

June 7, 1999

Ms. Madhulla Logan Alameda County Health Care Services Agency Department of Environmental Health 1131 Harbor Bay Parkway Alameda, CA 94502

Subject:

Risk Evaluation Report for the former Cryer Boatyard Site, 1899 Dennison

Street, Oakland

Dear Ms. Logan:

Please find enclosed the final *Risk Evaluation Report* for the former Cryer Boatyard Site, 1899 Dennison Street, Oakland. As discussed in the transmittal letter for the *Supplemental Site Investigation and Risk Evaluation Report*, dated September 1998, the Port would be providing this follow-up report once a better understanding of the future use of the site was confirmed. The enclosed risk evaluation focuses on the proposed future use of the property as a park.

As indicated in my voicemail to you on June 4, 1999, the Port would like to discuss the findings of the report and the future use of the site, with both you and Stephen Hill of the RWQCB. The proposed meeting dates are June 11, or June 15, 1999. Please let me know at your earliest convenience if these dates are amenable to your schedule.

Thank you for your attention in this matter, and your ongoing efforts at reviewing the risk evaluation report.

Sincerely,

Douglas P. Herman

Port of Oakland, EH&SC

encl.

cc w/encl:

Stephen Hill, RWQCB

Chris Noma, Wendel Rosen

Michel Heffes Diane Heinze

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PROTECTION PROTECTION

### GAIA CONSULTING, INC.

520 Third Street, Suite 104 Oakland, CA 94607 (510) 272-9946 (510) 893-5947 (fax)

June 4, 1999

Mr. Douglas Herman Port of Oakland 530 Water Street Oakland, California 94607

SUBJECT: Risk Evaluation for the Former Cryer Boatyard

Dear Doug:

As you requested, this letter report summarizes the results of the more detailed risk evaluation performed for the combined Port-owned and Steam Valve owned portions of the former Cryer Boatyard, and provides recommendation regarding remediation of the property. The data were provided in the *Supplemental Site Investigation and Risk Evaluation Report - Former Cryer Boatyard, Oakland California* (dated September 28, 1998) previously submitted to you. This risk evaluation focuses on the proposed future use of the property as a park; if the site is to be reused for industrial activities, additional risk evaluation may be required.

### BACKGROUND AND METHODOLOGY

The sample data collected from the Steam Valve and Port-owned portions of the Cryer site were combined into one data set to evaluate the potential human health and ecological risks associated with the entire site (i.e., both the Steam Valve and Port-owned portions of the property). The data set evaluated included the most recent data, as well as the data collected in prior years. The data from the slag investigation were not included in the analysis because there is no direct pathway for exposures to the slag. The slag is a relatively solid mass. Some type of heavy construction, which would result in the slag being broken up or ground into dust, would have to be occurring for exposures to be created to the slag. This type of exposure is likely only if the slag has to be removed; the redevelopment of the former Cryer Boatyard into a park area would not require removal of the slag (utilities could be rerouted, if necessary, around the slag). Appropriate (OSHA) worker

precautions would be required during slag removal. The evaluation focused on current receptors and potential future receptors, based on the proposed reuse.

The human health and ecological risk evaluations are provided below.

### 1.0 Human Health Risk Evaluation

As described in the previous report, the human health risk evaluation consisted of the following steps:

- Identification of potential current and future receptors;
- Identification of potential exposure pathways;
- Development and evaluation of a risk estimate for complete or potentially complete exposure pathways; and
- Identification of risk management techniques suitable for addressing the concerns identified.

### 1.1 Identification of Potential Receptors

Current receptors at the Cryer site are limited to adult workers at the Steam Valve portion of the property. The Port-owned portion of the property is fenced off and not in use. Potential future receptors for the entire site include construction workers (during the development of the park), adult and child park users, and landscape and utility workers maintaining the park and associated infrastructure. Because landscape workers and utility workers would have lower exposures than construction workers (i.e., landscape or utility workers would only be at the site for a limited number of days per year), the landscape and utility worker scenarios were not evaluated separately. Instead potential exposures to these two types of potential receptors were assumed to be addressed by the risk evaluation conducted for construction workers.

### 1.2 Identification of Exposure Pathways

Currently, the site is unpaved. In the future, the site is expected to be landscaped and partially paved (i.e., contain part of the park and a portion of the parking area associated with the park). The large building at the site may remain after the park is constructed. Groundwater at the site is not being used, and will not be used for any purpose in the future. As discussed in the Supplemental Site Investigation Report, all borings showed evidence of tidal influence; thus, saltwater intrusion will prohibit use of shallow groundwater. Given the current and proposed future uses of the site, the following exposure pathways may be complete:

 Dermal contact with soil (construction workers, current and future site workers, and future park users);



- Inhalation of soil (construction workers, current and future workers, and future park users);
- Inhalation of volatile compounds volatilizing from soil or groundwater into indoor or outdoor air (construction workers, current and future site workers, and future park users);
- Incidental ingestion of soil (construction workers, current and future workers, and future park users);
- Incidental dermal contact with and ingestion of groundwater (construction and utility workers only, during construction activities involving excavation or trenching to groundwater).

It should be noted that the degree of dermal, inhalation, and ingestion exposure associated with future park user is likely to be much lower than that for current site workers and future utility and maintenance workers. Park users will be at the site for a much shorter period of time, on average, than the current workers, or than construction workers during the construction phase. In addition, the presence of maintained landscaping in the park will significantly reduce the potential for contact with site soils. Because groundwater is and will not be used, non-volatile constituents in groundwater are not of concern for current site workers and future park users. Construction workers may have incidental contact with groundwater if construction/maintenance activities at the site require that work be carried out below the groundwater table. Construction workers and maintenance workers are not expected to be in the building; thus indoor air exposures are minimal for these receptors.

### 1.3 Development and Evaluation of Risk Estimates

The risk evaluation consisted of assessing the potential risk associated with each sample point to identify a maximum potential site-related risk. To evaluate the potential risk associated with each sample point, detected concentrations of compounds were divided by the applicable PRG. The PRG ratios were then summed. For non-carcinogenic compounds, each PRG ratio is the hazard quotient for the respective compound, and the sum of the ratios is the hazard index. For carcinogenic compounds, the sum of ratios was multiplied by 1 x 10<sup>-6</sup> (the carcinogenic risk level represented by the PRGs) to provide an estimate of the cumulative carcinogenic risk posed by the specific sample point. Sample points that did not have any detected compounds were removed from the tables. Similarly, constituents that were not detected in any sample collected at the site were removed from the evaluation. For the park user scenario, samples collected below 2.0 feet bgs that contained only non-volatile compounds were eliminated from the analysis; there is no direct contact pathway between park users and nonvolatile compounds in deeper soils.

Industrial PRGs were used to screen potential soil exposures to current site workers and construction workers. Groundwater screening levels were calculated separately,

following the PRGs/RBCA guidance. Groundwater screening levels for current site workers require only consideration of the groundwater to indoor air volatilization pathway because there is no direct contact with groundwater. The construction worker scenario requires consideration of the full range of groundwater exposure pathways (inhalation, ingestion, and dermal contact); however, the inhalation pathway is based on outdoor rather than indoor air exposures.

Park Use PRGs developed by the RWQCB for the Catellus Emeryville Crescent and Albany/Berkeley sites were used to screen potential exposures to future park users. Again, RCBA/PRG guidance were used to develop screening levels to assess the potential migration of volatile compounds into indoor air. Flüorene was the only non-volatile compound detected at the site that was not included in the RWQCB orders; the risk evaluation conservatively used the residential PRG for this compound. This approach is conservative because actual park use frequency and exposure duration is likely to be much less than 24 hours per day, 350 days per year. The human health risk evaluation calculations are shown in Tables 1 (future construction workers), 2 (future park users) and 3 (current site workers).

None of the cumulative carcinogenic risks for current site workers or future construction workers exceed  $1 \times 10^{-4}$ . The greatest carcinogenic risk is associated with boring location SV-10; due to the potential for inhalation exposures if the benzene migrates under the building, the estimated potential risk is  $1.54 \times 10^{-5}$ . All other carcinogenic risk estimates for current and future workers are below  $5 \times 10^{-6}$ . For current site workers, hazard indices for shallow soil samples (collected at 1.5 feet bgs or less) are all less than 1.0. Because there is no direct contact exposure pathway to deeper soils for current site workers, deeper soil samples are not of concern. For the construction worker scenario, several shallow and deep soil samples had an estimated hazard index greater than 1.0. These elevated hazard indices were generally due to the presence of heavy metals, especially lead, in soil. Thus, worker safety precautions (to avoid ingestion of contaminated soil or groundwater) may be required when construction activities occur at the site.

While several samples exceeded a carcinogenic risk of  $1 \times 10^{-6}$ , the highest estimated risk to future park users was  $4.55 \times 10^{-6}$ . Thus potential carcinogenic risks are generally not of concern for future park users. However, the extent of the benzene plume at SV-10 has not been defined; thus, potential risks associated with the presence of benzene in groundwater have not been fully characterized. Further investigation is required before a final decision can be made regarding the potential risks associated with the presence of VOCs in the shallow groundwater at the Steam Valve portion of the property. The only other potential exposures of concern for future park users are due to the presence of lead and other heavy metals in shallow soils. Several samples had estimated hazard indices greater than 1.0. The elevated hazard indices were due largely to the presence of lead, copper, and/or TPH-diesel in shallow soil. The TPH-diesel Park PRG is not a true health-based screening level; it is based on appearance. Thus, the primary constituents of concern under the park use scenario are heavy metals in shallow soils.

### 1.4 Risk Management

The potential human health risks identified at the former Cryer Boatyard are limited to the presence of heavy metals in soil. Both future construction workers and future park users could be exposed to soils posing an estimated hazard index of greater than 1.0. Direct contact with the slag material found on the Port-owned portion of the property was not evaluated, because there is no direct exposure pathway (i.e., the material is a relatively solid mass). However, should removal of the slag become necessary for any reason (e.g., installation of deep utilities), precautions will be required to protect workers from the elevated levels of heavy metals found in the slag. Potential risks to construction workers from either shallow soils or slag are easily managed by ensuring that the proper health and safety precautions are followed on the job site. Because the property would be managed by either the Port of Oakland or the City of Oakland, there would be no difficulty with ensuring that construction workers and future utility and maintenance workers are properly protected.

Direct contact exposures to non-volatile constituents in soil for future park users can be managed easily by placing a layer of clean top soil (at least one foot thick, in accordance with the Catellus orders) over the entire Port-owned portion of the property. Given the nature of the soil currently present at the site, it is likely that some top soil would have to be imported anyway, to allow plants to thrive. Thus potential human health risks are easily addressed.

### 2.0 Ecological Risk Evaluation

The ecological risk evaluation consisted of comparing the detected concentrations of the various compounds to the ecological buffer and upland screening levels developed for the Catellus Emeryville and Albany/Berkeley sites. Currently, the site provides only very limited habitat for terrestrial species (small strips of ruderal vegetation along the northern, eastern, and southern fence line on the Port-owned portion of the property, as well as trees and ground cover outside of the eastern and northern fence line of the entire site). Due to the presence of slag on the Port-owned portion of the property, and the hard-packed soil and active use of the Steam Valve portion of the property, it is unlikely that burrowing mammals are currently present () at the site. The site does not contain any plant species (e.g., pickleweed) that are preferred habitat for endangered species.

The data indicate that potential transport of heavy metals or TPH to the Bay is limited. As shown by the DI WET data presented in the Supplemental Site Investigation Report, the metals in the slag have only very low solubility under ambient conditions. In addition, groundwater data indicate that, with two exceptions, dissolved metals concentrations are below ecological screening levels. Dissolved TPH-diesel concentrations are also below ecological screening levels. Thus, current ecological risks are expected to be minimal.

Future ecological exposures are speculative, but were assessed to determine whether precautions were required in converting the site to a park area (which will be more attractive to ecological receptors). Again, transport of metals and TPH-diesel to the

Bay is not expected to be of concern. Thus, potential future ecological risks are limited to terrestrial receptors. Ingestion of contaminated soil clinging to food is the most significant potential exposure pathway. Standard ecological risk assessment guidance also indicates that small burrowing mammals (large burrowing mammals are not anticipated in this urban setting) may penetrate as deep as two feet. This assumption apparently resulted in the requirement of 2.0 feet of clean cover in areas potentially presenting ecological risks on the Catellus Emeryville and Albany/Berkeley sites. In addition, plants may take up contaminants through their roots and concentrate them in their leaves, further contributing to the ingestion exposure.

