Weiss Associates Environmental and Geologic Services

5500 Shellmound Street, Emeryville, CA 94608-2411 Fax: 510-547-5043 Phone: **510-450-6000**

December 9, 1996

Mr. Scott Seery
Alameda County Health Services Agency
1131 Harbor Bay Parkway, Room 250
Alameda, California 94502

RE: Tier I RBCA Evaluation
Former Shell Service Station
15275 Washington Avenue
San Leandro, California
WIC #204-6852-1008
WA Job #81-1227-4

Dear Mr. Seery:

On behalf of Shell Oil Products Company (Shell), Weiss Associates has prepared the attached Tier I Risk-Based Corrective Action (RBCA) Evaluation. The Tier I evaluation was completed as a portion of the work outlined in the *Workplan for Risk-Based Corrective Action Evaluation*, dated August 20, 1996. The remainder of the work outlined in the workplan includes collection of soil vapor data, completion of a Tier II RBCA evaluation, and completion of a Corrective Action Plan. Due to the sensitivity of soil gas data to wet weather, some delays in collection may be necessary in order to yield representative data. Please contact us at your convenience to discuss a timeline for completing this work.

Sincerely,
Weiss Associates

Steve Long, P.E.
Project Engineer

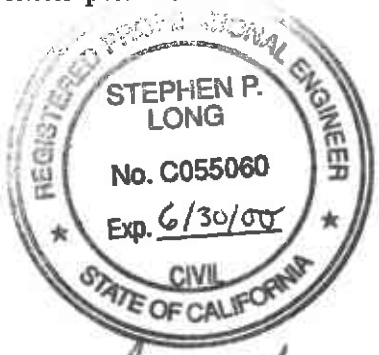
Enclosures: Tier I RBCA Evaluation

SPL:all

Weiss Associates

CERTIFICATION AND WARRANTY

The attached report, entitled *Tier I Risk-Based Corrective Action Evaluation - Former Shell Station - 15275 Washington Avenue, San Leandro, California* was prepared under my direct supervision. The report was prepared in accordance with ASTM E 1739-95 and generally accepted engineering practices. This report was prepared for the exclusive use of Shell Oil Products Company, and should not be relied upon by other parties without written permission of Weiss Associates. No other warranties are implied or expressed.



Stephen P. Long, P.E.
CA License # C055060

12/9/96
Date

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RBCA
SUMMARY REPORT

■ TIER 1 / ❑ TIER 2 RBCA SITE EVALUATION

FORMER SHELL SERVICE STATION
15275 WASHINGTON AVENUE
SAN LEANDRO, CALIFORNIA

WIC #204-6852-1108

Weiss Associates, Emeryville, California

PREPARED BY

December 9, 1996

DATE ISSUED

REVIEWED BY _____

DATE 12/9/96

Site Name: **Former Shell Service Station, WIC #204-6852-1108** Date Completed: December 9, 1996

Site Location: **15275 Washington Avenue, San Leandro, California** Completed By: Weiss Associates

TIER 1 / TIER 2 RBCA REPORT INDEX

■ = ENCLOSED

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**** = Required for Tier 2 Evaluation only*** ***(u) = For Tier 2, update Tier 1 version as needed.***

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TIER 1 / TIER 2 REPORT INDEX *continued*

■ = ENCLOSED

			Tier 1	Tier 2
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Figure 3	Site Plan		■	☐ *(u)*
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APPENDICES				
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Appendix C	Well Screen Intervals		■	
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	(SPECIFY)			

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TIER 1 EXECUTIVE SUMMARY

VISUAL/HISTORICAL ASSESSMENT	(■ TO SELECT)			
Site size (acres)	■ <1	❑ <10	❑ >10	❑ N/A
Site setting	❑ undeveloped	■ industrial/comm.	❑ residential	❑ N/A
Site access	■ capped	■ fenced-in	❑ open	❑ N/A
Visual evidence of environmental impact	■ none	❑ limited	❑ extensive	❑ N/A
Current site land use	❑ undeveloped	❑ indust./comm.	❑ residential	■ N/A
Contaminant sources	■ tanks/spills	❑ trench/drums	❑ ponds/pits	❑ N/A
Affected environmental media	■ soil (>3 ft BGS)	■ groundwater	❑ surficial soil	❑ N/A
Types of compounds likely to be present	■ petroleum hydrocarbons	❑ metals		
	❑ inorganic (nitrates)	❑ other:(pesticides)		

BASELINE RECEPTOR IDENTIFICATION				
Reasonable potential receptors (greatest concern)	❑ none	❑ ecological	■ human	❑N/A
Distance from fenceline to nearest off-site receptor (ft)	❑ >500	❑ 100 - 500	■ <100	❑N/A
Travel time to closest groundwater receptor (yr)	❑ >10	❑ 2 - 10	❑ <2	■ N/A
Depth to first encountered groundwater (ft)	❑ >150	❑ 50 - 150	■ <50	❑N/A
Potentially complete exposure pathways	❑ none	■ ingestion	■ inhalation	❑N/A
	❑ ecological	❑ dermal	❑ absorption	❑N/A

TIER 1 TASKS COMPLETED

- ■ Visual / historical assessment
- ■ Initial (screening) site assessment
- ■ Site prioritization / classification
- ■ Detailed site characterization
- ■ RBSL comparison
- ■ Corrective action planned or implemented

TIER 1 CLASSIFICATION EVALUATION

Classification No.	Scenario Description	Prescribed Interim Action	Date Implemented
3	Shallow ground water and subsurface soils are impacted. There are no domestic drinking water wells within 1/2 mile.	Upgrade evaluation to Tier 2, use site specific data and information.	1996

TIER 1 CORRECTIVE ACTION CRITERIA

	Screening Level Criteria Exceeded? (■ if yes)						
Affected Medium	Risk-Based	Other (MCL)	Others: (specify)	_____	_____	Not Applicable	None Exceeded
• Surface Soil (< 3ft BGS)	❑	❑	❑	❑	❑	■	❑
• Subsurface Soil (>3ft BGS)	■	❑	❑	❑	❑	❑	❑
• Groundwater (potable/nonpotable)	■	■	❑	❑	❑	❑	❑
• Surface waters	❑	❑	❑	❑	❑	■	❑

NOTES:

PROPOSED TIER 1 ACTION

- ❑ ***No Action:*** Site does not exceed Tier 1 criteria. - Apply for closure.
- ❑ ***Interim Corrective Action:*** Site exceeds some Tier 1 criteria. - Propose interim corrective action and reprioritize site.
- ❑ ***Final Corrective Action:*** Site exceeds some Tier 1 criteria. - Propose corrective action to achieve Tier 1 criteria.
- ■ ***Tier 2 Evaluation:*** Site exceeds some Tier 1 criteria. - Re-evaluate corrective action goals per Tier 2 risk assessment.

NOTE:
Rationale for proposed action documented on Worksheets 1.3 and 10.1-10.3.

ALL WORKSHEETS ENCLOSED IN THIS REPORT ARE IDENTIFIED ON THE TABLE OF CONTENTS FORM.

EXECUTIVE SUMMARY

Instructions: ***Provide brief description of site history, hydrogeologic conditions, ecological assessment, possible exposure pathways, RBSL / SSTL results, and the scope of work for proposed corrective action activity. Address proposed methods, implementation schedule, cost, and anticipated risk reduction at or near the site.***

SITE DESCRIPTION AND HISTORY

• Worksheets 2.1 - 2.5 • Figures 1 - 4

Briefly discuss site chronology, operations, features of potential concern, and future plans for site use.

The subject site is currently unoccupied and fenced. In 1985, monitoring wells S-1 through S-4 were installed, and dissolved TPH-G was detected in ground water. A thickness of 0.5 ft separate phase product was observed in Well S-3. In 1986, four exploratory borings S-A through S-D were drilled in the UST area and monitoring well S-5 was installed. Separate phase product was observed in boring S-B. In 1987 one waste oil tank and four USTs were removed. Additional excavation was carried out and exploratory trenches were excavated. Hydrocarbon impacted soils were disposed off-site. In 1988, monitoring wells S-6 through S-12 were installed and a soil vapor survey was conducted. In 1989 wells S-13 through S-17 and a recovery well SR-1 were installed. In 1991 monitoring well S-18 was installed. Ground water monitoring has been conducted since 1988. No active soil or ground water remediation other than soil excavation was conducted at the site. The site is next to a residential mobile home park and the future use of the site is not determined.

appears limited to excavated UST backfill, only

SITE ASSESSMENT INFORMATION

GEOLOGIC AND HYDROGEOLOGIC SUMMARY

• Worksheets 3.1 - 3.4 • Figures 6 and 7

Briefly describe regional site features, climate, vadose zone soils, and groundwater depth, quality, and use.

The surface soils in the region consist of Holocene fine-grained alluvium generally consisting of well-bedded, unconsolidated, moderately sorted carbonaceous silt and clay. Boring log data from site investigations indicate that the site is underlain primarily by clays and silts which contain thin interbeds of sand and clayey sand. Depth to ground water ranges from 5 to 10 ft below ground surface (bgs). Water in the shallow zone is most likely yielded from discrete sandy interbeds and silty horizons which appear to extend from 6 to 15 ft bgs. In well SR-1, a sandy unit from 28 to 40.5 ft bgs was encountered. Shallow ground water beneath the site is not used for any beneficial purpose and there are no active ground water supply wells in the shallow zone in the vicinity of the site. Historically, the ground water flow direction has been to the south and southwest with an average gradient of 0.004 ft/ft. Nearby residences and commercial properties receive water from the San Leandro and Pardee reservoirs through the East Bay Municipal Utility District (EBMUD). Drinking water is generally not supplied from ground water.

BASELINE EXPOSURE ASSESSMENT

COMPLETE EXPOSURE PATHWAYS AND APPLICABLE RECEPTORS

• Worksheets 4.1 - 4.5

Discuss current or potentially complete pathways for human or ecological exposure to site constituents.

Potentially complete current and/or future exposure pathways for human exposure have been identified as:

- inhalation of indoor and outdoor air via volatilization from subsurface soils
- inhalation of indoor and outdoor air via volatilization from ground water
- leachate to ground water from subsurface soils for ingestion
- ground water ingestion at a hypothetical point of exposure closest to the area of impact.

Worksheet 1.4 shows the potentially complete pathways. Residential receptors were considered in the evaluations as the future use of the site is not determined and there is a residential area located adjacent to the site. Pathways involving exposure to surface soil are not considered complete as the source is located underground, the site is completely paved and there is no evidence of surface soil impact. However, this pathway will be reevaluated after surface soil samples are collected and analyzed as described in the workplan. Assuming that leachate to ground water and volatilization from ground water are potentially complete exposure pathways is a conservative approach, because the impacted soils have been removed and ground water analytical results do not indicate any significant change in concentrations due to leaching and volatilization from soil is considered to be at higher rates than volatilization from ground water. Ground water ingestion is also conservatively considered a potentially complete pathway. There are no known uses of shallow ground water in the area and nearest municipal water supply wells, owned by EBMUD, are located in San Lorenzo. The San Lorenzo well field, which supplied water from deeper zones, is no longer in operation. The separate phase initially observed in well S-3 and boring S-B has not been observed in any well after the excavation of the UST and it is not considered a potential source in this evaluation.

irrigation wells located west of site

ECOLOGICAL ASSESSMENT SUMMARY

Discuss potentially sensitive ecological receptors and habitat in the vicinity of site, if any.

No potentially sensitive ecological receptors have been identified on-site or in the immediate vicinity of the site.

EXECUTIVE SUMMARY DISCUSSION Continued

TIER 1 RBSL OR TIER 2 SSTL EVALUATION

COMPARISON TO SOURCE MEDIA CONCENTRATIONS

- **Worksheets 5.1 - 5.7, 6.1 - 6.3**

For complete pathways, compare representative source concentrations to applicable RBSL or SSTL values.

The maximum detected concentration of chemicals of concern (COCs) in site soils, and the maximum concentrations of COCs in site ground water averaged over the last four quarters of monitoring, are compared to Tier 1 RBSLs for residential receptors. The results of the comparisons indicate that Tier 1 RBSLs for:

- Ethylbenzene and xylenes are not exceeded for any potential exposure pathway.
- Benzene and toluene are not exceeded for volatilization from ground water to ambient air.
- Benzene are exceeded for the following pathways
  - Volatilization to outdoor air from subsurface soils,
  - Soil leachate to ground water for ingestion,
  - Volatilization and vapor intrusion to buildings from ground water,
  - Ingestion of ground water from a hypothetical well.
- Benzene and toluene are exceeded for vapor intrusion to buildings from subsurface soils.

QUALITATIVE UNCERTAINTY ASSESSMENT

- **Worksheets 4.2, 4.4, and 5.1 - 5.7**

Discuss uncertainty / conservatism of the site data and calculation methods used in deriving RBSL or SSTL values.

Comparison of site-specific parameters to the ASTM Tier 1 default values show that the Tier 1 values provide a conservative estimate of risk.

For the Tier 1 analyses, maximum detected concentrations of COCs in site soils and the concentrations in ground water for the last four quarters of monitoring, have been assumed to apply throughout the site and at the hypothetical well location, which is a very conservative assumption.

At Tier 1, the ground water pathway conservatively assumes an on-site receptor, which is in fact not currently the case.

PROPOSED CORRECTIVE ACTION

- **Worksheets 10.1 - 10.3**

Describe rationale for proposed action (i.e., no action, interim action, final action, or tier upgrade), considering site classification and land use. Discuss basis for remedy selection, if applicable.

Proposed action is Tier upgrade to Tier 2 to evaluate those potentially complete COC/pathway pairs for which onsite concentrations exceeded the conservative Tier 1 RBSLs

REFERENCE DOCUMENTS

- **Appendices**

List the document sources for the data cited in this report.

Enviros, Corrective Action Plan letter and addendum, April 17, 1995.
(all other referenced are cited in this document)

Site Name: **Former Shell Service Station, WIC #204-6852-1108** Date Completed: December 9, 1996

Site Location: **15275 Washington Avenue, San Leandro, California** Completed By: Weiss Associates

BASELINE EXPOSURE FLOWCHART

Instructions: ***To characterize baseline exposure conditions, check boxes to identify applicable primary sources, secondary sources (affected media), potential transport mechanisms, and current or potential exposure pathways and receptors (■ = applicable to site). Identify types(s) of both on-site and off-site receptors, if applicable. Provide detailed information on complete pathways, exposure factors, and risk goals on Worksheets 4.3 - 4.5.***

PRIMARY SOURCES	SECONDARY SOURCES	TRANSPORT MECHANISMS	EXPOSURE PATHWAY	POTENTIAL RECEPTORS	POTENTIALLY COMPLETE PATHWAY?
■ Product Storage ❑ Piping / Distribution ❑ Operations ❑ Waste Management Unit ❑ Other:	❑ Affected Surface Soils (≤3 ft depth)	❑ Wind Erosion and Atmospheric Dispersion	❑ Soil — Dermal Contact/ Ingestion	**Exposed Receptors** *On-Site:* ❑ Residential ❑ Non-Resid. ■ N/A; ❑ Sensitive Habitat ❑ Recreation *Off-Site:* ❑ Residential ❑ Non-Resid. ■ N/A; ❑ Sensitive Habitat ❑ Recreation	■ No ❑ Yes ○ Current ○ Future ■ No ❑ Yes ○ Current ○ Future
	■ Affected Subsurface Soils (> 3 ft depth)	■ Volatilization and Atmospheric Dispersion	■ Air — Inhalation of Vapor or Dust	**Exposed Persons** *On-Site:* ■ Residential ■ Non-Resid. ❑ N/A *Off-Site:* ■ Residential ❑ Non-Resid. ❑ N/A	❑ No ■ Yes ○ Current ● Future ❑ No ■ Yes ● Current ● Future
		■ Volatilization and Enclosed-Space Accumulation			
	■ Dissolved Groundwater Plume	■ Leaching and Groundwater Transport	■ Groundwater — Potable Water Use	**Groundwater Users** *On-Site:* ❑ Residential ■ Non-Resid. ❑ N/A *Off-Site:* ■ Residential ❑ Non-Resid. ❑ N/A	❑ No ■ Yes ○ Current ● Future ❑ No ■ Yes ○ Current ● Future
	❑ Free-Phase Liquid Plume	❑ Mobile Free-Liquid Migration			
	❑ Affected Surface Soils, Sediments, or Surface Water	❑ Stormwater/ Surface Water Transport	❑ Surface Water — Recreational Use / Sensitive Habitat	**Surface Water Users** *On-Site:* ❑ Residential ❑ Non-Resid. ■ N/A; ❑ Sensitive Habitat ❑ Recreation *Off-Site:* ❑ Residential ❑ Non-Resid. ■ N/A; ❑ Sensitive Habitat ❑ Recreation	■ No ❑ Yes ○ Current ○ Future ■ No ❑ Yes ○ Current ○ Future

(■ OR ● TO SELECT)

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RESIDENTIAL RECEPTORS: COMPARISON OF SITE CHARACTERIZATION DATA TO RBSLS

Medium	Exposure Pathway	Potentially Complete?	Benzene		Ethylbenzene		Toluene		Xylenes	
			RBSL [1]	Maximum Detected Concentration [2]	RBSL [3]	Maximum Detected Concentration [2]	RBSL [3]	Maximum Detected Concentration [2]	RBSL [3]	Maximum Detected Concentration [2]
Soil (mg/kg)	Volatilization to Outdoor Air	Yes	**0.79**	**31**	RES [4]	280	RES	170	RES	560
	Vapor Intrusion to Buildings	Yes	**0.015**	**31**	427	280	**20.6**	**170**	RES	560
	Surficial Soil (0-3 ft depth): Ingestion/Dermal/Inhalation	No	16.8	No Data	7,830	No Data	13,300	No Data	145,000	No Data
	Leachate to Ground Water for Ingestion	Yes	**0.05**	**31**	575	280	**129**	**170**	RES	560
Ground Water (mg/l)	Volatilization to Outdoor Air	Yes	31.9	0.86	>S [5]	1.5	>S	0.29	>S	5.9
	Vapor Intrusion to Buildings	Yes	**0.069**	**0.86**	77.5	1.5	32.8	0.29	>S	5.9
	Ingestion	Yes	**0.0085**	**0.86**	3.65	1.5	7.3	0.29	73.0	5.9

Notes:

(1) The target risk level used for benzene is a carcinogenic risk of 1 in 100,000 (10^{-5}) calculated by straight line interpretation from the 10^{-4} and 10^{-6} RBSLs listed in Table X2.1 of the ASTM guidelines (ASTM E#95-1739), and corrected for the California Department of Health Services' cancer slope factor. Maximum detected ground water concentrations are based on the average concentration of benzene observed in the last four quarters (October, 1995 to July, 1996)

(2) Maximum soil concentrations ever detected are used for this comparison. Maximum detected ground water concentrations are based on the average concentration observed in the last four quarters (July, 1995 to April, 1996)

(3) The target risk level used for non-carcinogenic constituents of concern is a chronic hazard quotient of 1.0.

(4) RES = Selected risk level is not exceeded for pure compound present at any concentration in soil.

(5) >S = At pure component solubility (mg/l), selected risk level is not exceeded.

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SITE DESCRIPTION

Location Description (see Figure 1)

Address: 15275 Washington Avenue

Cross-Street: Lewelling Boulevard

City: San Leandro

County: Alameda

State: California

Notes: Site is currently fenced and is unoccupied.

Regulatory Agencies

Identify regulatory authorities and regulatory / legal status of site.

1) Agency: Alameda County Department of Environmental Health

Contact: Mr. Scott O. Seery, CHMM

Agency: Regional Water Quality Control Board, San Francisco Bay Region

Contact: Mr. Kevin Graves

3) Other Involved Parties:

(■ *TO SELECT)* ❑ Consent order ❑ Lawsuit

Discussion:

Local Land Use (See Figure 2)

(■ *TO SELECT*)

On-Site Use	Current	Potential	Prior
Commercial	❑	■	■
Residential	❑	■	❑
Industrial	❑	❑	❑
Sensitive Habitat	❑	❑	❑
Other: (below)	■	❑	❑

No use of site property

Other Comments:

Discuss options for listed items (including anticipated future use)

The site is currently fenced in and there is no current use of the property. There is an active gasoline service station across the street.

Topography (See Figures 1 and 3)

Terrain ■ Flat ❑ Steep ❑ Variable

Site Elevation Interval (ft-MSL)

High Pt. 22.22 Low Pt. 19.99

Average Ground Surface Slope

Direction East Grade (ft/ft) 0.002

Other Comments:

The site is paved

Local Climate

Average Annual Rainfall (in): 21.36

Annual Average Evapotranspiration (in): 30 (pan.)

Within 100 Year Floodplain?: ❑ yes / ■ no

Summer Temperature Range (°F): 72.7-55.9

Winter Temperature Range (°F): 55.4-40.6

Other Comments:

Infiltration rates for this site are likely low due to a surface cap and high evapotranspiration rates.

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PAST RELEASES OR SOURCE AREAS

Time Period Begin	Time Period End	Instructions: *Describe potential sources and spill events, including location, type and estimated volume of materials stored or released, time and duration of release, and affected media (soil, groundwater, surface water, etc.). Discuss past corrective action efforts as appropriate.*
Aug 1985	1985	Four ground water monitoring wells were installed (S-1 through S-4). Dissolved TPH-G was detected in groundwater and monitoring well S-3 had 0.5 ft of separate phase hydrocarbons.
Aug 1986	1986	Four exploratory borings within the UST area were drilled. Boring S-B had 0.4 ft of separate phase hydrocarbons and was completed as a monitoring well. Product thickness was measured and bailed on a weekly basis. Approx. 60 gals FP recovered from boring S-B. from 9/85 – 9/87.
Jun 6, 1987	1987	Waste oil tank was replaced with a double-walled tank. Soils were overexcavated to a depth of 13 ft bgs and 2 to 4 ft beyond the former waste oil tank. Soils were stockpiled on-site. (back fill)
Jun 9, 1987	1987	Two 5,000-gallon, one 8,000-gallon and one 7,500-gallon USTs were removed. Soils to 10.5 ft depth were excavated. A total of 500 cubic yards of soil were stockpiled on-site. Overexcavation was limited due to a nearby sewer line. The soils were subsequently transported to and disposed at an appropriate Class III facility. An estimated 46.9 lbs of hydrocarbons were removed based on an average stockpile soil concentration of 37.5 ppm.
Dec, 1987	1987	Trenches in the former tank pit area were excavated to a depth of 8.5 ft. Approximately 200 cubic yards of soil were stockpiled on-site and subsequently transported and disposed of at a Class III facility. An estimated 1.8 lbs of hydrocarbons were removed based on an average stockpile soil concentration of 3.5 ppm Up to 10ppm benzene still present @ 10' BG at distance of 40' from UST cluster.

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SUMMARY OF CURRENT & COMPLETED SITE ACTIVITIES

Typical site activities to be recorded include: ● *Preliminary Site Assessment/Site Inspection* ● *Emergency Response* ● *Review Hazard Ranking System* ● *Risk/Exposure Assessment* ● *Remedy Selection* ● *Remedy Implementation*

Types of sampling & testing include: ● *Soil* ● *Groundwater* ● *Surface Water* ● *Vapors*

Date Completed	Description of Task	Sampling and Testing Conducted	Goal / Result / Product / Impact	Project Cost
Aug 1985	Four ground water monitoring wells (designated S-1 through S-4) were installed	Petroleum hydrocarbons.	Identify impact of release. 3,100 to 3,900 mg/kg TPH-G detected in soil samples. 0.52 to 32 ppm TPH-G in ground water from wells S-1, S-2 and S-4. Separate-phase hydrocarbons thickness of 0.5 ft was measured in well S-3.	
Aug 1986	Four exploratory borings (designated S-A through S-D) were drilled.	Petroleum hydrocarbons.	Boring S-A was drilled adjacent to waste oil tank. Soils contained no waste oil and up to 330 mg/kg TPH-G. Soil from borings S-B and S-C contained up to 1,700 mg/kg. Soil samples from boring S-D contained no TPH-G. Boring S-B was completed as a monitoring well and 0.4 ft of floating product was observed in this well. Subsequently, this well was measured and SPH was bailed on a weekly basis.	
Dec 1986	Well S-5 was installed.	Petroleum hydrocarbons.	7,800 ppb TPH-G and 380 ppb benzene were detected in ground water from this well.	
Feb 1987	1 mile well-survey.		Three former irrigation wells were located, one of which was abandoned.	
May 1987	Wells S-B, S-2 and S-4 were destroyed.		These wells were destroyed due to on-site construction.	
Jun 6 1987	Waste oil tank replaced with double-wall tank.	Petroleum hydrocarbons, volatile organic compounds and metals.	Soils were overexcavated to a depth of 13 ft bgs and 2 to 4 ft beyond the dimensions of the tank. Soil samples contained up to 280 mg/kg TPH-G, 14 mg/kg benzene, ND for total petroleum hydrocarbons as Diesel (TPH-D), 0.027 mg/L STLC lead, 22 mg/kg TTLC lead, 0.020 mg/kg Organic Lead, ND for VOCs	
Jun 9 1987	Four USTs were removed: two 5,000-gal tanks, one 8,000-gal, and one 7,500-gal tank.	UST Removal.	Ground water encountered at 10.5 ft bgs. Samples A through C contained less than 100 mg/kg TPH-G in soil. Sample D contained 910 mg/kg TPH-G. Due to nearby sewer line, overexcavation was limited. Approximately 500 cubic yards of soil were excavated. An estimated 46.9 lbs of hydrocarbons were removed based on an average stockpile soil concentraiton of 37.5 ppm. backfill	

Site Name: **Former Shell Service Station, WIC #204-6852-1108** Date Completed: December 9, 1996

Site Location: **15275 Washington Avenue, San Leandro, California** Completed By: Weiss Associates

SUMMARY OF CURRENT & COMPLETED SITE ACTIVITIES

Typical site activities to be recorded include: ● *Preliminary Site Assessment/Site Inspection* ● *Emergency Response* ● *Review Hazard Ranking System* ● *Risk/Exposure Assessment* ● *Remedy Selection* ● *Remedy Implementation*

Types of sampling & testing include: ● *Soil* ● *Groundwater* ● *Surface Water* ● *Vapors*

Date Completed	Description of Task	Sampling and Testing Conducted	Goal / Result / Product / Impact	Project Cost
Dec 1987	Exploratory trenches were excavated down to 8.5 ft bgs.	Petroleum hydrocarbons.	Approximately 200 cubic yards of soil was excavated. Concentrations ranged from 100 to 730 mg/kg for TPH-G and 3.9 to 10 mg/kg for benzene in soil. An estimated 1.8 lbs of hydrocarbons were removed based on an average stockpile soil concentration of 3.5 ppm.	
Nov 1988	Monitoring wells S-6 through S-12 were installed. A Soil Gas Survey (SVS) was performed.	Petroleum hydrocarbons.	Wells S-1 through S-12 contained concentrations ranging from 0.05 to 70 ppm (Well S-3) of TPH-G and up to 4.6 ppm (Well S-3) of benzene in ground water. Samples from the soil vapor survey ranged from 0.63 to 5,800 mg/L for TPH-G and 0.070 to 1,000 mg/L for benzene.	
Apr 1989	Wells S-13 through S-17 were installed. Additionally recovery well SR-1 was installed.	Petroleum hydrocarbons.	TPH-Gasoline was detected in ground water wells S-3, S-5, S-9, S-10, S-13, S-14, and S-16 at concentrations ranging from 0.15 to 47 ppm. Wells S-1, S-6, S-7, S-8, S-11, S-12, S-15, and S-17 contained no detectable levels of TPH-Gasoline. Benzene was detected in wells S-1, S-3, S-5, S-8, S-9, S-13, S-14, and S-16 at concentrations ranging from 0.0001 to 4.4 ppm.	
Mar 1990	Aquifer Testing was performed.		A variable discharge pump test in Well SR-1, and slug tests in Wells S-1, S-3, S-5, S-7, S-9, S-10, S-13, S-14, and S-16 were performed. Hydraulic conductivity values ranged from 7.3 to 100 ft/day.	
1991	Well S-18 was installed.		TPH-G, and benzene were not detected in a soil sample collected from S-18 at a depth of 4.5 ft bgs. Toluene was detected at a concentration of .06 ppm in this sample. TPH-G and BTEX compounds were not detected in the ground water sample collected from S-18.	
1993	Wells S-11 through S-15 were paved over by the city of San Leandro.		Wells were relocated and resurveyed.	
1995	A corrective action plan was submitted.			

Site Name: **Former Shell Service Station, WIC #204-6852-1108** Date Completed: December 9, 1996

Site Location: **15275 Washington Avenue, San Leandro, California** Completed By: Weiss Associates

SUMMARY OF CURRENT & COMPLETED SITE ACTIVITIES

Typical site activities to be recorded include: ● *Preliminary Site Assessment/Site Inspection* ● *Emergency Response* ● *Review Hazard Ranking System* ● *Risk/Exposure Assessment* ● *Remedy Selection* ● *Remedy Implementation*

Types of sampling & testing include: ● *Soil* ● *Groundwater* ● *Surface Water* ● *Vapors*

Date Completed	Description of Task	Sampling and Testing Conducted	Goal / Result / Product / Impact	Project Cost
1991 through 1996	Quarterly monitoring conducted.	Petroleum hydrocarbons	Monitor ground water concentrations in wells.	

Site Name: **Former Shell Service Station, WIC #204-6852-1108** Date Completed: November 6, 1996

Site Location: **15275 Washington Avenue, San Leandro, California** Completed By: Weiss Associates

SUMMARY OF POTENTIAL NEAR-TERM SITE ACTIVITIES (1-2 YRS.)

Typical site activities to be recorded include: ● *Preliminary Site Assessment/Site Inspection* ● *Emergency Response* ● *Review Hazard Ranking System* ● *Risk/Exposure Assessment* ● *Remedy Selection* ● *Remedy Implementation*

Types of sampling & testing include: ● *Soil* ● *Groundwater* ● *Surface Water* ● *Vapors*

Date Completed	Description of Task	Sampling and Testing Conducted	Goal / Result / Product / Impact	Project Cost
Planned for 1996	Ground water sampling in monitoring wells S-5, S-16 and SR-1.	E. Coli (total and fecal colifora), TDS, nitrate, chloride and PCE.	Collect infomration to determine potential impact from the sewer line and off-site PCE sources.	
Planned for 1996	A depth profiled soil vapor survey is planned. A Tier 2 Risk Based Corrective Action (RBCA) Evaluation is also planned.	Soil vapor for petroleum hydrocarbons.	Collect information to identify petroleum hydrocarbon distribution in soil vapor. Evaluate the risk associated with potential exposure pathways to COC concentrations remaining in soil and ground water at the site.	

Tier 2 preliminary field work

Site Name: **Former Shell Service Station, WIC #204-6852-1108** Date Completed: December 9, 1996

Site Location: **15275 Washington Avenue, San Leandro, California** Completed By: Weiss Associates *Page 1 of 1*

REGIONAL HYDROGEOLOGIC CONDITIONS

REGIONAL HYDROGEOLOGY (See Figure 6)

Instructions: ***Describe regional geologic framework through depth of principal regional aquifer and any other potentially impacted lithologic units. Identify principal formations and water-bearing units.***

Regional Stratigraphy Identify principal formations, soil or rock type, depth intervals, etc. Add horizontal lines to segregate units. Stratum Description:	FORMATION	DEPTH	AQUIFER	Principal Aquifers Identify principal water-bearing zones. Indicate aquifer use designation (if any), Inherent water quality (TDS, etc.), and potential yield ("low" = <1500 gpd/well; "medium" = 1500 to 15000 gpm/well; "high" = >15000 gpd/well)
(Ground Surface)				
yellow sand		2 - 8		
hard yellow clay		8 - 37		
sand and clay		37 - 60		
yellow sandy clay		60 - 69		
hard gravel		69 - 74		
brown clay		74 - 100		
dark clay		100 - 142		
blue clay		142 - 163		
sandy yellow clay		163 - 177		
blue clay		177 - 191		
yellow clay		191 - 206		
blue clay		206 - 245		
packed sand and gravel		245 - 249		
blue clay		249 - 253		
packed sand and gravel		253 - 255		
blue clay		255 - 260		
sand and gravel		260 - 267		
blue clay		267 - 281		
yellow clay		281 - 312		
yellow clay with embedded gravel		312 - 318		
gravel		318 - 321		
yellow clay with embedded gravel		321 - 341		
yellow clay		341 - 354		
yellow clay		354 - 374		
blue clay		374 - 414		
yellow clay		414 - 419		
yellow clay		419 - 490		
gravel and yellow clay		490 - 510		
yellow clay and gravel		510 - 524		

Regional Stratigraphy was determined from
1J1 at 14441 Washington Ave. (0 - 142 ft)
and
12H1 at 15100 Washington Ave. (142 - 560 ft).
Source: Alameda County Dept. of
Public Works

Site Name: **Former Shell Service Station, WIC #204-6852-1108** Date Completed: December 9, 1996

Site Location: **15275 Washington Avenue, San Leandro, California** Completed By: Weiss Associates

HYDROGEOLOGIC CONDITIONS

SITE HYDROGEOLOGY

A. UNSATURATED / VADOSE ZONE (See Figure 6)

Depth to first encountered water (ft.):	6 to 9 ft bgs.
* Unsaturated zone permeability:	N/A
Soil or rock type:	low permeability clays interbedded with discrete stringers of sand and silt
Soil affected by hydrocarbons (Y/N)?	Yes

Discussion: Water in the upper zone is most likely yielded from the discrete sandy interbeds and from silty horizons in the predominantly clay matrix.

B. WATER-BEARING UNITS (See Figures 5 and 6)

	First Encountered Water Unit	Primary Drinking Water Unit
Aquifer type (perched, confined, unconfined):	unconfined	Confined
Depth to groundwater (ft):	6 - 9 ft bgs	N/A
* Aquifer thickness (ft):	2 to 3 ft interbeds	N/A
* Seasonal/Historical water level fluctuations (± ft):	2 to 4	N/A
Gradient (ft/ft)/ and flow direction:	0.004 to south/southwest	N/A
Soil or rock type:	clays interbedded with stringers of sands and silts	N/A
* Maximum well yield (gpm/ft):	N/A	N/A
* Saturated hydraulic conductivity (ft/day):	7.3 to 100	N/A
* Hydraulic conductivity test method: (■ *TO SELECT*)	☐ grain size ■ slug test ■ pump test ☐ other (specify)	☐ grain size ☐ slug test ☐ pump test ☐ other (specify)

Discussion: There is no primary drinking water unit currently in use in this region of San Leandro. The nearest well field is in San Lorenzo which is not operational as drinking water is supplied from the San Leandro and Pardee Reservoirs.

