. 348.00
LOT 1
LOT 2
BLOCK 402
LOT 3
348.1
GILLESPIE
LOT 4
348.2
LOT 3
30'
BLOCK 403
LOT 4
348.3
LOT 8
LOT 9
LOT 10
348.4
℄ GOETHALS DR.
LOT 5
348.5
BLOCK 405
LOT 7
GRANT EL. 348.56
RAILROAD AVE.
LOT 6
1" = 100'
DWN: 17294CON.DWG
DATE : 21 JUNE 1994 / BY: MCF
RSI

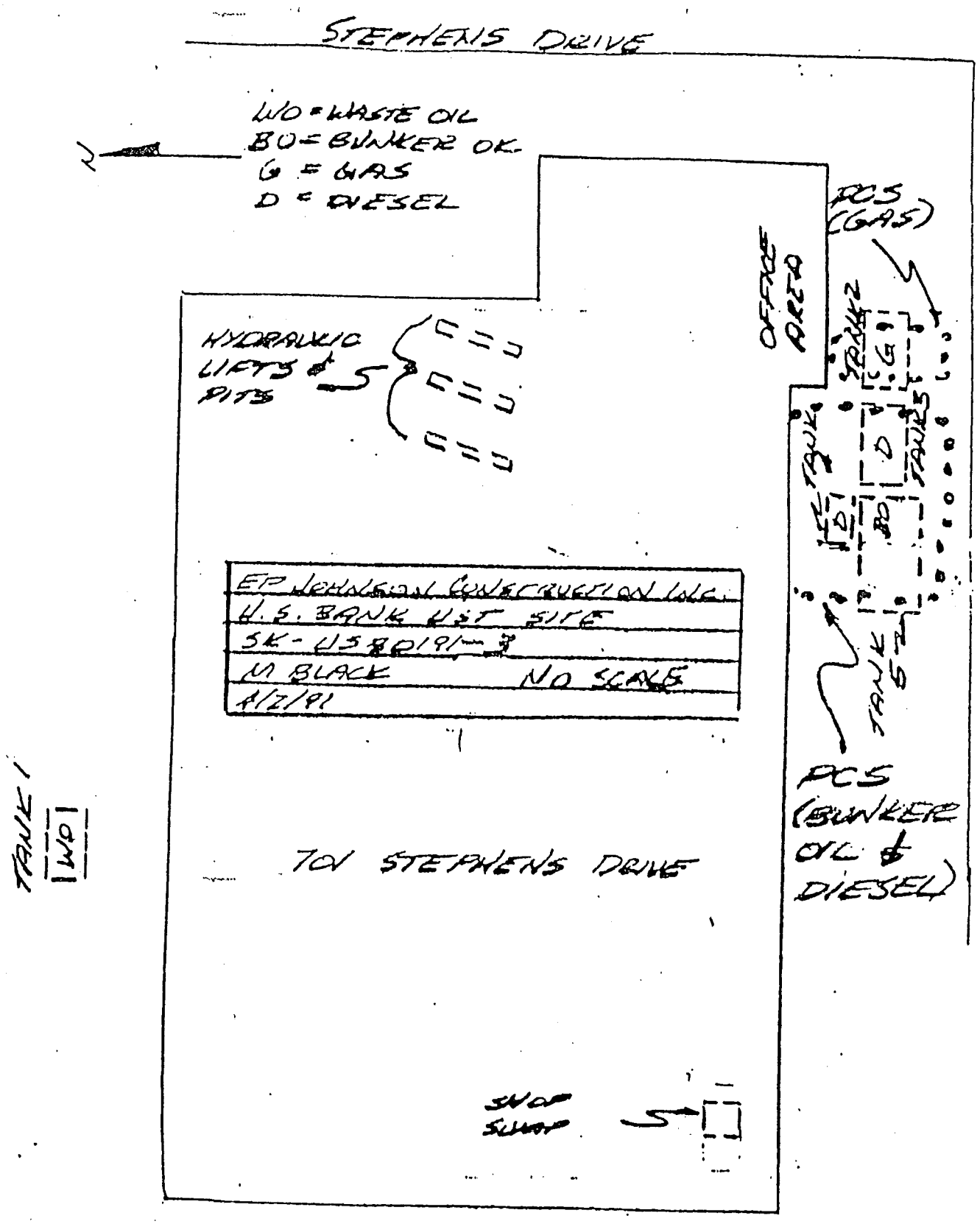


Figure 5
Former Locations of Underground Storage Tanks and Petroleum Contaminated Soils at 701 Stevens Drive