Data collected on the Steam Valve portion of the site were compared to the upland (non-buffer) screening levels because the Steam Valve portion of the site is clearly upland, and greater than 50 feet from the high tide line. Elevated level of metals in the shallow soil samples collected by SCI in 1991 are not of concern, because follow-up sampling has shown that the soil containing elevated levels of metals has been removed. In addition, two feet of clean fill were placed over the Steam Valve portion of the property, thus providing sufficient clean soil for ecological receptors. Only two of the groundwater samples collected on the Steam Valve portion of the property exceeded ecological screening levels. Samples 3A17 and 6A17 contained 77  $\mu$ g/l and 90  $\mu$ g/l mercury, respectively; the upland (non-buffer) ecological screening level for mercury in groundwater is 71  $\mu$ g/l. Because the detected concentrations are so close to the screening levels, they are not expected to be of concern for future receptors. Table 10 in the Supplemental Site Investigation Report identified the constituents detected at concentrations exceeding the ecological screening levels.

Data from the Port-owned portion of the property were compared to the more conservative buffer screening levels, although certain portions of the Port-owned property could also qualify as upland/non-buffer. Exceedances of ecological screening levels were generally limited to metals in soil. Throughout the Port-owned portion of the property, metals in soil are present at concentrations exceeding the ecological buffer screening criteria. Levels of PNAs and TPH-diesel exceeding ecological buffer screening criteria are apparently associated with the oily soil/gravel layer identified in several borings in the northwestern portion of the Port-owned portion of the property. Typically, the oily soil/gravel layer was identified at depths near the bottom of the range that small mammals would burrow to, and more importantly, was encountered at or near the groundwater. Thus, even under existing conditions, it is unlikely that ecological receptors would come into contact with the oily soil/gravel, either directly or through ingestion of contaminated plants.

Risk management for ecological receptors can therefore easily be accomplished with a sufficiently-thick layer of clean top soil and a requirement to plant only shallow-rooted plants. Consistent with the requirements of the Catellus orders, the clean top soil layer should be at least 2.0 feet thick (i.e., ecological risk management requires a thicker layer of clean fill than human health risk management).

### 3.0 Recommendations

The investigations performed at the former Cryer Boatyard have resulted in an understanding of site conditions and potential human health and ecological risk associated with the contaminants detected in slag, soil, and groundwater at the site. This section presents recommendations for remediation for both portions of the property.

### 3.1 Recommendations for Port-Owned Portion of Property

The risk evaluation indicates that the following remedial actions will be sufficient to control potential exposures associated with redevelopment of the Port-owned portion of the site into a park area:

- Require construction workers to observe appropriate health and safety precautions to avoid contact with contaminated soil and slag;
- Place two feet of clean top soil on the Port-owned portion of the property prior to landscaping for the park (two feet of top soil will provide sufficient depth to protect both human and ecological receptors);
- Plant only shallow-rooted plants to ensure that ecological receptors are not exposed to elevated levels of contaminants from ingestion of plant materials; and,
- Require that future utility and maintenance workers observe appropriate health and safety precautions to avoid contact with contaminated soil and slag.

Clearly, the shoreline of the future park will require some type of protection to hold the cover soils in place. Riprap would be consistent with the landscaping to the north of the Cryer site, and if properly designed would be adequate to hold the soil in place.

Although the extent of the slag has not been fully defined, the available data suggest that under ambient conditions the slag does not pose a risk to future site users and ecological receptors. Thus, as long as the precautions outlined above are followed, the site is suitable for redevelopment into a park area. Please call if you have any questions.

### 3.2 Recommendations for Steam Valve-Owned Portion of the Property

Limited additional investigation is required at the Steam Valve-owned portion of the property. While the detected levels of benzene in groundwater are within the acceptable risk range for future outdoor park use, and it does not appear that the benzene extends under the building at this time, the extent of the plume at SV-10 has not been defined. Once the extent of the benzene and related compounds in the vicinity of SV-10 has been established, the need for BTEX remediation in this area can be assessed. In addition, the plume should be monitored to determine whether bioattenuation is occurring.

The risk evaluation indicates that the following actions will be sufficient to control potential exposures (other than benzene) associated with redevelopment of the Steam Valve-owned portion of the site into a park area:

- Require construction workers to observe appropriate health and safety precautions to avoid potential contact with contaminated soil and slag in the vicinity of the Port-owned portion of the property; and,
- Plant only shallow-rooted plants near the Port-owned portion of the property to ensure that ecological receptors are not exposed to elevated levels of contaminants from ingestion of plant materials.

Please contact us if you have any questions or require further information.

Cordially,

GAIA CONSULTING, INC.

Susanne M. von Rosenberg, P.E.
Principal

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DATE		-			2/13/91			2/13/91			2/13/91			2/13/91	1		2/13/91			2/13/91	1		2/13/91
SAMPLE NUMBER	-				1			1			2	8		<del></del>	1		3	1		4	1		
DEPTH (FT)				L	11			3.5			1			3.5	-		1.5			1.5			1
Site Area			Worker	Scenario Non-	Steam Valve		Non-	Steam Valve		Non-	Steam Valve		Non-	Steam Valve									
			Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic PRG Ratio		Carcinogenic	Carcinogenic PRG Ratio		Carcinogenic PRG Ratio	Carcinogenic	
COMPOUND	MATRIX	UNITS	Carcinogenic PRG	PRĞ		PRG Ratio	PRG Ratio		PRC Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio	
Metals	6.3	- 0		750	ND<5			ND<5			ND<5			ND<5			14		0.02	ND<5			ND<5
Antimony Antimony	Soil Water	mg/kg ug/L		750 5110	NDC3						-			- NDC3			-		0.02	-			
Arsenic*	Soil	mg/kg	14	480	2.8	0.20	0.01	ND<2.5			ND<2.5			ND<2.5			5.9	0.42	0.01	3.1	0.22	0.01	4.9
Arsenic	Water	ug/L	47.8	3830	-						-									-			
Barium	Soil	mg/kg	<u> </u>	100,000	36		0.00	55		0.00	100		0.00	57		0.00	50		0.00	62		0.00	120
Barium Beryllium	Water Soil	ug/L mg/kg	1.2	SAT 3,700	ND<0.5			ND<0.5			ND<0.5			ND<0.5	<b></b>		ND<0.5			ND<0.5			ND<0.5
Cadmium	Soil	mg/kg	9	930	2		0.00	1.4		0.00	2.1		0.00	1		0.00	4.2		0.00	2.3		0.00	3.4
Chromium	Soil	mg/kg	450	-	36	0.08		27	0.06		27	0.06		30	0.07		39	0.09		47	0.10		26
Chromium	Water	ug/L		63,900				-			9			7			-			-		0.00	
Cobalt	Soil Soil	mg/kg	=	29,000 70,000	5.7 20		0.00	3.4 24		0.00	75		0.00	31		0.00	10 1700		0.00	7.7		0.00	7.5
Copper Lead	Soil	mg/kg mg/kg		1,000	ND<2.5		0.00	ND<2.5		0.00	24		0.02	ND<2.5		0.00	550		0.55	21		0.02	190
Lead	Water	ug/L	-	4.0										-			-			-			-
Mercury	Soil	mg/kg		56	ND<0.1			ND<0.1			0.2		0.00	0.2		0.00	0.6		0.01	2.3		0.04	0.5
Mercury	Water Soil	ug/L	-	1280 9,400	 ND<0.5			ND<0.5			ND<0.5			ND<0.5		-	 ND<0.5			ND<0.5			ND<0.5
Molybdenum Nickel	Soil	mg/kg mg/kg	-	37,000	ND<0.5		0.00	ND<0.5		0.00	32		0.00	34		0.00	65		0.00	35		0.00	33
Nickel	Water	ug/L	-	2,560,000			0.00	-		0.00			0.00			0.00	-			-			
Silver	Soil	mg/kg	-	9,400	16		0.00	ND<1			ND<1			ND<1			ND<1			5.8		0.00	ND<1
Thallium	Soil	mg/kg	-	150	ND<5			ND<5			ND<5			ND<5			ND<5		0.00	ND<5		0.00	ND<5
Vanadium	Soil Soil	mg/kg	-	13,000	20		0.00	14 69		0.00	15 120		0.00	50		0.00	25 220		0.00	120		0.00	19 350
Zinc Zinc	Water	(mg/kg) ug/L		3,830,000	42		0.00		.,	0.00			0.00			0.00	-		UNA			0.00	-
Petroleum Compounds	7,1444	-8, -																					
Benzene	Soil	mg/kg	1.4	24																-			
Benzene	Water	ug/L	51.9	12,100	-			ND<1.0			5000			-			ND<1.0			-			
TPH-Diesel** TPH-Diesel	Soil Water	mg/kg ug/L						3600			5000			-	-		-			-			-
Ethyl Benzene	Soil	mg/kg		5,800	-			-						-						-			-
Ethylbenzene	Water	ug/L		750,000				ND<1.0			-			-			ND<1.0			-			
TPH-Gasoline**	Soil	mg/kg	**	**										-			-			-			
TPH-Gasoline	Water Soil	ug/L						640			840						-			-			
Hydrocarbons (oil and grease) Toluene	Soil	mg/kg mg/kg	-	2,000										-			-			-			-
Toluene	Water	ug/L	-	2,090,000				ND<1.0			-			-			ND<1.0						
m,p-Xylenes	Soil	mg/kg		4,500										-			-						-
m,p-Xylenes	Water	ug/L	-	1,540,000	-			-						-			-			-			
o-Xylene Total Xylenes	Water Soil	ug/L mg/kg	-	1,540,000 4,500													-			-			
Xylenes, Total	Water	ug/L	_	1,540,000	-			ND<1.0			-			-			ND<1.0			-			
Unknown Hydrocarbons	Soil	mg/kg		-				-			44						-			-			-
Semivolatile Organic Compoun														-						-			
2-Methylnaphthalene Acenaphthene	Soil Soil	mg/kg mg/kg	-	28,000	-			-						-						-			
Acenaphthylene	Soil	mg/kg			-			-						-						-			-
Anthracene	Soil	mg/kg	-	220,000	-			-		N										-			-
Benzo(a)anthracene	Soil	mg/kg	3.6														-			-			-
Benzo(a)pyrene	Soil	mg/kg	0.36		-			-			-				-		-			=			
Benzo(b)fluoranthene Benzo(g,h,i)perylene	Soil Soil	mg/kg mg/kg	3.6		-			-			-			-			-			-			-
Benzo(k)fluoranthene	Soil	mg/kg	3.6	-				-						-			-			-			-
Chrysene	Soil	mg/kg	360	-	-			-						-			-						-
Dibenzo(a,h)anthracene	Soil	mg/kg	0.36					-						-			-			-			-
Fluoranthene	Soil	mg/kg	-	37,000 22,000	-									-		-	-						-
Fluorene Indeno(1,2,3,-cd)pyrene	Soil Soil	mg/kg mg/kg	3.6	22,000				-									-			-			
Naphthalene	Soil	mg/kg		1,900	-									-			-			-			
Naphthalene	Water	ug/L	-	490				-			-			-			-			-	4		-
Phenanthrene	Soil	mg/kg	-	-	-						-			-			-			-			
Pyrene TOTAL ESTIMATED RISK OR	Soil	mg/kg		26,000		2.80E-07	0.01		6.00E-08	0.00	-	6.00E-08	0.04		6.67E-08	0.01	-	5.08E-07	0.63	-	3.26E-07	0.08	-
TOTAL ESTIMATED KISK OR	DAZAKL	INDEX				2.00E-0/	0.01		0.002-08	0.00		0.002-08	0.04		0.0712-00	1 0.01		3.00E-0/	0.00		5.LUL-0/	0.00	