* C. AQUITARD/CONFINING LAYER (if known)

	Below First Encountered Water Unit	Above Primary Drinking Water Unit
Depth below grade (ft):	20 -30	N/A
Thickness (ft):	10	N/A
Soil or rock type:	clay	N/A

Discussion: From the boring log of well SR-1, a sandy unit from 28 to 40.5 ft bgs is overlain by a 10-ft clay unit.

D. CURRENT GROUNDWATER QUALITY DATA (see Figure 7)

	First Encountered Water Unit	Primary Drinking Water Unit
Total dissolved solids: (mg/L)	Ave. 745	N/A
Observed groundwater quality impact (Y/N):	yes	N/A
Separate phase product present (Y/N)?:	no	N/A
Off-site sources (Y/N, Identify below):	yes	N/A

Discussion: Service station to the south of site across Lewelling Boulevard.

REFERENCE DOCUMENTS FOR SITE

Title	Author	Date Issued
Corrective Action Plan and Addendum (all other references are cited in this document)	Enviros	April, 1995

* Items not required for Tier 1 analysis.

Site Name: **Former Shell Service Station, WIC #204-6852-1108** Date Completed: December 9, 1996

Site Location: **15275 Washington Avenue, San Leandro, California** Completed By: Weiss Associates

BENEFICIAL USE SUMMARY

Instructions: ***The purpose of this worksheet is to identify existing and reasonable beneficial uses for land, groundwater, and surface water. These uses will help establish any existing or potential receptors.***

LAND USE (■ TO SELECT)

Site Land Use *(See Figures 1 and 3)*

	Current	Potential	Prior
Residential	❑	■	❑
Commercial	❑	■	■
Industrial	❑	■	❑
Sensitive Habitat	❑	❑	❑
Other: Not in use	■	❑	❑

Surrounding Land Use *(See Figure 2)*

	Current	Potential	Prior
Residential	■	■	■
Commercial	■	■	■
Industrial	❑	■	❑
Sensitive Habitat	❑	❑	❑
Other:	❑	❑	❑

Notes: *Discuss options for listed items (including anticipated future use).*

SURFACE AND GROUNDWATER USE

Surface Water Use *(See Figures 1 and 3)*

	Current	Potential
Recreational	❑	❑
Domestic/Municipal Supply	❑	❑
Industrial Process Supply	❑	❑
Sensitive Habitat	❑	❑
Commercial/Sport Fishing	❑	❑
None	❑	❑
Other: Not Applicable	■	■

First Encountered Groundwater *(See Worksheet 3.1, 3.2, & Figure 6)*

	Current	Potential
Domestic Supply	❑	■
Public/Municipal Supply	❑	❑
Industrial Process Supply	❑	❑
Freshwater Replenishment	❑	❑
None	■	❑
Other:	❑	❑

Notes: *Discuss options for listed items (including anticipated future use).* The closest surface water is San Lorenzo Creek, located 3/16 of a mile south of the site, and is not threatened based on the current plume delineation. The first encountered ground water is not used for any beneficial purposes. The use of shallow ground water for irrigation may be likely as irrigation wells have been installed in the site vicinity.

Current → Alameda County Flood Control and Water Conservation District, Zone 7 Water Agency, the local well permitting agency, requires a 50-ft well seal for municipal and industrial wells. Therefore, shallow ground water municipal or industrial use is unlikely.

POTENTIAL RECEPTOR SURVEY

Comments: ***Discuss type of utility (water, storm sewer, sanitary sewer, electrical, etc.). Discuss type of building construction (slab on grade, crawl space, basement). Listing of receptor is <u>not</u> necessary if not near source or if a deep water table is present. (Indicate N/A in table where appropriate). Discuss nearest and other receptors and indicate on Figure 1.***

	Name & Type:	Distance & Direction from Source Area:
Underground Utility Survey (Figure 1, 2, 3)		
Nearest Underground Utility	Sewer Line	Next to former southern USTs
Nearest Off-Site Underground Utility	~~N/A~~	
Nearest Downgradient Utility	Sewer Line	Next to former southern USTs
Building Survey (Figure 1, 2, 3)		
Nearest Building	Former service station building (currently unoccupied)	10 ft north of USTs
Nearest Inhabited Building	Mobile Home Park	30 ft west of USTs
Nearest Off-Site Inhabited Building	Mobile Home Park	
Surface Water Hydrology		
Nearest Surface Water	San Lorenzo Creek	3/16 mile southwest of site
Nearest Downgradient Surface Water	San Lorenzo Creek	3/16 mile southwest of site

Notes:

Site Name: **Former Shell Service Station, WIC #204-6852-1108** Date Completed: December 9, 1996

Site Location: **15275 Washington Avenue, San Leandro, California** Completed By: Weiss Associates *Page 1 of 1*

WELL INVENTORY SURVEY

SUMMARY OF WELLS WITHIN 0.5 MILE RADIUS OF SITE

See Figure 1 for the well inventory survey within a 0.5 mile radius of the site.

Well Type	Radial Distance		Downgradient Direction		
	Total No.	Active No.	Total No.	Active No.	No. Screened in Potentially Impacted Aquifer
Public/Municipal	1	0	0	0	0
Industrial	0	0	0	0	0
Domestic	3	3	0	0	0
Agricultural*	46	46	3	2	0

*The wells are used for irrigation purposes. Three downgradient wells are 12J3, 12K1 and 12K4. Well 12K4 is abandoned. The two active wells are completed at depths more than 100 ft.

POTENTIAL RECEPTOR POINTS

	Closest Downgradient Supply Well (1)	Closest Downgradient Drinking Water Well (2)	Closest Actual Down-gradient Receptor (3)	Closest Reasonable Potential Well (4)
Well No. or Designation:	15325 Washington Ave. 12J3	No drinking water wells are located within 0.5 mile.	No drinking water wells are located within 0.5 mile.	At the downgradient property line
Distance from Site (ft):	1/8 mile	N/A	N/A	onsite
Total Well Depth (ft):	130	N/A	N/A	N/A
Current Use of Water:	irrigation	N/A	N/A	N/A
Screened Interval below Ground Surface (ft):	N/A	N/A	N/A	N/A
Seal Interval below Ground Surface (ft):	N/A	N/A	N/A	N/A
Year Constructed:	1920	N/A	N/A	N/A
Water Use Classification (see Worksheet 3.3):	Irrigation	N/A	N/A	N/A

Information Sources: The closest domestic supply wells are the EBMUD wells in the San Lorenzo well field which are no longer active and more than 0.5 miles from the site.

Alameda County Flood Control and Water Conservation District, Zone 7 Water Agency, the local well permitting agency, requires a 50-ft well seal for municipal and industrial wells. Therefore, shallow ground water municipal or industrial use is unlikely.

Notes:

1. *Supply Well: Any water supply well (drinking water, agricultural, industrial, etc.), which has not been abandoned and is completed through any lithologic unit that could be potentially impacted.*
2. *Drinking Water Well: Municipal or residential drinking water supply completed in any lithologic unit.*
3. *Actual Receptor: Municipal or residential drinking water supply well completed in same lithologic unit in which plume is migrating.*
4. *Potential Well: Closest reasonable placement for the future location of an off-site well.*

Site Name: **Former Shell Service Station, WIC #204-6852-1108** Date Completed: December 9, 1996

Site Location: **15275 Washington Avenue, San Leandro, California** Completed By: Weiss Associates *Page 1 of 1*

ECOLOGICAL ASSESSMENT SUMMARY

QUALITATIVE ECOLOGICAL IMPACT ASSESSMENT (■ TO SELECT)

Visual Site Inspection

Date Conducted: August 1996 By: Weiss Associates

Observed Impacts Associated with Site

On-site vegetation	■ none	❑ limited	❑ extensive
Off-site vegetation	■ none	❑ limited	❑ extensive
On-site mammals, birds, fish, etc.	■ none	❑ suspected	❑ observed
Off-site mammals, birds, fish, etc.	■ none	❑ suspected	❑ observed
Other impacts	■ none	❑ yes (explain below)	

Discussion:

The site is located in an urban area near Interstate 880.

HABITAT CHARACTERIZATION

Presence of Sensitive Habitat

Site located within or impacts a sensitive or protected habitat? ■ no ❑ yes (explain below)

Description of Sensitive Habitat

Name:

Location:

Habitat Type:	❑ Aquatic	❑ Wetland	❑ Riparian	❑ Upland
Habitat Condition:	❑ Pristine	❑ Highly Altered	❑ Early Recovery	❑ Late Recovery

Discussion: *Provide other information relative to habitat characterization including regulatory authority, basis for protection, etc.*

To the best of WA's knowledge, no sensitive habitat is located in the vicinity of the site.

ECOLOGICAL RECEPTORS

Presence of Impacted Ecological Receptors

Site conditions have impacted sensitive ecological receptors, either on-site or off-site? ■ no ❑ yes (explain below)

List of Affected Receptors

Threatened or Endangered Species	Economically/Sport Significant Species

ECOLOGICAL ASSESSMENT SUMMARY AND RECOMMENDED ACTION

Observed or Potential Impacts	--	Recommended Action
■ None observed or anticipated	--	No action required
❑ Potential for significant impact	--	Further study required (describe below)
❑ Significant impact observed	--	Further study and/or remedial action required (describe below)

Site Name: **Former Shell Service Station, WIC #204-6852-1108** Date Completed: December 9, 1996

Site Location: **15275 Washington Avenue, San Leandro, California** Completed By: Weiss Associates

RBCA SITE CLASSIFICATION SUMMARY

Instructions: ***Determine RBCA Site Classification using site classification flowcharts provided in Tier 1 RBCA Guidance Manual, as follows:***

Evaluate available information on site soils, vapors, groundwater, surface water, and miscellaneous impacts using the corresponding flowcharts. Record two-digit site classification number for each medium.

Compare numerical values from individual media to identify critical site classification(s) (i.e., lowest values).

Record critical site classification scenario and initial response action in space provided. If there is more than one number within the lowest classification group (e.g., Class 2), record both (e.g., 2.1, 2.3).

As site evaluation progresses, update site classification as appropriate by repeating Steps 1 - 3, based upon additional site data or completion of corrective measure.

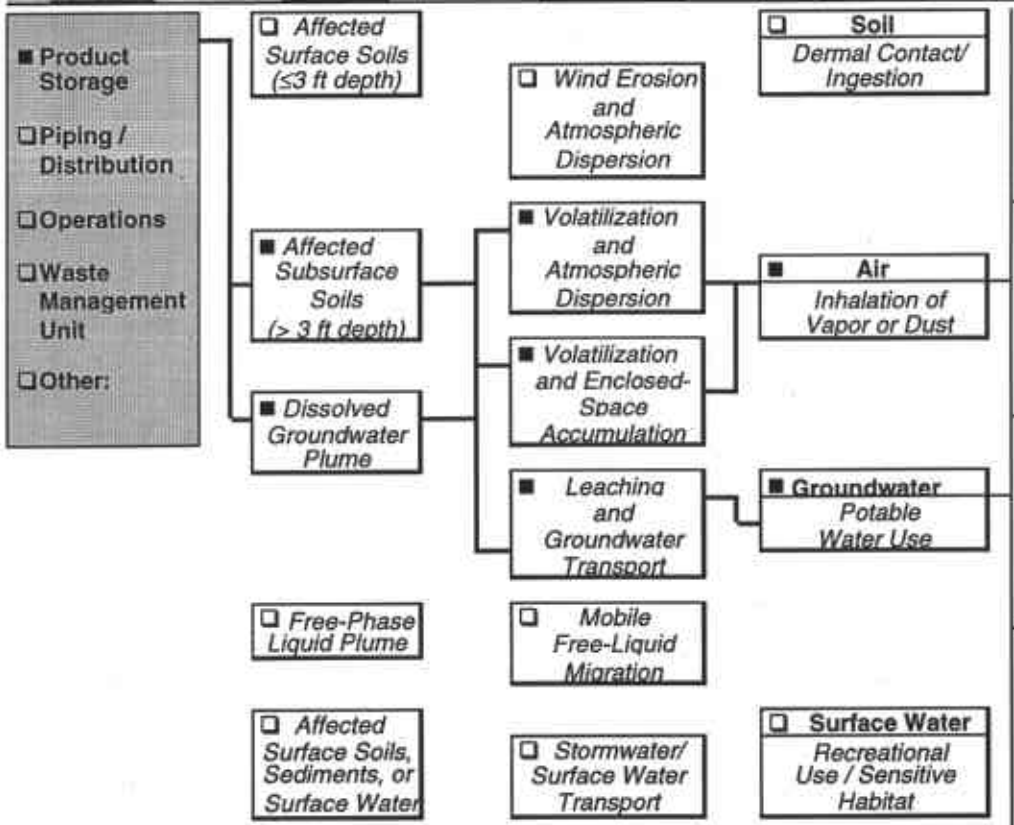
SITE STATUS		MEDIUM-SPECIFIC CLASSIFICATION VALUES					CRITICAL CLASSIFICATION(S)	
Date	Status Description	Soil	Ground-water	Vapor	Surface Water	Misc.	Classification No. and Scenario	Prescribed Initial Response
INITIAL CLASSIFICATION:								
Aug 1996	Shallow soils and ground water impacted.	3	3	3	4	4	3. Potential for vapor migration, possible long-term threat to human or beneficial ground water use. 4. No potential threat to human health or beneficial ground water use.	Continue ground water monitoring, prepare workplan to collect soil vapor data. Perform Tier 2 evaluation No futher action.
REVISED CLASSIFICATION:								
Nov 1996	COC concentrations in soil and ground water exceed Tier 1 RBSLs.	3	3	3	4	4	3. Potential for vapor migration, possible long-term threat to human or beneficial ground water use. 4. No potential threat to human health or beneficial ground water use.	Continue ground water monitoring, prepare workplan to collect soil vapor data. Perform Tier 2 evaluation No further action.

Site Name: **Former Shell Service Station, WIC #204-6852-1108** Date Completed: December 9, 1996

Site Location: **15275 Washington Avenue, San Leandro, California** Completed By: Weiss Associates

BASELINE EXPOSURE FLOWCHART

Instructions: *To characterize baseline exposure conditions, check boxes to identify applicable primary sources, secondary sources (affected media), potential transport mechanisms, and current or potential exposure pathways and receptors (■ = applicable to site). Identify types(s) of both on-site and off-site receptors, if applicable. Provide detailed information on complete pathways, exposure factors, and risk goals on Worksheets 4.3 - 4.5.*



POTENTIAL RECEPTORS		POTENTIALLY COMPLETE PATHWAY?	
Exposed Receptors			
On-Site	❑ Residential ❑ Non-Resid. ■ N/A ❑ Sensitive Habitat ❑ Recreation	■ No ❑ Yes	○ Current ○ Future
Off-Site:	❑ Residential ❑ Non-Resid. ■ N/A ❑ Sensitive Habitat ❑ Recreation	■ No ❑ Yes	○ Current ○ Future
Exposed Persons			
On-Site:	■ Residential ■ Non-Resid. ❑ N/A	❑ No ■ Yes	○ Current ● Future
Off-Site:	■ Residential ❑ Non-Resid. ❑ N/A	❑ No ■ Yes	● Current ● Future
Groundwater Users			
On-Site:	❑ Residential ■ Non-Resid. ❑ N/A	❑ No ■ Yes	○ Current ● Future
Off-Site:	■ Residential ❑ Non-Resid. ❑ N/A	❑ No ■ Yes	○ Current ● Future
Surface Water Users			
On-Site:	❑ Residential ❑ Non-Resid. ■ N/A ❑ Sensitive Habitat ❑ Recreation	■ No ❑ Yes	○ Current ○ Future
Off-Site:	❑ Residential ❑ Non-Resid. ■ N/A ❑ Sensitive Habitat ❑ Recreation	■ No ❑ Yes	○ Current ○ Future

(■ OR ● TO SELECT)

Site Name: **Former Shell Service Station, WIC #204-6852-1108** Date Completed: December 9, 1996

Site Location: **15275 Washington Avenue, San Leandro, California** Completed By: Weiss Associates *Page 1 of 1*

EXPOSURE FACTOR CHECKLIST

Instructions: • ***Tier 1 Evaluation:*** *Indicate use of either residential or commercial / industrial Reasonable Maximum Exposure (RME) factors at on-site points of exposure (POEs) for complete exposure pathways.* • ***Tier 2 Evaluation:*** *Indicate use of either a Reasonable Maximum Exposure (RME) factor or a site-specific exposure factor for both residential and commercial / industrial points of exposure (POEs), as appropriate for each exposure pathway. For Tier 2, data is required for Global Factors and for complete pathways only (see Worksheet 4.4).*

Tier 1

	RESIDENTIAL POE		COMMERCIAL/ INDUSTRIAL POE	
	RME	Site-Specific	RME	Site-Specific
GLOBAL FACTORS	■ TO SELECT			
AT_c Averaging time for carcinogens	■ 70 yrs	❑	❑ 70 yrs	❑
Averaging time for non-carcinogens	■ = ED	❑	❑ = ED	❑
BW Body weight -Adult	■ 70 kg	❑	❑ 70 kg	❑
-Child (1-6 yrs)	■ 15 kg	❑	❑ NA	❑
ED Exposure duration	■ 30 yrs	❑	❑ 25 yrs	❑
AIR EXPOSURE FACTORS	■ COMPLETE (provide data)		❑ NOT COMPLETE (skip)	
EF Exposure frequency (inhalation)	■ 350 dy/yr	❑	❑ 250 dy/yr	❑
IR_{ai} Daily indoor inhalation rate	■ 15 m^3/dy (24-hr/dy)	❑	❑ 20 m^3/dy (8-hr/dy)	❑
IR_{ao} Daily outdoor inhalation rate	■ 20 m^3/dy (24-hr/dy)	❑	❑ 20 m^3/dy (8-hr/dy)	❑
POTABLE WATER USE EXPOSURE FACTORS	■ COMPLETE (provide data)		❑ NOT COMPLETE (skip)	
EF Exposure frequency (ingestion/showering)	■ 350 dy/yr	❑	❑ 250 dy/yr	❑
IR_w Daily water ingestion rate	■ 2 L/dy (24-hr/dy)	❑	❑ 1 L/dy (8-hr/dy)	❑
EP_{sh} Exposure period (showering)	■ 12 min/dy	❑	❑ 12 min/day	❑
SA_w Skin surface area (showering) -Adult (70 kg)	■ 0.86 m^2	❑	❑ 0.86 m^2	❑
SOIL EXPOSURE FACTORS	❑ COMPLETE (provide data)		■ NOT COMPLETE (skip)	
EF Exposure Frequency -Dermal Contact	❑ 350 dy/yr	❑	❑ 40 dy/yr	❑
-Soil ingestion	❑ 350 dy/yr	❑	❑ 250 dy/yr	❑
SA_s Skin surface area (soil contact) -Adult (18 to 31 yrs, 70 kg)	❑ 0.58 m^2	❑	❑ 0.58 m^2	❑
-Child (1 - 17 yrs, 35 kg)	❑ 0.20 m^2	❑	❑ NA	❑
M Soil to skin adherance factor	❑ 1.0 mg/cm^2	❑	❑ 1.0 mg/cm^2	❑
IR_s Soil ingestion rate - Age-adjusted average	❑ 114 mg-yr /kg-dy	❑	❑ NA	❑
-Adult (7 to 31 yrs, 70 kg)	❑ 100 mg/dy (24-hr/dy)	❑	❑ 50 mg/dy (8-hr/dy)	❑
-Child (1 - 6 yrs, 15 kg)	❑ 200 mg/dy (24-hr/dy)	❑	❑ NA	❑
SURFACE WATER EXPOSURE FACTORS	❑ COMPLETE (provide data)		■ NOT COMPLETE (skip)	
EF Exposure Frequency -Fish consumption	❑ 350 dy/yr	❑	❑ NA	❑
-Swimming	❑ 7 dy/yr	❑	❑ NA	❑
IR_f Daily fish intake rate -Freshwater	❑ 10 g/dy	❑	❑ NA	❑
-Saltwater	❑ 15 g/dy	❑	❑ NA	❑
SA_w Skin surface area (swimming) -Adult (70 kg)	❑ 0.86 m^2	❑	❑ NA	❑
EP_{sw} Exposure period (swimming)	❑ 2.6 hrs/dy	❑	❑ NA	❑

Site Name: **Former Shell Service Station, WIC #204-6852-1108** Date Completed: December 9, 1996

Site Location: **15275 Washington Avenue, San Leandro, California** Completed By: Weiss Associates

SITE PARAMETER CHECKLIST FOR RISK-BASED SCREENING LEVELS

Instructions: ***For Tier 1 evaluation (generic screening levels), review specified default parameters (*) to ensure values are conservative for site. For Tier 2 Option 1 SSTL calculation (site-specific screening levels), provide site-specific values for sensitive parameters (§). Indicate parameter value used in evaluation by completing check box (■).***

Note: *** Confirm conservatism of these values for Tier 1 evaluation.**

§ Provide site-specific measurement or estimate for Tier 2 evaluation.

		Default Value Used	Site-Specific Value Used	
Soil Parameters				
	soil type	■ sandy soil	❑ _____	*§
Θ_T	Soil porosity	■ 0.38 (dim) Sand	❑ _____	§
Θ_{ws}	water content - vadose zone	■ 0.12 (dim)	❑ _____	§
Θ_{as}	air content - vadose zone (= Θ_T - Θ_{ws})	■ 0.26 (dim)	❑ _____	
Θ_{wcap}	water content - capillary fringe	■ 0.342 (dim)	❑ _____	
Θ_{acap}	air content - capillary fringe (= Θ_T - Θ_{wcap})	■ 0.038 (dim)	❑ _____	
ρ_s	Soil density	■ 1.7 g/cm^3 Sand	❑ _____	§
foc	mass fraction of organic carbon in soil	■ 0.01 (dim)	❑ _____	§
Ls	Depth to contaminated soil	■ 100 cm = 3.2'	❑ _____	§
Lgw	Depth to groundwater	■ 300 cm	❑ _____	§
h_{cap}	capillary zone thickness	■ 5 cm	❑ _____	
hv	vadose zone thickness (= Lgw - hc)	■ 295 cm = 9.7'	❑ _____	
pH	Soil/water pH	■ 6.5	❑ _____	
Groundwater Parameters				
I	Water infiltration rate	■ 30 cm/yr	❑ _____	§
V_{gw}	groundwater velocity	■ 82.0 ft/yr	❑ _____	*§
δ_{gw}	groundwater mixing zone depth	■ 200 cm	❑ _____	*§
DF	aquifer dilution factor (= 1 + V_{gw} δ_{gw}/ (IW))	■ 12.1	❑ _____	
Surface Parameters				
U_{air}	Amb. air velocity in mixing zone	■ 225 cm/s	❑ _____	*§
δ_{air}	Mixing zone height	■ 200 cm	❑ _____	*§
A	Contaminated Area	■ 2250000 cm^2	❑ _____	
W	Width of Contaminated Area	■ 1500 cm	❑ _____	§
d	Thickness of Surficial Soils	■ 100 cm	❑ _____	§
Pe	Particulate areal emission rate	■ 2.17E-10 g/cm^2-s	❑ _____	§
Building Parameters				
L_{crack}	Foundation crack thickness	■ 15 cm	❑ _____	
η	Foundation crack fraction	■ 0.01 (dim)	❑ _____	
Lb_r	Building Volume/Foundation Area Ratio (res.)	■ 200 cm	❑ _____	
Lb_c	Building Volume/Foundation Area Ratio (com./ind.)	■ 300 cm	❑ _____	
ER_r	Building vapor volume exchange rate (res.)	■ 12 dy^{-1}	❑ _____	
ER_c	Building vapor volume exchange rate (com./ind.)	■ 20 dy^{-1}	❑ _____	

Discussion: *Provide rationale for default parameter revision; discuss additional site-specific features of note; etc.*

(continue on next page if needed)

Site Name: **Former Shell Service Station, WIC #204-6852-1108** Date Completed: December 9, 1996

Site Location: **15275 Washington Avenue, San Leandro, California** Completed By: Weiss Associates *Page 1 of 1*

SUMMARY OF MEDIA INVESTIGATION & CHEMICAL ANALYSES

		Site Media Analyzed (■ TO SELECT)					
		Ground - water	Surface Soil	Subsurf. Soil	Soil Vapor	Ambient Vapor	Surface Water
	Applicable?	■	☐	■	■	☐	☐
	Sampled?	■	☐	■	■	☐	☐
Chemical Analysis	**EPA Analysis Method**	•ana. = chemical analyzed; •det. = chemical detected					
Organic Chemicals		ana./det.	ana./det.	ana./det.	ana./det.	ana./det.	ana./det.
Volatile Organics	*8240 / 624*	■ ■	☐ ☐	■ ■	☐ ☐	☐ ☐	☐ ☐
Semi-Volatile Organics	*8270 / 625*	☐ ☐	☐ ☐	☐ ☐	☐ ☐	☐ ☐	☐ ☐
Polynuclear Aromatic Hydrocarbons	*8310 / 8270*	☐ ☐	☐ ☐	☐ ☐	☐ ☐	☐ ☐	☐ ☐
Purgeable Aromatics	*8020 / 602*	■ ■	☐ ☐	■ ■	■ ■	☐ ☐	☐ ☐
Total Petroleum Hydrocarbons (GC)	*8015G / 8015D*	■ ■	☐ ☐	■ ■	■ ■	☐ ☐	☐ ☐
Halogenated Organic Chemicals		ana./det.	ana./det.	ana./det.	ana./det.	ana./det.	ana./det.
Halogenated Volatile Organics	*8010 / 601*	☐ ☐	☐ ☐	☐ ☐	☐ ☐	☐ ☐	☐ ☐
Organochlorine & PCBs	*8080*	☐ ☐	☐ ☐	☐ ☐	☐ ☐	☐ ☐	☐ ☐
Inorganic Chemicals		ana./det.	ana./det.	ana./det.	ana./det.	ana./det.	ana./det.
Metals (Lead)	*6010 / 7xxx series*	■ ■	☐ ☐	■ ■	☐ ☐	☐ ☐	☐ ☐
Others		ana./det.	ana./det.	ana./det.	ana./det.	ana./det.	ana./det.
• Organic Lead		■ ■	☐ ☐	■ ■	☐ ☐	☐ ☐	☐ ☐
• Total Oil and Grease		☐ ☐	☐ ☐	■ ■	☐ ☐	☐ ☐	☐ ☐
•		☐ ☐	☐ ☐	☐ ☐	☐ ☐	☐ ☐	☐ ☐
•		☐ ☐	☐ ☐	☐ ☐	☐ ☐	☐ ☐	☐ ☐

DISCUSSION OF MEDIA INVESTIGATION & CHEMICAL ANALYSES

Items for discussion include: •Selection of sampled media •Selected analysis methods •Planned additional sampling

Items	
Soil	Soil samples from the waste oil tank area, the former UST area and from soil borings were analyzed for the COCs listed above. and GW (1989)
Soil Vapor	Soil vapor samples were collected to define the extent of the source area in soils. A soil vapor profile survey is planned to assess the potential exposure due to vapors migrating to ground surface from soil and ground water beneath the site.
Ground Water	Ground water monitoring has been conducted at the site since 1989 to determine the extent and migration of of the hydrocarbon-impacted ground water
Surface Soils	Surface soil samples will be collected to determine any impact to surface soils.

Site Name: **Former Shell Service Station, WIC #204-6852-1108** Date Completed: December 9, 1996

Site Location: **15275 Washington Avenue, San Leandro, California** Completed By: Weiss Associates

SUMMARY OF SOURCE ZONE CHARACTERISTICS

Instructions: ***Provide information regarding presence and dimensions of affected soil and groundwater zones. For each affected medium, list constituents of concern (COCs) and representative concentration data on Worksheets 5.4 - 5.6. Describe source area histories on Worksheets 2.2 and 2.3 and show locations on Figures 3 through 7. (Under RBCA, the affected soil or groundwater zone is defined as the area or volume containing COC concentrations in excess of Tier 1 screening levels.)***

AFFECTED SURFACE SOILS (≤ 3 ft BGS) (■ TO SELECT)

- ☐ Present
- ☐ Not Present
- ■ Not Measured

If present, complete the following:

- Maximum areal extent (ft^2):
- Width of affected zone (ft):
- Length of affected zone (ft) :
- Depth interval (ft,BGS):

(Provide COC data on Worksheet 5.4)

Surface soil samples will be collected and analyzed for evaluation.

AFFECTED SUBSURFACE SOILS (> 3 ft BGS)

- ■ Present
- ☐ Not Present
- ☐ Not Measured

If present, complete the following:

- Depth to top of affected soil (ft) (min. 3 ft, BGS): 4
- Depth to base of affected soil (ft, BGS): 10
- Maximum areal extent (ft^2): 28,800 (approx. 240 x 120 ft)

(Provide COC data on Worksheet 5.5)

The maximum areal extent of the impacted soils was conservatively determined by the area enclosed by Wells S-9, S-10, S-11, S-12, S-15 and S-16. The area that encloses the western product island, the former waste oil tank and the former USTs is about 6,400 ft^2 (80 x 80 ft)

AFFECTED GROUNDWATER

- ■ Present
- ☐ Not Present
- ☐ Not Measured

If present, complete the following:

- Maximum areal extent (ft^2): 57,600 *(approx. 240 x 240 ft)*
- Length of plume (ft): 240
- Width of plume (ft): 240
- Depth to top of affected water-bearing unit (ft, BGS): 10
- Depth to base of plume (ft, BGS): 16

(Provide COC data on Worksheet 5.6)

The maximum areal extent of the impacted ground water was conservatively determined by the area enclosed by Wells S-11, S-12, S-13, S-15, S-16, S-17, and S-18 which define the ND line in the ground water flow direction. Average depth to ground water is 10 ft and soil samples from Wells S-8 and SR-1 indicate ND levels of COC concentrations below 16 ft bgs.

OTHER SOURCE MEDIUM

- ☐ Present
- ■ Not Present

If present, describe nature of material and dimensions:

(Provide COC data on separate table)

Site Name: **Former Shell Service Station, WIC #204-6852-1108** Date Completed: December 9, 1996

Site Location: **15275 Washington Avenue, San Leandro, California** Completed By: Weiss Associates

SUBSURFACE SOIL CONCENTRATION DATA SUMMARY (>3 FT BGS)

Source of Data: Enviros, Corrective Action Plan Letter, April 1995; EMCON, August 1985, September 1986, January 1987; Gettler-Ryan, April 1989, June 1991 reports.

Sample ID or Sample Set Used: Soil samples from all wells except S-1 and S-5 (no samples were taken during installation) and tank excavations were used.

Worse Case Depth to Max. Impact: 10 ft

Sample Date: Listed in individual reports.

CONSTITUENTS DETECTED		ANALYTICAL METHOD		SAMPLE POPULATION		DETECTED CONCENTRATIONS			SELECTED REPRESENTATIVE CONC. (mg/kg)
CAS No.	Name	Method No.	Typical Detection Limit (mg/kg	No. of Samples	No. of Detects	Max Conc. (mg/kg)	Mean Conc. (mg/kg)	Upper 90%-CL Conc. (mg/kg)	
71-43-2	Benzene	8020	0.005	29	16	31	3.9	NC	31
108-88-3	Toluene	8020	0.005	29	10	170	19.3	NC	170
100-41-4	Ethybenzene	8020	0.005	29	13	280[1]	47.3	NC	280
1330-20-7	Xylenes	8020	0.005	29	15	560[1]	119.0	NC	560

(1) Ethylbenzene and xylene concentrations in Wells S-3 and S-4 (source area wells) were reported as one total. Each specific COC concentration was divided using a ratio of 1 to 2 based on concentrations in soil from wells S-6 and S-8 at similar depths.
NC = Not Calculated

All "max" values are these correct?

Site Name: **Former Shell Service Station, WIC #204-6852-1108** Date Completed: December 9, 1996

Site Location: **15275 Washington Avenue, San Leandro, California** Completed By: Weiss Associates

GROUNDWATER CONCENTRATION DATA SUMMARY

Source of Data: Enviros, 2nd quarter 1996 report, June 10, 1996.

Sample ID or Sample Set Used: Most recent four quarters (July, 1995 to April, 1996), maximum impact in wells S-3, S-5, and S-9

Worse Case Depth to Max. Impact 16 ft

Sample Date: July 28, 1995; October 17, 1995; January 11, 1996; April 2, 1996.

CONSTITUENTS DETECTED		ANALYTICAL METHOD		SAMPLE POPULATION		DETECTED CONCENTRATIONS			SELECTED REPRESENTATIVE CONC. (mg/L)
CAS No.	Name	Method No.	Typical Detection Limit (mg/l	No. of Samples	No. of Detects	Max Conc.* (mg/L)	Mean Conc. (mg/L)	Upper 95%CI Conc. (mg/L)	
71-43-2	Benzene	8020	0.0005	39	24	1.3 ~~0.86~~	0.22	NC	1.3 ~~0.86~~
108-88-3	Toluene	8020	0.0005	39	15	0.29	0.07	NC	0.29
100-41-4	Ethybenzene	8020	0.0005	39	19	1.7 ~~1.5~~	0.48	NC	1.7 ~~1.5~~
1330-20-7	Xylenes	8020	0.0005	39	19	9.5 ~~5.8~~	1.39	NC	9.5 ~~5.8~~

Maximum concentrations are based on the higest concentration observed in a well when concentrations in the well are averaged over the last four quarters.

NC = Not Calculated

revised max conc

well	conc	date	analyte
S-9	1.3	4/96	B
S-3	0.29	1/96	T
S-5	1.7	7/95	E
S-5	9.5	1/96	X

Site Name: **Former Shell Service Station, WIC #204-6852-1108** Date Completed: December 9, 1996

Site Location: **15275 Washington Avenue, San Leandro, California** Completed By: Weiss Associates

TIER 1 RBSL EVALUATION: SUBSURFACE SOIL (> 3 FT BGS)

Tier 1 Target Risk Limits:
SCENARIO: Residential
TR = 10^{-5} Individual Constituent
HQ = 1.0 Individual Constituent

Instructions: *Specify target risk limits upon which Tier 1 risk-based screening levels (RBSLs) are based. Identify complete exposure pathways for site (■ = complete). Record site sample measurements for constituents of concern (COCs) and corresponding RBSL values for complete pathways. Identify minimum RBSL value for each COC. Note whether site concentration exceeds minimum RBSL value.*

CONSTITUENTS OF CONCERN			MAX. CONC.	RBSL RESULTS FOR POTENTIALLY COMPLETE EXPOSURE PATHWAYS (■ IF COMPLETE)					
				■ Leaching to Grdwtr.	☐ Leaching to GW MCL	■ Vol. to Amb. Air.	■ Vol. to Indoor Air	Minimum RBSL Value	RBSL Exceeded?
Sample ID (optional)	CAS No.	Name	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	■ If yes
	71-43-2	Benzene	31	0.05	N/A	0.79	0.015	0.05	■
	108-88-3	Toluene	170	129	N/A	RES	20.6	20.6	■
	100-41-4	Ethylbenzene	280	575	N/A	RES	427	427	☐
	1330-20-7	Xylenes	560	RES	N/A	RES	RES	RES	☐
									☐
									☐
									☐
									☐
									☐
									☐
									☐
									☐
									☐

Note: TR = Target risk limit for excess lifetime carcinogenic risk.
HQ = Hazard quotient for individual constituent non-carcinogenic effects.
MCL = Drinking Water Maximum Contaminant Level, if applicable.
RES = Selected risk level not exceeded for pur compound present at any concentration in soil.