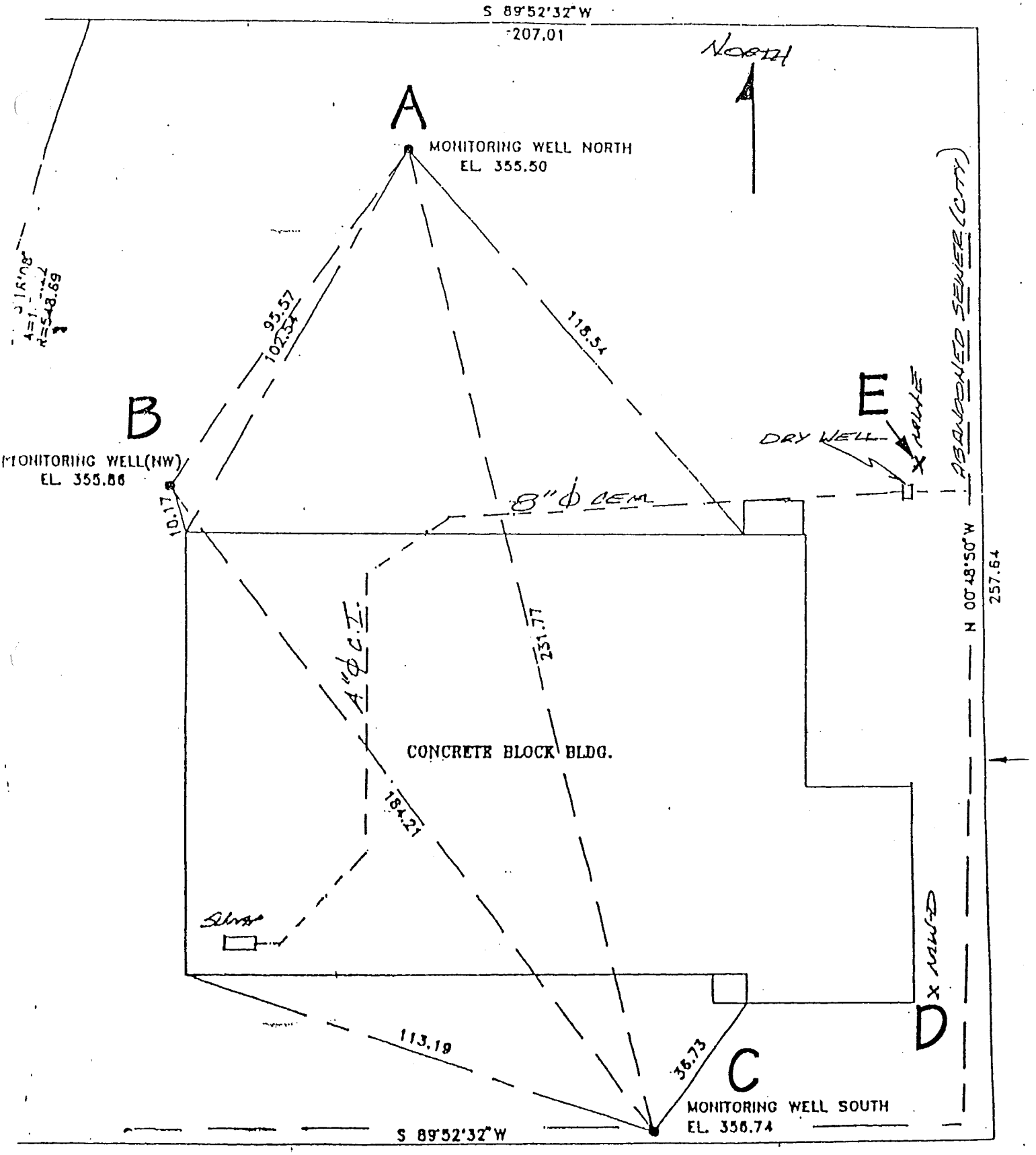


Figure 6

Monitoring Well Locations at 701 Stevens Drive

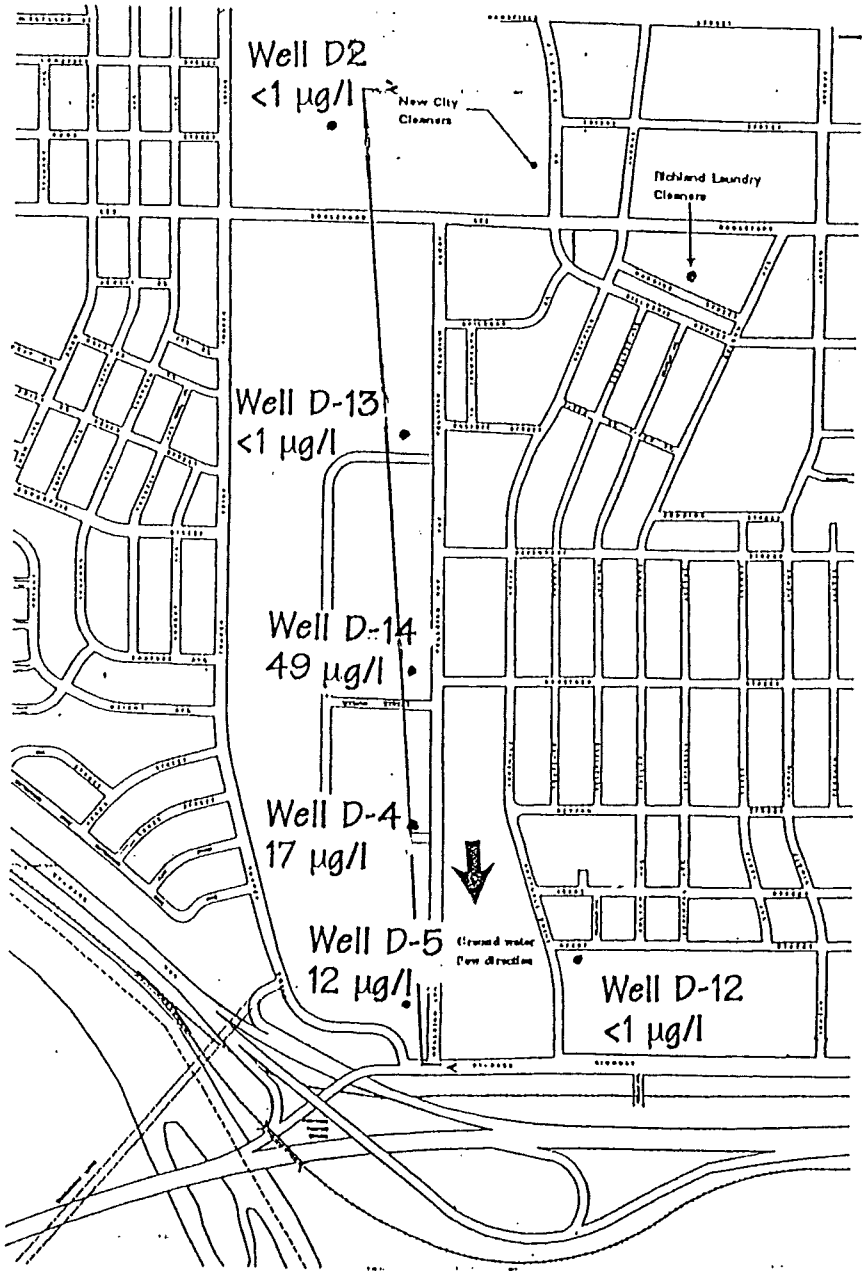


Figure 8
Tetrachloroethylene Concentrations in Groundwater

CHEN-NORTHERN, INC.

1200 0 1200 2400 N

SCALE 1" = 1200'

SITE MAP
WELLSIAN WAY WELL FIELD
RICHLAND WASHINGTON

AFTER THE CITY OF RICHLAND, 12/31/1992

DRAWN BY: m.b. CHECKED BY: d.u. PROJECT NO. 192-2104-3 DATE: 3/93 FIGURE NO: 2

Appendix 1 - Soil Results

TECHNICO
Environmental Services
PO Box 7244, Kennewick, WA 99336
(509) 582-7447 ☎ FAX (509) 586-7363

Project 79 Valpentest

2 Number of pages including this one

Date 2/15/94 Time

CHAIN OF CUSTODY RECORD TO:

ANATEK 1917 S Main Moscow ID 83843 208-883-2839 Fax 208-882-9246

Samplers Signatures D. Fox, John Zillich

Shipment Method UPS Next Day Air

Sample Location	Type	Analysis Requested	Lab #	Remarks
#1 3-5	Soil	HCID		
#1 5-8				
#2 -3-5				
#2 5-8	Soil	HCID		
(2) gwa 1	water	HCID 8260		DRY CLEANING SOLVENT
(2) gwa 5	water	HCID 8260		" " "

# of Containers 8

Special handling - storage requirements

Please return Blue Ice, Cooler(s), and Replacement Bottles Immediately. Please Fax Results as soon as obtained.

Relinquished By C. Benton	Date Relinquished 2/15/94	Time Relinquished
Received By	Date Received	Time Received
Relinquished By	Date Relinquished	Time Relinquished
Received By	Date Received	Time Received
Relinquished By	Date Relinquished	Time Relinquished