<sup>\*</sup> Concentration based on Bay Area background

<sup>\*\*</sup> No PRG available; risk addressed by constituent compounds

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Section   Sect						0.35	0.01	NDc25			5.8	0.41	0.01				8	0.57	0.02	2	0.14	0.00	3	0.21
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Case   Set   Mg/16     2,700   0.00   0.7   0.00   10   0.00						0.00						U.U.												
Company   Set							0.00			0.00			0.00	-										
Marey   Mare		Soil																						
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No.   No.											ND<0.5													
Color					37,000		0.00	54	la company	0.00			0.00						0.00			0.00		
Second   S			ug/L													-					-			$\vdash$
Company   Comp																								
Table   Tabl				_			0.00			0.00			0.00						0.00			0.00		
Triberian Company   State														-					0.00	42		0.00	54	
Findering   Set													- Inches	-			-	122		-				
Become   Sel   my/L   5.50																								
Becomes   Water   Scil   Style   15,10	Benzene		mg/kg											-							-			
1975-10-10-10   1975-10-10																								
English   English   Solid   English   Solid   English   Solid   English					-	-														-				
Elyberose   Water   Syll   -   78,000   -   -   -   -   -   -   -   -   -					5,800															-			-	
The Control of Walter   Walt				-	750,000			-									-							
The procedure of and group   Self   196/18   -   -     -																								$\vdash$
Totheries Sold Months (1988) 2 - 2000																<del>                                     </del>								
Total Water   Soft   Mark														-									-	
Imp-Yylenes   Sol														-			-							
Inspect   Water   wg/L   -					4,500			-						-										
o-Sylene Water ug/L - 1,500,000 - 1,500,000	m,p-Xylenes		ug/L								-		-			-				-				-
Total Xylenes   Soi   mg/kg   -   -																								
Agricultic Organic Compounds   Soil mg/kg   -   -							-																-	
Semivorable Organic Composed																							-	
2-Methyhaphthalene   Soil   mg/kg																						-	-	$\perp$
Acenaphthrene   Soil   mg/kg   -   28,000   -   -   ND-0.330   -   -   -   ND-0.330   -   -   ND-0.330   -	2-Methylnaphthalene	Soil												0,000			1000					-		+
Acetaphtylene   Soil   mg/kg         ND-0.330         ND-0.330         ND-0.330         ND-0.330         ND-0.330         ND-0.330         ND-0.330         ND-0.330         ND-0.330         ND-0.330         ND-0.330       ND-												-								-	<del>                                     </del>			+
Benza(a)anthracene							-									-			L				-	
Benzo(a)pyrene   Soil   mg/kg   0.36																							-	
Benzo(b) Tuoranthene   Soil   mg/kg   3.6       0.24   0.07       ND-0.330								-			-			ND<0.330										
Benzo(gh.l)perylene   Soil   mg/kg		Soil									-				0.07									-
Benzo(k)   fuoranthere   Soil   mg/kg   3.6															-	-					-	-		1
Chrysene   Soil   mg/kg   360											-	-			<u> </u>						<b>†</b>			
Fluoranthene   Soil   mg/kg   -     37,000   -   -     -       0.24     0.00   -     -     -						<b>-</b>					-									-		386		
Fluorene   Soil   mg/kg   -											-			0.24			1577							
Indeno(1,2,3,cd)pyrene   Soil   mg/kg   3.6   -   -   ND-0.130								-			_					0.00	-				-			
Naphthalene   Soil   mg/kg   - 1,900   -   -   -   Naphthalene   Water   ug/L   - 490   -   -   -   -   -   -   -   -   -			mg/kg	3.6	-											-	_				-	<b> </b>		1
Naphthalene												-	-				_							
Tremanductive					490							<b> </b>						72		-				
17/11/2 000 10/2/16					26,000															-				
TOTAL ESTIMATED RISK OR HAZARD INDEX 4.08E-07 0.23 0.00E+00 0.01 4.83E-07 0.22 6.67E-08 0.00 6.60E-07 0.03 1.83E-07 0.02						4.08E-07	0.23	-	0.00E+00	0.01		4.83E-07	0.22		6.67E-08	0.00		6.60E-07	0.03		1.83E-07	0.02		2.65E-07

<sup>\*</sup>Concentration based on Bay Area background
\*\* No PRG available; risk addressed by constituent compounds

DATE				Γ	Γ	9/27/93			9/27/93			9/27/93	T		9/27/93	I		9/27/93			3/30/95		
SAMPLE NUMBER					1	Boring 1			Boring 2			Boring 3	1		Boring 5			Boring 6			SB-1		
DEPTH (FT)						Boning 1			Boning 2			borngs	1		Boring 3			bornige			5		
	_	_	10/	Scenario		Steam Valve			Steam Valve			Steam Valve	1		Steam Valve			Steam Valve			Port		
Site Area			yvorker	Non-	Non-	Steam valve		Non-	Steam valve		Non-	Steam valve		Non-	Steam valve		Non-	Steam vaive		Non-	ron		Non-
			Carcinogenic	Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic
COMPOUND Metals	MATRIX	UNITS	PRG	PRG	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio
Antimony	Soil	mg/kg		750	0.01	-			ND<5			ND<5			ND<5			ND<5			9		0.01
Antimony	Water	ug/L		5110	0.01	-			-			-			-								0.01
Arsenic*	Soil	mg/kg	14	480	0.01	-			3	0.21	0.01	4	0.29	0.01	ND<1			5	0.36	0.01	10	0.71	0.02
Arsenic	Water	ug/L	47.8	3830		-			-			-									-		
Barium	Soil	mg/kg		100,000	0,00	-			56		0.00	54		0.00	34		0.00	54		0.00	190		0.00
Barium Beryllium	Water Soil	ug/L	1.2	SAT 3,700		-			ND<0.5			ND<0.5			ND<0.5			ND<0.5		-	0.2	0.17	0.00
Cadmium	Soil	mg/kg mg/kg	9	930		-			ND<0.5			0.6	0.07	0.00	ND<0.5			ND<0.5			5.5	0.61	0.01
Chromium	Soil	mg/kg	450	-		-			52	0.12		77	0.17		38	0.08		51	0.11		280	0.62	
Chromium	Water	ug/L		63,900		-			-			-			-			-			-		
Cobalt	Soil	mg/kg		29,000	0.00	-			12		0.00	11		0.00	7		0.00	12		0.00	32		0.00
Copper	Soil	mg/kg		70,000	0.00	-			18 ND-5		0.00	30 8		0.00	6 ND<5		0.00	12 ND-5		0.00	3900 530		0.06
Lead Lead	Soil Water	mg/kg ug/L	-	1,000	0,01	-			ND<5			-		0.01	ND-C3			ND<5		<b></b>	530		0.55
Mercury	Soil	mg/kg	-	56		-			ND<0.5			0.13		0.00	ND<0.5			0.3		0.01	2.3		0.04
Mercury	Water	ug/L	-	1280		-			-						-			-					
Molybdenum	Soil	mg/kg		9,400		-			ND<5			ND<5			ND<5			ND<5			5		0.00
Nickel	Soil	mg/kg	-	37,000	0.00	-			76		0.00	84		0.00	33		0.00	68		0.00	110		0.00
Nickel Silver	Water Soil	ug/L mg/kg		2,560,000 9,400					ND<5			ND<5			 ND<5			ND<5			 ND<0.5	-	
Thallium	Soil	mg/kg		150		=			ND<5			ND<5			ND<5			ND<5			5		0.03
Vanadium	Soil	mg/kg	-	13,000	0.00	-			36		0.00	36		0.00	37		0.00	26		0.00	45		0.00
Zinc	Soil	(mg/kg)	-	100,000	0.00	-			51		0.00	64		0.00	23		0.00	42		0.00	1600		0.02
Zinc	Water	ug/L	-	3,830,000		-			-			-			-			-					
Petroleum Compounds	6.1					244	0.10	201	0.013	0.01	0.00	ND<0.003			ND<0.003			ND<0.003					
Benzene Benzene	Soil Water	mg/kg ug/L	1.4 51.9	24 12,100		0.14	0.10	0.01	0.013	0.01	0.00	ND<0.003			ND<0.003			ND<0.003					
TPH-Diesel**	Soil	mg/kg				89			ND<10			ND<10			ND<10			26					
TPH-Diesel	Water	ug/L		-		-	8																
Ethyl Benzene	Soil	mg/kg	-	5,800		0.38		0.00	0.021		0.00	ND<0.003			ND<0.003			ND<0.003					
Ethylbenzene	Water	ug/L	-	750,000		17			 ND<1			 ND<1			 ND<1			 ND<1					
TPH-Gasoline** TPH-Gasoline	Soil Water	mg/kg ug/L	-	-					ND<1			ND<1			ND<1			ND<1			-		
Hydrocarbons (oil and grease)	Soil	mg/kg	-	-		ND<50			73			ND<50			ND<50			ND<50					
Toluene	Soil	mg/kg	-	2,000	steri Pillotonio agri	1.1		0.00	0.075		0.00	ND<0.003			ND<0.003			ND<0.003					
Toluene	Water	ug/L		2,090,000																			
m,p-Xylenes	Soil	mg/kg	-	4,500		-			-									-					
m,p-Xylenes o-Xylene	Water Water	ug/L ug/L	-	1,540,000 1,540,000		-			-			-						-					
Total Xylenes	Soil	mg/kg	-	4,500		1.6		0.00	0.084		0.00	ND<0.009			ND<0.009			ND<0.009					
Xylenes, Total	Water	ug/L	-	1,540,000		-			-			-						-			-		
Unknown Hydrocarbons	Soil	mg/kg				-			-			-			-			-		-	-		
Semivolatile Organic Compoun	ds Soil	ma/k-													-					-			
2-Methylnaphthalene Acenaphthene	Soil	mg/kg mg/kg		28,000		-												-					
Acenaphthylene	Soil	mg/kg		-		-			-			-			-			-					
Anthracene	Soil	mg/kg		220,000		-			-						-			-					
Benzo(a)anthracene	Soil	mg/kg	3.6	-		-			-			-			-			-			-		
Benzo(a)pyrene	Soil	mg/kg	0.36			-			-			-			-			-					
Benzo(b)fluoranthene Benzo(g,h,i)perylene	Soil Soil	mg/kg mg/kg	3.6						-			-			-			-					
Benzo(k)fluoranthene	Soil	mg/kg	3.6			-						-			-			-			-		
Chrysene	Soil	mg/kg	360	-																	_		
Dibenzo(a,h)anthracene	Soil	mg/kg	0.36	-					-						-								
Fluoranthene	Soil	mg/kg	-	37,000		-			-			-			-								
Fluorene	Soil Soil	mg/kg	3.6	22,000		-			-			-			-								
Indeno(1,2,3,-cd)pyrene Naphthalene	Soil	mg/kg mg/kg	3.6	1,900		-			-			-			-								
Naphthalene	Water	ug/L	-	490											-			-			-		
Phenanthrene	Soil	mg/kg		-								-						-					
Pyrene	Soil	mg/kg	-	26,000		-			-			-			-								
TOTAL ESTIMATED RISK OR	HAZARD	INDEX	-		0.03		1.00E-07	0.01		3.39E-07	0.01		5.23E-07	0.03		8.44E-08	0.00		4.70E-07	0.02		2.11E-06	0.72