Site Name: **Former Shell Service Station, WIC #204-6852-1108** Date Completed: December 9, 1996

Site Location: **15275 Washington Avenue, San Leandro, California** Completed By: Weiss Associates

TIER 1 RBSL EVALUATION: GROUNDWATER

Tier 1 Target Risk Limits:
SCENARIO: Residential
TR = 10^{-5} Individual Constituent
HQ = 1.0 Individual Constituent

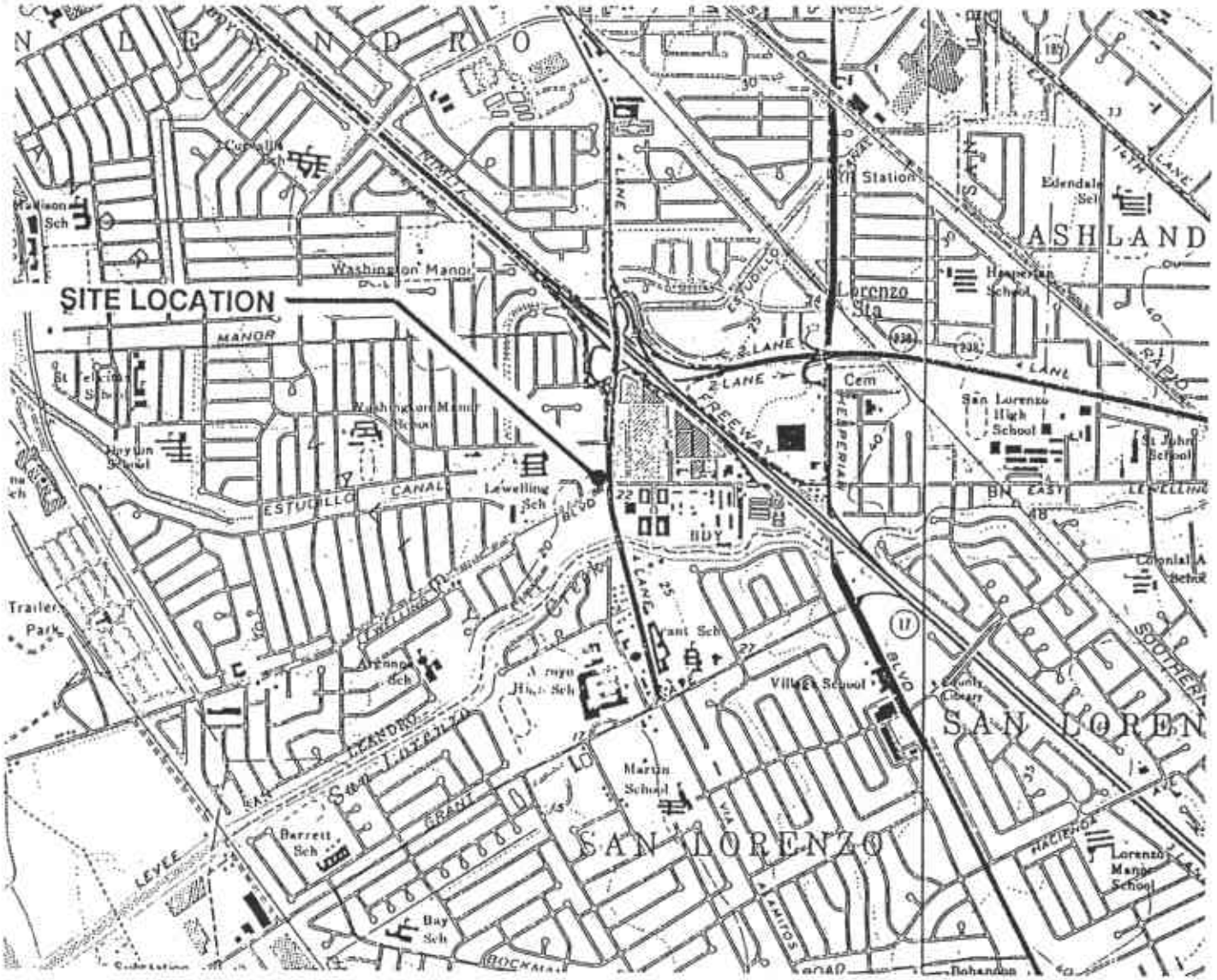
Instructions: *Specify target risk limits upon which Tier 1 risk-based screening levels (RBSLs) are based. Identify complete exposure pathways for site (■ = complete). Record site sample measurements for constituents of concern (COCs) and corresponding RBSL values for complete pathways. Identify minimum RBSL value for each COC. Note whether site concentration exceeds minimum RBSL value.*

CONSTITUENTS OF CONCERN			REP. CONC.	RBSL RESULTS FOR POTENTIALLY COMPLETE EXPOSURE PATHWAYS (■ IF COMPLETE)					
Sample ID (optional)	CAS No.	Name	(mg/L)	■ Grdwtr. Ingestion (mg/L)	☐ GW MCL Limit (mg/L)	■ Vol. to Amb. Air (mg/L)	■ Vol. to Indoor Air (mg/L)	Minimum RBSL Value (mg/L)	RBSL Exceeded? ■ If yes
	71-43-2	Benzene	~~0.86~~ 1.3	0.0085	N/A	31.9	0.069	0.0085	■
	108-88-3	Toluene	0.29	7.3	N/A	>S	32.8	7.3	☐
	100-41-4	Ethylbenzene	~~1.5~~ 1.7	3.65	N/A	>S	77.5	3.65	☐
	1330-20-7	Xylenes	~~5.8~~ 9.8	73.0	N/A	>S	>S	73.0	☐
									☐
									☐
									☐
									☐
									☐
									☐
									☐

Note: TR = Target risk limit for excess lifetime carcinogenic risk.
HQ = Hazard quotient for individual constituent non-carcinogenic effects.
MCL = Drinking Water Maximum Contaminant Level, if applicable.
>S = At pure compound solubility, selected risk is not exceeded.

FIGURE 1

SITE LOCATION MAP



N

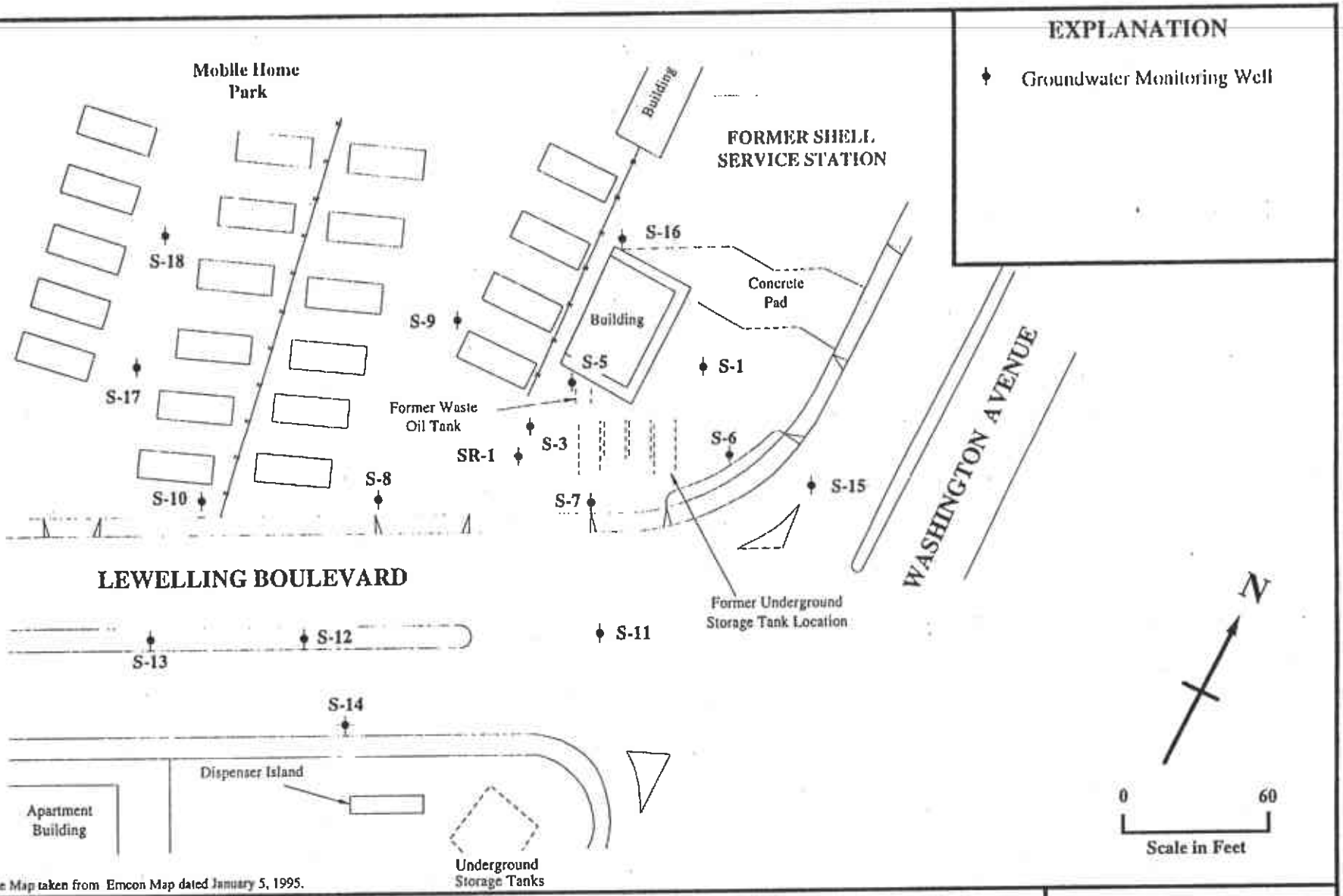
Approximate Scale : 1" = 2000'

GeoStrategies Inc.

Vicinity Map
Former Shell Service Station
15275 Washington Avenue
San Leandro, California

PLATE
1

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
7615		11/89		



Base Map taken from Emcon Map dated January 5, 1995.

PLATE **2**

SITE PLAN
Shell Oil Company
15275 Washington Avenue
San Leandro, California

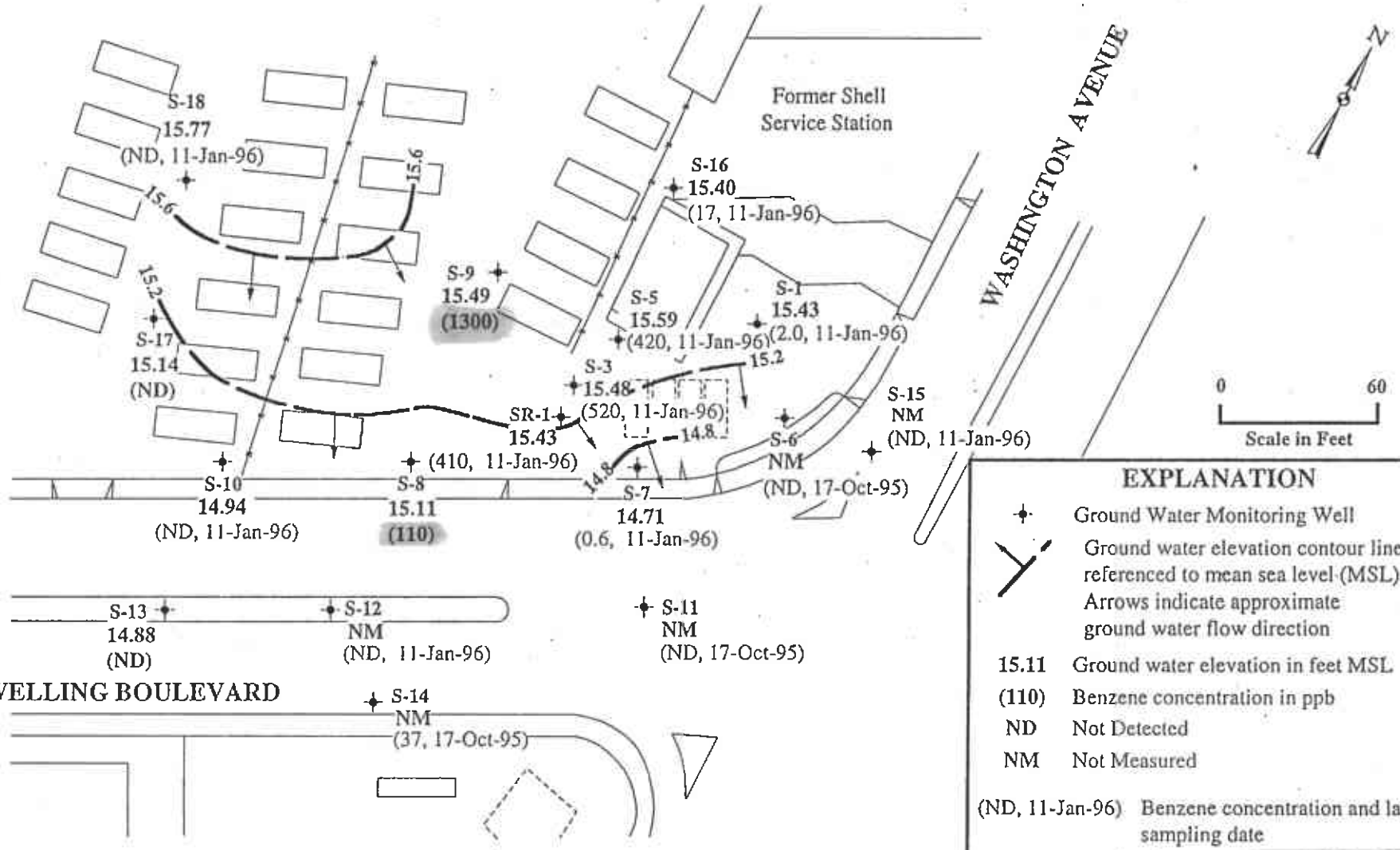
enviros ®
95276.01

Drawn By: JLP Date: 4-3-95

Approved By: DK Date: 4-17-95

FIGURE 5

GROUND WATER PLUME MAPS



Base Map taken from Emcon Map dated January 5, 1995.

EXPLANATION

- Ground Water Monitoring Well
- Ground water elevation contour line referenced to mean sea level (MSL). Arrows indicate approximate ground water flow direction
- 15.11 Ground water elevation in feet MSL
- (110) Benzene concentration in ppb
- ND Not Detected
- NM Not Measured
- (ND, 11-Jan-96) Benzene concentration and last sampling date

Notes: Water levels measured on April 2, 1996.
Approximate hydraulic gradient = 0.006

PLATE **2**

GROUND WATER CONTOUR/BENZENE CONCENTRATION MAP

Shell Oil Company
15275 Washington Avenue
San Leandro, California

enviros ®
96276

Drawn By: MED Date: 7-May-96

Approved By: _____ Date: _____

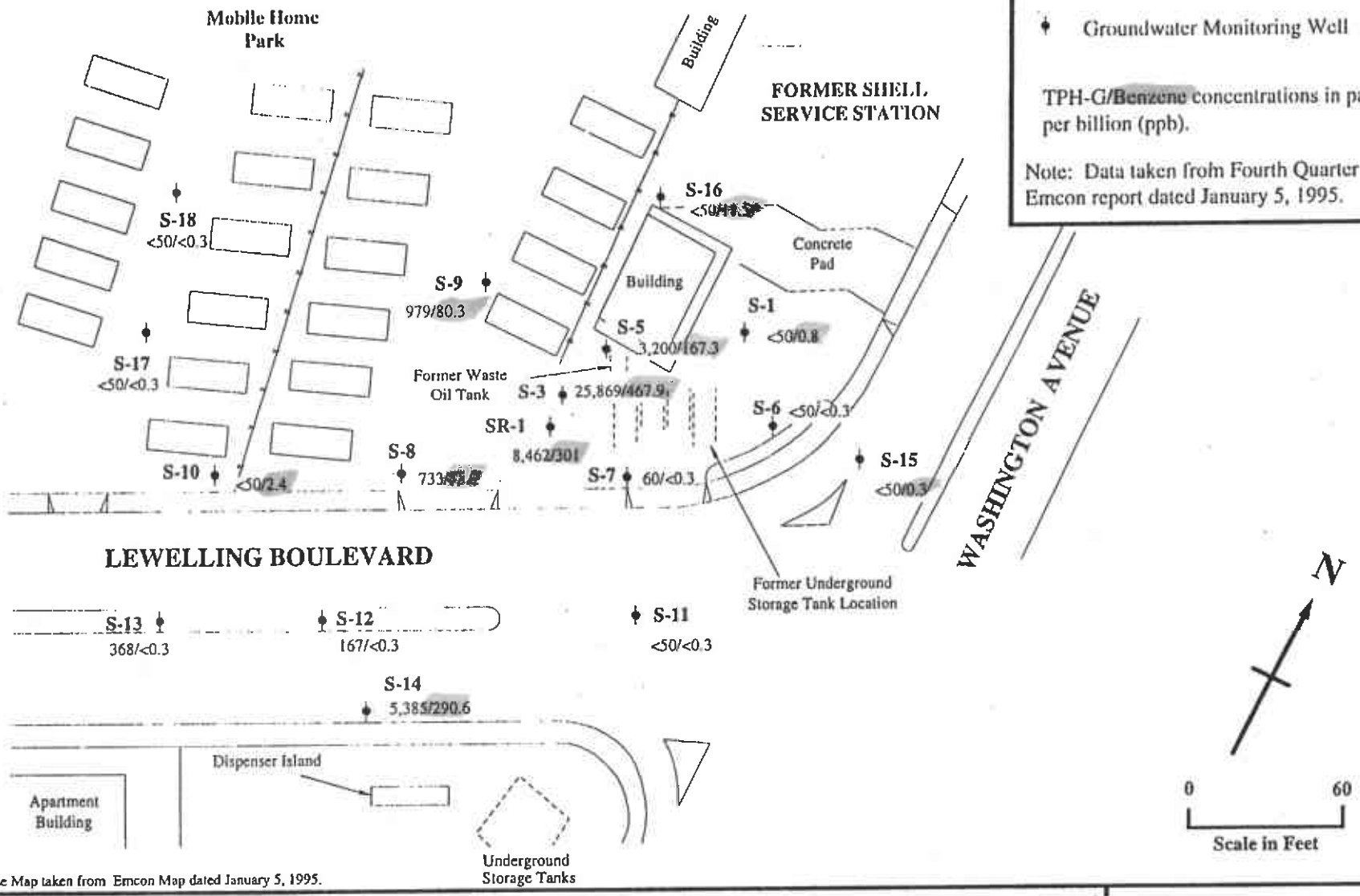
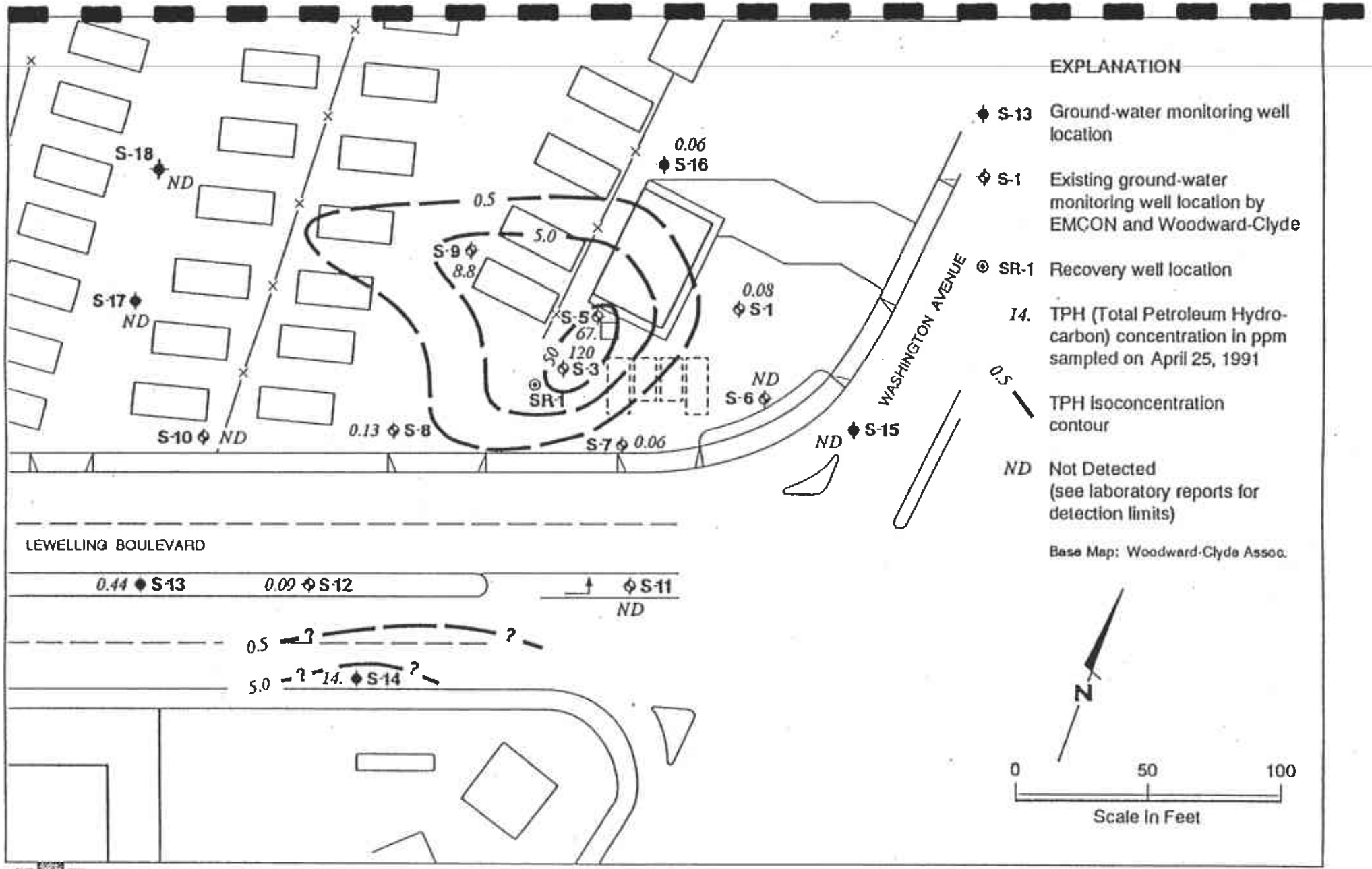


PLATE **4**

GROUNDWATER QUALITY MAP
Shell Oil Company
15275 Washington Avenue
San Leandro, California

enviros ®
95276.01

Drawn By: JLP | Date: 4-4-95 | Approved By: _____ | Date: 4/7-95

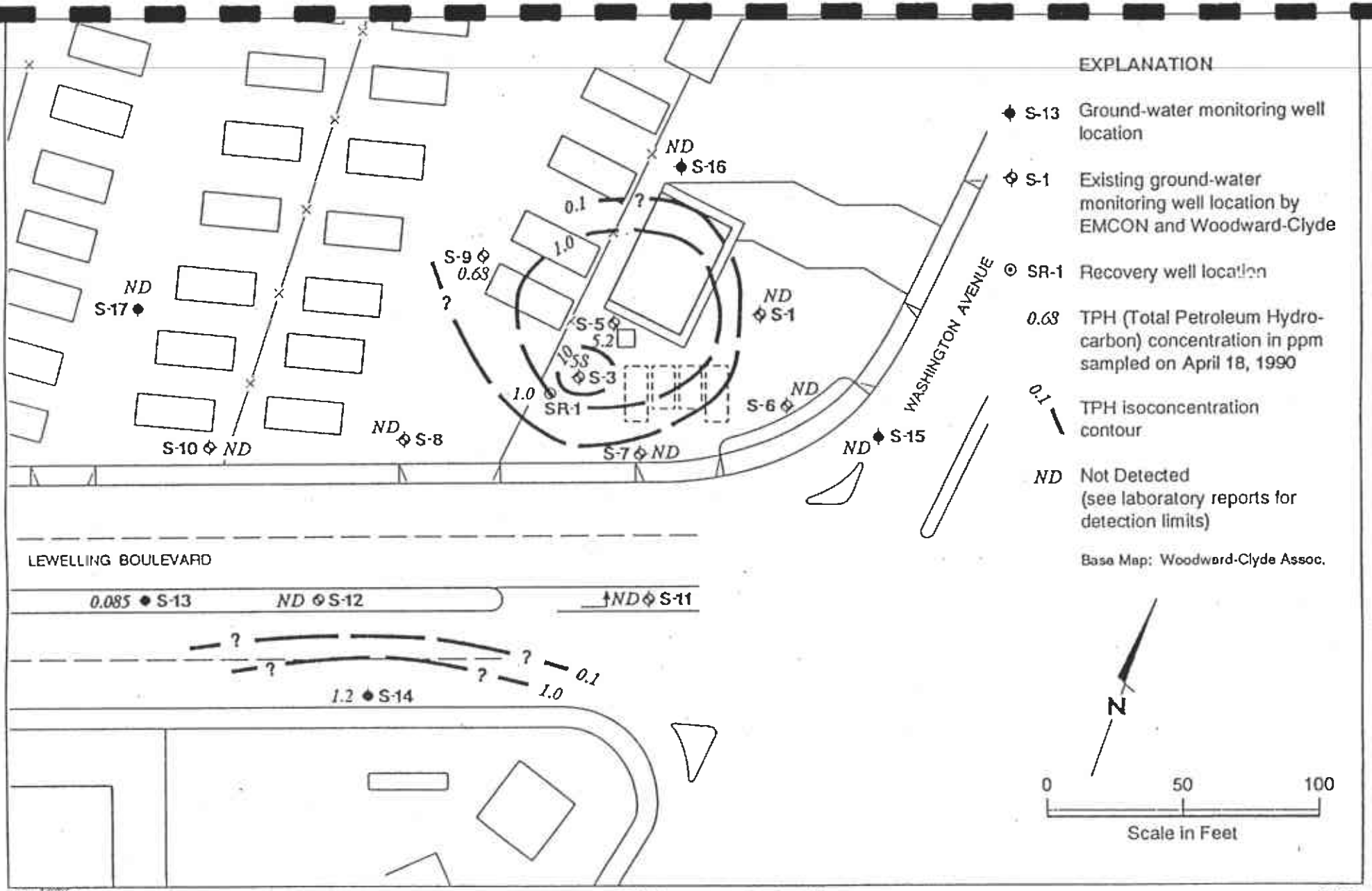


GeoStrategies Inc.

TPH Isoconcentration Map
Former Shell Service Station
15275 Washington Avenue
San Leandro, California

PLATE
4

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE	REVISED DATE
761502-13	DHP	6/91		

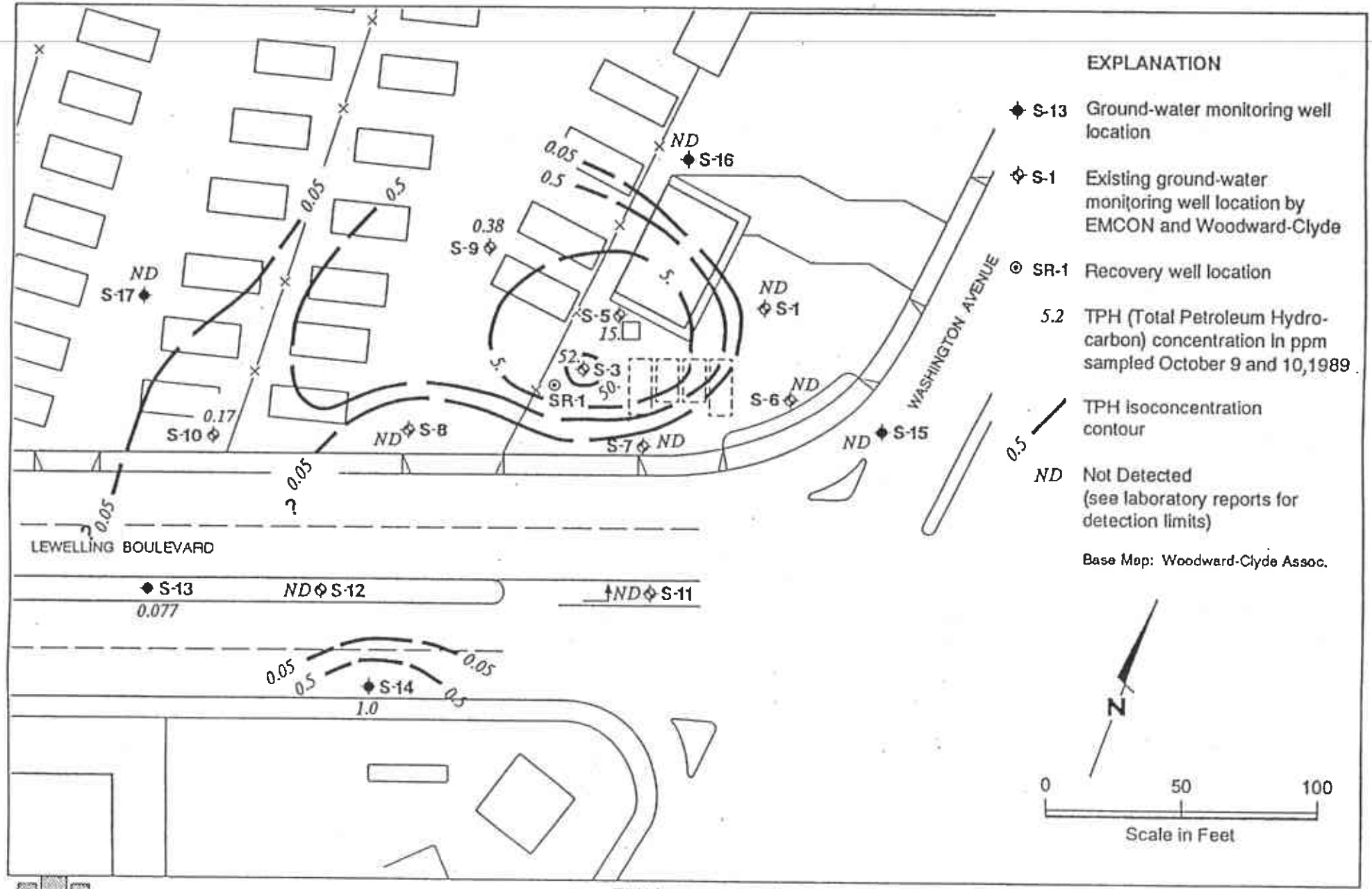


GeoStrategies Inc.

TPH Isoconcentration Map
Former Shell Service Station
15275 Washington Avenue
San Leandro, California

PLATE
4

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
7615	Cmp dec 12.62	5/90		

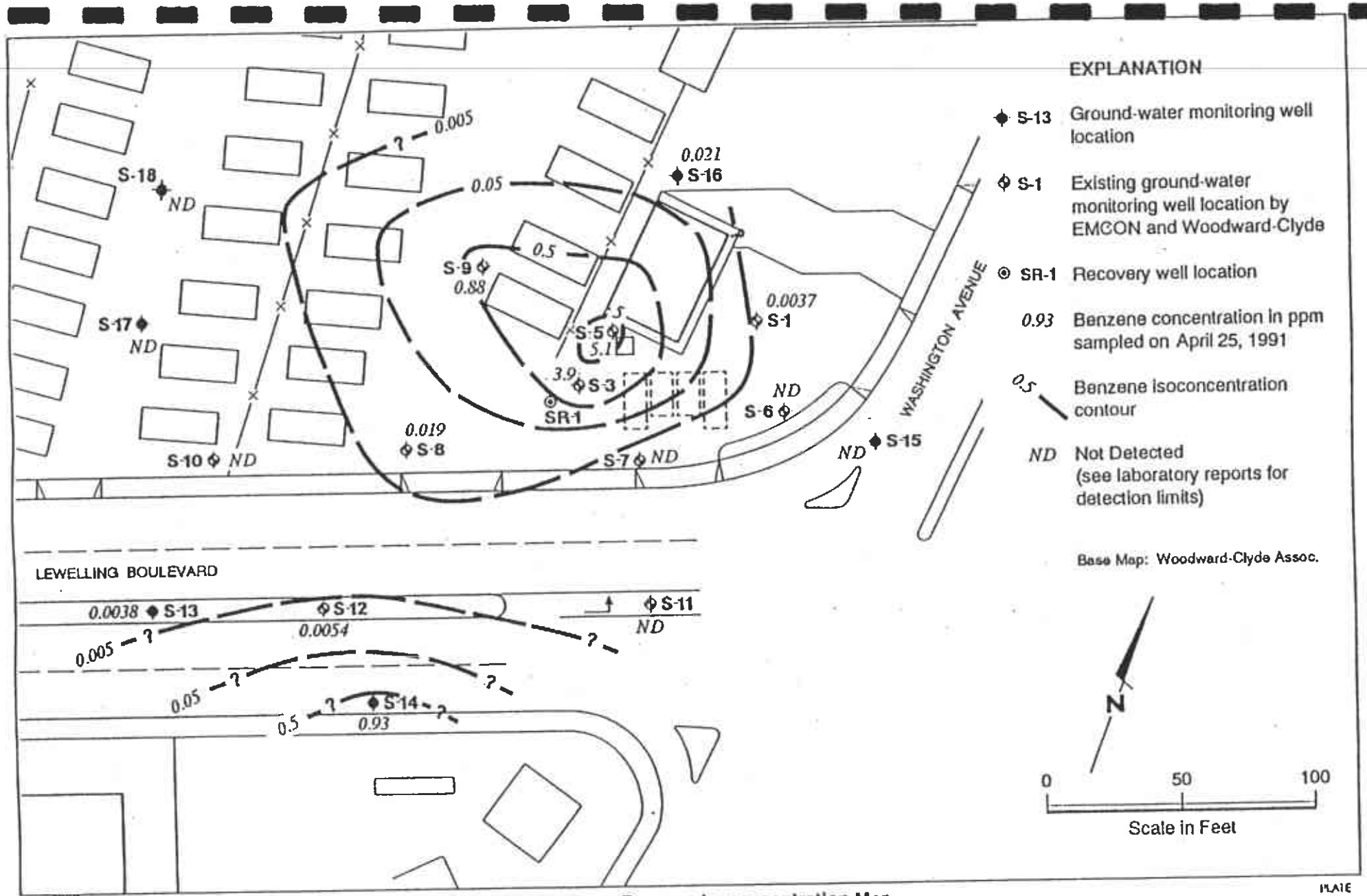


GeoStrategies Inc.