Received By	Date Received	Time Received

1505

TECHNICO
Environmental Services
PO Box 7244, Kennewick, WA 99336
(509) 582-7447 ☎ FAX (509) 586-7363

Project 79 Volpentest

2 Number of pages including this one

Date 2/15/94 Time

CHAIN OF CUSTODY RECORD TO:

ANATEK 1917 S Main Moscow ID 83843 208-883-2839 Fax 208-882-9246

Sampler Signatures

Shipment Method
UPS Next Day Air

Sample Location	Type	Analysis Requested	Lab #	Remarks
#3 -3-5		HCID		
#3 -5-8				
#4 0-3 ft		HCID		
#4 -3-5'				
#4 -5-8'				
#5 0-3'		HCID		
#5 -3-5'				
#5 -5-8'				
#6 0-3'				
#6 -3-5'				
#6 -5-8'		HCID		
#7 0-3				
#7 3-5				
#7 5-8	SOIL	HCID		

# of Containers 14

Special handling - storage requirements

Please return Blue Ice, Cooler(s), and Replacement Bottles Immediately. Please Fax Results as soon as obtained.

	Date	Time
Relinquished By	Date Relinquished	Time Relinquished
Received By	Date Received	Time Received
Relinquished By	Date Relinquished	Time Relinquished
Received By	Date Received	Time Received
Relinquished By	Date Relinquished	Time Relinquished
Received By	Date Received	Time Received

1563

Anatek Labs
1917 S. Main Moscow, ID 83843 (208) 883-BTEX (2839) FAX: (208) 882-9246

February 28, 1994

Technico Environmental
PO Box 7244
Kennewick, WA 99336
Attn: John Zillich

Items: Results of analysis for samples received 2/16/94. Sample Log-in number:1563
Project: 79VOLPENTEST
Date Sampled: 2/15/94
Report # 94-0301-TES Page 1 of 2