<sup>\*</sup> Concentration based on Bay Area background

<sup>\*\*</sup> No PRG available; risk addressed by constituent compounds

DATE					3/30/95			3/30/95			3/30/95	Γ		3/30/95	Т		3/30/95			3/30/95			3/30/95
SAMPLE NUMBER	_	$\vdash$			5/30/95 SB-1	1		SB-2			SB-2			SB-3	1		SB-3			SB-4	1		SB-5
DEPTH (FT)		$\vdash$			2.5			5			2.5			5	1		2.5			4	1		1.5
Site Area	$\vdash$	$\vdash$	Markan	Scenario	Port	1		Port			Port			Port	1		Port			Port	1		Port
Site Area			Worker	Non-	roit		Non-	Tort		Non-	Torc	000000000000000000000000000000000000000	Non-	1011		Non-	1011		Non-	1010		Non-	7010
on morain			Carcinogenic	Carcinogenic PRG		Carcinogenic	Carcinogenic		Carcinogenic PRG Ratio	Carcinogenic PRG Ratio		Carcinogenic PRG Ratio	Carcinogenic PRG Ratio		Carcinogenic PRG Ratio	Carcinogenic PRG Ratio		Carcinogenic PRG Ratio	Carcinogenic PRG Ratio		Carcinogenic PRG Ratio	Carcinogenic PRG Ratio	
COMPOUND Metals	MAIKIX	UNITS	PRĞ	PRG		PRG Ratio	PRG Ratio		PRG Katto	PKG RABO		FRG Ratio	PRG Rano		PAG Rano	FRG Ratio		FAG Anno	FRG Ratio		FAG RAGO	TAG Nano	
Antimony	Soil	mg/kg	-	750	3		0.00	6		0.01	3		0.00	24		0.03	14		0.02	2		0.00	3
Antimony	Water	ug/L	_	5110	-						-						-						-
Arsenic*	Soil	mg/kg	14	480	ND<1			6	0.43	0.01	ND<1			5	0.36	0.01	6	0.43	0.01	ND<1	_		2
Arsenic Barium	Water Soil	ug/L	47.8	3830 100,000	110		0.00	280		0.00	61		0.00	170		0.00	130		0.00	160		0.00	24
Barium	Water	mg/kg ug/L		SAT			0.00			0.00	-		0.00			0.00	-		0.00			0.00	
Beryllium	Soil	mg/kg	1.2	3,700	0.3	0.25	0.00	0.5	0.42	0.00	0.2	0.17	0.00	0.2	0.17	0.00	0.1	0.08	0.00	0.4			ND<0.1
Cadmium	Soil	mg/kg	9	930	ND<0.5			2.1	0.23	0.00	ND<0.5			2.6	0.29	0.00	0.6	0.07	0.00	ND<0.5			ND<0.5
Chromium	Soil	mg/kg	450	 (2.000	54	0.12		150	0.33		47	0.10		410	0.91		94	0.21		59	0.13		26
Chromium Cobalt	Water Soil	ug/L mg/kg	-	63,900 29,000	11		0.00	42		0.00	10		0.00	27		0.00	16		0.00	8		0.00	6
Copper	Soil	mg/kg	-	70,000	49		0.00	9100		0.13	110		0.00	3100		0.04	1300		0.02	34		0.00	51
Lead	Soil	mg/kg		1,000	29		0.03	230		0.23	59		0.06	520		0.52	300		0.30	13		0.01	33
Lead	Water	ug/L		4.0				-			-		0.55			0.00	-		0.04	ND-01	-		- 0.4
Mercury	Soil Water	mg/kg		56 1280	ND<0.1			2.1		0.04	0.1		0.00	1.1		0.02	0.5		0.01	ND<0.1			0.4
Mercury Molybdenum	Soil	ug/L mg/kg	-	9,400	ND<1			3		0.00	1		0.00	2		0.00	ND<1			ND<1			ND<1
Nickel	Soil	mg/kg	-	37,000	50		0.00	87		0.00	30		0.00	140		0.00	58		0.00	67		0.00	20
Nickel	Water	ug/L		2,560,000										-			-			-			-
Silver	Soil	mg/kg		9,400	ND<0.5			ND<0.5		201	ND<0.5			ND<0.5		0.00	ND<0.5			ND<0.5			ND<0.5 ND<1
Thallium Vanadium	Soil Soil	mg/kg mg/kg		150 13,000	ND<1 39		0.00	73		0.06	ND<1 37		0.00	39	-	0.03	ND<1 37		0.00	ND<1 37	-	0.00	25
Zinc	Soil	(mg/kg)	-	100,000	93		0.00	1200		0.01	120		0.00	1700		0.02	520		0.01	69		0.00	220
Zinc	Water	ug/L	-	3,830,000				-			-			-			-			-			-
Petroleum Compounds																							
Benzene	Soil	mg/kg	1.4	24				-			-									-	-		-
Benzene TPH-Diesel**	Water Soil	ug/L mg/kg	51.9	12,100	18			-			18			-	<u> </u>		460			24	-		530
TPH-Diesel	Water	ug/L						-						**	<b>—</b>					-			-
Ethyl Benzene	Soil	mg/kg	-	5,800	-						-									-			
Ethylbenzene	Water	ug/L		750,000	-			-			-						-						-
TPH-Gasoline** TPH-Gasoline	Soil Water	mg/kg	=		-			-			-				-		**			-	-		=
Hydrocarbons (oil and grease)	Soil	ug/L mg/kg			-									_	<b>—</b>		-			_			
Toluene	Soil	mg/kg	-	2,000	-			-			-						-						-
Toluene	Water	ug/L	-	2,090,000	-			_			**			**						-			-
m,p-Xylenes	Soil	mg/kg		4,500	-			-			-									-			-
m,p-Xylenes o-Xylene	Water Water	ug/L ug/L		1,540,000				-			=				<del>                                     </del>					-			-
Total Xylenes	Soil	mg/kg		4,500	-						-									-			-
Xylenes, Total	Water	ug/L	÷	1,540,000	-						-												-
Unknown Hydrocarbons	Soil	mg/kg	-								-			-				-		-			-
Semivolatile Organic Compoun	ds Soil	ma/k-	-		-									-	-								-
2-Methylnaphthalene Acenaphthene	Soil	mg/kg mg/kg		28,000										-									-
Acenaphthylene	Soil	mg/kg	-		-			-						-			-			-			
Anthracene	Soil	mg/kg		220,000				-			-									-			
Benzo(a)anthracene	Soil	mg/kg	3.6		-			-			-			-	-					-			-
Benzo(a)pyrene	Soil Soil	mg/kg	0.36 3.6		-			-	8		-			-	-	-	-						
Benzo(b)fluoranthene Benzo(g,h,i)perylene	Soil	mg/kg mg/kg	3.6		-									-	<b> </b>		-			<del>-</del> -			-
Benzo(k)fluoranthene	Soil	mg/kg	3.6		-						-												-
Chrysene	Soil	mg/kg	360								-			-			-			-			-
Dibenzo(a,h)anthracene	Soil	mg/kg	0.36	-	-			-						-						-			-
Fluoranthene	Soil	mg/kg		37,000 22,000										-	_		-						-
Fluorene Indeno(1,2,3,-cd)pyrene	Soil Soil	mg/kg mg/kg	3.6	22,000																-			
Naphthalene	Soil	mg/kg		1,900	-			-			-			-			-					Δ	-
Naphthalene	Water	ug/L	-	490	-			-						-									
Phenanthrene	Soil	mg/kg	-	-	-			-			-			-						-			-
Pyrene	Soil	mg/kg		26,000		2 70F 07	0.04		1.412.04	050		2715.07	0.07		1.72E-06	0.68		7.87E-07	0.37		1.31E-07	0.02	
TOTAL ESTIMATED RISK OR	HAZARI	INDEX		-		3.70E-07	0.04		1.41E-06	0.50		2.71E-07	0.07		1.725-06	0.00		7.07E-07	0.37		1.315-0/	0.02	

<sup>\*</sup> Concentration based on Bay Area background
\*\* No PRG available; risk addressed by constituent compounds

DATE				Г	T		3/30/95			3/30/95	I		3/30/95			10/14/96			10/14/96			10/14/96	
SAMPLE NUMBER					1		SB-6	1		SB-7			SB-8	1		WELL #1			WELL #2	1		WELL#4	1
DEPTH (FT)					1		1.5	1		5			3.5			3.5			3.5	1		PYELDIN	1
Site Area		$\vdash$	Mades	Scenario	1		Port	1	, and the second	Port	1		Port	1		Steam Valve			Steam Valve	1		Steam Valve	1
Site Area			Worker	Non-		Non-	Ton		Non-	TOIL		Non-	Ton		Non-	Steam valve		Non-	Steam valve		Non-	Steam valve	
			Carcinogenic PRG	Carcinogenic	Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic		Carcinogenic
COMPOUND	MATRIX	UNITS	PRG	PRG	PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio
Metals Antimony	Soil	mg/kg	-	750		0.00	12		0.02	12		0.02	14		0.02	ND<5			ND<5			-	
Antimony	Water	ug/L	-	5110			-			-			-			_			_			-	
Arsenic*	Soil	mg/kg	14	480	0.14	0.00	14	1.00	0.03	26	1.86	0.05	5	0.36	0.01	6.1	0.44	0.01	ND<5				
Arsenic	Water	ug/L	47.8	3830			-			-			-			-			-			-	
Barium Barium	Soil Water	mg/kg	-	100,000 SAT	-	0.00	75		0.00	66		0.00	99		0.00	41		0.00	37		0.00	-	
Beryllium	Soil	ug/L mg/kg	1.2	3,700			ND<0.1			ND<0.1			0.2	0.17	0.00	0.28	0.23	0.00	0.28	0.23	0.00		
Cadmium	Soil	mg/kg	9	930	<b></b>		1.5	0.17	0.00	7.5	0.83	0.01	ND<0.5		0.00	ND<0.25			ND<0.25			-	
Chromium	Soil	mg/kg	450		0.06		16	0.04		240	0.53		48	0.11		28	0.06		24	0.05		-	
Chromium	Water	ug/L		63,900			-			-			-			-			-			-	
Cobalt	Soil	mg/kg	-	29,000		0.00	12		0.00	9		0.00	13		0.00	7.4		0.00	7.1		0.00	=	
Copper Lead	Soil Soil	mg/kg mg/kg		70,000 1,000	<del></del>	0.00	1100 220		0.02	6500 720		0.09	500 280		0.01	3.9		0.00	14 5		0.00		
Lead	Water	ug/L	-	4.0		5.05							-			-						-	
Mercury	Soil	mg/kg	-	56		0.01	20		0.36	25		0.45	0.6		0.01	0.29		0.01	0.42		0.01		
Mercury	Water	ug/L	-	1280			-			-			-			-							
Molybdenum	Soil	mg/kg	-	9,400		0,00	ND<1		0.00	2		0.00	ND<1		0.00	ND<1		0.00	ND<1		0.00	-	
Nickel Nickel	Soil Water	mg/kg ug/L	-	37,000 2,560,000	<b>—</b>	0.00	45		0.00	29		0.00	79		0.00	51		0.00	49		0.00		
Silver	Soil	mg/kg	-	9,400			ND<0.5			ND<0.5			ND<0.5			ND<1			ND<1			-	
Thallium	Soil	mg/kg	-	150			ND<1			ND<1			ND<1			ND<10			ND<10				
Vanadium	Soil	mg/kg	-	13,000		0.00	18		0.00	9		0.00	48		0.00	18		0.00	16		0.00	-	
Zinc	Soil	(mg/kg)	-	100,000		0.00	780		0.01	1300		0.01	200		0.00	33		0.00	30		0.00	-	
Zinc	Water	ug/L	-	3,830,000			-						-			-		-	-	-		-	_
Petroleum Compounds Benzene	Soil	mg/kg	1.4	24												0.15	0.11		ND<0.005		-		-
Benzene	Water	ug/L	51.9	12,100			_						-			55	1.06	0.00	25	0.48	0.00	0.5	0.01
TPH-Diesel**	Soil	mg/kg	-				240			360			84			ND<1			ND<1				
TPH-Diesel	Water	ug/L					-						**			450			220			ND<50	
Ethyl Benzene Ethylbenzene	Soil Water	mg/kg		5,800 750,000			-									0.78 2.1		0.00	ND<0.005		0.00	 ND<0.5	
TPH-Gasoline**	Soil	ug/L mg/kg		730,000						-						5.9		0.00	ND<1		0.00	-	
TPH-Gasoline	Water	ug/L	-				-			_						20,000			3,400			-	
Hydrocarbons (oil and grease)	Soil	mg/kg	-										-						-			-	
Toluene	Soil	mg/kg		2,000			-						-			0.01		0.00	ND<0.005			-	
Toluene	Water Soil	ug/L		2,090,000 4,500			=			-			-			0.9		0.00	0.6		0.00	0.7	
m,p-Xylenes m,p-Xylenes	Water	mg/kg ug/L		1,540,000												-						-	
o-Xylene	Water	ug/L	-	1,540,000			-			_			-										
Total Xylenes	Soil	mg/kg	-	4,500			-			-						0.43	λ	0.00	ND<0.005			-	
Xylenes, Total	Water	ug/L	:	1,540,000												4.2 10		0.00	2.4 5		0.00	0.6	
Unknown Hydrocarbons Semivolatile Organic Compoun	Soil	mg/kg	-							-						10			3				
2-Methylnaphthalene	Soil	mg/kg					-						-			-			-			-	
Acenaphthene	Soil	mg/kg		28,000			-			-						-			-			-	
Acenaphthylene	Soil	mg/kg					-															-	
Anthracene	Soil	mg/kg		220,000			-			-			_=_									-	
Benzo(a)anthracene	Soil Soil	mg/kg	3.6 0.36													-							
Benzo(a)pyrene Benzo(b)fluoranthene	Soil	mg/kg mg/kg	3.6	-			-			-			-			-							
Benzo(g,h,i)perylene	Soil	mg/kg	-	-			-			-			-									-	
Benzo(k)fluoranthene	Soil	mg/kg	3.6							-			-									-	
Chrysene	Soil	mg/kg	360				-			-			-						-			-	
Dibenzo(a,h)anthracene	Soil	mg/kg	0.36	37,000			-			-			-									-	
Fluoranthene Fluorene	Soil Soil	mg/kg mg/kg		22,000														-					
Indeno(1,2,3,-cd)pyrene	Soil	mg/kg	3.6												the property of the second							-	
Naphthalene	Soil	mg/kg	-	1,900						-										·			
Naphthalene	Water	ug/L	-	490												-							
Phenanthrene	Soil	mg/kg											-			-						-	
Pyrene TOTAL ESTIMATED RISK OR	Soil	mg/kg	-	26,000	2.01E-07	0.05	-	1.20E-06	0.65		3.22E-06	1.35		6.30E-07	0.34		1.90E-06	0.03		7.68E-07	0.02	-	9.63E-09
TOTAL ESTIMATED RISK UK	IIILAKL	MADEN			2.016-0/	0.03		1.201-00	0.05		3.222-00	1.00		0.002-07	0.04		1.701-03	0.00		1.002-07	0.04		7.000 07