TPH Isoconcentration Map
Former Shell Service Station
15275 Washington Avenue
San Leandro, California

PLATE 4

JOB NUMBER	REVIEWED BY HG/CEG	DATE	REVISED DATE	REVISED DATE
7615	CHP CEG 1262	11/89		

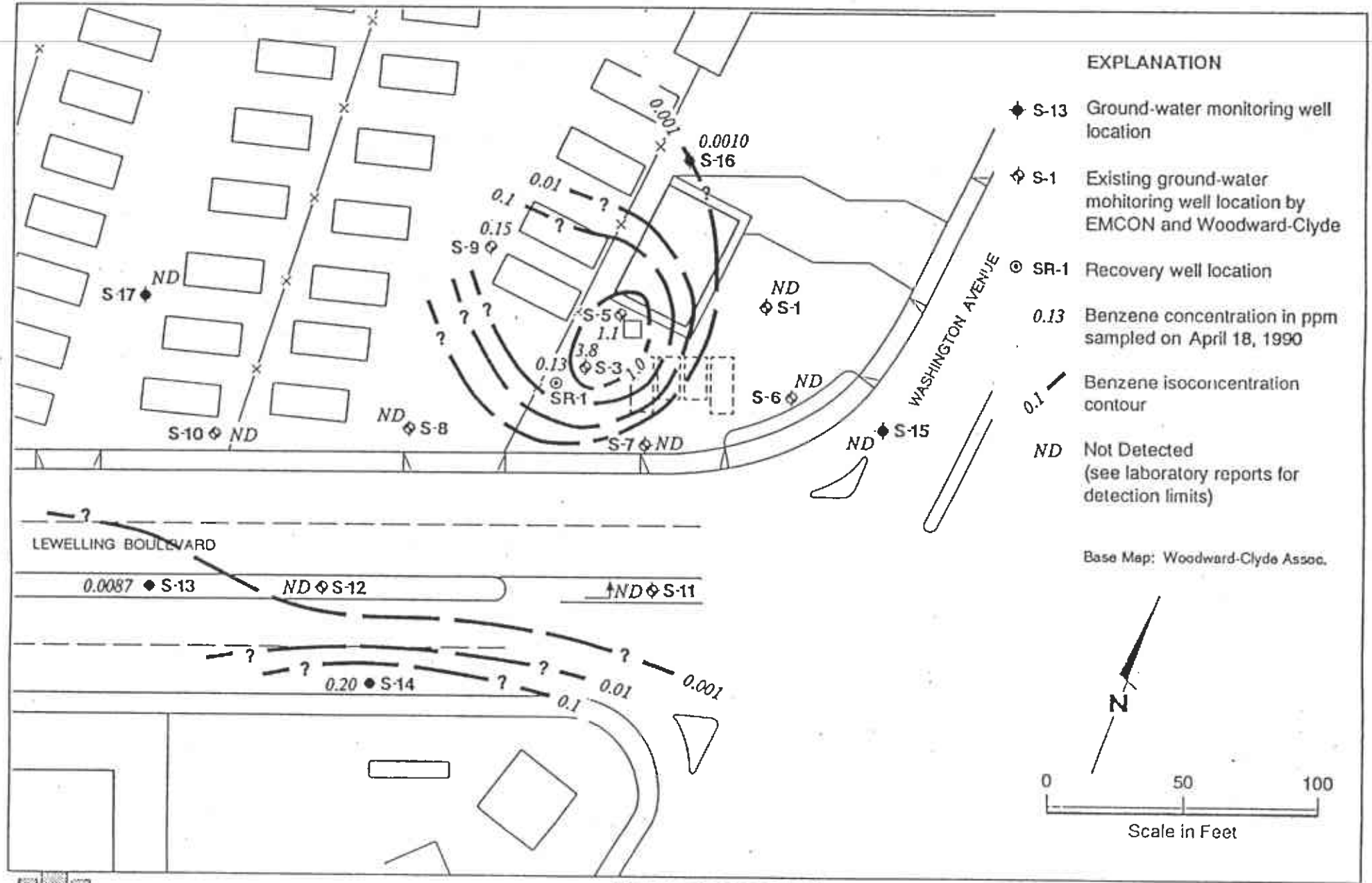


GeoStrategies Inc.

Benzene Isoconcentration Map
Former Shell Service Station
15275 Washington Avenue
San Leandro, California

PLATE
5

JOB NUMBER	REVIEWED BY	DATE	REVISED DATE	REVISED DATE
761502-13	DHP	6/91		



GSI GeoStrategies Inc.

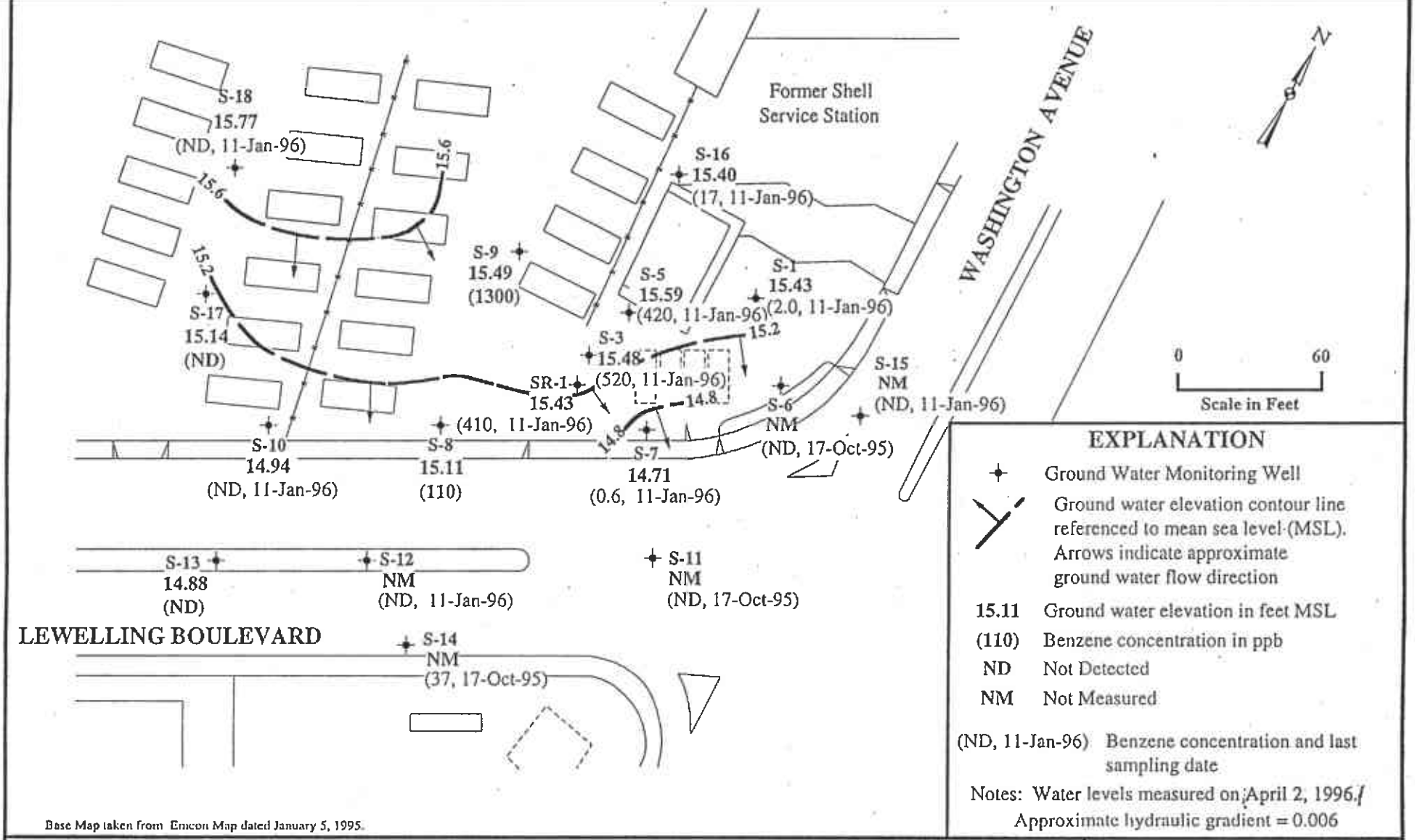
Benzene Isoconcentration Map
Former Shell Service Station
15275 Washington Avenue
San Leandro, California

PLATE
5

JOB NUMBER	REVIEWED BY/RG/CEG	DATE	REVISED DATE	REVISED DATE
7615	CEG 1262	5/90		

FIGURE 6

GROUND WATER ELEVATION MAPS



Base Map taken from Emcon Map dated January 5, 1995.

EXPLANATION

- Ground Water Monitoring Well
- Ground water elevation contour line referenced to mean sea level (MSL). Arrows indicate approximate ground water flow direction
- 15.11 Ground water elevation in feet MSL
- (110) Benzene concentration in ppb
- ND Not Detected
- NM Not Measured
- (ND, 11-Jan-96) Benzene concentration and last sampling date

Notes: Water levels measured on April 2, 1996.
Approximate hydraulic gradient = 0.006

PLATE **2**

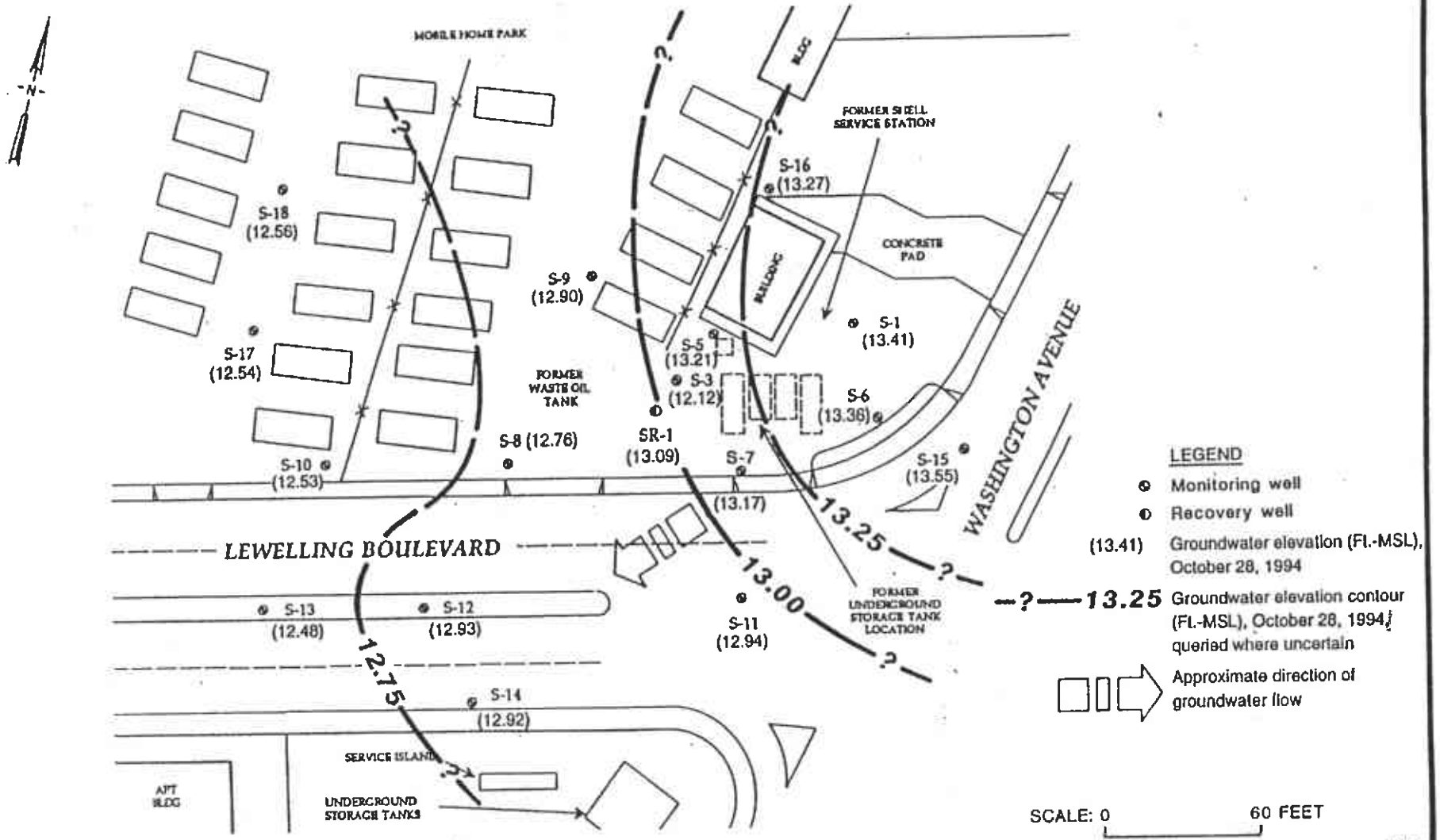
GROUND WATER CONTOUR/BENZENE CONCENTRATION MAP
Shell Oil Company
15275 Washington Avenue
San Leandro, California

enviros ®
96276

Drawn By: MED Date: 7-May-96

Approved By: _____ Date: _____

149964



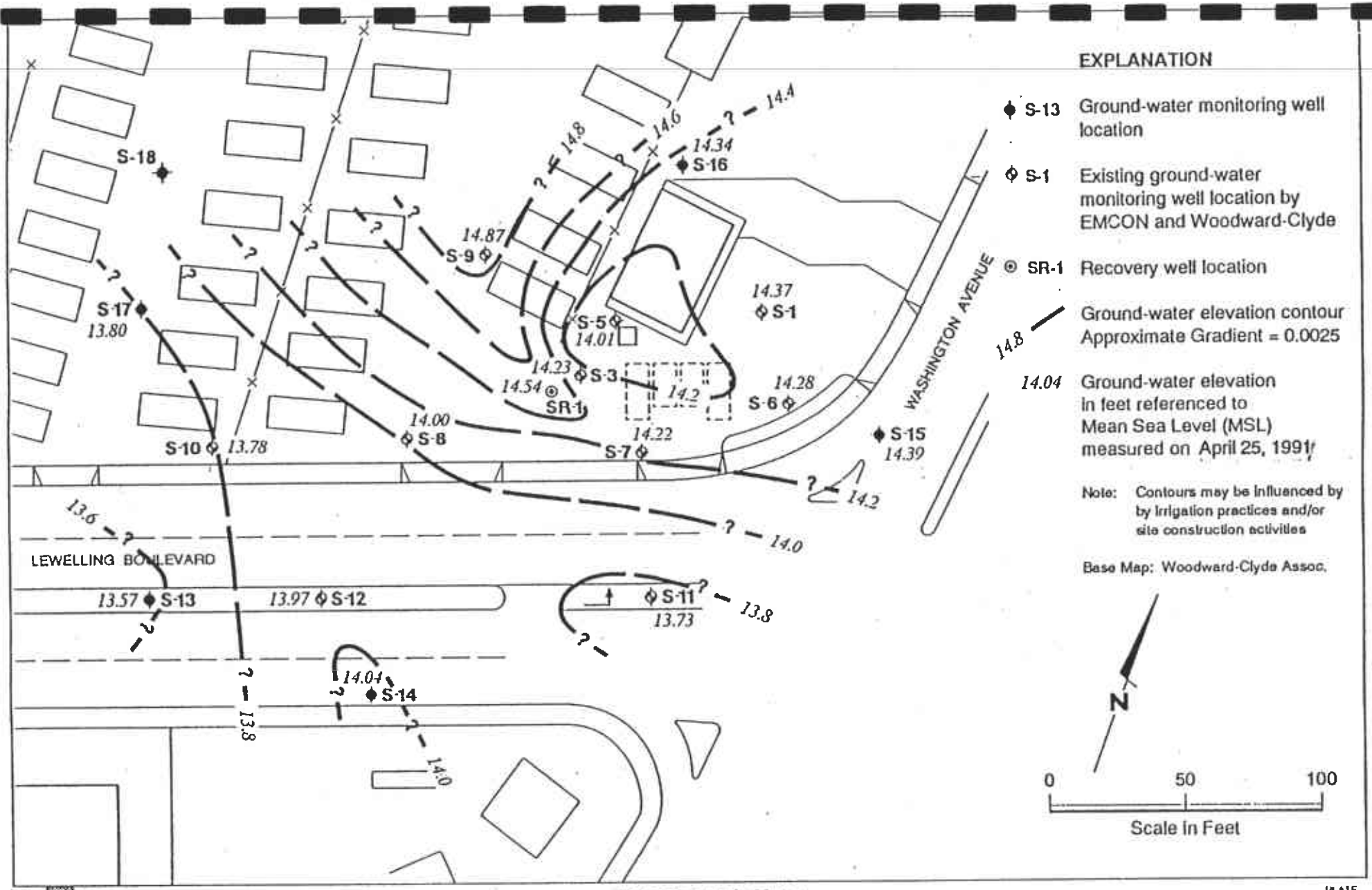
Base map from Hydro-Environmental Technologies, Inc.

EMCON Associates
Sacramento, California

SHELL OIL COMPANY
FORMER SHELL SERVICE STATION
15275 WASHINGTON AVENUE
SAN LEANDRO, CALIFORNIA

GROUNDWATER CONTOUR MAP, OCTOBER 28, 1994

FIGURE
2
PROJECT NO.
0117-115.01

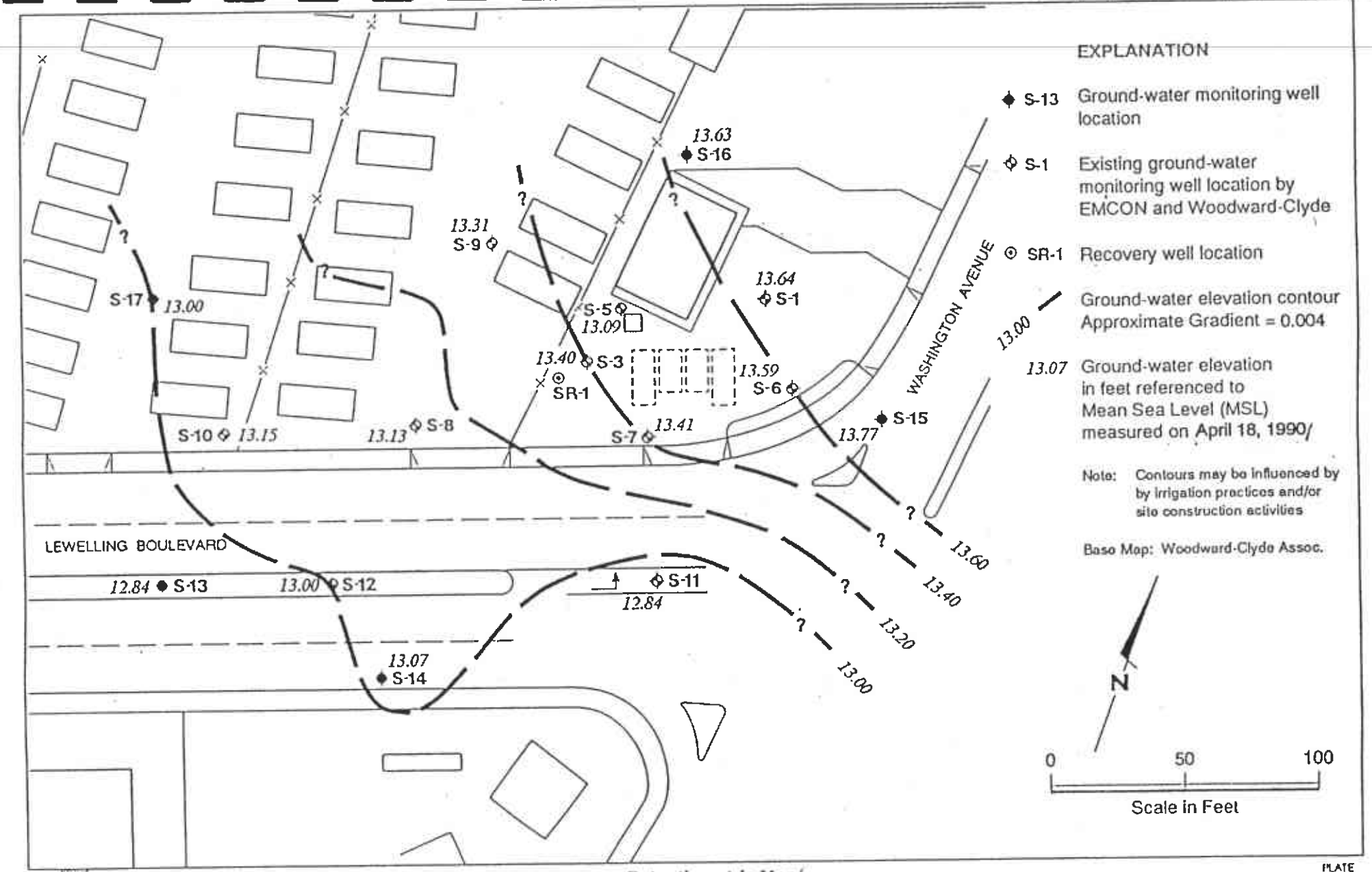


GeoStrategies Inc.

Potentiometric Map
Former Shell Service Station
15275 Washington Avenue
San Leandro, California

PLATE
3

JOB NUMBER	REVIEWED	DATE	REVISED DATE	REVISED DATE
761502-13	DHP	6/91		

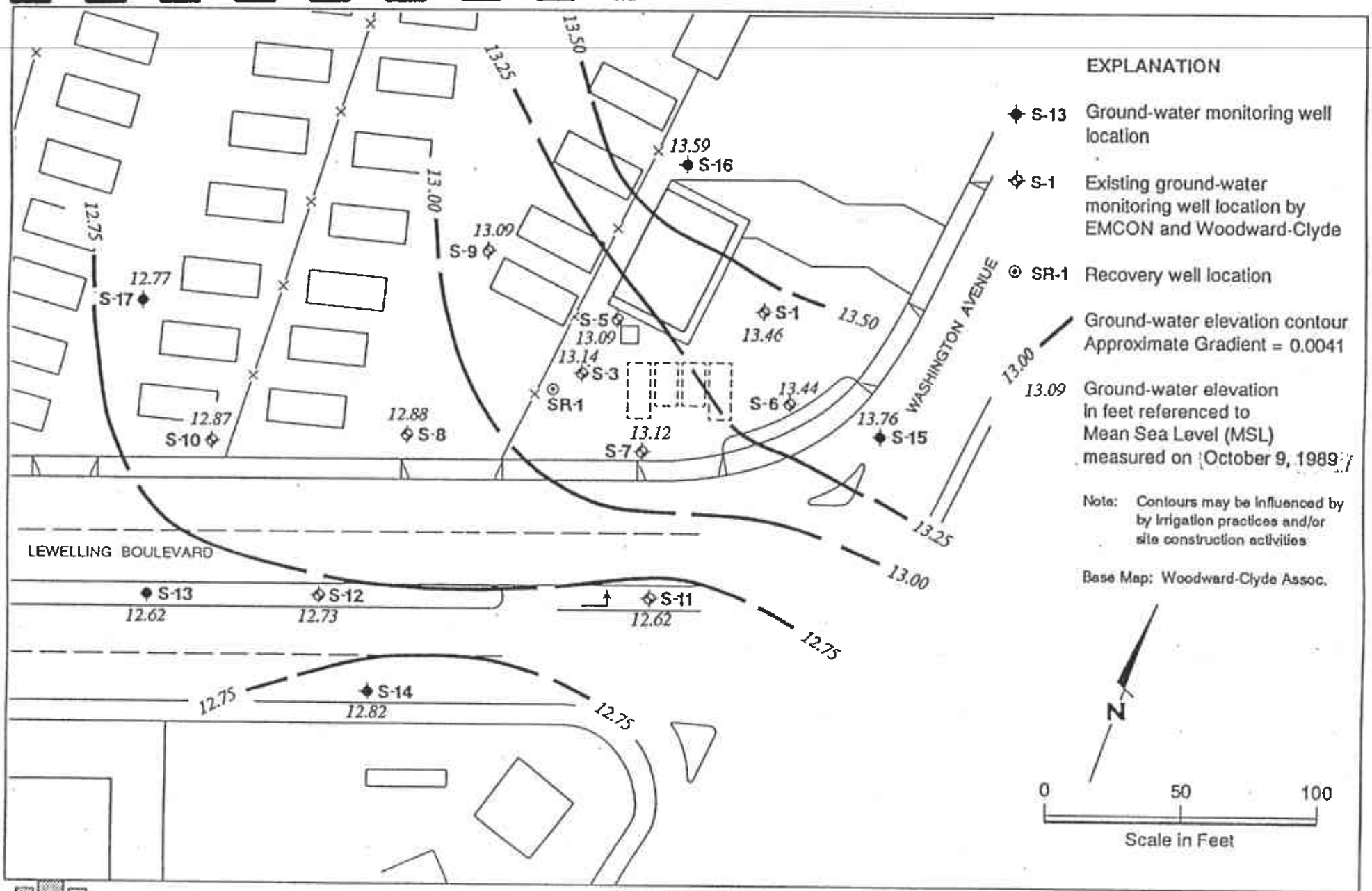


GeoStrategies Inc.

Potentiometric Map
Former Shell Service Station
15275 Washington Avenue
San Leandro, California

PLATE
3

JOB NUMBER	REVIEWED BY/DG,CEG	DATE	REVISED DATE	REVISED DATE
7615	CMP CEG 12/92	5/90		



GeoStrategies Inc.

Potentiometric Map
Former Shell Service Station
15275 Washington Avenue
San Leandro, California

PLATE
3

JOB NUMBER	REVIEWED BY RG/CEG	DATE	REVISED DATE	REVISED DATE
7615	CWP CEG 1262	11/89		

APPENDIX A

CHEMICAL ANALYSIS DATA TABLES

APPENDIX A-1

GROUND WATER ANALYTICAL TABLES

TABLE 1

WELL CONCENTRATIONS
Shell Oil Products Company
15275 Washington
San Leandro, California
WIC# 204-6852-1008

Sample Date	Measured GW Depth (ft)	Corrected GW Elev (ft)	SP (ft)	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	Comments
S-1		Top casing elevation (ft): 21.55								
08-Jul-85	NA	NA	NA	520	NA	NA	NA	NA	NA	Well Inaccessible
06-Sep-88	NA	NA	NA	<50	<0.5	<1	<1	<0.3	NA	
16-Nov-88	8.01	13.54	0.00	<50	<0.5	<1	<1	<0.3	NA	
27-Feb-89	NA	NA	NA	<50	0.5	<1	<1	<0.3	NA	
04-May-89	NA	NA	NA	<50	1.0	<1	<1	<0.3	NA	
10-Aug-89	7.93	13.62	0.00	<50	0.7	<1	<1	<0.3	NA	
10-Oct-89	8.09	13.46	0.00	<50	<0.5	<1	<1	<0.3	NA	
25-Jan-90	7.73	13.82	0.00	<50	<0.5	<0.5	<0.5	<1	NA	
18-Apr-90	7.91	13.64	0.00	<50	<0.5	<0.5	<0.5	<1	NA	
23-Jul-90	7.72	13.83	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
18-Oct-90	8.55	13.00	0.00	80	5	<0.5	<0.5	3.0	NA	
28-Jan-91	8.52	13.03	0.00	<50	4.5	<0.5	<0.5	2.0	NA	
25-Apr-91	7.18	14.37	0.00	80*	3.7	<0.5	0.7	2.0	NA	
09-Jul-91	8.22	13.33	0.00	200	16	<0.5	1.3	5.8	NA	
08-Oct-91	8.70	12.85	0.00	<50	2.3	<0.5	<0.5	<0.5	NA	
05-Feb-92	8.14	13.41	0.00	160	8.9	<0.5	2.1	6.0	NA	
28-Apr-92	7.52	14.03	0.00	<50	2.4	<0.5	<0.5	0.9	NA	
27-Jul-92	8.28	13.27	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
26-Oct-92	8.74	12.81	0.00	57	3.0	1.6	1.4	1.7	NA	
14-Jan-93	5.91	15.64	0.00	490	53	1.2	20	33	NA	
16-Apr-93	6.66	14.89	0.00	240	20	<0.5	15	240	NA	
23-Jul-93	7.53	14.02	0.00	<50	0.5	<0.5	<0.5	<0.5	NA	
27-Oct-93	8.20	13.35	0.00	60	5.9	<0.5	2.5	1.7	NA	
27-Jan-94	7.26	14.29	0.00	<50	2.1	<0.5	<0.5	0.63	NA	
		New top casing elevation (ft): 21.27								
05-May-94	7.38	13.89	0.00	57	3.9	<0.5	1.9	1.9	NA	
26-Jul-94	7.86	13.41	0.00	<50	2.2	<0.3	<0.3	<0.6	NA	
28-Oct-94	7.86	13.41	0.00	<50	0.8	<0.3	<0.3	0.8	NA	
02-Jan-95	6.85	14.42	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
14-Apr-95	6.08	15.19	0.00	NA	NA	NA	NA	NA	NA	
28-Jul-95	6.79	14.48	0.00	60	2.2	<0.5	1.3	1.2	NA	
17-Oct-95	7.04	14.23	0.00	60	2.6	<0.5	1.2	1.3	NA	
11-Jan-96	6.40	14.87	0.00	<50	2.0	<0.5	<0.5	<0.5	<2	
02-Apr-96	5.84	15.43	0.00	NA	NA	NA	NA	NA	NA	
09-Jul-96	6.50	14.77	0.00	NA	NA	NA	NA	NA	NA	

TABLE 1

WELL CONCENTRATIONS
Shell Oil Products Company
15275 Washington
San Leandro, California
WIC# 204-6852-1008

Sample Date	Measured GW Depth (ft)	Corrected GW Elev (ft)	SP (ft)	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	Comments
S-3		**Top casing elevation (ft): 21.14**								
06-Sep-88	NA	NA	NA	96000	3400	9500	2700	17000	NA	
16-Nov-88	7.76	13.38	0.00	70000	4600	8400	2500	13000	NA	
27-Feb-89	NA	NA	NA	32000	2400	3100	1500	6400	NA	
04-May-89	NA	NA	NA	47000	4400	300	2400	15000	NA	
10-Aug-89	7.92	13.22	0.00	110000	5700	5700	3200	19000	NA	
10-Oct-89	8.00	13.14	0.00	52000	4600	3300	2600	15000	NA	
25-Jan-90	7.54	13.60	0.00	420000	5200	4100	6700	34000	NA	
18-Apr-90	7.74	13.40	0.00	58000	3800	1400	2400	12000	NA	
23-Jul-90	7.55	13.59	0.00	49000	3400	1800	2300	12000	NA	
18-Oct-90	8.47	12.67	0.00	44000	3500	650	2400	11000	NA	
28-Jan-91	8.38	12.76	0.00	64000	40900	570	1940	8090	NA	
25-Apr-91	6.91	14.23	0.00	120000	3900	3600	2400	8900	NA	
09-Jul-91	8.07	13.07	0.00	50000	3600	2300	1800	10000	NA	
08-Oct-91	8.61	12.53	0.00	130000	3600	1000	2800	8400	NA	
05-Feb-92	7.80	13.34	0.00	150000	2500	670	2700	10000	NA	
28-Apr-92	7.27	13.87	0.00	120000	2200	1200	2000	5800	NA	
27-Jul-92	8.10	13.04	0.00	190000	1400	<1250	<1250	3400	NA	
26-Oct-92	8.62	12.52	0.00	950000	2000	8400	16000	36000	NA	
14-Jan-93	5.16	15.98	0.00	41000	2700	2500	1800	6900	NA	
16-Apr-93	7.18	13.96	0.00	40000	930	2800	1900	14000	NA	
23-Jul-93	7.34	13.80	0.00	87000	1600	<5	1300	4000	NA	
27-Oct-93	8.03	13.11	0.00	36000	2200	<500	1500	3200	NA	
27-Jan-94	6.79	14.35	0.00	190000	3200	3100	4100	15000	NA	
		New top casing elevation (ft): 20.48								
05-May-94	6.75	13.73	0.00	36000	1100	490	1600	4700	NA	
26-Jul-94	7.30	13.18	0.00	18000	1039	170.5	845.4	967.5	NA	
28-Oct-94	8.36	12.12	0.00	25869	467.9	294	546.2	343.3	NA	
02-Jan-95	6.36	14.12	0.00	23000	850	260	900	2100	NA	
14-Apr-95	5.87	14.61	0.00	33000	720	670	1600	6600	NA	
28-Jul-95	6.33	14.15	0.00	12000	540	<10	580	780	NA	
17-Oct-95	6.48	14.00	0.00	NA	NA	NA	NA	NA	NA	Well Inaccessible
11-Jan-96	5.80	14.68	0.00	16000	520	290	740	2600	<200	
02-Apr-96	5.00	15.48	0.00	NA	NA	NA	NA	NA	NA	
09-Jul-96	5.93	14.55	0.00	NA	NA	NA	NA	NA	NA	
S-5		**Top casing elevation (ft): 21.41**								

TABLE 1

WELL CONCENTRATIONS
Shell Oil Products Company
15275 Washington
San Leandro, California
WIC# 204-6852-1008