HCID by WTPH-HCID; Volatile Organics by EPA 8260; mg/Kg = ppm

Sample Name	*Matrix*	*Analysis Date*	*Analyte*	*Concentration*
#1 5-8'	Soil	2/16/94	Gasoline	< 10 mg/Kg by HCID
			Diesel	< 25 mg/Kg by HCID
			Waste Oil	< 100 mg/Kg by HCID
#2 5-8'	Soil	2/16/94	Gasoline	< 10 mg/Kg by HCID
			Diesel	< 25 mg/Kg by HCID
			Waste Oil	< 100 mg/Kg by HCID
#3 3-5'	Soil	2/16/94	Gasoline	< 10 mg/Kg by HCID
			Diesel	< 25 mg/Kg by HCID
			Waste Oil	< 100 mg/Kg by HCID
#4 0-3'	Soil	2/16/94	Gasoline	< 10 mg/Kg by HCID
			Diesel	< 25 mg/Kg by HCID
			Waste Oil	< 100 mg/Kg by HCID
#5 0-3'	Soil	2/16/94	Gasoline	< 10 mg/Kg by HCID
			Diesel	< 25 mg/Kg by HCID
			Waste Oil	< 100 mg/Kg by HCID
#6 5-8'	Soil	2/16/94	Gasoline	< 10 mg/Kg by HCID
			Diesel	< 25 mg/Kg by HCID
			Waste Oil	< 100 mg/Kg by HCID
#7 5-8'	Soil	2/16/94	Gasoline	< 10 mg/Kg by HCID
			Diesel	< 25 mg/Kg by HCID
			Waste Oil	< 100 mg/Kg by HCID
GWW1	Water	2/16/94	Gasoline	< 1.0 mg/L by HCID
			Diesel	< 2.5 mg/L by HCID
			Waste Oil	< 10 mg/L by HCID
GWW5	Water	2/16/94	Gasoline	Detected by HCID
			Diesel	< 2.5 mg/L by HCID
			Waste Oil	< 10 mg/L by HCID

Anatek Labs
1917 S. Main Moscow, ID 83843 (208) 883-BTEX (2839) FAX: (208) 882-9246

Sample Name	Matrix	Analysis Date	Analyte	Concentration
GWW5	Water	2/23/94	Chloromethane	< 1 ug/L
			Chloroethane	< 1 ug/L
			Bromomethane	< 1 ug/L
			Vinyl chloride	< 1 ug/L
			Trichlorofluoromethane	< 1 ug/L
			Dichloromethane	< 1 ug/L
			1,1-Dichloroethene	< 1 ug/L
			cis-1,2-Dichloroethene	< 1 ug/L
			trans1,2-Dichloroethene	< 1 ug/L
			1,1-Dichloroethane	< 1 ug/L
			Chloroform	< 1 ug/L
			1,1,1-Trichloroethane	< 1 ug/L
			1,2-Dichloroethane	< 1 ug/L
			Carbon tetrachloride	< 1 ug/L
			1,1-Dichloropropene	< 1 ug/L
			1,2-Dichloropropane	< 1 ug/L
			Trichloroethene	1 ug/L
			Bromodichloromethane	< 1 ug/L
			cis-1,3-Dichloropropene	< 1 ug/L
			trans-1,3-Dichloropropene	< 1 ug/L
			1,1,2-Trichloroethane	< 1 ug/L
			Dibromochloromethane	< 1 ug/L
			Tetrachloroethene	< 1 ug/L
			Chlorobenzene	< 1 ug/L
			Bromoform	< 1 ug/L
			1,1,2,2-Tetrachloroethane	< 1 ug/L
			Styrene	< 1 ug/L
			Benzene	10 ug/L
			Toluene	3 ug/L
			Ethylbenzene	177 ug/L
			Xylene(Total)	326 ug/L
			1,2-Dichlorobenzene	< 1 ug/L
			1,3-Dichlorobenzene	< 1 ug/L
			1,4-Dichlorobenzene	< 1 ug/L

Mike Pearson
Laboratory Director

Appendix 2 - Groundwater Results

TECHNICO
Environmental Services
PO Box 7244, Kennewick, WA 99336
(509) 582-7447 ☎ FAX (509) 586-7363

Project Vapor Test

1 Number of pages including this one

Date 3/7/94 Time 4:30 PM

CHAIN OF CUSTODY RECORD TO:

ANATEK 1917 S Main Moscow ID 83843 208-883-2839 Fax 208-882-9246

Sampler Signatures

Shipment Method
UPS Next Day Air

	Sample Location	Type	Analysis Requested	Lab #	Remarks
3/1/94	Influent 76W	Water (2)	HCID		
3/4/94	" 6GW	" (2)	"		
"	" 6GW	" (2)			DO NOT ANALYSE
"	" 8GW	" (2)	"		
"	" Passenger Blank	" (2)	"		

# of Containers 10

Special handling - storage requirements

Please return Blue Ice, Cooler(s), and Replacement Bottles Immediately. Please Fax Results as soon as obtained.

Relinquished By: Willie Benton	Date Relinquished: 3/7/94	Time Relinquished: 4:30 PM
Received By: [signature]	Date Received: 3/8/94	Time Received: 11:55 AM
Relinquished By	Date Relinquished	Time Relinquished
Received By	Date Received	Time Received
Relinquished By	Date Relinquished	Time Relinquished
Received By	Date Received	Time Received

1617

Anatek Labs
1917 S. Main Moscow, ID 83843 (208) 883-BTEX (2839) FAX: (208) 882-9246

March 11, 1994

Technico Environmental
PO Box 7244
Kennewick, WA 99336
Attn: John Zillich

Items: Results of analysis for samples received 3/8/94. Sample Log-in number is 1617.
Date Sampled: 3/4/94
Project: Volpentest
Report # 94-0311-WJE

Gasoline by WTPH-G
BTEX by EPA 602; mg/L = ppm.