<sup>\*</sup> Concentration based on Bay Area background
\*\* No PRG available; risk addressed by constituent compounds

DATE			T		Γ	5/1/97			5/1/97	I		5/1/97			5/1/97	T		5/1/97			5/1/97			5/1/97	
SAMPLE NUMBER						SB-9			SB-9			SB-10			SB-10			SB-11			SB-11			SB-12	
DEPTH (FT)					1	0.5			3	1		0.5			3			0.4			3			0.5	
Site Area			Worker	Scenario	1	Port			Port	1		Port			Port			Port			Port			Port	
Site Area			WOLKE	Non-	Non-	Torc		Non-	TOR		Non-	TOIL		Non-	TOIL		Non-	101		Non-	101		Non-	1010	000000000000000000000000000000000000000
			Carcinogenic	Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic		Carcinogenic
COMPOUND Metals	MATRIX	UNITS	PRĞ	PRĞ	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio
Antimony	Soil	mg/kg	-	750		-			-			-			-			-						-	
Antimony	Water	ug/L	-	5110					-			-			-			-							
Arsenic*	Soil	mg/kg	14	480		-			-			-			-			-							
Arsenic	Water	ug/L	47.8	3830		-			-						-			-						-	
Barium Barium	Soil Water	mg/kg ug/L		100,000 SAT		=			-						-			-			-			-	
Beryllium	Soil	mg/kg	1.2	3,700								-			-			-			-				
Cadmium	Soil	mg/kg	9	930								-			-			-			-			-	
Chromium	Soil	mg/kg	450	-		-			-						-			-			-			-	
Chromium	Water	ug/L	-	63,900		-			-									-			-			-	
Copper	Soil Soil	mg/kg	-	29,000 70,000		164		0.00	108		0.00	1130		0.02	1140		0.02	95.6		0.00	74.9		0.00	49.4	
Copper Lead	Soil	mg/kg mg/kg	-	1,000		308		0.31	27.7		0.03	321		0.32	1740		1.74	196		0.20	1.96		0.00	7.53	
Lead	Water	ug/L	-	4.0					ND<10			_			<0.02			-			-			-	
Mercury	Soil	mg/kg	-	56		0.286		0.01	0.0764		0.00	0.638		0.01	0.378		0.01	0.17		0.00	0.286		0.01	0.138	
Mercury	Water	ug/L		1280		-			ND<2			-			ND<2			-			-			-	
Molybdenum Nickel	Soil Soil	mg/kg		9,400 37,000								-			-			-			-				
Nickel	Water	mg/kg ug/L		2,560,000					-			=			-			-			-			-	
Silver	Soil	mg/kg		9,400		-			-			-			-			-			-			-	
Thallium	Soil	mg/kg		150								-			-			-							
Vanadium	Soil	mg/kg		13,000											-			-							
Zinc Zinc	Soil Water	(mg/kg)		100,000 3,830,000		-			-			-			-			-			-			-	
Petroleum Compounds	vvater	ug/L		3,030,000							_							-			-				
Benzene	Soil	mg/kg	1.4	24		-			-									-			-				
Benzene	Water	ug/L	51.9	12,100		-			-									-							
TPH-Diesel**	Soil	mg/kg		-		-			8						29			-			23			-	
TPH-Diesel	Water Soil	ug/L		5,800		-			ND -						ND 			-			-			-	
Ethyl Benzene Ethylbenzene	Water	mg/kg ug/L		750,000		-						-			-			-			-			-	
TPH-Gasoline**	Soil	mg/kg	-	-		-												-			-			-	
TPH-Gasoline	Water	ug/L	-	-					-																
Hydrocarbons (oil and grease)	Soil	mg/kg	-	-		-			-			-						-						-	
Toluene Toluene	Soil Water	mg/kg		2,000	0.00	-			-									-						-	-
m,p-Xylenes	Soil	ug/L mg/kg		4,500	0.00	-			-									-			-			-	
m,p-Xylenes	Water	ug/L	-	1,540,000		-			-						-									-	
o-Xylene	Water	ug/L	-	1,540,000		-			-				V	<u> </u>				-		Š					
Total Xylenes	Soil	mg/kg		4,500		-			-									-						-	$\overline{}$
Xylenes, Total Unknown Hydrocarbons	Water Soil	ug/L mg/kg	-	1,540,000	0.00							-			-			-			-			-	
Semivolatile Organic Compoun	_																								
2-Methylnaphthalene	Soil	mg/kg				-						-			-			-						-	
Acenaphthene	Soil	mg/kg	-	28,000		-						-			-			-						-	
Acenaphthylene	Soil	mg/kg		220,000		-			-			-			-			-			-			-	
Anthracene Benzo(a)anthracene	Soil Soil	mg/kg	3.6	220,000								-			-			<del>-</del> -			-			-	
Benzo(a)pyrene	Soil	mg/kg mg/kg	0.36	_		-						-			-			<u> </u>			-			-	
Benzo(b)fluoranthene	Soil	mg/kg	3.6	-		-			-	and the contract of			L	And the second				-			-			-	
Benzo(g,h,i)perylene	Soil	mg/kg		-		-			-									-						-	
Benzo(k)fluoranthene	Soil	mg/kg	3.6															-			-			-	
Chrysene Dibenzo(a,h)anthracene	Soil Soil	mg/kg	360 0.36			=			-							<b></b>	_								
Fluoranthene	Soil	mg/kg mg/kg	0.36	37,000		-						-						-						-	
Fluorene	Soil	mg/kg	-	22,000		-			-						-			-						-	
Indeno(1,2,3,-cd)pyrene	Soil	mg/kg	3.6	-		-						-						-							
Naphthalene	Soil	mg/kg	-	1,900		-			-			-						-						-	
Naphthalene Phonon throng	Water	ug/L	-	490		-			ND<1			-			ND<1			-						-	
Phenanthrene Pyrene	Soil Soil	mg/kg mg/kg	-	26,000		-									-			-			-			-	$\overline{}$
TOTAL ESTIMATED RISK OR				20,000	0.00		0.00E+00	0.32		0.00E+00	0.03		0.00E+00	0.35		0.00E+00	1.76		0.00E+00	0.20		0.00E+00	0.01		0.00E+00
		-				-			-					1.							***************************************				

<sup>\*</sup> Concentration based on Bay Area background
\*\* No PRG available; risk addressed by constituent compounds

In.m	Г —	Т		Т	T	5/1/97	T		5/1/97			6/12/97			5/13/97			5/13/97			5/13/97			5/13/97
DATE SAMPLE NUMBER		_			1	SB-12	1		SB-13	1		SB-13			1AB	1		2AB			3A17			6A17
	-	+		<del> </del>	1	3			0.5			3,0			IAD	1		ZAD			3/11/			OAD
DEPTH (FT)	-	-	147 1	Caracta	1				Port			Port			Steam Valve	1		Steam Valve			Steam Valve			Steam Valve
Site Area			Worke	r Scenario Non-	Non-	Port		Non-	Port		Non-	ron		Non-	Steam valve									
			Carcinogenic	Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic	
COMPOUND	MATRIX	UNITS	PRG	PRG	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio	
Metals Antimony	Soil	mg/kg	-	750		-			-			-			-			-			-			
Antimony	Water	ug/L		5110		-			-			-			-			-			ND<50			59
Arsenic*	Soil	mg/kg	14	480											-								<u> </u>	
Arsenic	Water	ug/L	47.8	3830								-						-			25	0.52	0.01	15
Barium	Soil	mg/kg		100,000 SAT		-			-			-			=			=			72			70
Barium Beryllium	Water Soil	ug/L mg/kg	1.2	3,700		-			-			-			-						- 12			- 70
Cadmium	Soil	mg/kg	9	930		-						-			-			-			-			-
Chromium	Soil	mg/kg	450			-			-						-			-			-			-
Chromium	Water	ug/L	-	63,900		-						-			-			-			ND<5			ND<5
Cobalt	Soil	mg/kg		29,000	0.00	- 201		0.01	126		0.00	5250		0.08	-									-
Copper Lead	Soil Soil	mg/kg mg/kg	<del>-</del> -	70,000	0.00	394 513		0.01	136 164		0.16	138		0.08	-									-
Lead	Water	ug/L	-	4.0	1	ND<10			-				<u> </u>		-			-			ND<5			ND<5
Mercury	Soil	mg/kg		56	0.00	5.76		0.10	0.726		0.01	1.78		0.03	-			-			-			-
Mercury	Water	ug/L		1280		ND<2			-			-			-			-			ND<0.8			ND<0.8
Molybdenum	Soil	mg/kg	-	9,400		-			-						-			-			-			-
Nickel Nickel	Soil Water	mg/kg ug/L	-	37,000 2,560,000		-									-						77		0.00	90
Silver	Soil	mg/kg		9,400		-			-						-			-			-			
Thallium	Soil	mg/kg	-	150		-									-						-			
Vanadium	Soil	mg/kg	-	13,000											-			-			-			-
Zinc	Soil	(mg/kg		100,000 3.830.000		-						-			-						 ND<50			 ND<50
Zinc Petroleum Compounds	Water	ug/L	-	3,830,000					-										_		NDCSU	-		NDCSO
Benzene	Soil	mg/kg	1.4	24		-			-			-			-									-
Benzene	Water	ug/L	51.9	12,100		-			-			-			ND<0.5			ND<0.5			-			ND<1
TPH-Diesel**	Soil	mg/kg		-		8300			-			7.7												-
TPH-Diesel	Water Soil	ug/L		5,800		0.3			-			-			-									
Ethyl Benzene Ethylbenzene	Water	mg/kg ug/L	-	750,000		-			=						ND<0.5			ND<0.5						ND<1
TPH-Gasoline**	Soil	mg/kg	-						-			-												-
TPH-Gasoline	Water	ug/L		-					-						-									-
Hydrocarbons (oil and grease)	Soil	mg/kg	-	-					-			-			-									-
Toluene	Soil	mg/kg	1	2,000					-			-			0.92		0.00	0.79		0.00	-			 ND<1
Toluene m,p-Xylenes	Water Soil	ug/L mg/kg	-	4,500	<b>-</b>	-			=			-					0.00			0.00	-			-
m,p-Xylenes	Water	ug/L		1,540,000		-			-			-			-									-
o-Xylene	Water	ug/L	**	1,540,000					-			-			-									-
Total Xylenes	Soil	mg/kg	-	4,500					-						-									ND 4
Xylenes, Total Unknown Hydrocarbons	Water Soil	ug/L mg/kg	-	1,540,000		-									1.4			1.5			-			ND<1
Semivolatile Organic Compoun		mg/ Ng				_			-															
2-Methylnaphthalene	Soil	mg/kg	-									-			-			-			-			-
Acenaphthene	Soil	mg/kg	-	28,000		1.5		0.00	-			ND<1.7			-			-			-			
Acenaphthylene	Soil	mg/kg				ND<3.3		0.00				ND<3.3 ND<1.7			-						-			-
Anthracene Benzo(a)anthracene	Soil Soil	mg/kg mg/kg	3,6	220,000		1.4	0.39	0.00	-			ND<1.7												
Benzo(a)pyrene	Soil	mg/kg	0.36	-		0.95	2.64					0.67	1.86		-						-			-
Benzo(b)fluoranthene	Soil	mg/kg	3.6	-		0.93	0.26		-			ND<1.7									-			
Benzo(g,h,i)perylene	Soil	mg/kg		-		0.56			-			ND<0.33			-						-			-
Benzo(k)fluoranthene	Soil	mg/kg	3.6	-		1.4	0.39		-			ND<1.7 ND<1.7			-				-		-			-
Chrysene Dibenzo(a,h)anthracene	Soil Soil	mg/kg mg/kg	0.36	-		2.8 ND<3.3	0.01		=			ND<0.67									-			-
Fluoranthene	Soil	mg/kg mg/kg		37,000		5.6		0.00	-			5.9		0.00	-									-
Fluorene	Soil	mg/kg	-	22,000		1.3		0.00	-			1.6		0.00	-			-						-
Indeno(1,2,3,-cd)pyrene	Soil	mg/kg	3.6	-		0.36	0.10					ND<0.170			-									-
Naphthalene	Soil	mg/kg	**	1,900	<b>_</b>	ND<3.3						ND<1.7									 ND<2.5			
Naphthalene Phenanthrene	Water Soil	ug/L mg/kg		490		ND<1	- 1			-		8.7							-	-	ND<2.5			-
Pyrene	Soil	mg/kg mg/kg		26,000		5.1		0.00	-			4.4		0.00	-			-			-			-
TOTAL ESTIMATED RISK OR					0.01		3.78E-06	0.62		0.00E+00	0.18		1.86E-06	0.25		0.00E+00	0.00		0.00E+00	0.00		5.23E-07	0.01	
		-					-	-		-					200									