Sample Date	Measured GW Depth (ft)	Corrected GW Elev (ft)	SP (ft)	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	Comments
08-Jan-87	NA	NA	NA	7800	380	510	NA	1000	NA	
06-Sep-88	NA	NA	NA	7000	2600	60	400	700	NA	
16-Nov-88	NA	NA	NA	3000	660	60	120	220	NA	
27-Feb-89	NA	NA	NA	5700	2000	220	260	320	NA	
04-May-89	NA	NA	NA	9000	3000	600	630	1700	NA	
10-Aug-89	8.28	13.13	0.00	5100	1100	<50	270	400	NA	
10-Oct-89	8.32	13.09	0.00	15000	3300	160	830	2200	NA	
25-Jan-90	8.20	13.21	0.00	12000	2400	360	570	1400	NA	
18-Apr-90	8.32	13.09	0.00	5200	1100	40	300	460	NA	
23-Jul-90	8.03	13.38	0.00	5500	1300	140	320	730	NA	
18-Oct-90	9.03	12.38	0.00	12000	3200	40	720	900	NA	
28-Jan-91	8.80	12.61	0.00	2550	410	15	110	60	NA	
25-Apr-91	7.40	14.01	0.00	67000	5100	3100	2800	11000	NA	
09-Jul-91	8.52	12.89	0.00	4900	480	36	360	1000	NA	
08-Oct-91	9.00	12.41	0.00	6600	370	7.0	190	380	NA	
05-Feb-92	8.11	13.30	0.00	44000	4800	850	2700	8400	NA	
28-Apr-92	7.70	13.71	0.00	33000	1400	320	1600	5200	NA	
27-Jul-92	8.52	12.89	0.00	20000	2400	<25	1800	2300	NA	
26-Oct-92	9.02	12.39	0.00	21000	1600	140	1500	2800	NA	
14-Jan-93	5.22	16.19	0.00	54000	1900	1000	2700	16000	NA	
16-Apr-93	7.04	14.37	0.00	42000	2000	1300	4300	18000	NA	
23-Jul-93	7.75	13.66	0.00	46000	2500	2200	3400	11000	NA	
27-Oct-93	8.49	12.92	0.00	6500	990	31	1100	1000	NA	
27-Jan-94	7.04	14.37	0.00	34000	1800	580	2900	9700	NA	
		New top casing elevation (ft): 21.03								
05-May-94	7.20	13.83	0.00	24000	670	70	1400	2700	NA	
27-Jul-94	7.72	13.31	0.00	4700	193.6	33.1	332.3	281.2	NA	
28-Oct-94	7.82	13.21	0.00	3200	167.3	18	238.7	104.5	NA	
02-Jan-95	6.65	14.38	0.00	18000	1300	220	3400	10000	NA	
14-Apr-95	5.99	15.04	0.00	NA	NA	NA	NA	NA	NA	
28-Jul-95	6.77	14.26	0.00	25000	440	74	1700	4500	NA	
17-Oct-95	7.00	14.03	0.00	18000	360	24	1300	2200	NA	
11-Jan-96	6.22	14.81	0.00	41000	420	180	1600	9500	<200	
02-Apr-96	5.44	15.59	0.00	NA	NA	NA	NA	NA	NA	
09-Jul-96	6.41	14.62	0.00	NA	NA	NA	NA	NA	NA	
S-5 DUP										

TABLE 1

WELL CONCENTRATIONS
Shell Oil Products Company
15275 Washington
San Leandro, California
WIC# 204-6852-1008

Sample Date	Measured GW Depth (ft)	Corrected GW Elev (ft)	SP (ft)	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	Comments
28-Jul-95	NA	NA	NA	25000	450	<50	1700	4600	NA	
S-6		**Top casing elevation (ft): 22.02**								
16-Nov-88	8.58	13.44	0.00	50	0.7	<1	<1	<3	NA	
27-Feb-89	NA	NA	NA	<50	<0.5	<1	<1	<3	NA	
04-May-89	NA	NA	NA	<50	<0.5	<1	<1	<3	NA	
10-Aug-89	8.54	13.48	0.00	<50	<0.5	<1	<1	<3	NA	
10-Oct-89	8.58	13.44	0.00	<50	<0.5	<1	<1	<3	NA	
25-Jan-90	8.31	13.71	0.00	<50	<0.5	<0.5	<0.5	<1	NA	
18-Apr-90	8.43	13.59	0.00	<50	<0.5	0.6	<0.5	1.0	NA	
23-Jul-90	8.24	13.78	0.00	<50	<0.5	0.9	<0.5	1.8	NA	
18-Oct-90	9.20	12.82	0.00	<50	<0.5	0.7	<0.5	0.8	NA	
28-Jan-91	9.10	12.92	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
25-Apr-91	7.74	14.28	0.00	<50	<0.5	<0.5	<0.5	0.7	NA	
09-Jul-91	8.81	13.21	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
08-Oct-91	9.26	12.76	0.00	<50	0.7	<0.5	<0.5	<0.5	NA	
02-Feb-92	8.47	13.55	0.00	NA	NA	NA	NA	NA	NA	
28-Apr-92	7.91	14.11	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
27-Jul-92	8.83	13.19	0.00	NA	NA	NA	NA	NA	NA	
26-Oct-92	9.29	12.73	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
13-Jan-94	9.43	12.59	0.00	NA	NA	NA	NA	NA	NA	
16-Apr-93	7.12	14.90	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
23-Jul-93	8.14	13.88	0.00	NA	NA	NA	NA	NA	NA	
27-Oct-93	8.75	13.27	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
27-Jan-94	7.87	14.15	0.00	NA	NA	NA	NA	NA	NA	
		New top casing elevation (ft): 21.40								
05-May-94	7.71	13.69	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
26-Jul-94	8.10	13.30	0.00	NA	NA	NA	NA	NA	NA	
28-Oct-94	8.04	13.36	0.00	<50	<0.3	<0.3	<0.3	<0.6	NA	
02-Jan-95	7.07	14.33	0.00	NA	NA	NA	NA	NA	NA	
14-Apr-95	6.29	15.11	0.00	<50	<0.5	1.3	<0.5	<0.5	NA	
28-Jul-95	6.91	14.49	0.00	NA	NA	NA	NA	NA	NA	
17-Oct-95	7.20	14.20	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
11-Jan-96	6.60	14.80	0.00	NA	NA	NA	NA	NA	NA	
S-7		**Top casing elevation (ft): 21.47**								
16-Nov-88	8.24	13.23	0.00	100	5.1	15	2.0	13	NA	
27-Feb-89	NA	NA	NA	50	0.5	3.0	1.0	11	NA	

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WELL CONCENTRATIONS
Shell Oil Products Company
15275 Washington
San Leandro, California
WIC# 204-6852-1008

Sample Date	Measured GW Depth (ft)	Corrected GW Elev (ft)	SP (ft)	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	Comments
04-May-89	NA	NA	NA	<50	<0.5	<1	<1	<3	NA	
10-Aug-89	8.18	13.29	0.00	<50	<0.5	<1	<1	<3	NA	
10-Oct-89	8.35	13.12	0.00	<50	<0.5	<1	<1	<3	NA	
25-Jan-90	7.95	13.52	0.00	<50	<0.5	<0.5	<0.5	<1	NA	
18-Apr-90	8.06	13.41	0.00	<50	<0.5	<0.5	<0.5	<1	NA	
23-Jul-90	7.89	13.58	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
18-Oct-90	8.83	12.64	0.00	<50	<0.5	0.5	0.5	4.1	NA	
28-Jan-91	8.77	12.70	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
25-Apr-91	7.25	14.22	0.00	60	<0.5	<0.5	<0.5	<0.5	NA	
09-Jul-91	8.41	13.06	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
08-Oct-91	8.95	12.52	0.00	NA	NA	NA	NA	NA	NA	
05-Feb-92	8.04	13.43	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
08-Oct-91	8.95	12.52	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
28-Apr-92	7.45	14.02	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
27-Jul-92	8.48	12.99	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
26-Oct-92	9.95	11.52	0.00	570	<0.5	<0.5	<0.5	<0.5	NA	
14-Jan-93	5.84	15.63	0.00	56	<0.5	<0.5	<0.5	<0.5	NA	
16-Apr-93	6.38	15.09	0.00	110	28	<0.5	<0.5	1.8	NA	
23-Jul-93	7.72	13.75	0.00	80	0.48	<0.5	<0.5	0.8	NA	
27-Oct-93	7.79	13.68	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
27-Jan-94	7.85	13.62	0.00	70**	<0.5	<0.5	<0.5	<0.5	NA	
		New top casing elevation (ft): 20.85								
05-May-94	9.45	11.40	0.00	92	2.1	<0.5	<0.5	<0.5	NA	
26-Jul-94	7.64	13.21	0.00	88	<0.3	<0.3	<0.3	<0.6	NA	
28-Oct-94	7.68	13.17	0.00	60	<0.3	0.5	<0.3	<0.6	NA	
02-Jan-95	6.95	13.90	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
14-Apr-95	5.82	15.03	0.00	NA	NA	NA	NA	NA	NA	
28-Jul-95	6.32	14.53	0.00	170	1.7	<0.5	<0.5	2.2	NA	
17-Oct-95	7.07	13.78	0.00	100	<0.5	0.6	<0.5	<0.5	NA	
11-Jan-96	6.10	14.75	0.00	80	0.6	<0.5	<0.5	<0.5	54	
02-Apr-96	6.14	14.71	0.00	NA	NA	NA	NA	NA	NA	
09-Jul-96	6.40	14.45	0.00	NA	NA	NA	NA	NA	NA	
S-8		Top casing elevation (ft): 20.72								
16-Nov-88	7.76	12.96	0.00	210	5.0	<1	1.0	5.0	NA	
27-Feb-89	NA	NA	NA	<50	2.4	<1	<1	<3	NA	
04-May-89	NA	NA	NA	<50	7.5	<1	2.0	<3	NA	

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WELL CONCENTRATIONS
Shell Oil Products Company
15275 Washington
San Leandro, California
WIC# 204-6852-1008

Sample Date	Measured GW Depth (ft)	Corrected GW Elev (ft)	SP (ft)	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	Comments
10-Aug-89	7.79	12.93	0.00	<50	0.6	<1	<1	<3	NA	
10-Oct-89	7.84	12.88	0.00	<50	<0.5	<1	<1	<3	NA	
25-Jan-90	7.47	13.25	0.00	<50	<0.5	<0.5	<0.5	<1	NA	
18-Apr-90	7.59	13.13	0.00	<50	<0.5	<0.5	<0.5	<1	NA	
23-Jul-90	7.49	13.23	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
18-Oct-90	8.44	12.28	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
28-Jan-91	8.28	12.44	0.00	<50	55	0.5	<0.5	1.4	NA	
25-Apr-91	6.72	14.00	0.00	130*	19	<0.5	1.3	1.1	NA	
09-Jul-91	7.98	12.74	0.00	200	33	<0.5	1.8	2.8	NA	
08-Oct-91	8.55	12.17	0.00	580	95	2.2	4.9	6.5	NA	
05-Feb-92	7.50	13.22	0.00	90*	18	<0.5	6.2	1.8	NA	
28-Apr-92	7.14	13.58	0.00	<50	5.9	<0.5	2.5	<0.5	NA	
27-Jul-92	8.06	12.66	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
26-Oct-92	8.58	12.14	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
14-Jan-93	5.32	15.40	0.00	270	74	0.9	25	5.5	NA	
16-Apr-93	5.76	14.96	0.00	1100	420	<0.5	200	20	NA	
23-Jul-93	7.29	13.43	0.00	160	23	<0.5	1.2	1.5	NA	
27-Oct-93	7.93	12.79	0.00	420	650	0.7	11	1.7	NA	
27-Jan-94	6.31	14.41	0.00	290	65	<1	6.9	2.4	NA	
		New top casing elevation (ft): 20.32								
05-May-94	6.84	13.48	0.00	120	13	<0.5	<0.5	<0.5	NA	
26-Jul-94	7.42	12.90	0.00	115	12.2	1.3	<0.3	2.7	NA	
28-Oct-94	7.56	12.76	0.00	733	75.9	3.2	4.9	4.2	NA	
02-Jan-95	6.19	14.13	0.00	290	54	<0.5	10	<0.5	NA	
14-Apr-95	5.54	14.78	0.00	230	68	<0.5	10	2.4	NA	
28-Jul-95	6.28	14.04	0.00	290	44	<0.5	8.0	<0.5	NA	
17-Oct-95	6.64	13.68	0.00	190	24	<0.5	1.0	0.9	NA	
11-Jan-96	5.96	14.36	0.00	400	85	1.1	13	3.4	2.3	
02-Apr-96	5.21	15.11	0.00	300	110	0.7	4.9	0.9	<2	
09-Jul-96	6.05	14.27	0.00	<50	5.4	<0.50	0.63	<0.50	<2.5	
S-9		**Top casing elevation (ft): 20.96**								
16-Nov-88	7.78	13.18	0.00	1400	69	3.0	52	180	NA	
27-Feb-89	NA	NA	NA	1600	240	4.0	130	180	NA	
04-May-89	NA	NA	NA	2600	470	10	240	480	NA	
10-Aug-89	7.82	13.14	0.00	520	73	<10	40	<30	NA	
10-Oct-89	7.87	13.09	0.00	380	82	<1	46	13	NA	

TABLE 1

WELL CONCENTRATIONS
Shell Oil Products Company
15275 Washington
San Leandro, California
WIC# 204-6852-1008

Sample Date	Measured GW Depth (ft)	Corrected GW Elev (ft)	SP (ft)	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	Comments
25-Jan-90	7.41	13.55	0.00	750	140	1.2	69	75	NA	
18-Apr-90	7.65	13.31	0.00	680	150	1.7	50	37	NA	
23-Jul-90	7.58	13.38	0.00	490	94	1.2	32	24	NA	
18-Oct-90	8.46	12.50	0.00	390	140	0.7	3.3	24	NA	
28-Jan-91	8.29	12.67	0.00	1040	450	4.6	85	97	NA	
25-Apr-91	6.09	14.87	0.00	5800	880	9.0	360	500	NA	
09-Jul-91	7.82	13.14	0.00	1400	220	2.8	82	100	NA	
08-Oct-91	8.55	12.41	0.00	890	960	<2.5	16	29	NA	
05-Feb-92	6.96	14.00	0.00	950	240	<2.5	28	55	NA	
28-Apr-92	6.76	14.20	0.00	1400*	290	3.0	100	81	NA	
27-Jul-92	8.10	12.86	0.00	890	190	<2.5	66	68	NA	
26-Oct-92	8.53	12.43	0.00	650	160	<2.5	63	89	NA	
13-Jan-93	6.80	14.16	0.00	19000	2400	38	1700	2200	NA	
16-Apr-93	6.28	14.68	0.00	10000	1500	<5	1100	990	NA	
23-Jul-93	7.26	13.70	0.00	1100	400	<5	260	160	NA	
27-Oct-93	8.00	12.96	0.00	2500	400	<5	190	110	NA	
27-Jan-94	5.96	15.00	0.00	4800	990	16	630	490	NA	
		New top casing elevation (ft): 20.68								
05-May-94	6.99	13.69	0.00	3700	480	<5	21	120	NA	
26-Jul-94	7.56	13.12	0.00	1000	124.6	<0.3	35.8	28.6	NA	
28-Oct-94	7.78	12.90	0.00	979	80.3	7.0	21.7	29.2	NA	
02-Jan-95	6.29	14.39	0.00	3900	540	2.4	350	150	NA	
14-Apr-95	5.69	14.99	0.00	5100	1000	<10	380	230	NA	
28-Jul-95	6.61	14.07	0.00	4600	680	<10	120	47	NA	
17-Oct-95	7.00	13.68	0.00	1600	150	<0.5	42	15	NA	
11-Jan-96	6.20	14.48	0.00	6800	1100	12	720	95	24	
02-Apr-96	5.19	15.49	0.00	6000	1300	8.3	430	99	49	
09-Jul-96	6.43	14.25	0.00	3400	680	6.7	54	31	<25	

TABLE 1

WELL CONCENTRATIONS
Shell Oil Products Company
15275 Washington
San Leandro, California
WIC# 204-6852-1008

Sample Date	Measured GW Depth (ft)	Corrected GW Elev (ft)	SP (ft)	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	Comments
S-9 (DUP)										
02-Apr-96	NA	NA	NA	6500	1200	8.3	410	90	<20	
09-Jul-96	NA	NA	NA	3300	730	<5.0	58	28	<25	
S-10		**Top casing elevation (ft): 20.86**								
16-Nov-88	7.91	12.95	0.00	330	0.5	<1	1.0	11	NA	
27-Feb-89	NA	NA	NA	140	<0.5	<3	2.0	6.0	NA	
03-May-89	NA	NA	NA	220	<0.5	1.0	2.0	7.0	NA	
10-Aug-89	7.94	12.92	0.00	<50	<0.5	<1	<1	<3	NA	
09-Oct-89	7.99	12.87	0.00	170	<0.5	<1	<1	<3	NA	
25-Jan-90	7.56	13.30	0.00	<50	<0.5	<0.5	1.1	4.0	NA	
18-Apr-90	7.71	13.15	0.00	<50	<0.5	0.9	<0.5	2.0	NA	
23-Jul-90	7.64	13.22	0.00	590	<0.5	<0.5	1.9	19	NA	
18-Oct-90	8.58	12.28	0.00	140	<0.5	0.7	<0.5	7.0	NA	
28-Jan-91	8.35	12.51	0.00	<50	<0.5	<0.5	<0.5	0.5	NA	
		New top casing elevation (ft): 20.69								
25-Apr-91	6.91	13.78	0.00	<50	<0.5	<0.5	1.1	0.8	NA	
09-Jul-91	8.14	12.55	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
08-Oct-91	8.70	11.99	0.00	140	<0.5	<0.5	<0.5	<0.5	NA	
05-Feb-92	7.57	13.12	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
28-Apr-92	7.20	13.49	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
27-Jul-92	8.17	12.52	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
26-Oct-92	8.68	12.01	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
13-Jan-93	3.78	16.91	0.00	88	<0.5	0.6	0.6	<0.5	NA	
16-Apr-93	6.46	14.23	0.00	80	<0.5	<0.5	<0.5	<0.5	NA	
23-Jul-93	7.38	13.31	0.00	<50	1.5	<0.5	0.7	2.7	NA	
27-Oct-93	8.09	12.60	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
27-Jan-94	5.81	14.88	0.00	270	1.1	1.3	2.0	7.4	NA	
		New top casing elevation (ft): 20.15								
05-May-94	6.82	13.33	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
26-Jul-94	7.40	12.75	0.00	<50	<0.3	<0.3	<0.3	<0.6	NA	
28-Oct-94	7.62	12.53	0.00	<50	2.4	<0.3	0.5	0.8	NA	
02-Jan-95	6.13	14.02	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
14-Apr-95	5.60	14.55	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
28-Jul-95	6.44	13.71	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
17-Oct-95	6.85	13.30	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
11-Jan-96	6.08	14.07	0.00	<50	<0.5	<0.5	<0.5	<0.5	<2	

TABLE 1

WELL CONCENTRATIONS
Shell Oil Products Company
15275 Washington
San Leandro, California
WIC# 204-6852-1008

Sample Date	Measured GW Depth (ft)	Corrected GW Elev (ft)	SP (ft)	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	Comments
02-Apr-96	5.21	14.94	0.00	NA	NA	NA	NA	NA	NA	
09-Jul-96	6.20	13.95	0.00	NA	NA	NA	NA	NA	NA	
S-11		**Top casing elevation (ft): 21.26**								
16-Nov-88	8.62	12.64	0.00	<50	<0.5	<1	<1	<3	NA	
27-Feb-89	NA	NA	NA	<50	<0.5	<1	<1	<3	NA	
03-May-89	NA	NA	NA	<50	<0.5	<1	<1	<3	NA	
10-Aug-89	8.65	12.61	0.00	<50	<0.5	<1	<1	<3	NA	
09-Oct-89	8.64	12.62	0.00	<50	<0.5	<1	<1	<3	NA	
25-Jan-90	8.43	12.83	0.00	<50	<0.5	<0.5	<0.5	<1	NA	
18-Apr-90	8.42	12.84	0.00	<50	<0.5	<0.5	<0.5	<1	NA	
23-Jul-90	8.23	13.03	0.00	<50	<0.5	0.6	<0.5	1.1	NA	
18-Oct-90	9.20	12.06	0.00	<50	<0.5	<0.5	<0.5	0.5	NA	
28-Jan-91	9.13	12.13	0.00	63	<0.5	3.3	0.9	7.0	NA	
25-Apr-91	7.53	13.73	0.00	<50	<0.5	<0.5	0.8	<0.5	NA	
09-Jul-91	8.85	12.41	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
08-Oct-91	9.34	11.92	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
05-Feb-91	8.50	12.76	0.00	NA	NA	NA	NA	NA	NA	
28-Apr-92	7.80	13.46	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
27-Jul-92	8.80	12.46	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
26-Oct-92	9.42	11.84	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
13-Jan-93	6.52	14.74	0.00	NA	NA	NA	NA	NA	NA	
16-Apr-93	6.86	14.40	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
23-Jul-93	8.07	13.19	0.00	NA	NA	NA	NA	NA	NA	
27-Oct-93	NA	NA	NA	NA	NA	NA	NA	NA	NA	Well Inaccessible
27-Jan-94	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		New top casing elevation (ft): 21.24								
05-May-94	7.73	13.51	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
26-Jul-94	8.30	12.94	0.00	NA	NA	NA	NA	NA	NA	
28-Oct-94	8.30	12.94	0.00	<50	<0.3	<0.3	<0.3	<0.6	NA	
02-Jan-95	7.25	13.99	0.00	NA	NA	NA	NA	NA	NA	
14-Apr-95	6.99	14.25	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
28-Jul-95	7.21	14.03	0.00	NA	NA	NA	NA	NA	NA	
17-Oct-95	7.41	13.83	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
11-Jan-96	6.80	14.44	0.00	NA	NA	NA	NA	NA	NA	
S-12		**Top casing elevation (ft): 21.05**								

TABLE 1

WELL CONCENTRATIONS
Shell Oil Products Company
15275 Washington
San Leandro, California
WIC# 204-6852-1008

Sample Date	Measured GW Depth (ft)	Corrected GW Elev (ft)	SP (ft)	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	Comments
16-Nov-88	NA	NA	NA	50	3.5	<1	<1	<3	NA	
27-Feb-89	NA	NA	NA	<50	0.8	<1	<1	<3	NA	
03-May-89	NA	NA	NA	<50	<0.5	<1	<1	<3	NA	
10-Aug-89	8.32	12.73	0.00	<50	<0.5	<1	<1	<3	NA	
09-Oct-89	8.32	12.73	0.00	<50	<0.5	<1	<1	<1	NA	
25-Jan-90	8.18	12.87	0.00	<50	<0.5	<0.5	<0.5	<1	NA	
18-Apr-90	8.05	13.00	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
23-Jul-90	7.92	13.13	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
18-Oct-90	8.90	12.15	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
28-Jan-91	8.54	12.51	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
25-Apr-91	7.08	13.97	0.00	90	5.4	<0.5	1.1	0.7	NA	
09-Jul-91	8.42	12.63	0.00	<50	2.9	<0.5	<0.5	<0.5	NA	
08-Oct-91	8.80	12.25	0.00	50	<0.5	<0.5	<0.5	<0.5	NA	
05-Feb-92	8.07	12.98	0.00	50*	<0.5	<0.5	<0.5	<0.5	NA	
28-Apr-92	8.33	12.72	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
27-Jul-92	8.55	12.50	0.00	94	<0.5	<0.5	<0.5	<0.5	NA	
26-Oct-92	9.03	12.02	0.00	86	<0.5	<0.5	<0.5	<0.5	NA	
14-Jan-93	6.38	14.67	0.00	120	2.0	<0.5	<0.5	<0.5	NA	
16-Apr-93	6.56	14.49	0.00	60	<0.5	<0.5	<0.5	<0.5	NA	
23-Jul-93	7.76	13.29	0.00	90	<0.5	<0.5	<0.5	<0.5	NA	
27-Oct-93	NA	NA	NA	NA	NA	NA	NA	NA	NA	Well Inaccessible
27-Jan-94	NA	NA	NA	NA	NA	NA	NA	NA	NA	Well Inaccessible
		New top casing elevation (ft): 20.71								
05-May-94	7.49	13.22	0.00	<50	2.0	<0.5	<0.5	<0.5	NA	
26-Jul-94	7.92	12.79	0.00	128	<0.3	<0.3	<0.3	<0.6	NA	
28-Oct-94	7.78	12.93	0.00	167	<0.3	<0.3	<0.3	<0.6	NA	
02-Jan-95	7.33	13.38	0.00	50	<0.5	<0.5	<0.5	<0.5	NA	
14-Apr-95	6.47	14.24	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
28-Jul-95	6.90	13.81	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
17-Oct-95	7.16	13.55	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
11-Jan-96	6.65	14.06	0.00	<50	<0.5	<0.5	<0.5	<0.5	82	
S-13		Top casing elevation (ft): 20.57								
03-May-89	NA	NA	NA	150	4.9	4.0	2.0	14	NA	
10-Aug-89	8.00	12.57	0.00	110	2.9	<1	<1	<3	NA	
09-Oct-89	7.95	12.62	0.00	77	1.4	<1	<1	<3	NA	
25-Jan-90	7.79	12.78	0.00	51	0.5	<0.5	<0.5	<1	NA	

TABLE 1

WELL CONCENTRATIONS
Shell Oil Products Company
15275 Washington
San Leandro, California
WIC# 204-6852-1008

Sample Date	Measured GW Depth (ft)	Corrected GW Elev (ft)	SP (ft)	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	Comments
18-Apr-90	7.73	12.84	0.00	85	8.7	<0.5	<0.5	<1	NA	
23-Jul-90	7.63	12.94	0.00	80	0.8	<0.5	<0.5	<0.5	NA	
18-Oct-90	8.58	11.99	0.00	130	<0.5	<0.5	<0.5	<5	NA	
28-Jan-91	8.39	12.18	0.00	<50	<0.5	0.9	1.2	1.0	NA	
25-Apr-91	7.00	13.57	0.00	440*	3.8	<0.5	<0.5	0.6	NA	
09-Jul-91	8.12	12.45	0.00	320*	0.6	<0.5	<0.5	<0.5	NA	
08-Oct-91	8.69	11.88	0.00	310	<0.5	<0.5	<0.5	<0.5	NA	
05-Feb-92	7.62	12.95	0.00	NA	NA	NA	NA	NA	NA	
28-Apr-92	7.15	13.42	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
27-Jul-92	8.20	12.37	0.00	NA	NA	NA	NA	NA	NA	
26-Oct-92	8.73	11.84	0.00	180	<0.5	<0.5	<0.5	<0.5	NA	
13-Jan-93	5.06	15.51	0.00	NA	NA	NA	NA	NA	NA	
16-Apr-93	6.38	14.19	0.00	240	4.8	<0.5	1.3	<0.5	NA	
23-Jul-93	7.45	13.12	0.00	NA	NA	NA	NA	NA	NA	
27-Oct-93	NA	NA	NA	NA	NA	NA	NA	NA	NA	Well Inaccessible
27-Jan-94	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		New top casing elevation (ft): 20.16								
05-May-94	6.91	13.25	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
26-Jul-94	7.52	12.64	0.00	NA	NA	NA	NA	NA	NA	
28-Oct-94	7.68	12.48	0.00	368	<0.3	<0.3	<0.3	<0.6	NA	
02-Jan-95	6.37	13.79	0.00	NA	NA	NA	NA	NA	NA	
14-Apr-95	5.81	14.35	0.00	NA	NA	NA	NA	NA	NA	
28-Jul-95	6.73	13.43	0.00	NA	NA	NA	NA	NA	NA	
17-Oct-95	6.94	13.22	0.00	<50	1.0	<0.5	<0.5	<0.5	NA	
11-Jan-96	6.20	13.96	0.00	NA	NA	NA	NA	NA	NA	
02-Apr-96	5.28	14.88	0.00	<50	<0.5	<0.5	<0.5	<0.5	<2	
09-Jul-96	6.35	13.81	0.00	NA	NA	NA	NA	NA	NA	

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WELL CONCENTRATIONS
Shell Oil Products Company
15275 Washington
San Leandro, California
WIC# 204-6852-1008

Sample Date	Measured GW Depth (ft)	Corrected GW Elev (ft)	SP (ft)	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	Comments
S-14		**Top casing elevation (ft): 20.44**								
03-May-89	NA	NA	NA	5300	750	400	200	800	NA	
10-Aug-89	7.58	12.86	0.00	1800	540	140	42	50	NA	
09-Oct-89	7.62	12.82	0.00	1000	360	60	20	30	NA	
25-Jan-90	7.82	12.62	0.00	640	160	77	17	39	NA	
18-Apr-90	7.37	13.07	0.00	1200	200	110	30	96	NA	
23-Jul-90	7.28	13.16	0.00	5000	430	340	140	660	NA	
18-Oct-90	8.10	12.34	0.00	1800	770	13	17	120	NA	
28-Jan-91	8.04	12.40	0.00	720	200	36	21	78	NA	
25-Apr-91	6.40	14.04	0.00	14000	930	430	250	970	NA	
09-Jul-91	7.69	12.75	0.00	160	30	5.3	5	16	NA	
08-Oct-91	8.24	12.20	0.00	5400	81	57	95	380	NA	
02-Feb-92	7.20	13.24	0.00	NA	NA	NA	NA	NA	NA	
28-Apr-92	9.75	10.69	0.00	2000	270	140	48	170	NA	
26-Oct-92	8.32	12.12	0.00	920	33	12	25	88	NA	
13-Jan-93	5.07	15.37	0.00	NA	NA	NA	NA	NA	NA	
16-Apr-93	5.86	14.58	0.00	4500	1100	29	91	170	NA	
23-Jul-93	7.06	13.38	0.00	NA	NA	NA	NA	NA	NA	
27-Oct-93	NA	NA	NA	NA	NA	NA	NA	NA	NA	Well Inaccessible
27-Jan-94	NA	NA	NA	NA	NA	NA	NA	NA	NA	
		New top casing elevation (ft): 19.99								
05-May-94	6.48	13.51	0.00	810	250	<2.5	9.4	19	NA	
26-Jul-94	7.04	12.95	0.00	NA	NA	NA	NA	NA	NA	
28-Oct-94	7.07	12.92	0.00	5385	290.6	85.8	49.7	186.2	NA	
02-Jan-95	5.95	14.04	0.00	NA	NA	NA	NA	NA	NA	
14-Apr-95	5.22	14.77	0.00	1600	40	4.7	11	20	NA	
28-Jul-95	6.21	13.78	0.00	NA	NA	NA	NA	NA	NA	

TABLE 1

WELL CONCENTRATIONS
Shell Oil Products Company
15275 Washington
San Leandro, California
WIC# 204-6852-1008

Sample Date	Measured GW Depth (ft)	Corrected GW Elev (ft)	SP (ft)	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	Comments
17-Oct-95	6.30	13.69	0.00	1200	37	<0.5	7.8	11	NA	
11-Jan-96	5.70	14.29	0.00	NA	NA	NA	NA	NA	NA	
S-15		**Top casing elevation (ft): 22.22**								
03-May-89	NA	NA	NA	<50	<0.5	<1	<1	<3	NA	
10-Aug-89	8.48	13.74	0.00	<50	<0.5	<1	<1	<3	NA	
09-Oct-89	8.46	13.76	0.00	<50	<0.5	<1	<1	<3	NA	
25-Jan-90	8.34	13.88	0.00	<50	<0.5	<1	<1	<1	NA	
18-Apr-90	8.45	13.77	0.00	<50	<0.5	<0.5	<0.5	<1	NA	
23-Jul-90	8.22	14.00	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
18-Oct-90	9.11	13.11	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
28-Jan-91	9.13	13.09	0.00	<50	<0.5	0.6	<0.5	0.8	NA	
25-Apr-91	7.83	14.39	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
09-Jul-91	8.93	13.29	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
08-Oct-91	9.26	12.96	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
05-Feb-92	8.60	13.62	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
28-Apr-92	8.09	14.13	0.00	50	0.8	0.9	<0.5	1.4	NA	
27-Jul-92	8.83	13.39	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
26-Oct-92	9.31	12.91	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
14-Jan-93	6.64	15.58	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
16-Apr-93	7.14	15.08	0.00	<50	0.6	1.0	<0.5	0.7	NA	
23-Jul-93	8.23	13.99	0.00	<50	1.2	<0.5	<0.5	1.6	NA	
27-Oct-93	NA	NA	NA	NA	NA	NA	NA	NA	NA	Well Inaccessible
27-Jan-94	NA	NA	NA	NA	NA	NA	NA	NA	NA	Well Inaccessible
		New top casing elevation (ft): 21.42								
05-May-94	7.57	13.85	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
26-Jul-94	8.16	13.26	0.00	<50	<0.3	<0.3	<0.3	<0.6	NA	
28-Oct-94	7.87	13.55	0.00	<50	0.3	<0.3	<0.3	<0.6	NA	
02-Jan-95	7.02	14.40	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
14-Apr-95	6.19	15.23	0.00	NA	NA	NA	NA	NA	NA	
28-Jul-95	6.72	14.70	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
17-Oct-95	7.04	14.38	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
11-Jan-96	6.40	15.02	0.00	<50	<0.5	<0.5	<0.5	<0.5	<2	
S-16		**Top casing elevation (ft): 21.82**								
04-May-94	NA	NA	NA	380	44	3.0	2.0	<3	NA	
10-Aug-89	8.36	13.46	0.00	<50	0.6	<1	<1	<3	NA	

TABLE 1

WELL CONCENTRATIONS
Shell Oil Products Company
15275 Washington
San Leandro, California
WIC# 204-6852-1008

Sample Date	Measured GW Depth (ft)	Corrected GW Elev (ft)	SP (ft)	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	Comments
10-Oct-89	8.23	13.59	0.00	<5	<0.5	<1	<1	<3	NA	
25-Jan-90	7.88	13.94	0.00	240	160	3.3	0.8	11	NA	
18-Apr-90	8.19	13.63	0.00	<50	1.0	<0.5	<0.5	<1	NA	
23-Jul-90	8.09	13.73	0.00	<50	1.1	<0.5	<0.5	<0.5	NA	
18-Oct-90	8.90	12.92	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
28-Jan-91	8.55	13.27	0.00	<50	<0.5	0.6	<0.5	0.9	NA	
25-Apr-91	7.48	14.34	0.00	60^	21	0.5	3.2	4.8	NA	
09-Jul-91	8.48	13.34	0.00	<50	1.0	<0.5	<0.5	<0.5	NA	
08-Oct-91	8.95	12.87	0.00	50	17	1.4	1.2	5.5	NA	
05-Feb-92	8.20	13.62	0.00	150	65	0.7	<0.5	8.4	NA	
28-Apr-92	7.80	14.02	0.00	<50	13	<0.5	<0.5	<0.5	NA	
27-Jul-92	8.29	13.53	0.00	510	130	<2.5	<0.5	21	NA	
26-Oct-92	9.02	12.80	0.00	<50	<0.5	<0.5	<2.5	<0.5	NA	
13-Jan-93	5.78	16.04	0.00	100	25	1.9	<0.5	8.4	NA	
16-Apr-93	6.80	15.02	0.00	150	56	1.8	4.6	12	NA	
23-Jul-93	7.67	14.15	0.00	<50	0.9	<0.5	<0.5	<0.5	NA	
27-Oct-93	8.52	13.30	0.00	<50	1.5	<0.5	<0.5	<0.5	NA	
27-Jan-94	7.20	14.62	0.00	140	85	<1	<1	13	NA	