Sample Name	*Matrix*	*Analysis Date*	*Analyte*	*Concentration*
GWW6	Water	3/10/94	Gasoline	< 1.0 mg/L
			Benzene	< 0.005 mg/L
			Toluene	< 0.005 mg/L
			Ethylbenzene	< 0.005 mg/L
			Xylenes (total)	< 0.015 mg/L
GWW7	Water	3/11/94	Gasoline	1.8 mg/L
			Benzene	< 0.001 mg/L
			Toluene	< 0.005 mg/L
			Ethylbenzene	0.014 mg/L
			Xylenes (total)	0.017 mg/L
GWW8	Water	3/11/94	Gasoline	38.8 mg/L
			Benzene	0.024 mg/L
			Toluene	0.017 mg/L
			Ethylbenzene	0.218 mg/L
			Xylenes (total)	0.418 mg/L
Presample blank	Water	3/11/94	Gasoline	< 1.0 mg/L
			Benzene	< 0.001 mg/L
			Toluene	< 0.005 mg/L
			Ethylbenzene	< 0.005 mg/L
			Xylenes (total)	< 0.015 mg/L

Mike Pearson
Laboratory Director

TECHNICO
Environmental Services
PO Box 7244, Kennewick, WA 99336
(509) 582-7447 ¤ FAX (509) 586-7363

Project T13 Volpentest

1 Number of pages including this one

Date 3/27/94 Time 3:45

CHAIN OF CUSTODY RECORD TO:

ANATEK 1917 S Main Moscow ID 83843 208-883-2839 Fax 208-882-9246

Sampler Signatures

Shipment Method
UPS Next Day Air

Sample Location	Type	Analysis Requested		Lab #	Remarks
T13 - GWI - 5	WATER 4VOAS	WTPHG - BTEX			FAX RESULTS MONDAY
T13 - GWI - 10	WATER 4VOAS	"	"		AM
T13 - GWI - 11	WATER 4VOAS	"	"		
T13 - GWI - 12	WATER 2VOAS	"	"		

# of Containers 14

Special handling - storage requirements

Please return Blue Ice, Cooler(s), and Replacement Bottles Immediately. Please Fax Results as soon as obtained.

	Date Relinquished	Time Relinquished
Relinquished By		
Received By	**Date Received**	**Time Received**
	3/28/94	2:30PM
Relinquished By	Date Relinquished	Time Relinquished
Received By	Date Received	Time Received
Relinquished By	Date Relinquished	Time Relinquished
Received By	Date Received	Time Received

2791

Anatek Labs
1917 S. Main Moscow, ID 83843 (208) 883-BTEX (2839) FAX: (208) 882-9246

March 28, 1994

Technico Environmental
PO Box 7244
Kennewick, WA 99336
Attn: John Zillich

Items: Results of analysis for samples received 3/25/94. Sample Log-in number is 1672.
Date Sampled: 3/24/94
Project: Volpentest - T13
Report # 94-0328-TES

Gasoline by WTPH-G; BTEX by EPA 8020; mg/L = ppm.

Sample Name	*Matrix*	*Analysis Date*	*Analyte*	*Concentration*
T13-GWI-5	Water	3/25/94	Gasoline	14.0 mg/L
			Benzene	0.018 mg/L
			Toluene	0.046 mg/L
			Ethylbenzene	0.250 mg/L
			Xylenes (total)	0.838 mg/L
T13-GWI-10	Water	3/25/94	Gasoline	< 1.0 mg/L
			Benzene	< 0.005 mg/L
			Toluene	< 0.005 mg/L
			Ethylbenzene	< 0.005 mg/L
			Xylenes (total)	< 0.015 mg/L
T13-GWI-11	Water	3/25/94	Gasoline	< 1.0 mg/L
			Benzene	< 0.005 mg/L
			Toluene	< 0.005 mg/L
			Ethylbenzene	< 0.005 mg/L
			Xylenes (total)	< 0.015 mg/L
T13-GWI-12	Water	3/25/94	Gasoline	< 1.0 mg/L
			Benzene	< 0.005 mg/L
			Toluene	< 0.005 mg/L
			Ethylbenzene	0.009 mg/L
			Xylenes (total)	0.028 mg/L

Mike Pearson
Laboratory Director

Laucks Since 1908
Testing Laboratories, Inc.
940 South Harney St., Seattle, WA 98108 (206) 767-5060 FAX (206) 767-5063
Chemistry, Microbiology, and Technical Services

CLIENT: Technico Environmental Serv.
P.O. Box 7244
Kennewick, WA 99336

ATTN : John Zillich

Work ID : Lead Analysis
Taken By : Client
Transported by: Hand Delivered
Type : Water

Certificate of Analysis

Work Order# : 94-05-781
DATE RECEIVED : 05/20/94
DATE OF REPORT: 05/24/94

SAMPLE IDENTIFICATION:

	Sample Description	Collection Date
01	T13-17	05/19/94
02	T13-19	05/19/94
03	T13-13	05/19/94
04	T13-5	05/19/94
05	T13-5	05/19/94

Per your request, samples 9405781-01 thru -03 and -05 were on hold without anlysis.

FLAGGING:

The flag "U" indicates the analyte of interest was not detected, to the limit of detection indicated.

Unless otherwise instructed all samples will be discarded on 07/07/94

Respectfully submitted,
Laucks Testing Laboratories, Inc.