<sup>\*</sup> Concentration based on Bay Area background

<sup>\*\*</sup> No PRG available; risk addressed by constituent compounds

Mathematical   Math																	T								
Part	DATE		-	-		1		4/27/98			4/27/98			4/27/98			4/27/98			4/27/98			4/27/98		
No. Section		-	-			1															-			ł	
Marche   M		-	$\vdash$			-															1			-	
Control   Cont	Site Area			Worker				Port			Port			Port		The second	Port			Port			Port	MACHE CONSTRUCT	
Segregative segretary segr				Carcinogenic		Carcinogenic			Carcinogenic			Carcinosténic			Carcinogenic			Carcinogenic			Carcinogenic			Carcinogenic	Carcinogenic
Section 1.	COMPOUND	MATRIX	UNITS	PRG	PRG	PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio	100	PRG Ratio	PRC Ratio
Scheeles   Mary   Mary		6470,1691																							
American Marie Mar						-	0.01																		
Amenication May 1966 167 167 168 168 169 169 169 169 169 169 169 169 169 169							0.01																		
See					3830	0.31	0.00				-			-			-			-					
Martine   Mart																									
Cacherine   Set																									
Camerian   See								-				` `													
Chemister   Monte									0.17			0.08		-	0.13			0.33			0.14			0.47	
Cache					63,900						-			ND<10						ND<10					
Left Sel 28/16 - 1,000   60																	-								
Mart													0100												
Memory   Sel   Wight   1										0.04			0.02			0.02			0.45						0.23
Marcon   M								16		0.29			0.01			0.01	-		0.03				8.2		0.15
Marging   Marg	Mercury	Water		-	1280			-						ND<0.20									-		
Noted Mys	Molybdenum		mg/kg																						
Series Series   Serie				_			0.00																		
Tablem 6.5 de   mg/s   - 1500   - 1000   - 1   -				_			0.00																		
Variety   Vari	Thallium										-			-											
The Control Company   Sect   1	Vanadium	Soil	mg/kg																						
Preference Components Returner  Water  Water	Zinc									0.01			0.00						0.00						0.01
Manual   M		Water	ug/L		3,830,000			-						41		0.00	-			34		0.00			
Processing   Process   P		Soil	mg/kg	1.4	24						-			-			-			-			-		
The Close   Sol	Benzene							-			-			-									-		
Production   Sol   Implication   Sol   Impli	TPH-Diesel**		mg/kg	-																			-		
Displaymenter   Water   Sold																	_								
TPIC Casoline*																				_					
TPH-Casoling   Water	TPH-Gasoline**																						-		
Tokener   Note   1.50	TPH-Gasoline			-							-														
Tollary   Water   Wa	Hydrocarbons (oil and grease)																								
The control of the																_					_				
Mark																-									-
Comparison   Com	m,p-Xylenes										-			-			-						-		
Note																									
Dikknown Hydrocarbonx   Soil   mg/kg   -																				0.000					
Semivolatile Organic Composition   Semivolatile Organic Composition   Semivolatile Organic Composition   Semivolation   Semi				-																	<del>                                     </del>				<b>-</b>
2-Methylaphthalene			1878																						
Acemaphthylene Soil mg/kg - 20,000 NDc1.0			mg/kg								-			-			-								
Anthraceme Soil mg/kg - 220,000 ND - ND <td>Acenaphthene</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>_</td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>_</td> <td></td> <td></td>	Acenaphthene										_			-									_		
Benzo(s)anthracene   Soil   mg/kg   3.6	Acenaphthylene																						_		-
Democyal pyrene   Soil   mg/kg   0.36																									
Benzo(b)Horanthene   Soil   mg/kg   3.6																									
Perzo(k)fluorinthere   Soil   mg/kg   3.6		Soil		3.6				_																	
Chrysene Soil mg/kg 360 1.5 0.00																									
Diberaco(a,h)anthracene   Soil   mg/kg   0.36																					0.00				
Fluoranthere Soil mg/kg 37,000               4.4   0.00																									<b>—</b>
Fluorene Soil mg/kg 22,000           NDcl.0       NDcl.0     N	Fluoranthene																-					0.00			
Indeno(1,2,3,-cd)pyrene Soil mg/kg 3.6 Soil mg/kg 1,900 Soi	Fluorene	Soil												_						ND<1.0					
Naphthalene Water ug/L 490 1.9 Phenanthrene Soil mg/kg 1.9 Pyrene Soil mg/kg 25,000 3.7 0.00 3.7	Indeno(1,2,3,-cd)pyrene		mg/kg														_								
Name	Naphthalene													-		-									-
Pyrene Soil mg/kg 26,000 3.7 0.00																-									<del>                                     </del>
	Pyrene																	in the second second				0.00			
						3.14E-07	0.02		1.69E-07	0.99		8.44E-08	0.03		1.29E-07	0.03		3.33E-07	0.50		5.00E-06	3.01		4.67E-07	0.43

<sup>\*</sup> Concentration based on Bay Area background
\*\* No PRG available; risk addressed by constituent compounds

DATE		T			4/27/98			4/27/98			4/27/98			4/28/98	l		8/13/98			8/13/98			8/13/98	
SAMPLE NUMBER		$\vdash$			SB-16			SB-17			SB-17			SB16A			SV-7			5V-8			SV-8	1
DEPTH (FT)	-	_			2.0			0.5			3.0			1.5			2.5			2.5			6.0	1
	-	-													ŀ								Steam Valve	1
Site Area		400000000	Worker	Scenario Non-	Port		Non-	Port		Non-	Port		Non-	Port		Non-	Steam Valve		Non-	Steam Valve		Non-	Steam vaive	
			Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic		Carcinogenic
COMPOUND	MATRIX	UNITS	PRĞ	PRG		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio
Metals	6.3	4		770										-		(2010)	-			_			_	KAROL HILLIAN
Antimony Antimony	Soil Water	mg/kg ug/L		750 5110							-													-
Arsenic*	Soil	mg/kg	14	480							-			-			-			-			-	
Arsenic	Water	ug/L	47.8	3830							-			-			-			-			-	
Barium	Soil	mg/kg		100,000							-			-			-			-			-	
Barium	Water	ug/L	-	SAT							-			-			-			-				
Beryllium	Soil	mg/kg	1.2	3,700	-						-									-				
Cadmium Chromium	Soil Soil	mg/kg mg/kg	450	930	92	0.20		65	0.14		68	0.15		-			- 44	0.10		- 46	0,10		52	0.12
Chromium	Water	ug/L	-	63,900	- '-	0.20			0.21		26		0.00	ND<10			ND<10	0.10		-			ND<10	
Cobalt	Soil	mg/kg	-	29,000																-			-	
Copper	Soil	mg/kg	-	70,000	1700		0.02	6700		0.10	600		0.01				35		0.00	18		0.00	28	
Lead	Soil	mg/kg	-	1,000	3100		3.10	800		0.80	150		0.15				15		0.02	3.7		0.00	10	
Lead	Water	ug/L		4.0	6.0		0	44		0.08	ND<3.0		0.02	5.0		1.25	ND<3	<u> </u>	0.00	ND<0.039	-		4.8 ND<0.038	
Mercury Mercury	Soil Water	mg/kg		56 1280	6.0		0.11	4.4		0.08	0.91 ND<0.20		0.02	44		0.03	0.0/9 ND<0.2		0.00	ND<0.039			ND<0.08	
Molybdenum	Soil	ug/L mg/kg		9,400	-			-			IND<0.20			44						-			-	
Nickel	Soil	mg/kg	-	37,000	-																		-	
Nickel	Water	ug/L	-	2,560,000	-									-			-			-				
Silver	Soil	mg/kg		9,400										-			-			-				
Thallium	Soil	mg/kg		150										-			-			-				
Vanadium Zinc	Soil Soil	mg/kg (mg/kg)		13,000	1700		0.02	7500		0.08	510		0.01	-			35		0.00	38		0.00	52	
Zinc	Water	ug/L		3,830,000			0.02			0.00	44		0.00	ND<20			90		0.00	- 50		0.00	36	
Petroleum Compounds		ľ																						
Benzene	Soil	mg/kg	1.4	24	-			-			ND<0.005			-			ND<0.005			ND<0.005			ND<0.005	
Benzene	Water	ug/L	51.9	12,100	-			-			ND<0.5			-			ND<0.5			-			ND<0.5	
TPH-Diesel** TPH-Diesel	Soil Water	mg/kg	-		-						=			1500 ND<61	-		7.5 4600(YH)			-			-	
Ethyl Benzene	Soil	ug/L mg/kg	-	5,800	-						ND<0.005			- ND<61			ND<0.005		-	ND<0.005			ND<0.005	
Ethylbenzene	Water	ug/L	-	750,000	-						ND<0.5			-			ND<0.5			-			ND<0.5	
TPH-Gasoline**	Soil	mg/kg		-	-			-			ND<1.0			-			ND<1			ND<1			ND<1	
TPH-Gasoline	Water	ug/L	-	-	-			-			ND<50			-			ND<50			-			ND<50	
Hydrocarbons (oil and grease)	Soil	mg/kg	-		-								0.00				ND<0.005			- NTD 0.005			ND<0.005	
Toluene Toluene	Soil Water	mg/kg ug/L		2,000	-						0.0069 ND<0.5		0.00	-			ND<0.005			ND<0.005			ND<0.005	
m,p-Xylenes	Soil	mg/kg	_ :	4,500	-					•	ND<0.005			-	-		ND<0.005			ND<0.005			ND<0.005	
m,p-Xylenes	Water	ug/L	- 1	1,540,000	-			_			-			-			-			-				
o-Xylene	Water	ug/L	-	1,540,000	-			-			-			-			-			-				
Total Xylenes	Soil	mg/kg	-	4,500				-			-			-			-			-			-	
Xylenes, Total Unknown Hydrocarbons	Water Soil	ug/L	-	1,540,000	-												-							
Semivolatile Organic Compoun	_	mg/kg						-																
2-Methylnaphthalene	Soil	mg/kg		-										-			-			-			-	
Acenaphthene	Soil	mg/kg		28,000										ND<0.25			ND<0.075			-			-	
Acenaphthylene	Soil	mg/kg	-	-										ND<0.25			ND<0.075			-			-	
Anthracene	Soil	mg/kg	-	220,000										ND<0.25			ND<0.075	0.77					-	
Benzo(a)anthracene	Soil Soil	mg/kg	3.6 0.36		-			-			-			ND<0.25 ND<0.25			0.100	0.03					<del></del>	<del> </del>
Benzo(a)pyrene Benzo(b)fluoranthene	Soil	mg/kg mg/kg	3.6					-			-			0.53			ND<0.075	0.50		-			-	
Benzo(g,h,i)perylene	Soil	mg/kg	-	-	-			-			-			ND<0.25			0.075						-	
Benzo(k)fluoranthene	Soil	mg/kg	3.6	-	-			-			-						-			-				
Chrysene	Soil	mg/kg	360	-	-									ND<0.25			0.140	0.00		-				
Dibenzo(a,h)anthracene	Soil	mg/kg	0.36		-			-						ND<0.25		0.00	0.075	0.21	0.00				-	
Fluoranthene	Soil Soil	mg/kg	-	37,000 22,000				-						0.39 ND<0.25		0.00	0.350 ND<0.075		0.00				-	
Fluorene Indeno(1,2,3,-cd)pyrene	Soil	mg/kg mg/kg	3.6	22,000				-			-			ND<0.25			ND<0.075			<del></del>			-	
Naphthalene	Soil	mg/kg		1,900	-						-			ND<0.25			ND<0.075			-			-	
Naphthalene	Water	ug/L		490							-			-			-			-			-	
Phenanthrene	Soil	mg/kg			-						-			ND<0.25			ND<0.075			-			-	
Pyrene	Soil	mg/kg		26,000	-						-			0.67	0.00m 0-	0.00	0.380	corp or	0.00	-	4 000 00	0.00	-	11/200
TOTAL ESTIMATED RISK OR	HAZARE	INDEX	- 1			2.04E-07	3.25		1.44E-07	1.05		1.51E-07	0.18		0.00E+00	1.28		6.95E-07	0.02		1.02E-07	0.00		1.16E-07