TABLE 1

WELL CONCENTRATIONS
Shell Oil Products Company
15275 Washington
San Leandro, California
WIC# 204-6852-1008

Sample Date	Measured GW Depth (ft)	Corrected GW Elev (ft)	SP (ft)	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	Comments
		New top casing elevation (ft): 21.24								
05-May-94	7.76	13.48	0.00	71	25	<0.5	<0.5	4.2	NA	
26-Jul-94	7.84	13.40	0.00	<50	<0.3	<0.3	<0.3	<0.6	NA	
28-Oct-94	7.97	13.27	0.00	<50	11.5	<0.3	<0.3	1.8	NA	
02-Jan-95	6.49	14.75	0.00	70	64	<0.5	<0.5	4.0	NA	
14-Apr-95	6.08	15.16	0.00	NA	NA	NA	NA	NA	NA	
28-Jul-95	7.00	14.24	0.00	<50	1.7	<0.5	<0.5	<0.5	NA	
17-Oct-95	7.15	14.09	0.00	<50	4.6	<0.5	<0.5	<0.5	NA	
11-Jan-96	6.30	14.94	0.00	80	17	0.7	<0.5	2.9	<2	
02-Apr-96	5.84	15.40	0.00	NA	NA	NA	NA	NA	NA	
09-Jul-96	6.72	14.52	0.00	NA	NA	NA	NA	NA	NA	
S-17		**Top casing elevation (ft): 20.95**								
03-May-89	NA	NA	NA	<50	<0.5	<1	<1	<3	NA	
10-Aug-89	8.13	12.82	0.00	<50	<0.5	<1	<1	<3	NA	
09-Oct-89	8.18	12.77	0.00	<50	<0.5	<1	<1	<3	NA	
25-Jan-90	7.60	13.35	0.00	<50	<0.5	<0.5	<0.5	<1	NA	
18-Apr-90	7.95	13.00	0.00	<50	<0.5	<0.5	<0.5	<1	NA	
23-Jul-90	7.87	13.08	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
18-Oct-90	8.71	12.24	0.00	390	10	62	22	110	NA	
28-Jan-91	8.54	12.41	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
25-Apr-91	7.15	13.80	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
09-Jul-91	8.24	12.71	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
08-Oct-91	8.86	12.09	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
05-Feb-92	7.74	13.21	0.00	NA	NA	NA	NA	NA	NA	
28-Apr-92	7.41	13.54	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
27-Jul-92	8.34	12.61	0.00	NA	NA	NA	NA	NA	NA	
26-Oct-92	8.87	12.08	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
13-Jan-93	3.43	17.52	0.00	NA	NA	NA	NA	NA	NA	
16-Apr-93	6.70	14.25	0.00	130	<0.5	<0.5	<0.5	<0.5	NA	
23-Jul-93	7.53	13.42	0.00	NA	NA	NA	NA	NA	NA	
27-Oct-93	8.29	12.66	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
27-Jan-94	5.78	15.17	0.00	NA	NA	NA	NA	NA	NA	
		New top casing elevation (ft): 20.45								
05-May-94	6.99	13.46	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
26-Jul-94	7.62	12.83	0.00	NA	NA	NA	NA	NA	NA	
28-Oct-94	7.91	12.54	0.00	<50	<0.3	<0.3	<0.3	<0.6	NA	

TABLE 1

WELL CONCENTRATIONS
Shell Oil Products Company
15275 Washington
San Leandro, California
WIC# 204-6852-1008

Sample Date	Measured GW Depth (ft)	Corrected GW Elev (ft)	SP (ft)	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	Comments
02-Jan-95	6.33	14.12	0.00	NA	NA	NA	NA	NA	NA	
14-Apr-95	5.53	14.92	0.00	NA	NA	NA	NA	NA	NA	
28-Jul-95	6.75	13.70	0.00	NA	NA	NA	NA	NA	NA	
17-Oct-95	7.15	13.30	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
11-Jan-96	6.37	14.08	0.00	NA	NA	NA	NA	NA	NA	
02-Apr-96	5.31	15.14	0.00	<50	<0.5	<0.5	<0.5	<0.5	<2	
09-Jul-96	6.30	14.15	0.00	<50	<0.50	<0.50	<0.50	<0.50	<2.5	
S-18		**Top casing elevation (ft): 21.03**								
31-May-91	NA	NA	NA	<50	<0.5	<0.5	<0.5	<0.5	NA	
09-Jul-91	8.23	12.80	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
08-Oct-91	8.84	12.19	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
05-Feb-92	7.67	13.36	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
28-Apr-92	7.40	13.63	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
27-Jul-92	8.38	12.65	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
26-Oct-92	8.83	12.20	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
13-Jan-93	5.86	15.17	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
16-Apr-93	4.88	16.15	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
23-Jul-93	7.56	13.47	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
27-Oct-93	8.30	12.73	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
27-Jan-94	6.84	14.19	0.00	<50	1.9	<0.5	<0.5	<0.5	NA	
		New top casing elevation (ft): 20.57								
05-May-94	7.05	13.52	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
26-Jul-94	7.62	12.95	0.00	<500	<3	1.1	<0.3	1.8	NA	
28-Oct-94	8.01	12.56	0.00	<50	<0.3	<0.3	<0.3	<0.6	NA	
02-Jan-95	6.26	14.31	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
14-Apr-95	4.85	15.72	0.00	NA	NA	NA	NA	NA	NA	
28-Jul-95	5.80	14.77	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
17-Oct-95	7.22	13.35	0.00	<50	<0.5	<0.5	<0.5	<0.5	NA	
11-Jan-96	6.40	14.17	0.00	<50	<0.5	<0.5	<0.5	<0.5	<2	
02-Apr-96	4.80	15.77	0.00	NA	NA	NA	NA	NA	NA	
09-Jul-96	5.74	14.83	0.00	NA	NA	NA	NA	NA	NA	
SR-1		**Top casing elevation (ft): 21.45**								
22-Mar-89	NA	NA	NA	5400	1100	230	350	1300	NA	
25-Jan-90	7.53	13.92	0.00	2200	470	120	110	510	NA	
18-Apr-90	8.17	13.28	0.00	1000	130	47	47	220	NA	

TABLE 1

WELL CONCENTRATIONS
Shell Oil Products Company
15275 Washington
San Leandro, California
WIC# 204-6852-1008

Sample Date	Measured GW Depth (ft)	Corrected GW Elev (ft)	SP (ft)	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	Comments
23-Jul-90	7.58	13.87	0.00	3200	470	320	170	870	NA	
18-Oct-90	8.81	12.64	0.00	1300	280	6.6	110	130	NA	
28-Jan-91	8.37	13.08	0.00	110	120	12	51	110	NA	
25-Apr-91	6.91	14.54	0.00	NA	NA	NA	NA	NA	NA	
09-Jul-91	8.11	13.34	0.00	1400	200	27	130	340	NA	
08-Oct-91	8.63	12.82	0.00	980	79	1.5	44	52	NA	
05-Feb-91	7.68	13.77	0.00	3800	580	36	320	400	NA	
28-Apr-92	7.27	14.18	0.00	38000	1800	460	1900	750	NA	
27-Jul-92	8.11	13.34	0.01	NA	NA	NA	NA	NA	NA	
26-Oct-92	8.63	12.82	0.00	1800	370	10	130	130	NA	
13-Jan-93	5.46	15.99	0.00	47000	1000	1100	1700	13000	NA	
16-Apr-93	6.28	15.17	0.00	25000	1700	430	2400	8300	NA	
23-Jul-93	7.34	14.11	0.00	33000	2400	2000	3800	14000	NA	
27-Oct-93	8.04	13.41	0.00	2300	340	<12.5	270	440	NA	
27-Jan-94	6.68	14.77	0.00	36000	2000	1700	3000	11000	NA	
		New top casing elevation (ft): 20.57								
05-May-94	6.81	13.76	0.00	43000	1500	130	2900	12000	NA	
26-Jul-94	7.38	13.19	0.00	13600	682.7	39.2	996.6	2516	NA	
28-Oct-94	7.48	13.09	0.00	8462	301.5	29.3	384.7	2019	NA	
02-Jan-95	6.34	14.23	0.00	13000	400	120	2500	10000	NA	
14-Apr-95	5.29	15.28	0.00	43000	690	370	2500	12000	NA	
28-Jul-95	6.36	14.21	0.00	35000	760	120	2300	8100	NA	
17-Oct-95	6.62	13.95	0.00	9700	310	12	610	1200	NA	
11-Jan-96	5.66	14.91	0.00	18000	410	170	1200	4400	42	
02-Apr-96	5.14	15.43	0.00	NA	NA	NA	NA	NA	NA	
09-Jul-96	NA	NA	NA	NA	NA	NA	NA	NA	NA	Well Inaccessible
SR-1 (DUP)										
17-Oct-95	NA	NA	NA	8300	230	9.6	680	840	NA	
11-Jan-96	NA	NA	NA	17000	420	180	1100	4000	42	

Abbreviations:
TPPH = Total Purgeable Petroleum Hydrocarbons carbon range C6 to C12 by EPA Method (Modified)
(previously reported as Total Petroleum Hydrocarbons as Gasoline)
BTEX = benzene, toluene, ethylbenzene, xylenes by EPA Method 8020
MTBE = methyl-tertiary-butyl ether by EPA Method 8020
NA = Not analyzed or not available

TABLE 1

WELL CONCENTRATIONS
Shell Oil Products Company
15275 Washington
San Leandro, California
WIC# 204-6852-1008

Sample Date	Measured GW Depth (ft)	Corrected GW Elev (ft)	SP (ft)	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE (ug/L)	Comments

(DUP) = Duplicate
<x - Not detected at detection limit of x

Notes:
* = Compounds detected within the chromatographic range of gasoline but not characteristic of the standard gasoline pattern.
** = The concentration reported as gasoline is primarily due to the presence of a discrete peak not indicative of gasoline.

APPENDIX A-2

SOIL ANALYTICAL TABLES AND MAPS

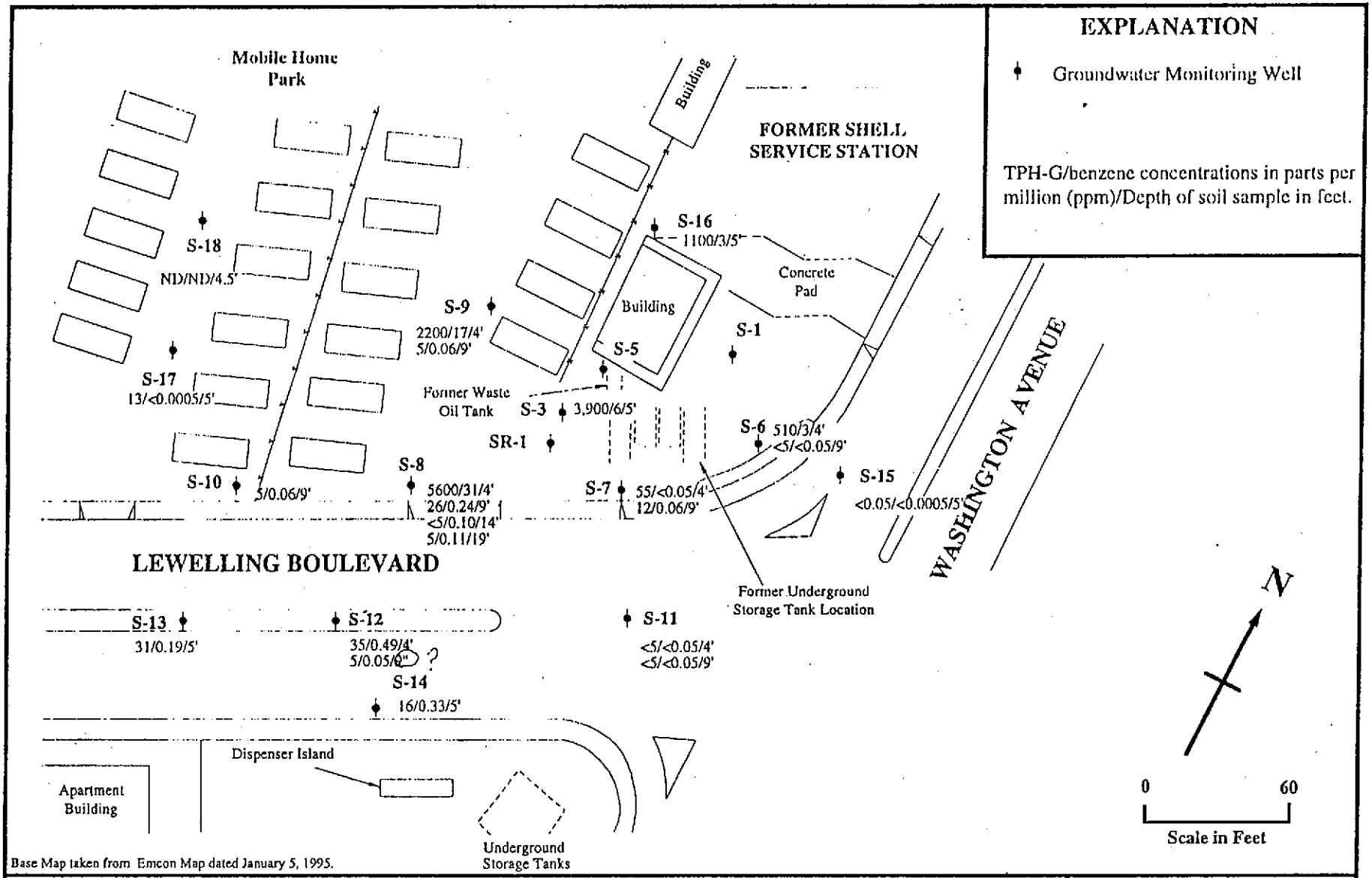


PLATE **3**

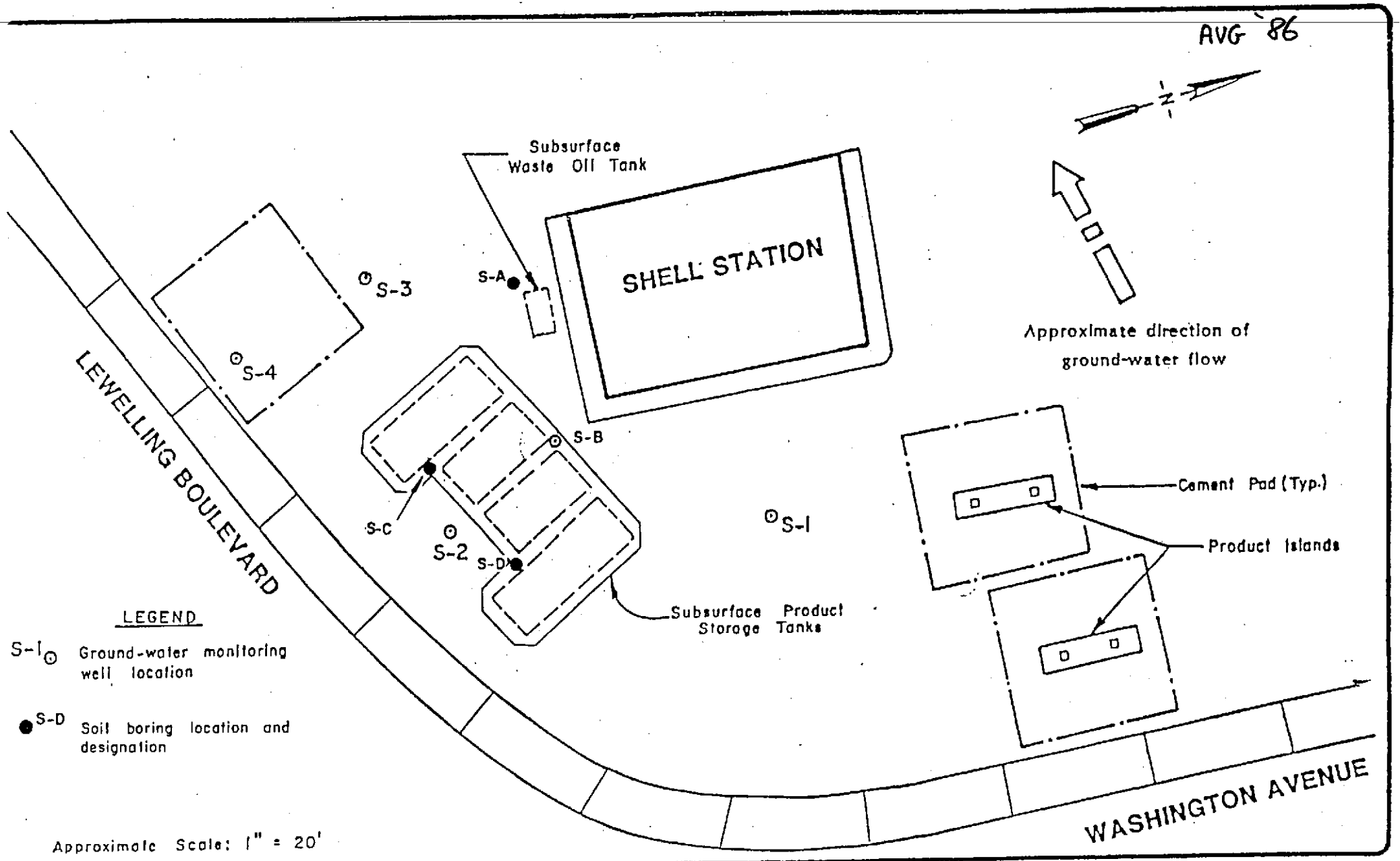
SOIL QUALITY MAP
Shell Oil Company
15275 Washington Avenue
San Leandro, California

enviros ®
95276.01

Drawn By: JLP Date: 4-3-95

Approved By: _____ Date: 4-17-95

AVG '86



EMCON Associates
San Jose, California

GETTLER-RYAN, INC.
SUBSURFACE HYDROGEOLOGIC INVESTIGATION
SHELL STATION, LEWELLING BLVD & WASHINGTON AVE.
SAN LEANDRO, CALIFORNIA

SITE PLAN

FIGURE
1

PROJECT NO.
738-08.02

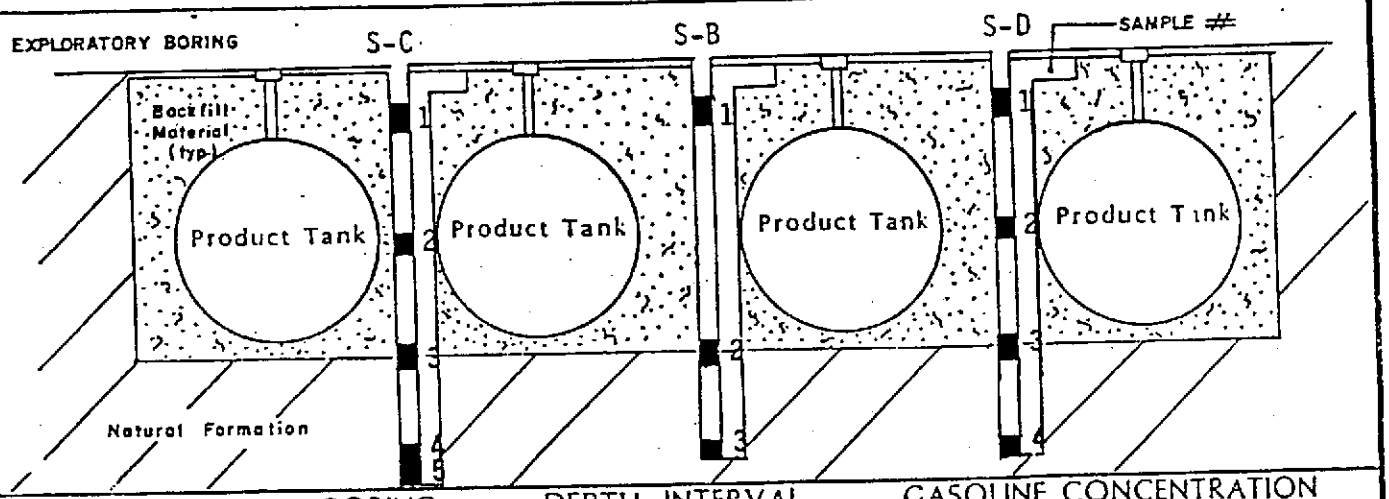
GETTLER-RYAN, INC.

EMCON ASSOCIATES

GENERALIZED PROFILE OF SUBSURFACE TANK COMPLEX AND GASOLINE CONCENTRATIONS WITHIN BACKFILL MATERIAL

PROJECT NUMBER 738-08.02
PROJECT NAME G-R Shell, San Leandro
NUMBER OF TANKS IN COMPLEX 4

MAPVIEW DIMENSIONS 27' x 42'
APPROXIMATE DEPTH 12 feet



SAMPLE #	BORING	DEPTH INTERVAL	GASOLINE CONCENTRATION (parts per million)
1	S-B	3-1/2 to 5	1,700
2	S-B	11 to 12-1/2	1,500
3	S-B	14 to 15-1/2	nd*
1	S-C	3-1/2 to 5	310
2	S-C	7-1/2 to 9	nd[1]
3	S-C	11-1/2 to 13	nd*
4	S-C	14 to 15-1/2	300
5	S-C	15-1/2 to 17	nd*
1	S-D	3-1/2 to 5	nd[2]
2	S-D	7 to 8-1/2	nd*
3	S-D	11 to 12-1/2	nd*
4	S-D	14 to 15-1/2	nd*

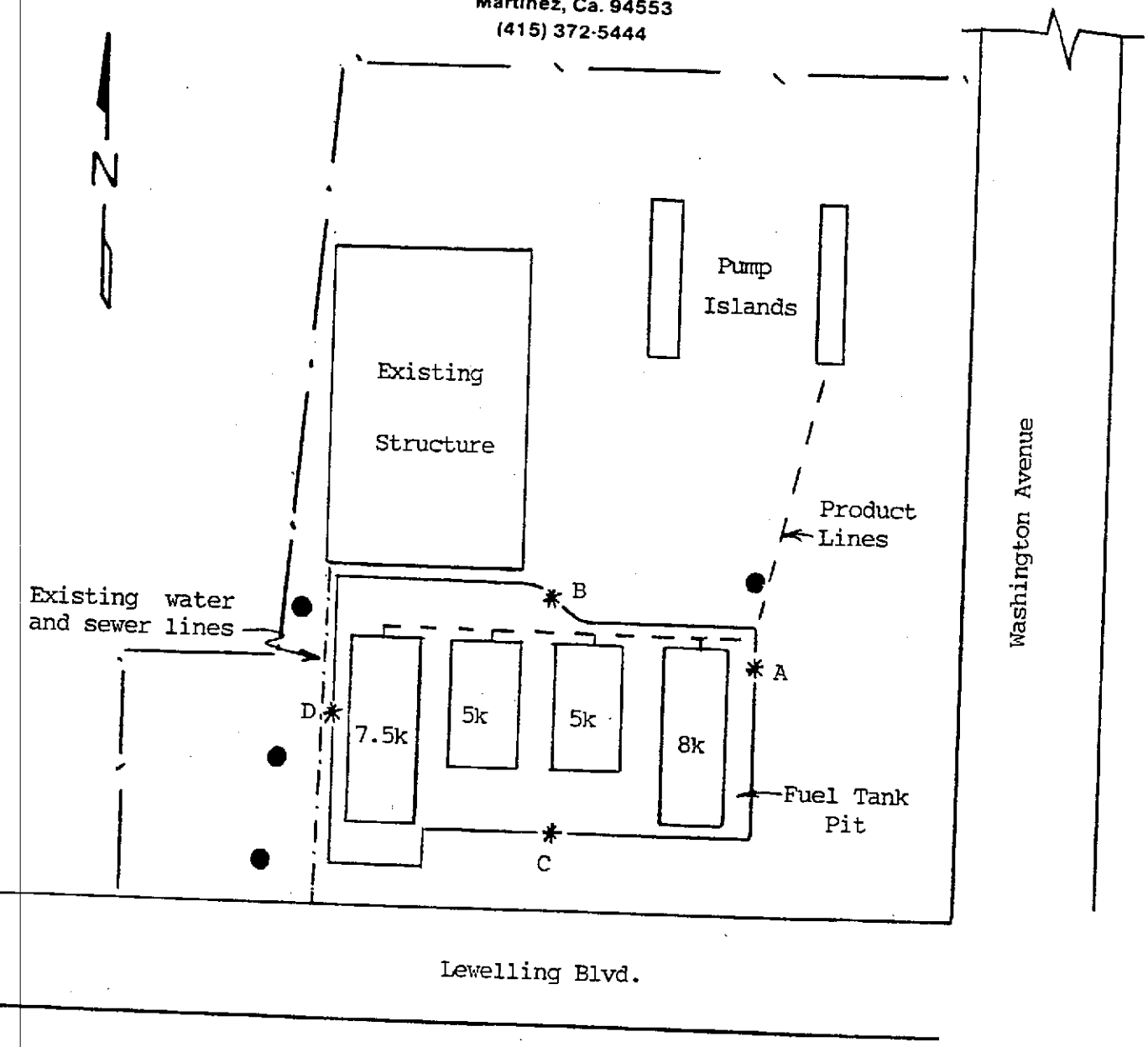
nd = no detection.

* Detection limit = 5 parts per million.

1 Detection limit = 200 ppm due to matrix interferences.

2 Detection limit = 100 ppm due to matrix interferences.

KAPREALIAN ENGINEERING, INC.
Consulting Engineers
535 Main Street
Martinez, Ca. 94553
(415) 372-5444



LOCATION PLAN
(not to scale)

● Existing monitoring well

✱ soil sample location

SHELL SERVICE STATION
13275 Washington Avenue
San Leandro, CA

SEQUOIA Analytical Laboratory
2549 Middlefield Road
Redwood City, CA 94063 • (415) 364-9222

prealian Engineering, Inc.
35 Main Street, Suite 309
artinez, CA 94553
tn: Mardo Kaprealian, P.E.
President

Date Sampled: 06-11-87
Date Received: 06-11-87
Date Reported: 06-22-87

mple Number
7060803

Sample Description
Soil A
Shell at Washington Avenue
in San Leandro, CA

ANALYSIS

	Detection Limit ppm	Sample Results ppm
l Hydrocarbons as Gasoline	1	1.0
ene	0.1	< 0.1
uene	0.1	< 0.1
nes	0.1	< 0.1

E: Analysis was performed using EPA methods 5020 and 8015 with method 8020 used for BTX distinction.

DIA ANALYTICAL LABORATORY

nur G. Burton
ratory Director

SEQUOIA Analytical Laboratory
2549 Middlefield Road
Redwood City, CA 94063 • (415) 364-9222

Kaprealian Engineering, Inc.
535 Main Street, Suite 309
Martinez, CA 94553
Attn: Mardo Kaprealian, P.E.
President

Date Sampled: 06-11-87
Date Received: 06-11-87
Date Reported: 06-22-87

Sample Number

7060804

Sample Description

Soil B
Shell at Washington Avenue
in San Leandro, CA

ANALYSIS

	Detection Limit ppm	Sample Results ppm
tal Hydrocarbons as Gasoline	1	74
enzene	0.1	2.5
oluene	0.1	1.1
enes	0.1	3.7

TE: Analysis was performed using EPA methods 5020 and 8015 with method 8020 used for BTX distinction.

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ur G. Burton
oratory Director

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Redwood City, CA 94063 • (415) 364-9222

Kaprealian Engineering, Inc.
535 Main Street, Suite 309
Martinez, CA 94553
Attn: Mardo Kaprealian, P.E.
President

Date Sampled: 06-11-87
Date Received: 06-11-87
Date Reported: 06-22-87

Sample Number

7060805

Sample Description

Soil C
Shell at Washington Avenue
in San Leandro, CA

ANALYSIS

	Detection Limit ppm	Sample Results ppm
tal Hydrocarbons as Gasoline	1	31
enzene	0.1	< 0.1
luene	0.1	0.69
enes	0.1	1.2

E: Analysis was performed using EPA methods 5020 and 8015 with method 8020 used for BTX distinction.

OIA ANALYTICAL LABORATORY

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oratory Director

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Kaprealian Engineering, Inc.
535 Main Street, Suite 309
Martinez, CA 94553
Attn: Mardo Kaprealian, P.E.
President

Date Sampled: 06-11-87
Date Received: 06-11-87
Date Reported: 06-22-87

Sample Number

7060806

Sample Description

Soil D
Shell at Washington Avenue
in San Leandro, CA

ANALYSIS

	Detection Limit ppm	Sample Results ppm
Total Hydrocarbons as Gasoline	1	910
Benzene	0.1	7.4
Toluene	0.1	43
Xylenes	0.1	43

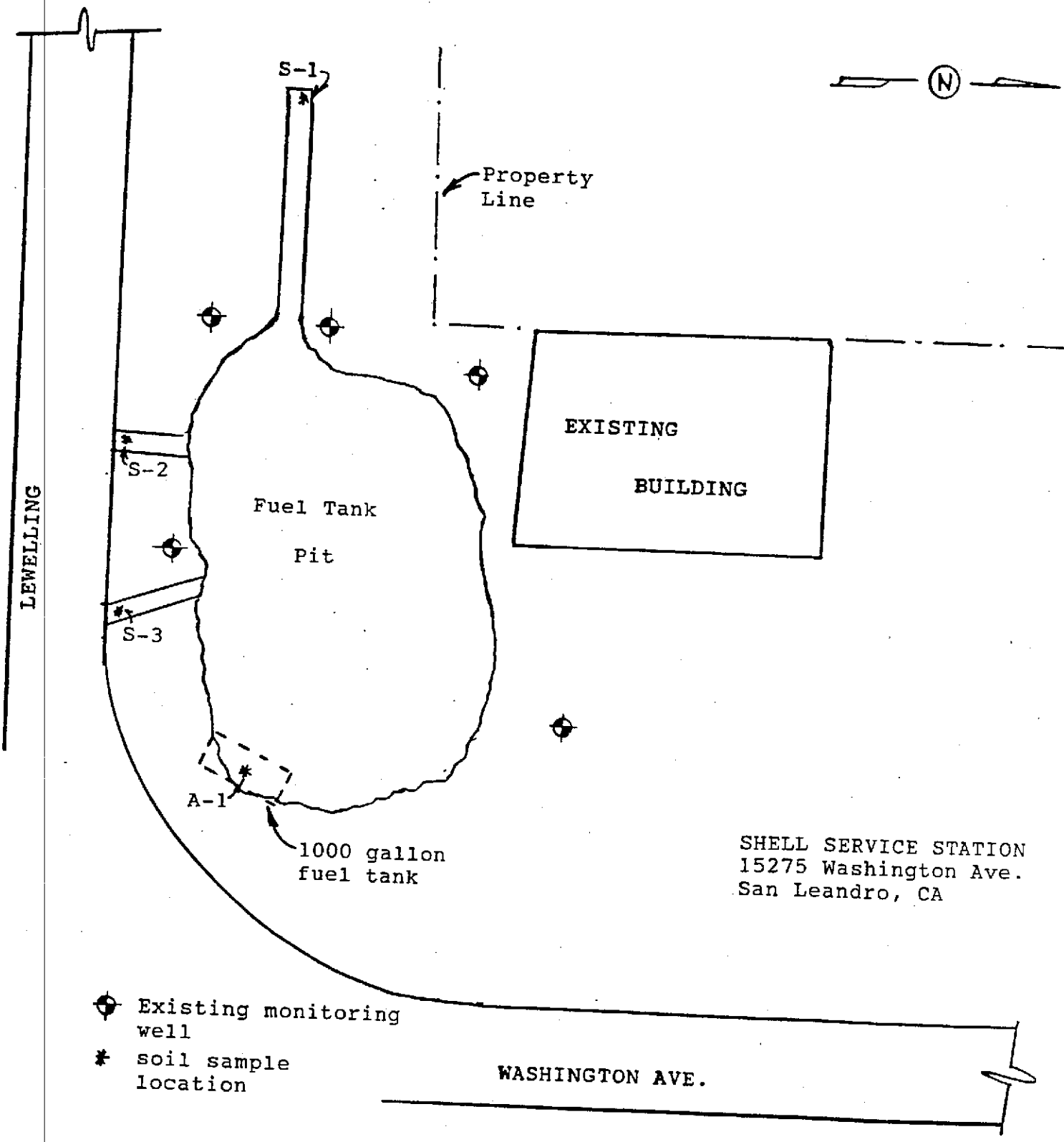
NOTE: Analysis was performed using EPA methods 5020 and 8015 with method 8020 used for BTX distinction.

SEQUOIA ANALYTICAL LABORATORY

Arthur G. Burton
Laboratory Director

jao

KAPREALIAN ENGINEERING, INC.
Consulting Engineers
P. O. BOX 913
BENICIA, CA 94510
(415) 676-9100 (707) 746-8915



SITE PLAN
1" = 20 ft.

TABLE -1

SUMMARY OF LABORATORY ANALYSES
(all results in parts per million)

Sample Number	Date Sampled	Total Petroleum Hydrocarbons	Benzene	Toluene	Xylene
S-1	10-13-87	260	10	0.2	3.0
S-2		100	5.7	2.9	52
S-3		730	3.9	1.0	79
A-1*	11-16-87	950	21	1.4	17
Comp Q	9-03-87	850	5.1	14	33
Comp A*	11-25-87	1.3	<0.1	<0.1	0.2
Comp B*		1.5	<0.1	<0.1	0.4

* A-1 Ethylbenzene = 35 ppm
Comp A Ethylbenzene <0.1 ppm
Comp B Ethylbenzene <0.1 ppm

July 23, 1985

Emcon Associates
90 Archer Street
San Jose, CA 95112

Reference: Shell Purchase Order MOH050908

ATTN: Erin Garner

Following are the results of our analyses for the presence of volatile hydrocarbons due to gasoline in three samples of soil received on June 27, 1985.

The samples were examined using the purge and trap technique. Final detection was by gas chromatography using a flame ionization detector as well as a photoionization detector and a Carbopack B/3% SP-1500 column.

nd = none detected

Lab. #	Sample Identification	Results: Parts per Million (dry soil basis) Volatile Hydrocarbons Due to Gasoline (includes benzene, toluene and xylenes)	Benzene	Toluene	Xylene isomers and ethyl benzene
	Job 738-8.1 15275 Washington San Leandro, 6/18/85				
29747	S-2 @ 7 - 8.5'	nd	nd	nd	nd
29748	S-3 @ 5 - 6.5'	3,900.	6.	170.	840.
29749	S-4 @ 5 - 6.5'	3,100.	nd*	18.	530.
Detection Limits		2.	0.1 10.*	0.1	0.4

Patricia L. Murphy

Patricia L. Murphy

PLM/jd

cc: Stan Roller
Shell Oil Company

INTERNATIONAL TECHNOLOGY CORPORATION

Gettler-Ryan
1992 National Avenue
Hayward, CA 94545

December 6, 1988

ATTN: John Werfal

Following are the results of analyses on the samples described below.