J. M. Owens

Laucks Since 1908
Testing Laboratories, Inc.
940 South Harney St., Seattle, WA 98108 (206) 767-5060 FAX (206) 767-5063
Chemistry, Microbiology, and Technical Services

CLIENT : Technico Environmental Serv.

Certificate of Analysis

Work Order # 94-05-781

TESTS PERFORMED AND RESULTS:

Analyte	Units	04
Lead (Method 200.8)	mg/L	0.002 U

TECHNICO
Environmental Services
PO Box 7244, Kennewick, WA 99336
(509) 582-7447 ☎ FAX (509) 586-7363

Project 11 Vaxpanlist

1 Number of pages including this one

Date 5/19/94 Time

CHAIN OF CUSTODY RECORD TO:

ANATEK 1917 S Main Moscow ID 83843 208-883-2839 Fax 208-882-9246

Sampler Signatures

Shipment Method
UPS Next Day Air

Sample Location	Type	Analysis Requested	Lab #	Remarks
T13 5/19/94 - 17	WATER	BTEX		2 VOAS
T13 5/19/94 - 19	WATER	BTEX		"
T13 5/19/94 - 13	WATER	BTEX		"

# of Containers 6

Special handling - storage requirements

Please return Blue Ice, Cooler(s), and Replacement Bottles Immediately. Please Fax Results as soon as obtained.

Relinquished By	Date Relinquished	Time Relinquished
Received By	Date Received 5/20/94 1130	Time Received
Relinquished By	Date Relinquished	Time Relinquished
Received By	Date Received	Time Received
Relinquished By	Date Relinquished	Time Relinquished
Received By	Date Received	Time Received

559

Anatek Labs
1917 S. Main Moscow, ID 83843 (208) 883-BTEX (2839) FAX: (208) 882-9246

May 23, 1994

Technico Environmental
PO Box 7244
Kennewick, WA 99336
Attn: John Zillich

Items: Results of analysis for samples received 5/20/94. Sample Log-in number:1855
Date Sampled: 5/19/94
Report # 94-0523-TES
Project: Volpentest T13

BTEX by EPA 602

Sample Name	*Matrix*	*Analysis Date*	*Analyte*	*Concentration*
T13 5/19/94-17	Water	5/20/94	Benzene	0.002 mg/L
			Toluene	< 0.005 mg/L
			Ethylbenzene	0.013 mg/L
			Xylenes (total)	< 0.005 mg/L
T13 5/19/94-19	Water	5/20/94	Benzene	0.003 mg/L
			Toluene	< 0.001 mg/L
			Ethylbenzene	0.025 mg/L
			Xylenes (total)	0.006 mg/L
T13 5/19/94-13	Water	5/20/94	Benzene	0.004 mg/L
			Toluene	< 0.005 mg/L
			Ethylbenzene	0.009 mg/L
			Xylenes (total)	< 0.005 mg/L

Mike Pearson
Laboratory Director

TECHNICO
Environmental Services
PO Box 7244, Kennewick, WA 99336
(509) 582-7447 ☎ FAX (509) 586-7363

Project 115 Open VO

1 Number of pages including this one

Date 5/24/94 Time 4:00

CHAIN OF CUSTODY RECORD TO:

ANATEK 1917 S Main Moscow ID 83843 208-883-2839 Fax 208-882-9246

Sampler Signatures Barger

Shipment Method
UPS Next Day Air

Sample Location	Type	Analysis Requested	Lab #	Remarks
14	water	BETX		4 VOA ~~1 1 Liter~~ mL
15	"	"		4 VOA
16	"	"		4 VOA
0	"	—		2 - Trip blank
14	"	2 NITRATE		1 Quart
14	"	2 TKN		250 ml H2SO4

# of Containers 15

Special handling - storage requirements

Please return Blue Ice, Cooler(s), and Replacement Bottles Immediately. Please Fax Results as soon as obtained.

Relinquished By Barger	Date Relinquished	Time Relinquished
Received By	Date Received 5/25/94	Time Received 1015
Relinquished By	Date Relinquished	Time Relinquished
Received By	Date Received	Time Received
Relinquished By	Date Relinquished	Time Relinquished
Received By	Date Received	Time Received

1877

Anatek Labs
1917 S. Main Moscow, ID 83843 (208) 883-BTEX (2839) FAX: (208) 882-9246

June 7, 1994

Technico Environmental
PO Box 7244
Kennewick, WA 99336
Attn: John Zillich

Items: Results of analysis for samples received 5/25/94. Sample Log-in number:1877
Report # 94-0607-TES
Project: Volpentest T13

BTEX by EPA 602

Sample Name	*Matrix*	*Analysis Date*	*Analyte*	*Concentration*
14	Water	6/2/94	TKN	0.451 mg/L
			NO_3	4.52 mg/L
			Benzene	< 0.001 mg/L
			Toluene	< 0.005 mg/L
			Ethylbenzene	< 0.005 mg/L
			Xylenes (total)	< 0.005 mg/L
15	Water	6/2/94	Benzene	< 0.001 mg/L
			Toluene	< 0.005 mg/L
			Ethylbenzene	< 0.005 mg/L
			Xylenes (total)	< 0.005 mg/L
16	Water	6/2/94	Gasoline	15.5 mg/L
			Benzene	0.601 mg/L
			Toluene	0.062 mg/L
			Ethylbenzene	0.210 mg/L
			Xylenes (total)	0.608 mg/L

Mike Pearson
Laboratory Director

Appendix 3 - Site Photos

Site Sampling Locations

Digging at Sample Location 7 at 1323 Lee Boulevard

Appendix 4 - WAC 173-340-450

property at reasonable times for the purpose of evaluating compliance with the cleanup action plan and other required plans, including the right to take samples, inspect any remedial actions taken at the site, and to inspect records.