<sup>\*</sup> Concentration based on Bay Area background

<sup>\*\*</sup> No PRC available; risk addressed by constituent compounds

					T	0.410.400			8/12/98			8/12/98	1		8/12/98			8/12/98			8/12/98		
DATE					1	8/12/98	1						1		8/12/98 SV10			8/12/98 SV-11			8/12/98 SV-11		
SAMPLE NUMBER					ł	SV-9			SV-9			SV-10									5.5		
DEPTH (FT)					1	2.5			6.0			2.5			5.5			2.5					
Site Area			Worker	Scenario		Steam Valve			Steam Valve			Steam Valve		Non-	Steam Valve		Non-	Steam Valve		Non-	Steam Valve		Non-
			Carcinogenic	Non- Carcinogenic	Non- Carcinogenic		Carcinogenic	Non- Carcinogenic		Carcinogenic	Non- Carcinogenic		Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic
COMPOUND	MATRIX	UNITS	PRG	PRG	PRC Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRC Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio
Metals													30010000000000										
Antimony	Soil	mg/kg	-	750					-			-			-						-		
Antimony Arsenic*	Water Soil	ug/L mg/kg	14	5110 480	<b></b>	-						-		<b></b>				-					
Arsenic	Water	ug/L	47.8	3830		-						-			-						-		
Barium	Soil	mg/kg		100,000					-			-			-						-		
Barium	Water	ug/L		SAT					-			-											
Beryllium	Soil	mg/kg	1.2	3,700					-			-			-			-			-		
Cadmium	Soil	mg/kg	9	930						0.09			0.10		- 49	0.11		- 57	0.13		- 65	0.14	
Chromium	Soil Water	mg/kg ug/L	450	63,900		40	0.09		39 ND<10	0.09		46	0.10		ND<10	0.11		- 5/	0.13		ND<10	0.14	
Chromium Cobalt	Soil	mg/kg	-	29,000								-			-			-			-		
Copper	Soil	mg/kg		70,000	0.00	10		0.00	15		0.00	85		0.00	36		0.00	16		0.00	18		0.00
Lead	Soil	mg/kg		1,000	0.01	6.9		0.01	4.7		0.00	250		0.25	74		0.07	20		0.02	6.4		0.01
Lead	Water	ug/L	-	4.0	1.20				ND<3			-			ND<3			-			ND<3		
Mercury	Soil	mg/kg	-	56		0.17		0.00	0.15		0.00	0.26		0.00	0.096		0.00	0.11		0.00	0.098		0.00
Mercury	Water	ug/L		1280 9,400					ND<0.2			-			ND<0.2			-			ND<0.2		
Molybdenum Nickel	Soil Soil	mg/kg mg/kg	-	37,000		-			-			-			<del>  -</del> -			-			-		
Nickel	Water	ug/L	-	2,560,000		-						-			-						_		
Silver	Soil	mg/kg	-	9,400					-			-			-			-	20000000000		-		
Thallium	Soil	mg/kg	-	150					-						-						-		
Vanadium	Soil	mg/kg	-	13,000																			
Zinc	Soil	(mg/kg)	-	100,000 3,830,000	0.00	33		0.00	1 ND<20		0.00	160		0.00	100 ND<20		0.00	44		0.00	41 ND<20		0.00
Zinc	Water	ug/L	-	3,830,000	0.00				ND<20						ND<20						NDC20		
Petroleum Compounds Benzene	Soil	mg/kg	1.4	24	-	-			-			ND<0.005			0.57	0.41	0.02						
Benzene	Water	ug/L	51.9	12,100		-			-			-			770	14.84	0.06	-			-		
TPH-Diesel**	Soil	mg/kg	-	-		-						100			28			-					
TPH-Diesel	Water	ug/L	-	-		-									250			-					
Ethyl Benzene	Soil	mg/kg	-	5,800 750,000		-			-			0.0074		0.00	0.063		0.00	-					
Ethylbenzene TPH-Gasoline**	Water Soil	ug/L		750,000					-			1.3			9.9		0.00	-	-				
TPH-Gasoline	Water	mg/kg ug/L	-			-									7,500						-		
Hydrocarbons (oil and grease)	Soil	mg/kg	-	-		-			-						-			-			-		
Toluene	Soil	mg/kg		2,000		-			-			0.0064		. 0.00	0.02		0.00						
Toluene	Water	ug/L		2,090,000		-									10		0.00	-			-		
m,p-Xylenes	Soil Water	mg/kg		4,500 1,540,000		-			-			0.008		0.00	0.014		0.00	-					
m,p-Xylenes o-Xylene	Water	ug/L ug/L	-	1,540,000					-			-			5.9		0.00	-					
Total Xylenes	Soil	mg/kg		4,500		-			-												-		
Xylenes, Total	Water	ug/L	1	1,540,000		-			-			-									-		
Unknown Hydrocarbons	Soil	mg/kg				-						-			-			-			-		
Semivolatile Organic Compoun																							
2-Methylnaphthalene	Soil Soil	mg/kg		28,000		-			-			ND<0.05			ND<0.05			-					
Acenaphthene Acenaphthylene	Soil	mg/kg mg/kg	-	28,000		-			-			0.140			ND<0.05			-					
Anthracene	Soil	mg/kg		220,000		-			-			ND<0.05			ND<0.05			-					
Benzo(a)anthracene	Soil	mg/kg	3.6	-		-			~			ND<0.05			ND<0.05			-			-		
Benzo(a)pyrene	Soil	mg/kg	0.36	-		-						ND<0.05			ND<0.05			-			-		
Benzo(b)fluoranthene	Soil	mg/kg	3.6	-		-			-			0.120	0.03		ND<0.05			-			-		
Benzo(g,h,i)perylene	Soil	mg/kg		-		=			-			ND<0.05		_	ND<0.05			-			==		
Benzo(k)fluoranthene Chrysene	Soil Soil	mg/kg mg/kg	3.6 360						-			0.062	0.00		ND<0.05			-				· ·	
Dibenzo(a,h)anthracene	Soil	mg/kg mg/kg	0.36			-			-			ND<0.05	00		ND<0.05			-			-		
Fluoranthene	Soil	mg/kg		37,000		-			-			ND<0.05			ND<0.05			-			-		
Fluorene	Soil	mg/kg	~	22,000		-			-			ND<0.05			ND<0.05			-			-		
Indeno(1,2,3,-cd)pyrene	Soil	mg/kg	3.6	-		-			-			ND<0.05			ND<0.05			-			-		
Naphthalene	Soil	mg/kg		1,900		-						ND<0.05			0.170		0.00				-		
Naphthalene Phenanthrene	Water Soil	ug/L		490		-						ND<0.05			ND<0.05		0.31	-				<b> </b>	-
Phenanthrene Pyrene	Soil	mg/kg mg/kg	-	26,000								0.060		0.00	ND<0.05			-			-		
TOTAL ESTIMATED RISK OR					1.21		8.89E-08	0.01		8.67E-08	0.01		1.36E-07	0.26	ND<0.05	1.54E-05	0.47		1.27E-07	0.02		1.44E-07	0.01
L								-			-	-	-										

<sup>\*</sup> Concentration based on Bay Area background
\*\* No PRG available; risk addressed by constituent compounds

				T			-	0.450.000			0.45.45			8/12/98			8/12/98			8/12/98		
DATE					8/12/98			8/12/98 SV-12			8/12/98 SV-13			SV-13	1		8/12/98 SV-14			8/12/98 SV-14		
SAMPLE NUMBER		-			SV-12										-			1				1
DEPTH (FT)		-		<u> </u>	2.5			5.5			2.5			5.5			2.5	1		5.5		
Site Area			Worker	Scenario	Steam Valve		.,	Steam Valve			Steam Valve		Non-	Steam Valve		Non-	Steam Valve		Non-	Steam Valve		Non-
			Carcinogenic	Non- Carcinogenic		Carcinogenic	Non- Carcinogenic		Carcinogenic	Non- Carcinogenic		Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic
COMPOUND	MATRIX	UNITS	PRĞ	PRĞ		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRC Ratio		PRG Ratio	PRG Ratio		PRC Ratio	PRG Ratio
Metals	6.7	- 71		750				-						-			-			_		-
Antimony Antimony	Soil Water	mg/kg ug/L	-	5110	-										,							
Arsenic*	Soil	mg/kg	14	480	-			-			-			-		-12000000000000000000000000000000000000				-	Eou repentant cons	
Arsenic	Water	ug/L	47.8	3830	-			-			-			-						-		
Barium	Soil	mg/kg		100,000	-			-			-			-			-			-		
Barium	Water Soil	ug/L	1.2	SAT 3,700				-			-						-					
Beryllium Cadmium	Soil	mg/kg mg/kg	9	930	-																	
Chromium	Soil	mg/kg	450		66	0.15		25	0.06		58	0.13		46	0.10		52	0.12		39	0.09	
Chromium	Water	ug/L	-	63,900	-			ND<10			-			ND<10			-			ND<10		
Cobalt	Soil	mg/kg		29,000				-			-			- 10		2.00			0.00	-		
Copper	Soil Soil	mg/kg mg/kg		70,000 1,000	24 5.9		0.00	7.8 2.4		0.00	9.9 5.4		0.00	3.2		0.00	4.9		0.00	14 3.7		0.00
Lead	Water	ug/L	-	4.0	- 5.9		0.01	ND<3		0.00	- 3.4		0.01	ND<3		0.00	- 4.7		V.00	ND<3		0.00
Mercury	Soil	mg/kg		56	0.12		0.00	0.052		0.00	0.069		0.00	0.063		0.00	0.048		0.00	0.072		0.00
Mercury	Water	ug/L		1280				ND<0.2			-			ND<0.2			-			ND<0.2		
Molybdenum	Soil Soil	mg/kg		9,400 37,000	-						-											
Nickel Nickel	Water	mg/kg ug/L	-	2,560,000	-			-						-			-					
Silver	Soil	mg/kg	-	9,400	-			-			-			-			-			-		
Thallium	Soil	mg/kg		150	-			-			-			-						-		
Vanadium		mg/kg	-	13,000																		
Zinc	Soil Water	(mg/kg) ug/L	-	100,000 3,830,000	43		0.00	22 ND<20		0.00	- 27		0.00	32 ND<20		0.00	150		0.00	35 ND<20		0.00
Petroleum Compounds	water	ug/L		3,830,000				NDCZU						NDC20				_		NDCZU		-
Benzene	Soil	mg/kg	1.4	24				-			-									-		
Benzene	Water	ug/L	51.9	12,100			000 VICES VICES	-			-			-			-					
TPH-Diesel**	Soil	mg/kg		-	-						-			-			-					$\overline{}$
TPH-Diesel Ethyl Benzene	Water Soil	ug/L mg/kg	-	5,800							-			-								-
Ethylbenzene	Water	ug/L		750,000							-									-		
TPH-Gasoline**	Soil	mg/kg	-	-	-															-	19 No.	
TPH-Gasoline	Water	ug/L		-							-									-		$\overline{}$
Hydrocarbons (oil and grease) Toluene	Soil Soil	mg/kg	-	2,000	-			-						-						-		-
Toluene	Water	mg/kg ug/L		2,090,000							-			-			-			-		
m,p-Xylenes	Soil	mg/kg	_	4,500	-															-		
m,p-Xylenes	Water	ug/L	-	1,540,000																-		
o-Xylene Total Xylenes	Water Soil	ug/L		1,540,000 4,500				-			-			-			-			-		
Xylenes, Total	Water	mg/kg ug/L		1,540,000				-						-			-			-		
Unknown Hydrocarbons	Soil	mg/kg												-			-			-		
Semivolatile Organic Compoun																						
2-Methylnaphthalene	Soil Soil	mg/kg	-	28,000	-			-						-						-		
Acenaphthene Acenaphthylene	Soil	mg/kg mg/kg		20,000	-			-						-			-			-		
Anthracene	Soil	mg/kg	-	220,000				-			-			-								
Benzo(a)anthracene	Soil	mg/kg	3.6								-			-								
Benzo(a)pyrene	Soil	mg/kg	0.36		-						-			-			-					
Benzo(b)fluoranthene	Soil	mg/kg	3.6	-	-						-			-			-					
Benzo(g,h,i)perylene Benzo(k)fluoranthene	Soil Soil	mg/kg mg/kg	3.6		-			-			-			-			-					
Chrysene	Soil	mg/kg	360	-	-									-			-			-		
Dibenzo(a,h)anthracene	Soil	mg/kg	0.36					-		4							-					
Fluoranthene	Soil	mg/kg		37,000				-			-									-		-
Fluorene Indeno(1,2,3,-cd)pyrene	Soil Soil	mg/kg mg/kg	3.6	22,000							-							-		-		
Naphthalene	Soil	mg/kg		1,900	-			-			-			_						-		
Naphthalene	Water	ug/L		490	-			-			-			-			-			-		
Phenanthrene	Soil	mg/kg			-			-			-			-								
Pyrene TOTAL ESTIMATED RISK OR	Soil	mg/kg	-	26,000	-	1.47E-07	0.01		5.56E-08	0.00	-	1.29E-07	0.01	-	1.02E-07	0.00		1.16E-07	0.01	-	8.67E-08	0.01
TOTAL ESTIMATED KISK OR	HAZAKD	INDEX		-		1.4/E-0/	10.01		5.50E-08	0.00		1.27E-U/	0.01		1.025-07	0.00		1.10E-07	0.01		0.07 E-08	0.01