Project:	G-R #89831/WCC #8820011A-0097, Shell Washington and Lewelling, San Leandro, CA, CORRECTED REPORT
Lab Numbers:	SB-11-098-01 thru SB-11-098-16
Number of Samples:	16
Sample Type:	Soil
Date Received:	11/7/88
Analyses Requested:	Low Boiling Hydrocarbons

The method of analysis for low boiling hydrocarbons is taken from EPA Methods 8015, 8020 and 5030. The sample is examined using the purge and trap technique. Final detection is by gas chromatography using a flame ionization detector as well as a photoionization detector. The result for total low boiling hydrocarbons is calculated as gasoline and includes benzene, toluene, ethyl benzene and xylenes.

Fred Rouse

FR/mlh

2 Pages Following - Tables of Results

TABLE 2

SOIL SAMPLE ANALYSIS DATA

BORING NO	SAMPLE DATE	ANALYSIS DATE	TPH (PPM)	BENZENE (PPM)	TOLUENE (PPM)	ETHYLBENZENE (PPM)	XYLENES (PPM)
SR-1-5	27-Oct-89	05-Nov-89	770.	0.8	3.1	5.	33.
SR-1-10	27-Oct-89	05-Nov-89	20.	0.33	0.18	0.27	1.2
SR-1-15	27-Oct-89	05-Nov-89	<2.5	<0.025	<0.025	<0.025	0.05
SR-1-30	27-Oct-89	05-Nov-89	<2.5	<0.025	<0.025	<0.025	<0.05

TPH = Total Petroleum Hydrocarbons as Gasoline
PPM = Parts Per Million

Note: 1. All data shown as <x is reported as ND (none detected)

APPENDIX B

GEOLOGIC CROSS-SECTION

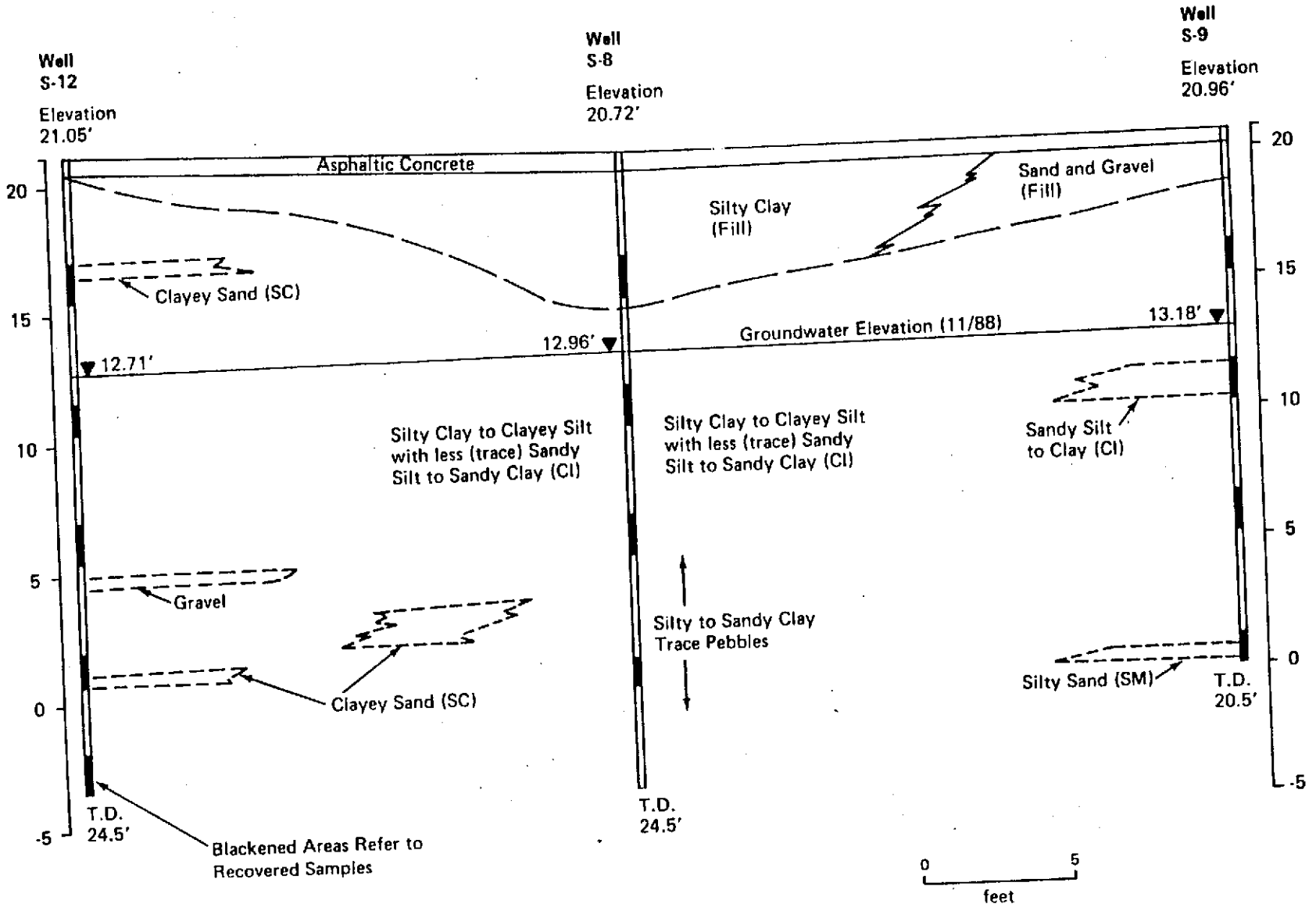
Woodward-Clyde Consultants

Project No. 8820011A

Gettler Ryan

CROSS SECTION
SHELL SERVICE STATION
LEWELLING BLVD. AND WASHINGTON AVE.
SAN LEANDRO, CALIFORNIA

Figure 6



APPENDIX C

WELL SCREEN INTERVALS

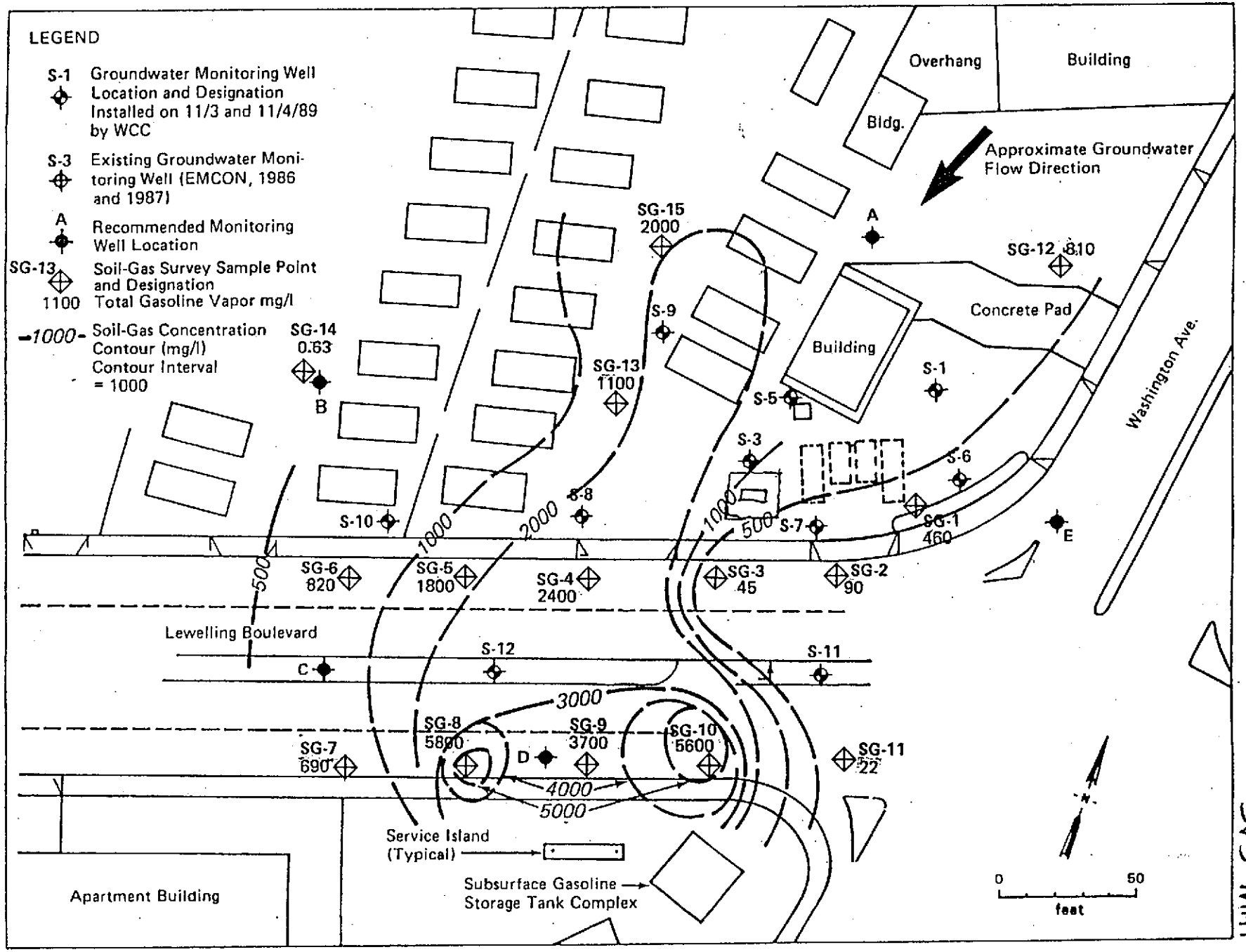
Former Shell Service Station
15275 Washington Avenue
San Leandro, California
WIC #204-6852-1108

Well Screen Intervals

Well	Screen Interval	Comments
S-1	4.0 - 19.0	
S-2	4.0 - 18.5	Destroyed during UST removal
S-3	4.0 - 16.5	
S-4	4.0 - 18.0	Destroyed during UST removal
S-5	3.5 - 18.5	
S-6	3.0 - 24.5	
S-7	3.0 - 24.5	
S-8	3.0 - 24.5	
S-9	3.0 - 18.0	
S-10	3.0 - 18.0	
S-11	3.5 - 25.0	
S-12	3.0 - 24.5	
S-13	4.0 - 24.0	
S-14	4.0 - 24.0	
S-15	4.0 - 24.0	
S-16	4.0 - 24.0	
S-17	4.0 - 24.0	
S-18	4.0 - 18.0	
SR-1	6.5 - 21.5	

APPENDIX D

SOIL VAPOR SURVEY RESULTS



SVS MAP

Project No. 8820011A

Woodward-Clyde Consultants

Gettler - Ryan

SOIL-GAS SURVEY CONTOUR MAP
SHELL SERVICE STATION
LEWELLING BLVD. AND WASHINGTON AVE.
SAN LEANDRO, CALIFORNIA

Figure 5

Table 3. SUMMARY OF SOIL GAS SURVEY RESULTS, OCTOBER, 1988, FORMER SHELL SERVICE STATION, 15275 WASHINGTON AVENUE, SAN LEANDRO, CALIFORNIA

Sample Number	Depth	Benzene	Toluene	Ethyl Benzene	Xylene	Total Hydrocarbon
SG-01	6'	25	110	65	36	460
SG-02	6'	4.4	25	16	5.6	90
SG-03	6'	0.68	16	14	16	45
SG-04	6'	220	300	33	12	2,400
SG-05	6'	140	440	33	12	1,800
SG-06	6'	41	140	26	8.9	820
SG-07	6'	460	180	48	<0.059	690
SG-08	6'	750	260	100	<0.59	5,800
SG-09	6'	1,000	460	140	<0.59	3,700
SG-10	6'	840	290	120	<0.59	5,600
SG-11	6'	4.8	*I	0.098	<0.006	22
SG-12	6'	260	72	1.3	1.2	810
SG-13	6'	120	68	45	<0.059	1,100
SG-14	6'	0.070	0.2	0.2	0.015	0.63
SG-15	6'	720	200	3.3	3.0	2,000
Air	Surface	<0.3	<0.3	<0.3	<0.3	<0.3

*I = Interference with adjacent peaks.

APPENDIX E

WELL SURVEY INFORMATION

WELL INVENTORY FILE

Definitions and abbreviations for items listed in the well inventory file are as follows:

[**WELLNO**] Well number - Wells are numbered according to their location in the rectangular system of the Public Land Survey. The part of the number preceding the slash indicates the township; the part following the slash indicates the range and section number; the letter following the section number indicates the 40-acre subdivision; and the final digit is a serial number for wells in each 40-acre subdivision.

[**DAT**] Date - The month and year when drilling or boring was completed.

[**ELEV**] Surface elevation - The surface elevation of the well, if known, in feet above mean sea level. A zero designates an unknown elevation.

[**TD**] Total depth - The depth of the well. This usually designates the completed well depth. If the well has a well log available on file, then the total drilled depth of the well is given. The inventory does not show total depth data for geotechnical borings. This is because only one state well number is assigned to one boring at a site, and there are usually several borings of different depth.

[**DTW**] Depth to water - This category usually indicates the standing groundwater level in the well on the date of completion. The "depth to first water encountered" is recorded in the inventory when it is the only water level data reported on the well driller's report.

[**USE**] Use - The well use (or in the case of cathodic protection wells and geotechnical borings, the reason for the excavation) as indicated in the well driller's report or data sheets. A plus sign (+) after the well use indicates a well in the current ACFC & WCD monitoring network.

[**ABN**] Abandoned well - A well whose use has been permanently discontinued or which is in such a state of disrepair that no water can be produced. In the inventory, this may include wells which are covered or capped but not properly destroyed.

[**CAT**] Cathodic protection well - Any artificial excavation constructed by any method for the purpose of installing equipment or facilities for the protection from corrosion by electrochemical methods of metallic equipment (usually piping) in contact with the ground; commonly referred to as cathodic protection.

[**DES**] Destroyed well - A well that has been properly filled so that it cannot produce water nor act as a vertical conduit for the movement of groundwater.

[**DOM**] Domestic well - A water well which is used to supply water for the domestic needs of an individual residence or systems of four or less service connections or "hookups".

[EXT] Extraction well - generally used in site remediation to extract contaminated water for treatment.

[GEO] Geotechnical boring - A temporary boring made to determine certain engineering properties of soils. An asterisk (*) indicates that the state well number assigned to the boring represents more than one boring at a particular site.

[INA] Inactive well - A well not routinely operating but capable of being made operable with a minimum of effort. Also called a "standby well".

[IND] Industrial well - A well used to supply water for industrial use

[INJ] Injection well - reintroduces water into the aquifer for recharge

[IRR] Irrigation well - A water well used to supply water only for irrigation or other agricultural purposes. In the inventory, this category includes large capacity wells as well as small capacity wells for lawn irrigation.

[MON] Monitoring or observation well - Wells constructed for the purpose of observing or monitoring groundwater conditions. (see piezometer).

[MUN] Municipal well - A water well used to supply water for domestic purposes in systems subject to Chapter 7, Part 1,
Division 5 of the California Health and Safety Code. Included are wells supplying public water systems classified by the Department of Health Services. (Also referred to as community water supply wells).

[PIE] Piezometer - A piezometer is a well specifically designated to measure the hydraulic head within a zone small enough to be considered a point as contrasted with a well that reflects the average head of the aquifer for the screened interval.

[REC] Recovery well - same as extraction well

[STO] Stock - A water well used primarily for livestock.

[TES] Test well and test hole - A test well is constructed for the purpose of obtaining the information needed to design a well prior to its construction. Such wells are not to be confused with "test holes" which are temporary in nature (i.e., uncased excavations whose purpose is the immediate determination of existing geologic and hydrologic conditions). Test wells are cased and can be converted to observation or monitoring wells, and under certain circumstances, to production wells. In the inventory, "TES" includes both test wells and test holes.

[?] Unidentified use - This indicates water wells whose use could not be ascertained from the available well data.

[LOG] Log - This category indicates whether a geologic record, or log, for the well or boring is available in the Agency's files. Abbreviations are as follows:

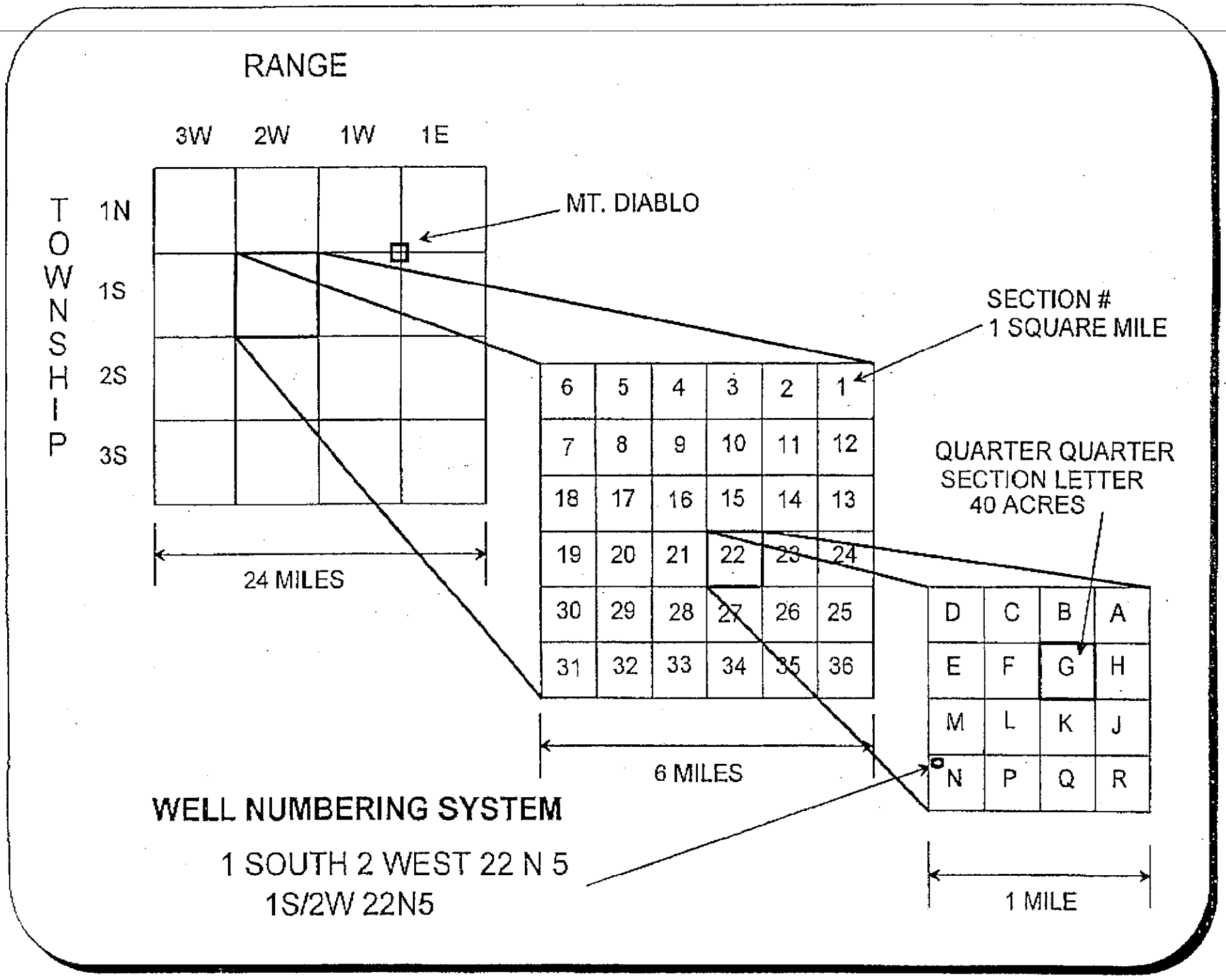
D - well driller's log
G - geotechnical boring log
E - electric (resistivity) log or other subsurface geophysical logs.

[WQ] Water quality data available - This category indicates which wells have water quality data available in ACFC & WCD files. The numbers 1 through 9 signify the number of sets of water quality measurements available for that well. A plus sign (+) indicates that 10 or more sets of data are available. A "0" indicates that no data is available.

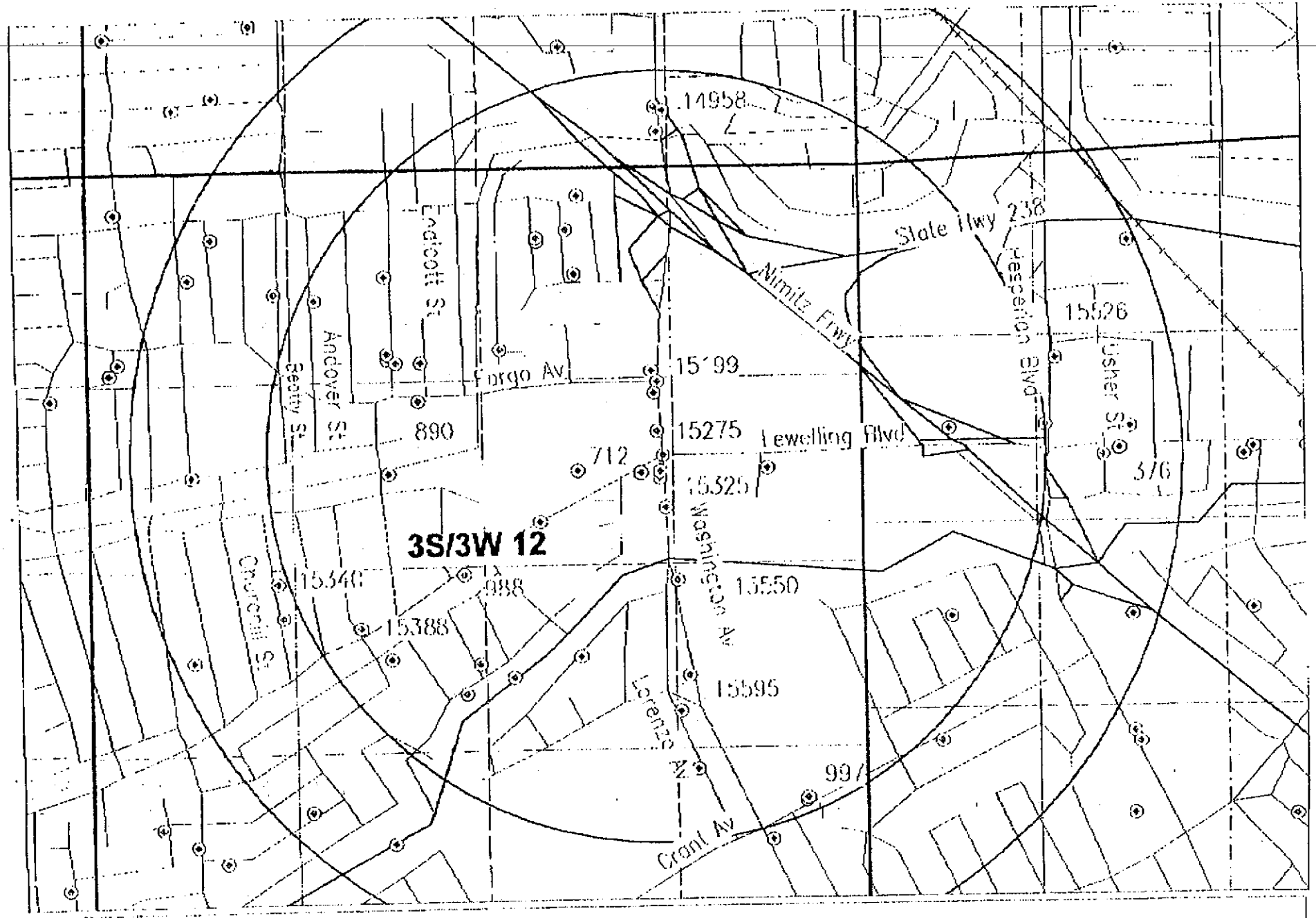
[WL] Water level data available - This category indicates which wells have water level data other than the data reported on the well driller's logs. The numbers 1 through 9 signify the number of water level measurements available. A plus sign (+) indicates that 10 or more measurements are available for that well.
A "0" indicates that no data is available.

[YLD] Yield - The maximum pumping rate in gallons per minute that can be supplied by a well without lowering the water level in the well below the pump intake. This data is taken from pump test data recorded in the driller's records. Some of the yield data reflects current production rates and does not reflect maximum yield values determined in a capacity test.

[DIA] Diameter - The diameter in inches of the main casing in a well. May also indicate the diameter of a hand-dug well. Diameter data is not recorded for geotechnical borings.



AUG-30-'96 FRI 13:30 ID:ALAMEDA CO PUBLIC WK FAX NO:510/670-5262 — #716 P05



.5 mile radius from Lewelling & Washington Ave.
03/30/1995

WELL #	CITY	ADDRESS	OWNER		PHONE	USE	DR.DATE	DIAM	TOT.DEPTH	DTW	ST.ELEV	WA.ELEV	YIELD	LOG	WQ	RL	DATAORGN	MARGIN
2S/3W 10M 4	SLZ	15275 WASHINGTON AVE	SHELL OIL CO.			O MON	04/89	3	25	8	0	0	0	D	0	0	L	
2S/3W 10M 5	SLZ	15275 WASHINGTON AVE	SHELL OIL CO.			O MON	04/89	3	25	9	0	0	0	D	0	0	L	
2S/3W 10M 6	SLZ	15275 WASHINGTON AVE	SHELL OIL CO.			O MON	04/89	3	26	9	0	0	0	D	0	0	L	
2S/3W 10M 7	SLZ	15275 WASHINGTON AVE	SHELL OIL CO.			O MON	04/89	3	26	8	0	0	0	D	0	0	L	
3S/2W 7C 1	SLZ	SYCAMORE	STENNEBL			D IRR	/35	10	270	0	37	0	0	?	0	0	L	Yes
3S/2W 7E 2	SLZ	15599 Hesperian Blvd	Unocal Corporation			O MON	4/91	2	20	11	37	25	0	D	2	2	D	
3S/2W 7E 3	SLZ	15599 Hesperian Blvd	Unocal Corporation			O MON	4/91	2	23	11	36	25	0	D	1	1	D	
3S/2W 7E 4	SLZ	15599 Hesperian Blvd	Unocal Corporation			O MON	4/91	2	25	16	37	21	0	G	1	1	D	
3S/2W 7E 5	SLZ	1599 Hesperian Blvd	Unocal Corporation			O DBS	2/91	10	40	0	0	0	0	?	0	0	D	
3S/2W 7E 5	SLZ	15599 Hesperian Blvd	Uocal Corp	MW4		O MON	7/91	2	26	18	0	0	0	G	1	1	D	
3S/2W 7E 6	SLZ	15599 Hesperian Blvd	Unocal Corp	MW5		O MON	7/91	2	26	18	0	0	0	G	1	1	D	
3S/2W 7E 7	SLZ	15599 Hesperian Blvd	Unocal Corp	MW6		O MON	7/91	2	26	21	0	0	0	G	1	1	D	
3S/2W 7E 8	SLZ	15599 Hesperian Blvd	Unocal Corp	RW-1		O REC	4/92	6	30	17	0	0	0	G	1	1	D	
3S/2W 7F 1	SLZ	15559 USHER	CHARLES GONSALVES			D IRR	?	0	25	0	38	0	0	?	0	0	L	Yes
3S/2W 7F 2	SLZ	15594 SHARON ST	FRANK MACIEL			O IRR	/55	4	27	0	44	0	0	?	0	0	L	Yes
3S/2W 7F 3	SLZ	376 LEWELLING BLVD	UNOCAL STATION			O MON	02/88	3	30	18	0	0	0	G	0	0	L	Yes
3S/2W 7G 3	SLZ	SAN LORENZO H.S.	HAY UNION H.S. DISTRICT			O IRR	9/51	14	616	20	42	22	250	D	1	0	L	
3S/2W 7L 6	HAY	15900 Hesperian	Chevron USA			D MON	11/89	2	25	8	0	0	0	D	0	0	D	Yes
3S/2W 7L 7	HAY	15900 Hesperian	Chevron USA			O MON	11/89	2	25	8	0	0	0	D	0	0	D	Yes
3S/2W 7L 8	HAY	15900 Hesperian	Chevron USA			O MON	11/89	2	26	0	0	0	0	D	0	0	D	Yes
3S/2W 7M 1	SLZ	646 VIA DELRIO	LEVY			O IRR	?	4	22	0	28	0	0	?	0	0	L	
3S/2W 7M 2	SLZ	LEWELLING	KINO NURSERY			O IRR	/20	12	150	0	33	0	0	?	0	0	L	
3S/2W 8K 2	SLZ	LEWELLING	S. BOTTINCOURT			D IRR	?	12	104	0	54	0	0	?	0	0	L	
3S/2W 8L 3	SLZ	988 LEWELLING BLVD	KNAPP'S NURSERY			D IRR+	/42	10	211	0	57	0	200	?	0	+	L	
3S/3W 1Q 5	SLZ	15550 WASHINGTON AVE	MODERN VEGETABLE PRO.			O IRR	9/64	12	460	0	0	0	750	D	0	0	L	
3S/3W 1Q 6	SLZ	14985 WASHINGTON AVE	ROTO ROOTER			O TES	4/86	2	29	9	0	0	0	D	0	0	L	
3S/3W 1Q 7	SLZ	14985 WASHINGTON AVE	ROTO ROOTER			O TRS	4/86	2	20	7	0	0	0	D	0	0	L	
3S/3W 1Q 8	SLZ	14985 Washington Ave.	Roto-Rooter			O MON	2/91	4	21	10	0	0	0	D	0	0	D	
3S/3W 1Q 9	SLZ	14985 Washington Ave	Roto-Rooter			D MON	3/91	2	15	7	0	0	0	D	0	0	D	
3S/3W 1Q10	SLZ	14985 Washington Ave.	Roto-Rooter			D DOM	3/91	5	200	30	0	0	25	D	0	0	D	
3S/3W 11Q 1	SLZ	LEWELLING BLVD	TROJAN POWDER CO.			O ABN	?	17	535	0	0	0	0	D	9	0	L	
3S/3W 11Q 2	SLZ	LEWELLING BLVD	EBMUD			O CAT	3/78	0	65	0	0	0	0	D	0	0	L	
3S/3W 11R 1	SLZ	LEWELLING & WASHINGTON	?			O IRR	?	8	500	0	13	0	0	?	0	+	L	
3S/3W 11R 2	SLZ	LEWELLING BLVD & SPRR	?			O IRR	?	0	0	0	9	0	0	?	0	0	L	
3S/3W 12A 1	SLZ	14953 WASHINGTON	D. MARENGO			O ?	/20	8	60	0	22	0	0	?	0	0	L	
3S/3W 12A 2	SLZ	14958 WASHINGTON	TWIN NURSERY CORP			O IRR	/36	12	335	0	0	0	0	?	0	0	L	
3S/3W 12A 3	SLZ	14958 WASHINGTON AV	TWIN NURSERY CORP.			O DBS	11/61	12	603	0	0	0	0	D	0	0	L	
3S/3W 12B 1	SLZ	391 W. 150 AV	FARA BROTHERS			O DOM	/30	10	120	0	20	0	0	?	0	0	L	
3S/3W 12B 2	SLZ	150 & WASHINGTON	H. GANSBERGER			O IRR	9/34	12	545	0	35	0	0	D	0	0	L	
3S/3W 12B 3	SLZ	14960 CROSBY ST	L. RAMIREZ			D IRR	/49	4	32	0	0	0	0	?	0	0	L	
3S/3W 12B 4	SLZ	15038 ALEXANDRIA ST	J. BOSTICK			O IRR	7/77	4	29	8	0	0	0	D	0	0	L	
3S/3W 12B 5	SLZ	15034 ALEXANDRIA ST	ROY SWATMAN			O IRR	5/77	4	28	7	0	0	15	D	0	0	L	
3S/3W 12B 6	SLZ	15028 GRENADA ST	LYLE BATES			O IRR	5/77	4	28	8	0	0	0	D	0	0	L	
3S/3W 12B 7	SLZ	GREENHOUSE MARKET PLAZA	GREENHOUSE MARKET PLAZA			O MON	6/85	0	22	13	0	0	0	G	0	0	L	
3S/3W 12B 8	SLZ	GREENHOUSE MARKET PLAZA	GREENHOUSE MARKET PLAZA			O MON	6/85	0	27	7	0	0	0	G	0	0	L	
3S/3W 12B 9	SLZ	GREENHOUSE MARKET PLAZA	GREENHOUSE MARKET PLAZA			O MON	6/85	0	22	14	0	0	0	G	0	0	L	
3S/3W 12B10	SLZ	519 MANOR BLVD	FARIA BROTHERS HARDWARE			O MON	08/86	2	23	11	0	0	0	G	0	0	L	
3S/3W 12B11	SLZ	Swenson St & Swenson Ct	PG&E			D OTH	12/91	0	122	0	0	0	0	D	0	0	D	
3S/3W 12B12	SLZ	15199 Washington Ave.	BP Oil Co.	MW-2		O MON	10/92	2	13	8	22	14	0	G	0	0	D	
3S/3W 12B13	SLZ	15199 Washington Ave.	BP Oil Co.	MW-3		O MON	10/92	2	15	6	22	16	0	G	0	0	D	
3S/3W 12B14	SLZ	15199 Washington Ave.	BP Oil Co.	MW-4		O MON	10/92	2	15	6	22	16	0	G	0	0	D	
3S/3W 12C 1	SLZ	ZELMA & MERSEY	CITY OF SAN LORENZO			O IRR	?	10	106	0	0	0	0	?	0	0	L	
3S/3W 12C 2	SLZ	W. 150 AV & ZELMA	KNAPP			D IRR	/47	6	75	0	0	0	0	?	0	0	L	
3S/3W 12C 3	SLZ	15086 ANDOVER ST	ORLINO ANDRADA			O IRR	7/77	4	34	8	0	0	0	D	0	0	L	
3S/3W 12D 1	SLZ	1146 BODMIN AV	O. OWLSON			O IRR	?	6	30	0	0	0	0	?	0	0	L	Yes
3S/3W 12E 1	SLZ	15099 EDGEWOOK	JOE ALAMEDA			O IRR	?	4	32	0	10	0	0	?	0	0	L	Yes
3S/3W 12E 2	SLZ	15118 INVERNESS ST				O ?	?	0	0	0	0	0	0	?	0	0	L	Yes
3S/3W 12F 1	SLZ	15211 NORTON ST	KEAIRNIN			D IRR	/52	6	16	0	0	0	0	?	0	0	L	
3S/3W 12F 2	SLZ	15049 FLEMING ST	L. BOTHELL			O IRR	/58	6	26	0	0	0	0	?	0	0	L	
3S/3W 12F 3	SLZ	15185 NORTON ST	HERMAN ALBRIGHT			D IRR	4/77	5	46	38	0	0	0	D	0	0	L	
3S/3W 12F 4	SLZ	15177 NORTON ST	RICHAND ARMSTRONG			D IRR	8/77	4	40	31	0	0	0	D	0	0	L	
3S/3W 12F 5	SLZ	15193 ENDICOTT ST	JAN TISBY			D IRR	6/77	4	29	11	0	0	0	D	0	0	L	