(6) Financial assurances. The department may require the potentially liable person to provide financial assurances, through a trust fund or equivalent financial mechanism approved by the department, sufficient to cover all costs of operation and maintenance including compliance monitoring and undertaking appropriate corrective measures. It is the department's expectation that such assurances will be required wherever the cleanup action includes containment and in other appropriate circumstances.

(7) Removal of restrictions. If the residual hazardous substances remaining at the site are subsequently reduced in concentration such that the method A or method B cleanup levels, as applicable, established under WAC 173-340-700 through 173-340-760 are met without a conditional point of compliance, then the owner may request that the restrictive covenant or other restrictions be eliminated. The restrictive covenant or other restrictions shall be removed, if the department, after public notice and opportunity for comment, concurs.

[Statutory Authority: Chapter 70.105D RCW. 91-04-019, §173-340-440, filed 1/28/91, effective 2/28/91.]

WAC 173-340-450 Releases From Underground Storage Tanks.

(1) Purpose.
(2) Initial response.
(3) Interim actions.
(4) Reporting requirements.
(5) State remedial investigation and feasibility study.
(6) Engineering documents.
(7) Cleanup standards.
(8) Independent cleanup actions.

(1) Purpose. The purpose of this section is to set forth the requirements for addressing releases which may pose a threat to human health or the environment from USTs defined under chapter 90.76 RCW and rules adopted therein, including heating oil USTs of greater than 1,100 gallons capacity.

(a) Releases from USTs exempted under chapter 90.76 RCW and rules adopted therein are still subject to all other requirements of this chapter.

(b) Unless the department requires otherwise, UST owners and UST operators shall comply with the requirements in this section after confirmation of an UST release which may pose a threat to human health or the environment.

(2) Initial response. Within twenty-four hours of the UST release, the UST owner or the UST operator shall perform the following actions:

(a) Report the UST release to the department and other authorities with jurisdiction, in accordance with rules adopted under chapter 90.76 RCW and any other applicable law;

(b) Remove as much of the hazardous substance from the UST as is possible and necessary to prevent further release to the environment;

(c) Eliminate or reduce any fire, explosion or vapor hazards in such a way as to minimize any release of hazardous substances to surface water and ground water; and

(d) Visually inspect any aboveground releases or exposed belowground releases and prevent the hazardous substance

from spreading into surrounding soils, ground water and surface water.

(3) Interim actions.

(a) As soon as possible but no later than twenty days following confirmation of an UST release, the UST owner or the UST operator shall perform the following interim actions:

(i) Continue to monitor and mitigate any additional fire and safety hazards posed by vapors or free product which may have migrated from the UST into structures in the vicinity of the site, such as sewers or basements;

(ii) Reduce the threat to human health and the environment posed by contaminated soils that are excavated or discovered as a result of investigation or cleanup activities. Treatment, storage and disposal of soils must be carried out in compliance with all applicable federal, state and local requirements;

(iii) Test for hazardous substances in the environment where they are most likely to be present. Such testing shall be done in accordance with a sampling and analysis plan prepared under WAC 173-340-820. The sample types, sample locations, and measurement methods shall be based on the nature of the stored substance, type of subsurface soils, depth to ground water and other factors as appropriate for identifying the presence and source of the release. If contaminated soil is found in contact with the ground water or soil contamination appears to extend below the lowest soil sampling depth, then testing shall include the installation of ground water monitoring wells to test for the presence of possible ground water contamination. Information gathered for the site check or closure site assessment conducted pursuant to rules adopted under chapter 90.76 RCW, which sufficiently characterizes the releases at the site, may be substituted for the testing required under this paragraph;

(iv) The testing performed under (a)(iii) of this subsection shall include, at a minimum, the following:

(A) Benzene, toluene, ethylbenzene, xylene, lead, and total petroleum hydrocarbons where leaded gasoline may be present;

(B) Benzene, toluene, ethylbenzene, xylene and total petroleum hydrocarbons where unleaded gasoline may be present;

(C) Total petroleum hydrocarbons and other appropriate indicator hazardous substances where any petroleum product other than gasoline may be present;

(D) The hazardous substance stored and any likely decomposition by-products where a hazardous substance other than petroleum may be present; and

(E) Any other tests required by the department; and

(v) Investigate for the presence of free product.

(b) Free product removal. At sites where investigations indicate free product is present, the UST owner or the UST operator shall conduct, as soon as

possible after discovery, an interim action to remove the free product while continuing, as necessary, any other actions required under this section. To accomplish this the UST owner or UST operator shall:

(i) Conduct free product removal to the maximum extent practicable and in a manner which minimizes the spread of hazardous substances, by using recovery and disposal techniques appropriate to the hydrogeologic conditions at the site. The objective of free product removal system must be, at a minimum, to stop the free product migration;

(ii) Properly treat, discharge, or dispose of recovery by-products in compliance with all applicable local, state, and federal regulations and permits; and

(iii) Handle all flammable products safely to prevent fires and explosions.

(4) Reporting requirements. The following reports are required to be submitted to the department:

(a) Status report. Within twenty days after an UST release, the UST owner or UST operator shall submit a status report to the department. The status report shall identify if known, the types, amounts, and locations of hazardous substances released, how the release occurred, evidence confirming the release, actions taken under subsections (2) and (3) of this section, any planned remedial actions, and any results of work done up to the time of the report. This report may be provided verbally to the department.

(b) Site characterization reports. Within ninety days after release confirmation, unless directed to do otherwise by the department, the UST owner or UST operator shall submit a report to the department about the site and nature of the release. This report shall be submitted to the department in writing and may be combined with the twenty-day status report, if the information required is available at that time. The site characterization report shall include, at a minimum, the following information:

(i) The information required for the status report under (a) of this subsection;

(ii) A site conditions map indicating approximate boundaries of the property, all areas where hazardous substances are known or suspected to be located, and sampling locations. This map may consist of a sketch of the site at a scale sufficient to illustrate this information;

(iii) Available data regarding surrounding populations, surface and ground water quality, use and approximate location of wells potentially affected by the release, subsurface soil conditions, depth to ground water, direction of ground water flow, proximity to and potential for affecting surface water, locations of sewers and other potential conduits for vapor or free product migration, surrounding land use, and proximity to sensitive environments;

(iv) Results of tests for hazardous substances performed under subsection (3)(a)(iii) and (iv) of this section;

(v) Results of the free product investigation required under subsection (3)(a)(v) of this section;

(vi) Results of all completed site investigations, interim actions and cleanup actions and a

description of any remaining investigations, cleanup actions and compliance monitoring which are planned or underway; and

(vii) Information on the free product removal efforts at sites where investigations indicate free product is present. This shall include, at a minimum, the following information:

(A) Name of the person responsible for implementing the free product removal measures;

(B) The estimated quantity, type, and thickness of free product observed or measured in wells, boreholes and excavations;

(C) The type of free product recovery system used;

(D) The location of any on-site or off-site discharge during the recovery operation;

(E) The type of treatment applied to, and the effluent quality expected from, any discharge;

(F) The steps taken and planned to obtain necessary permits for any discharge;

(G) Disposition of recovered free product; and

(viii) Any other information required by the department.

(5) State remedial investigation and feasibility study.

(a) The scope of a state remedial investigation and feasibility study under this chapter will depend on the informational needs at a specific site and will vary from site to site to avoid the collection of unnecessary information. For sites with UST releases, a state remedial investigation and feasibility study must at a minimum address the elements in WAC 173-340-350 (6)(a), (b), (c)(ii), (c)(iii), (c)(v) through (c)(vii) and (e). The department may require additional information when needed to select a cleanup action. UST owners and operators shall conduct a state remedial investigation and feasibility study for sites where the following conditions exist:

(i) There is evidence that the release has caused hazardous substances to be present in the ground water in excess of the ground water standards promulgated under chapter 90.48 RCW or cleanup levels in WAC 173-340-720 (Table 1);

(ii) Free product is found; or

(iii) Where otherwise required by the department.

(b) UST owners and UST operators shall submit the information collected for the state remedial investigation/feasibility study to the department as soon as practicable. The information may be included with other reports submitted under this section.

(6) If the department determines, based on the results of the remedial investigation/feasibility study or other information, that additional remedial action is required, the department may require the UST owner or the UST operator to submit engineering documents as described in WAC 173-340-400.

(7) Unless directed to do otherwise by the department, cleanup actions performed by UST owners or UST operators shall comply with cleanup standards, WAC 173-340-700 through 173-340-750 and the requirements for the selection of cleanup actions, WAC 173-340-360.

(8) Independent cleanup actions. In addition to work performed under subsections (2) through (5), and (7) of this section, UST owners or

UST operators performing independent cleanup actions shall:

(a) Notify the department of their intention to begin cleanup. This can be included with other reports under this section;

(b) Comply with any conditions imposed by the department to assure adequate protection of human health and the environment; and

(c) Within ninety days of completion of the cleanup action, submit the results of all investigations, interim and cleanup actions and compliance monitoring not previously submitted to the department.

Statutory Authority: Chapter 70.105D RCW. 91-04-019, § 173-340-450, filed 1/28/91, effective 2/28/91.]

PART V--ADMINISTRATIVE PROCEDURES FOR REMEDIAL ACTIONS

WAC 173-340-500 Determination of Status as a Potentially Liable Person.

(1) Status letter.
(2) Contents of letter.
(3) Opportunity to comment.
(4) Determination of status.
(5) Voluntary waiver.
(6) Additional potentially liable persons.

(1) Status letter. The department shall issue a potentially liable person status letter to any person it believes to be potentially liable as provided for in RCW 70.105D.020(8), unless an emergency requires otherwise. Persons will be notified when the department has credible evidence of their potential liability under RCW 70.105D.040 and when the department is ready to proceed with remedial action except for emergencies and initial investigations. The status letter shall be sent by certified mail, return receipt requested, or by personal service.

(2) Contents of letter. The status letter shall provide:

(a) The name of the person the department believes to be potentially liable;

(b) A general description of the location of the facility;

(c) The basis for the department's belief that the person has a relationship to the facility;

(d) The basis for the department's belief that a release or threatened release of a hazardous substance has occurred at the facility and that the release or threatened release poses a threat to human health or the environment;

(e) An indication of the department's intentions regarding enforcement or other actions at the facility; and

(f) The names of other persons to whom the department has sent a status letter.