	WELL #	CITY	ADDRESS	OWNER		PHONE	USE	DR.DATE	DIAM	TOT.DEPTH	D/W	ST.ELEV	WA.ELEV	YIELD	LOG	MQ	WL	DATACRON	MARGIN	
	3S/3W 12F 7	SLE	890 FARGO AV	CHRIST PRESBYTERIAN		0	IRR	7/77	4	28	0	0	0	0	D	0	0	L		
	3S/3W 12F 8	SLE	15190 NORTON ST	SAL. CANDILENGO		0	IRR	5/77	6	35	8	0	0	0	D	0	0	L		
O	3S/3W 12G 1	SLZ	685 FARGO AV			0	DOM	?	0	42	0	0	0	0	?	0	0	L		
	3S/3W 12G 2	SLE	WASHINGTON & FARGO AVE	MOBIL OIL CORP		0	MON	03/86	2	20	10	0	0	0	G	0	0	L		
	3S/3W 12G 3	SLE	15275 WASHINGTON AVE	SHELL OIL		0	MON	12/86	4	20	7	22	0	0	G			L		
	3S/3W 12G 4	SLE	15275 WASH. AVE.	SHELL OIL		0	MON	11/88	3	24	8	0	0	0	G	0	0	L		
	3S/3W 12G 5	SLE	15275 WASHINGTON AVE	SHELL OIL		0	MON	11/88	3	24	8	0	0	0	G	0	0	L		
	3S/3W 12G 6	SLE	15275 WASH. AVE.	SHELL		0	MON	11/88	3	24	8	0	0	0	G	0	0	L		
	3S/3W 12G 7	SLE	15275 WASH. AVE.	SHELL OIL		0	MON	11/88	3	20	8	0	0	0	G	0	0	L		
	3S/3W 12G 8	SLE	15275 WASH. AVE.	SHELL OIL		0	MON	11/88	3	20	8	0	0	0	G	0	0	L		
	3S/3W 12G 9	SLE	15275 WASH. AVE.	SHELL OIL		0	MON	11/88	3	25	8	0	0	0	G	0	0	L		
	3S/3W 12G10	SLE	15275 WASH. AVE.	SHELL OIL		0	MON	11/88	3	24	8	0	0	0	G	0	0	L		
	3S/3W 12G11	SLE	15275 WASHINGTON AVE	SHELL OIL		0	MON	04/89	3	24	9	0	0	0	G	0	0	L		
	3S/3W 12G12	SLE	15275 WASHINGTON AVE	SHELL OIL		0	MON	05/89	3	24	9	0	0	0	G	0	0	L		
	3S/3W 12G13	SLE	15275 WASHINGTON AVE	SHELL OIL		0	MON	05/89	3	24	9	0	0	0	G	0	0	L		
	3S/3W 12G14	SLE	15275 WASHINGTON AVE	SHELL OIL		0	MON	05/89	3	24	8	0	0	0	G	0	0	L		
	3S/3W 12G15	SLE	15275 WASHINGTON AVE	SHELL OIL		0	MON	05/89	3	24	8	0	0	0	G	0	0	L		
	3S/3W 12G16	SLE	15201 WASH. AVE.	DESERT PETROLEUM		0	MON	09/88	2	28	80	0	0	0	D	Y	0	L		
	3S/3W 12G17	SLE	15201 WASH. AVE.	DESERT PETROLEUM		0	MON	09/88	2	28	8	0	0	0	D	Y	0	L		
	3S/3W 12G18	SLE	15201 WASH. AVE.	DESERT PETROLEUM		0	MON	09/88	2	29	9	0	0	0	D	Y	0	L		
	3S/3W 12G19	SLE	15275 East Washington St.	Shell Oil Company		0	TES	10/89	6	22	11	0	0	0	D	0	0	D		
	3S/3W 12G20	SLE	712 Lewelling Blvd.	ARCO		0	MON	8/90	2	41	6	10	4	0	G	0	0	D		
	3S/3W 12G21	SLE	712 Lewelling Blvd.	ARCO		0	MON	6/90	2	12	9	0	0	0	G	0	0	D		
	3S/3W 12G22	SLE	712 Lewelling Blvd.	ARCO		0	MON	6/90	2	12	11	0	0	0	G	0	0	D		
	3S/3W 12G23	SLE	712 Lewelling Blvd	ARCO Prod. Co.	MW-4	0	MON	5/91	4	18	8	0	0	0	D	0	0	D		
	3S/3W 12G24	SLE	712 Lewelling Blvd	ARCO Prod. Co.	MW-5	0	MON	5/91	4	20	8	0	0	0	D	0	0	D		
	3S/3W 12G25	SLE	712 Lewelling Blvd	ARCO Prod. Co.	MW-6	0	MON	5/91	4	16	0	0	0	0	D	0	0	D		
	3S/3W 12G26	SLE	712 Lewelling Blvd	ARCO Prod. Co.	MW-7	0	MON	5/91	4	16	9	0	0	0	D	0	0	D		
	3S/3W 12G27	SLE	712 Lewelling Blvd	ARCO Prod. Co.	MW-8	0	MON	5/91	4	16	9	0	0	0	D	0	0	D		
	3S/3W 12G28	SLE	15275 Washington Ave	Shell Oil Co	SLE	0	TEST	5/91	3	19	8	0	0	0	D	0	0	D		
	3S/3W 12G29	SLE	15301 Washington Ave.	Arco Productu Co.	MW-14	0	NON	8/92	2	13	12	0	0	0	D	0	0	D		
	3S/3W 12G30	SLE	712 Lewelling Blvd.	ARCO MW-15		0	NON	3/93	2	11	6	0	0	0	D	0	0	D		
	3S/3W 12G31	SLE	712 Lewelling Blvd.	ARCO MW-13		0	NON	11/92	2	14	12	0	0	0	G	0	0	D		
	3S/3W 12G32	SLE	712 Lewelling Blvd.	ARCO #601 MW-11		0	NON	10/92	4	12	9	0	0	0	G	0	0	D		
	3S/3W 12G33	SLE	712 Lewelling Blvd.	ARCO #601 MW-12		0	NON	10/92	4	13	8	0	0	0	G	0	0	D		
	3S/3W 12H 1	SLZ	15100 WASHINGTON AV	SAN LORENZO NURSERY		0	IRR	6/57	12	525	32	23	-9	0	D	0	0	L		
	3S/3W 12H 2	SLZ	15100 WASHINGTON AV	SAN LORENZO NURSERY		0	ABN	10/47	12	720	0	23	0	0	D	0	0	L		
	3S/3W 12J 2	SLE	15550 WASHINGTON	MODERN VEGETABLE NURSERY		0	IRR	/32	12	360	0	24	0	0	?	0	0	L		
X	3S/3W 12J 3	SLE	15325 WASHINGTON	E. MANUEL GUALCO		0	IRR	/20	10	130	0	0	0	0	?	0	0	L		
	3S/3W 12J 4	SLE	15600 LORENZO AVE	FRANK PERRY		0	IRR	8/78	8	80	9	0	0	20	D	0	0	L		
	3S/3W 12J 5	SLE	15595 WASHINGTON AVE	TEXACO		0	MON	08/86	2	15	11	0	0	0	G	0	0	L		
	3S/3W 12J 6	SLZ	15595 WASHINGTON AVE	TEXACO		0	MON	08/86	2	15	9	0	0	0	G	0	0	L		
	3S/3W 12J 7	SLZ	15595 WASHINGTON AVE	TEXACO		0	MON	08/86	2	16	12	0	0	0	G	0	0	L		
X	3S/3W 12K 1	SLZ	915 LEWELLING ST	E. PIANETTA		0	IRR	/25	12	120	0	17	0	0	?	0	0	L		
	3S/3W 12K 2	SLZ	983 LEWELLING BLVD	W. JONES		0	IRR	?	6	42	0	17	0	0	?	0	0	L		
X	3S/3W 12K 4	SLZ	15547 EUGENAN ST	EAGLE		0	IRR	/77	6	30	13	0	0	0	D	0	0	L		
	3S/3W 12L 1	SLE	15388 ANDOVER ST	E. PIANETTA		0	IRR	/57	6	22	0	0	0	0	?	0	0	L		
	3S/3W 12L 2	SLZ	15367 NORTON ST	BURKE		0	IRR	/53	6	30	0	0	0	0	?	0	0	L		
	3S/3W 12L 3	SLE	15596 TILDEN ST	ROBERT PERINO		0	IRR	3/77	4	30	12	0	0	6	D	0	+	L		
	3S/3W 12L 4	SLE	1018 KRAMER ST	AUBREY ELLIOTT		0	IRR	4/77	6	30	14	0	0	0	D	0	+	L		
	3S/3W 12M 1	SLZ	15311 FARNSWORTH ST	STRATMAN		0	IRR	/56	6	36	0	0	0	0	?	0	0	L	Yes	
	3S/3W 12M 2	SLZ	15301 FARNSWORTH ST	E. ROSENQUIST		0	IRR	?	6	30	0	9	0	0	?	0	0	L	Yes	
	3S/3W 12N 4	SLZ	15307 FARNSWORTH ST	HERMAN HOWELL		0	IRR	5/77	6	24	7	0	0	0	D	0	0	L	Yes	
	3S/3W 12P 1	SLE	TWIN PALMS	MASSOLA		0	IRR	?	0	0	0	17	0	0	?	0	0	L	Yes	
	3S/3W 12Q 1	SLZ	15701 Lorenzo Ave.	Arroyo H.S. (SLnzo USD)		0	PIE	1/91	2	20	8	0	0	0	D	0	0	D		
	3S/3W 12Q 2	SLZ	15701 Lorenzo Ave.	Arroyo H.S. (SLnzo USD)		0	MON	1/91	2	25	11	0	0	0	G	0	0	D		
	3S/3W 12Q 3	SLZ	15701 Lorenzo Ave.	Arroyo H.S. (SLnzo USD)		0	MON	1/91	2	25	11	0	0	0	G	0	0	D		
	3S/3W 12R 2	SLE	15651 WASHINGTON	CORSO		0			0	0	0	0	0	0				A	Yes	
	3S/3W 12R 4	MAY	GRANT & WASHINGTON	TOM CLEMENTS		0	IRR	12/89	8	38	0	0	0	0	?	0	0	L	Yes	
	3S/3W 12R 5	SLZ	997 Grant Ave	Chevron USA		0	NON	9/90	4	35	10	0	0	0	D	0	0	D		
	3S/3W 12R 6	SLE	997 Grant Ave	Chevron USA		0	NON	11/90	2	28	13	0	0	0	D	0	0	D		
	3S/3W 12R 7	SLE	997 Grant Ave	Chevron USA		0	NON	11/90	2	28	11	0	0	0	D	0	0	D		

WELL #	CITY	ADDRESS	OWNER	PHONE	USE	DR.DATE	DIAM	TOT.DEPTH	DTW	ST.ELEV	WA.ELEV	YIELD	ICG	WQ	WL	DATAORGN	MARGIN
3S/3W 12R 8	SLZ	997 Grant Ave	Chevron USA	0	MON	11/90	2	27	12	0	0	0	D	0	0		D
3S/3W 12R 8	SLZ	997 Grant Ave	Chevron USA	0	MON	2/91	2	14	4	100	96	0	G				D
3S/3W 12R 9	SLZ	15700 Lorenzo Ave.	SLZ Unified School Distri	0	MON	8/92	2	24	20	0	0	0	D	0	0		D
3S/3W 12R10	SLZ	15221 Nicke Blvd.	SLZ Unified School Dist.	0	MON	8/92	2	25	10	0	0	0	D	0	0		D
3S/3W 12R11	SLZ	15221 Nicke Blvd.	SLZ Unified School Dist.	0	MON	8/92	2	20	11	0	0	0	D	0	0		D
3S/3W 12R12	SLZ	15221 Nicke Blvd.	SLZ Unified School Dist.	0	MON	8/92	2	20	9	0	0	0	D	0	0		D
3S/3W 12R13	SLZ	997 Grant Ave	Chevron USA C-5	0	MON	2/93	2	21	15	0	0	0	G	0	0		D
3S/3W 13B 1	SLZ	15550 WASHINGTON AV	MODERN VEGETABLE NURSERY	0	IRR	6/48	12	550	0	0	0	0	D	0	0		L
3S/3W 14A 2	SLZ	SAN LORENZO WELL FIELD	USBWCD	0	MUN	10/15	10	834	0	7	0	0	D	0	0		L
3S/3W 14B 1	SLZ	LEWELLING	TROJAN POWDER CO.	0	ABN	?	12	533	0	6	0	0	D	0	0		L
3S/3W 14C 4	SLZ	LEWELLING BLVD	LIVERMORE-AMADOR VALLEY	0	CAT	5/79	0	140	0	0	0	0	D	0	0		L
3S/3W 14F 1	SLZ	LEWELLING BLVD	TROJAN POWDER CO	0	ABN	10/19	12	769	0	0	0	0	D	0	0		L
3S/3W 14G 1	SLZ	LEWELLING	TROJAN POWDER CO.	0	ABN	8/19	12	600	0	0	0	0	D	0	0		L
3S/3W 14G 2	SLZ	LEWELLING BLVD	TROJAN POWDER CO.	0	ABN	9/19	12	785	0	5	0	0	D	0	0		L
3S/3W 14H 3	SLZ	LEWELLING BLVD	TROJAN POWDER CO.	0	ABN	?	10	0	0	0	0	0	?	0	0		L

ICON WELL NUMBER	DATE DRILLED, DRILLER	WELL OWNER LISTED	STATUS IF KNOWN	WELL CONSTRUCTION DETAILS									EDITED DRILLER REPORTS
				TOT. DPTH (FT.)	COMP. DPTH (FT.)	PERF. INTER. (FT.)	SEAL DPTH (FT.)	CASE DIA. (IN.)	CASE MAT.	WAT. LEV. (FT.)	EST. Q (GPM)	SURF. ELEV. (FT.)	
		Modern											
40	1932	Vegetable	Irrig.	?	350	340-350		12				24	
	Western	Nursery											
	Well	15550 Washington											
		San Leandro											
41	1920 X	Gualco	Irrig.	?	130			10				24	
	Swan	15325 Washington											
		San Leandro											
42	1978	Perry	Irrig.	?	?								
	Wood Co.	15600 Lorenzo											
		San Lorenzo											
43	1925 X	Pianetta	Irrig.	?	120	100-120		12				17	
	Nunes	915 Lewelling											
		San Lorenzo											
44		Jones	Irrig.	?	42	30-42		6				17	
	Owner	983 Lewelling											
		San Lorenzo											
45	X	Raele	Irrig.	?	?								
		15547											
		Sedgeham											
		San Leandro											
46	1957	Pianetta	Irrig.	?	22			6				21	
	Owner	15388 Andover											
		San Leandro											

[redacted] WATER WELL SURVEY FORM [redacted]-08 [redacted]

MCON ASSOCIATES

MCON WELL NUMBER	DATE DRILLED, DRILLER	WELL OWNER LISTED	STATUS IF KNOWN	WELL CONSTRUCTION DETAILS									EDITED DRILLER REPORTS
				TOT. DPTH (FT.)	COMP. DPTH (FT.)	PERF. INTER. (FT.)	SEAL DPTH (FT.)	CASE DIA. (IN.)	CASE MAT.	WAT. LEV. (FT.)	EST. Q (GPM)	SURF. ELEV. (FT.)	
1	1900 Owner	Heide 90 Grant San Lorenzo	Domestic	?	36			6					
2	1935 Owner	Gianelli 143 Grant San Lorenzo	Irrig.	?	113	48-113		10-8					
3	6/12/48 ?	Modern Veg. Irrig. Nursery 15550 Washington Ave. San Lorenzo		?	?								
					550			12					
4	? ?	Gianelli 15841 Nielson Ave. San Lorenzo	Irrig.	?	113	48-113							
5	Owner ?	Bratton 15868 Corte Ulisse, San Lorenzo	Irrig.	?	21								
6	Owner ?	Moyers 1508 Via Hermana San Lorenzo	Irrig.	?	30								
7	? ?	Norris 16030 Via Nueva San Lorenzo	Irrig.	?	20								
8	8/5/56 Domestic Water Well Company	Lichty 16148 Channel St. San Lorenzo	Irrig.	?	30	15-30		6					

MC[redacted]SSO[redacted]ES

MCON ELL UMBER	DATE DRILLED, DRILLER	WELL OWNER LISTED	STATUS IF KNOWN	WELL CONSTRUCTION DETAILS									EDITED DRILLER REPORTS
				TOT. DPTH (FT.)	COMP. DPTH (FT.)	PERF. INTER. (FT.)	SEAL DPTH (FT.)	CASE DIA. (IN.)	CASE MAT.	WAT. LEV. (FT.)	EST. Q (GPM)	SURF. ELEV. (FT.)	
9	1920	Marengo		?	60			8					
	?	14953 Washington											
		San Lorenzo											
10	1936	Twn. Nursery Irrig		?	335			14				23	
	White	Corp. 14958											
		Washington											
		San Lorenzo											
11	1936	Twn. Nursery Irrig.		?	325			14				23	
	White	Corp. 14958											
		Washington											
		San Lorenzo											
12	5/26/78	McCarthy		?	?								
	AR-GO	2770 Scott Blvd.											
	Pump Co.	Santa Clara											
13	1930	Fara Bros	Domestic	?	120	99-110		10				20	
	?	391 W. 150th											
		San Lorenzo											
14	1949	Ramirez	Irrig.	?	32	22-32		4					
	Owner	14960 Crosby											
		San Lorenzo											
						453-469							
15	9/28/34	Gansberger		?	545	487-492		12				35	
	G.P. Nelson					518-520							
						521-528							
						530-540							

CON LL MBER	DATE DRILLED, DRILLER	WELL OWNER LISTED	STATUS IF KNOWN	WELL CONSTRUCTION DETAIL									EDITED DRILLER REPORTS
				TOT. DPTH (FT.)	COMP. DPTH (FT.)	PERF. INTER. (FT.)	SEAL DPTH (FT.)	CASE DIA. (IN.)	CASE MAT.	WAT. LEV. (FT.)	EST. Q (GPM)	SURF. ELEV. (FT.)	
16	1977 ?	Bostick 15038 Alexandria San Lorenzo		?	29								
17	? Swatman	Swatman 15054 Alexandria San Lorenzo	Irrig.	28	28								
18	? Owner	Bates 15028 Grenda San Lorenzo	Irrig.	28	25								
19	1977 ?	Andrada 15088 Andover San Lorenzo	Irrig.	?	?								
20	? ?	City of San Lorenzo Washington Manor Park	Irrig.	?	106			10					
21	1947 ?	Knapp Silva Bros. 150 West 150th Avenue San Lorenzo	Irrig.	?	75			6					
22	? Owner	Owlson 1146 Bodmin San Lorenzo	Irrig.	?	30			6					
23	? ?	Kirkley 15008 Dewey San Lorenzo	Domestic	?	60			4					

MCON ELL UMBER	DATE DRILLED, DRILLER	WELL OWNER LISTED	STATUS IF KNOWN	WELL CONSTRUCTION DETAILS									EDITED DRILLER REPORTS
				TOT. DPTH (FT.)	COMP. DPTH (FT.)	PERF. INTER. (FT.)	SEAL DPTH (FT.)	CASE DIA. (IN.)	CASE MAT.	WAT. LEV. (FT.)	EST. Q (GPM)	SURF. ELEV. (FT.)	
24	?												
	owner	Alameda	Irrig.	?	32			4				10	
		15099 Edgemoore											
		San Lorenzo											
25	?	?	Irrig.	?	?								
	?	15118 Inverness											
		San Lorenzo											
26	1977	Vandenberg	Irrig.	?	40								
		15202 Galt											
		San Leandro											
27	1977	Fassler	Irrig.	30	30								
	?	15205 Galt											
		San Leandro											
28	1952	Reairwin	Irrig.	?	18			6					
	Owner	15211 Norton											
		San Leandro											
29	1958	Bothell	Irrig.	?	28			6					
	Owner	15049 Fleming											
		San Leandro											
30	?	Albright	Irrig.	46	20								
	Owner	15185 Norton											
		San Leandro											
31	?	Armstrong	Irrig.	?	?								
	Owner	15177 Norton											
		San Leandro											
32	1977	Tisby	Irrig.	20	20								
	?	15193 Endicott											
		San Leandro											

CON LL NBER	DATE DRILLED, DRILLER	WELL OWNER LISTED	STATUS IF KNOWN	TOT. DPTH (FT.)	COMP. DPTH (FT.)	PERF. INTER. (FT.)	SEAL DPTH (FT.)	CASE DIA. (IN.)	CASE MAT.	WAT. LEV. (FT.)	EST. Q (GPM)	SURF. ELEV. (FT.)	EDITED DRILLER REPORTS
33	1977	Lapin	Irrig.	38	38								
	?	15105 Beatty											
		San Leandro											
34	?	Christ	Irrig.	?	?								
	?	Prebyterian											
		Church											
		840 Fargo											
		San Leandro											
35	1976	Campilengo	Irrig.	35	35								
	?	15190 Norton St.											
		San Leandro											
36	?	?	Domestic ?		42								
	?	658 Fargo											
		San Leandro											
37	1957	San Leandro	Aband. ?		525	341-354		16					
	Bassett	Nursery	1985			490-511							
		15100 Washington											
		San Lorenzo											
38	1947	"	Inactive ?		720	660-720		12				23	
	Fuentes	"											
		"											
		"											
39	1938	Christensen	Irrig.		370			12				26.5	
	Silva Bros.												

ICON WELL NUMBER	DATE DRILLED, DRILLER	WELL OWNER LISTED	STATUS IF KNOWN	TOT. DPTH (FT.)	COMP. DPTH (FT.)	PERF. INTER. (FT.)	SEAL DPTH (FT.)	CASE DIA. (IN.)	CASE MAT.	WAT. LEV. (FT.)	EST. Q (GPM)	SURF. ELEV. (FT.)	EDITED DRILLER REPORTS
47	1953	Burke											
	Owner	15367 Norton Irig		?	30			6					
		San Lorenzo											
48	1956	Stratman	Irrig.	?	36			6					
	Owner	15311 Farnsworth											
		San Lorenzo											
49	?	Rosenquist	Irrig	?	30			6					
	Owner	15301 Farnsworth											
		San Lorenzo											
50	1977	Perino	Irrig.	30	30								
	?	15596 Tilden											
		San Leandro											
51	1977	Elliott	Irrig.	30	30								
		1018 Kramer											
		San Leandro											
52	?	Wollery	Irrig.	?	23								
	?	15340 Churchill											
		San Leandro											
53	?	Howell	Irrig	24	25								
		15302 Farnsworth											
		San Leandro											
54	1977	Stanley		30	30								
	?	15368 Churchill											
		San Leandro											

ON L BER	DATE DRILLED, DRILLER	WELL OWNER LISTED	ST IF KNOWN	TOT. DPTH (FT.)	COMP. DPTH (FT.)	PERF. INTER. (FT.)	SEAL DPTH (FT.)	CASE DIA. (IN.)	CASE MAT.	LEV. (FT.)	Q (GPM	ELEV. (FT.)	DRILLER REPOR
		Parodi											
55	?	1508	Domestic ?		?								
	?	Lewelling											
		San Lorenzo											
		Beuit Enterprises		?	?								
56													
	?	2020 Davis	Abandoned										
		San Leandro											
57	1977	McTigue	Irrig.	21	20								
	?	1500 Sayre											
		San Leandro											
58	?	Bolla	Irrig.	?	?								
	?	1335 Sayre											
		San Leandro											
59	?	Brown	Irrig.	31	31								
		15591 Jutland											
		San Leandro											
								12	12				
60	?	Perry	Irrig	?	60								
	?	15500 Lorenzo											
		San Lorenzo											
												19	
61	1957	Arroyo High	Irrig	?	600								
	?	School											
		Grant St.											
		San Lorenzo											
62	?	Corso	?	?	?								
	?	15651 Washington											
		San Lorenzo											

CO[redacted] LL MBER	DATE DRILLED, DRILLER	WELL OWNER LISTED	[redacted] KNOWN	TOT. DPTH (FT.)	CON[redacted] DPTH (FT.)	PER[redacted] INTER. (FT.)	S[redacted] DPTH (FT.)	CAS[redacted] DIA. (IN.)	[redacted]SE MAT.	[redacted]. LEV. (FT.)	[redacted] Q (GPM)	[redacted] ELEV. (FT.)
		Richols										
3	1946	3000	Domestic ?		197			10				
	Basset	Halcolm										
		San Leandro										26
64	1937	Moore	Irrg.	?	50	30-47		6				
	Jet	15241 Upton										
		San Leandro										
												29
6[redacted]	1952	Crane	Irrig	?	20			4				
	Owner	487 Lloyd										
		San Leandro										
												27
66	1953	Wilson	Irrig.	?	25			8				
	Owner	15360 Dermody										
		San Leandro										
												28
67	1958	Cuimente	Irrig	?	20			6				
	Owner	15508 Werner										
		San Leandro										
												38
68	1935	Stewzel	Irrig	?	270			10				
	Silva	Sycamore										
		San Leandro										
												31
69	?	Twin	Irrig	?	?							
	?	Nursery										
		Washington Street										
		San Leandro										
												30
70	?	Twin	Abandoned		?			8				
	?	Nursery										
		Washington St.										
		San Leandro										

CONTROL NUMBER	DATE DRILLED, DRILLER	WELL OWNER LISTED	STATUS IF KNOWN	TOT. DPTH (FT.)	COMP. DPTH (FT.)	PERF. INTER. (FT.)	SEAL DPTH (FT.)	CASE DIA. (IN.)	CASE MAT.	WAT. LEV. (FT.)	EST. Q (GPM)	SURF. ELEV. (FT.)
	?	Gonzales										38
71	?	15559 Usher San Leandro	Irrg	?	25							
												44
72	1955	Maciel	Irrig.	?	27			4				
	Owner	15594 Sharon										
		San Lorenzo										
												42
73	1951	Hayward	Domestic ?		616			30/14				
	Western	Union High	Irrig									
	Well	School Dist.										
		San Lorenzo										
74	1937	Teel	Domestic ?		75			8				
	Swanson	624 Lewelling										
		San Lorenzo										
75	1949	Ratti	Domestic ?		410							
	Anderson	Lewelling?	Irrig.									
		Hesparian										
		San Lorenzo										
												28
76	?	Levy	Irrig.	?	22			4				
	?	646 Via Del Oro										
		San Lorenzo										
												33
77	1920	Kino Nurs-	Irrig	?	150			12				
	?	ery										
		880 Lewelling										
		San Lorenzo										

EDITED DRILLER REPORTS

WELL NUMBER	DRILLED, DRILLER	OWNER LISTED	IF KNOWN	TOT. DPTH (FT.)	COMP. DPTH (FT.)	PERF. INTER. (FT.)	SEAL DPTH (FT.)	CASE DIA. (IN.)	CASE MAT.	MAT. LEV. (FT.)	EST. Q (GPM)	SURF. ELEV. (FT.)	EDITED DRILLER REPORTS
		P. Duncan	Irrig.	?	?								
78	?	16089 Via Alamitos											
	?	San Lorenzo											
		Avansino											
79	1951	1441	Irrig.	?	701			12				36	
	Bassett	Washington											
		San Leandro											
80	1951	Abansino	Irrig.	?	701							35	
	?	Mortenson Nursery Co.											
		14441 Washington											
		San Leandro											
81	1952	Abansino	Irrig.	?	701							32	
	?	Mortenson Nursery Co.											
		14441 Washington											
		San Leandro											
82	1937	Abansino	Irrig	?	288			10				35	
	?	Mortenson Nursery Co.											
		14441 Washington											
		San Leandro											
83	?	Abansino	Irrig	?	135			8/10				38	
	?	Mortenson Nursery Co.											
		14441 Washington											
		San Leandro											
84	1931	Abansino	Irrig.	?	235			12				34	
	?	Mortenson Nursery Co.											
		14441 Washington											
		San Leandro											

[redacted] L BER	DRILLED, DRILLER	[redacted] OWNER LISTED	IF KNOWN	TOT. DPTH (FT.)	COMP. DPTH (FT.)	PERF. INTER. (FT.)	SEAL DPTH (FT.)	CASE DIA. (IN.)	CASE MAT.	WAT. LEV. (FT.)	Q (GPM)	SU ELEV. (FT.)	[redacted] DRILLER REPORTS
85	?	Abansino	Irrig.	?	254			12					
	?	Mortenson Nursery Co.											
		14441 Washington											
		San Leandro											
86	1931	Avansino	Irrig.	?	235			12				34	
	?	Mortenson Nursery Co.											
		14441 Washington											
		San Leandro											
87	?	Avansino	Irrig.	?	135			12					
	?	Mortenson											
		14441 Washington											
		San Leandro											
88	1956	Clark	Irrig.	?	30			6					
	Domestic	417 Bradrick											
	Well	San Leandro											
89	1930	Cardoza	Domestic ?		150			10					
	?	14700	Irrig.										
		Washington											
		San Leandro											
90	?	Olsen	Irrig.	62	60								
	AAA Drill	14737 Harold											
	ing	San Leandro											
91	1951	K-Mart	Irrig.	?	701			12				35	
	Bassett	14441 Washington											
		San Leandro											

L BER	DRILLED DRILLER	OWNE LISTED	KNOWN	OPTH (FT.)	CO OPTH (FT.)	PER INTER. (FT.)	S .DPTH (FT.)	CAS DIA. (IN.)	SE MAT.	LEV. (FT.)	Q (GPM)	SUR ELEV. (FT.)	DRILLER REPORTS
92	1957	Graves	Irrig.	?	23			4					
	Owner	3894 Carmel											
		San Leandro											
93	1958	Kirkland	Irrig.	?	19			4					
	Owner	883 Halycon											
		San Leandro											
1	1956	Grego	Irrig.	?	125			5				30	
	Murphy	3701 Monterey											
		San Leandro											
95	?	Hastie											
	?	3712 Awravy	Irrig	?	?								
		San Leandro											
96	1955	Thomas	Irrig.	?	29			4					
	Owner	3689 Figueroa											
		San Leandro											
97	?	Bolesworth	Irrig.	?	?								
	?	1044 Marquette											
		San Leandro											
98	1977	Spitznagle	Irrig.	?	38								
	?	1075 Tulane											
		San Leandro											
99	1956	Smith	Irrig.	?	16			5					
	Owner	1227 Purdue											
		San Leandro											

:O[redacted] L :BER	[redacted] DRILLED, DRILLER	[redacted]WEL[redacted] OWNER LISTED	[redacted] IF KNOWN	[redacted] TOT. OPTH (FT.)	[redacted] COMP. OPTH (FT.)	[redacted] PERF. INTER. (FT.)	[redacted] SEAL DPTH (FT.)	[redacted] CASE DIA. (IN.)	[redacted] CASE MAT.	[redacted] MAT. LEV. (FT.)	[redacted] EST. Q (GPM)	[redacted] SURF. ELEV. (FT.)	[redacted] ED[redacted]D DRILLER REPORTS
100	1957	Hawks	Irrig.	?	60			4				27	
	Owner	1051 Tulane											
		San Leandro											
101	?	Tavis	Irrig.	?	?								
	?	1144 Avon											
		San Leandro											
102	1977	Brannon	Irrig.	?	36								
	?	1075 Avon											
		San Leandro											
103	1957	Heisler	Irrig.	?	37			6					
	Leite	14861 Crosby											
		San Leandro											
104	1952	Souza	Irrig.	?	27			6					
	Owner	1009 Cumberland											
		San Leandro											
	1977	Friesen	Domestic	?	84								
	?	324 Anza											
		San Leandro											
106	?	Chuck	Irrig.	?	30			4					
	Owner	335 Aloha											
		San Lorenzo											
107	1958	Calvao	Irrig.	?	23	15-23		5					
	Owner	830 Crespi											
		San Leandro											

CON - LL MBER	DATE DRILLED, DRILLER	WELL OWNER LISTED	STATUS IF KNOWN	WELL CONSTRUCTION DETAILS									EDITED DRILLER REPORTS
				TOT. DPTH (FT.)	COMP. DPTH (FT.)	PERF. INTER. (FT.)	SEAL DPTH (FT.)	CASE DIA. (IN.)	CASE MAT.	WAT. LEV. (FT.)	EST. Q (GPM)	SURF. ELEV. (FT.)	
108	1957	Payne	Irrig.	?	14								
	Owner	916 Sierra											
		San Leandro											
109	1955	Davies	Irrig.	?	28								
	Owner	418 Lloyd											
		San Leandro											
.0	1977	Brooks	Irrig.	?	?								
	?	1341 Devonshire											
		San Leandro											
111	1977	Henwood	Irrig.	18	18								
	?	15700 Inverness											
		San Leandro											
112	1977	Knupler	Irrig.	25	25								
	?	1439 Abbey											
		San Leandro											
-3	1977	Tatman	Irrig.	27	27								
	?	15149 Wiley											
		San Leandro											
114	1977	Gietzen	Irrig.	28	27								
	?	1435 Church											
		San Leandro											
115	1977	Frink	Irrig.	?	?								
	?	754 Grant											
		San Lorenzo											

MCON ELL UMBER	DATE DRILLED, DRILLER	WELL OWNER LISTED	STATUS IF KNOWN	WELL CONSTRUCTION DETAILS									EDITED DRILLER REPORTS
				TOT. DPTH (FT.)	COMP. DPTH (FT.)	PERF. INTER. (FT.)	SEAL DPTH (FT.)	CASE DIA. (IN.)	CASE MAT.	WAT. LEV. (FT.)	EST. Q (GPM)	SURF. ELEV. (FT.)	
116	1977	Maxwell	Irrig.	?	?								
	?	538 Rutgers											
		San Leandro											
117	1986	Mobil Oil	Mon.	?	?								
	?	Washington & Farmo											
		San Leandro											
118	1986	Mobil Oil	4 Mon	?	?								
	?	15884 Hesparian											
		San Lorenzo											