<sup>\*</sup>Concentration based on Bay Area background
\*\*No PRG available; risk addressed by constituent compounds

# TABLE 2 HUMAN HEALTH RISK EVALUATION -- PARK USER SCENARIO FORMER CRYER BOAT YARD

DATE				2/13/91			9/27/93			9/27/93			9/27/93	T		9/27/93		
SAMPLE NUMBER		-		2/13/91 Composite:2@1.0,			9/2//93 Boring 1			Boring 2	1		9/2//93 Boring 3	1		9/2//93 Boring 5		
DEPTH (FT)		$\vdash$		5@1.0, & 6@1.0			Boring 1			Doring 2	1		Boring 5	1		Boring 5		
Site Area		-	Park Use	Steam Valve	S.		Steam Valve			Steam Valve			Steam Valve			Steam Valve		
Site Area			Park Use	Steam valve			Steam Valve			Steam vaive			Steam valve			Steam valve		
COMPOUND	MATRIX	UNITS	Carcinogenic Park PRG		Carcinogenic PRG Ratio	Non- Carcinogenic PRG Ratio		Carcinogenic PRG Ratio	Non- Carcinogenic PRG Ratio		Carcinogenic PRG Ratio	Non- Carcinogenic PRG Ratio		Carcinogenic PRG Ratio	Non- Carcinogenic PRG Ratio		Carcinogenic PRG Ratio	Non- Carcinogenic PRG Ratio
Metals																		
Antimony	Soil	mg/kg		-			-			ND<5			ND<5			ND<5		
Arsenic*	Soil	mg/kg	14							3	0.21	0.01	4	0.29	0.01	ND<1		
Barium	Soil	mg/kg								56		0.00	54		0.00	34		0.00
Beryllium	Soil	mg/kg	1.7							ND<0.5			ND<0.5			ND<0.5		
Cadmium	Soil	mg/kg	-				-			ND<0.5			0.6		0.00	ND<0.5		
Chromium	Soil	mg/kg	2,700							52	0.02		77	0.03		38	0.01	
Cobalt	Soil	mg/kg		-			-			12		0.00	11		0.00	7		0.00
Copper	Soil	mg/kg	-				-			18		0.00	30		0.00	6		0.00
Lead	Soil	mg/kg								ND<5			8		0.01	ND<5		
Mercury	Soil	mg/kg	-							ND<0.5			0.13		0.00	ND<0.5		
Molybdenum	Soil	mg/kg	-							ND<5			ND<5			ND<5		
Nickel	Soil	mg/kg	-							76		0.00	84		0.00	33		0.00
Silver	Soil	mg/kg	-				-			ND<5			ND<5			ND<5		
Thallium	Soil	mg/kg		-			-			ND<5			ND<5			ND<5		
Vanadium	Soil	mg/kg		-						36		0.01	36		0.01	37		0.01
Zinc	Soil	(mg/kg)	-				-			51		0.00	64		0.00	23		0.00
Petroleum Compounds																		
Benzene	Soil	mg/kg	2.3				0.14	0.06	0.02	0.013	0.01	0.00	ND<0.003			ND<0.003		
Benzene	Water	ug/L	303				-						-					
TPH-Diesel**	Soil	mg/kg					89		0.09	ND<10			ND<10			ND<10		
Ethyl Benzene	Soil	mg/kg	-	-			0.38		0.00	0.021		0.00	ND<0.003			ND<0.003		
Ethylbenzene	Water	ug/L	-	-			-						-					
TPH-Gasoline**	Soil	mg/kg	-				17			ND<1			ND<1			ND<1		
Hydrocarbons (oil and grease)	Soil	mg/kg	-	-			ND<50			73			ND<50			ND<50		
Toluene	Soil	mg/kg	-	-			1.1		0.00	0.075		0.00	ND<0.003			ND<0.003		
Toluene	Water	ug/L	-	-			-						-					
m,p-Xylenes	Soil	mg/kg	-				_						_			-		
m,p-Xylenes	Water	ug/L	-	-			-						-			-		
o-Xylene	Water	ug/L	-	-			-									-		
Total Xylenes	Soil	mg/kg		-			1.6		0.00	0.084		0.00	ND<0.009			ND<0.009		
Xylenes, Total	Water	ug/L	-	-			-											1
Unknown Hydrocarbons	Soil	mg/kg	570				-						-					1
Semivolatile Organic Compoun	ds																	
2-Methylnaphthalene	Soil	mg/kg	-	0.380		0.00	-											
Acenaphthene	Soil	mg/kg	-	ND<0.330			-											
Acenaphthylene	Soil	mg/kg	_	ND<0.330						-			_			_		
Anthracene	Soil	mg/kg	-	ND<0.330			-						-			-		
Benzo(a)anthracene	Soil	mg/kg	3.9	ND<0.330														
Benzo(a)pyrene	Soil	mg/kg	0.39	ND<0.330			-			-			-					
Benzo(b)fluoranthene	Soil	mg/kg	3.9	0.24	0.06		_			-			-			-		1
Benzo(g,h,i)perylene	Soil	mg/kg	-	ND<0.330			-			-			-			-		
Benzo(k)fluoranthene	Soil	mg/kg	3.9	ND<0.330									-					
Chrysene	Soil	mg/kg	39	ND<0.330			-											
Dibenzo(a,h)anthracene	Soil	mg/kg	0.39	ND<0.330			-						-			-		
Fluoranthene	Soil	mg/kg	-	0.24		0.00	_			-	9		-			-		
Fluorene	Soil	mg/kg	-	0.19		0.00	-						-					
Indeno(1,2,3,-cd)pyrene	Soil	mg/kg	3.9	ND<0.330			-						-					
Naphthalene	Soil	mg/kg		ND<0.330			-			-			-			-		
Phenanthrene	Soil	mg/kg		0.26		0.00										-		
Pyrene	Soil	mg/kg		0.18		0.00	-											
TOTAL ESTIMATED RISK OR					6.15E-08	0.00		6.09E-08	0.11		2.39E-07	0.02		3.14E-07	0.03		1.41E-08	0.01
L		LI TOLA			0.101700	5.00		OIO ZE-OO	V.11		2.0.71.07	5/1/4	<u></u>	0.2.2.07	vito		1.115-00	5.01

<sup>\*</sup> Concentration based on Bay Area background

<sup>\*\*</sup> PRG based on appearance, not risk

# TABLE 2 HUMAN HEALTH RISK EVALUATION -- PARK USER SCENARIO FORMER CRYER BOAT YARD

DATE				9/27/93			3/30/95			3/30/95			10/14/96			10/14/96			10 /14 /0/		
SAMPLE NUMBER		-		Boring 6	1		SB-5			SB-6	-		WELL #1			WELL.#2	1		10/14/96 WELL#4		
DEPTH (FT)				boring 6	1		1.5			1.5			3.5			3.5	-		WELL#4		
Site Area	_		Park Use	Steam Valve	1		Port			Port	+		Steam Valve			Steam Valve	•		0: 1/ 1		
Site Area		0.000.000.000	Park Use	Steam vaive			Port			Port		1	Steam valve			Steam valve		<b>1</b> 000000000000000000000000000000000000	Steam Valve		1
						Non-			Non-			Non-		0.000	Non-			Non-			Non-
COMPOUND	MATRIX	UNITS	Carcinogenic Park PRG		Carcinogenic PRG Ratio	Carcinogenic PRG Ratio		Carcinogenic PRG Ratio	PRG Ratio		Carcinogenic PRG Ratio	Carcinogenic PRG Ratio		Carcinogenic PRG Ratio	Carcinogenic PRG Ratio		Carcinogenic PRG Ratio	Carcinogenic PRG Ratio		Carcinogenic PRG Ratio	Carcinogenic
Metals	WAIKIA	UNIIS	TarkTRG		FRG RAIRO	1 NG Katio		1 NG KARO	1 KG Ratio		T NG KAIRO	r KG Katio		T NG NAUG	r KG Katik)		r NG RAHO	FRG Ratio		FRG Kano	PRG Ratio
Antimony	Soil	mg/kg		ND<5			3		0.01	12		0.04	ND<5			ND<5			-		
Arsenic*	Soil	mg/kg	14	5	0.36	0.01	2	0.14	0.00	14	1.00	0.03	6.1	0.44	0.01	ND<5					
Barium	Soil	mg/kg		54	0.50	0.00	24	0.14	0.00	75	1.00	0.00	41	0.44	0.00	37		0.00	-		<b>-</b>
Beryllium	Soil	mg/kg	1.7	ND<0.5		0.00	ND<0.1		0.00	ND<0.1		0.00	0.28	0.16	0.00	0.28	0.16	0.00			
Cadmium	Soil	mg/kg		ND<0.5			ND<0.5			1.5		0.00	ND<0.25	0.10	0.00	ND<0.25	0.10	0.00			
Chromium	Soil	mg/kg	2,700	51	0.02		26	0.01		16	0.01	0.00	28	0.01		24	0.01				
Cobalt	Soil	mg/kg		12	0.02	0.00	6	0.01	0.00	12	0.01	0.00	7.4	0.01	0.00	7.1	0.01	0.00			
Copper	Soil	mg/kg		12		0.00	51		0.00	1100	<del>                                     </del>	0.03	10		0.00	14		0.00			
Lead	Soil	mg/kg		ND<5		0.00	33		0.04	220		0.26	3.9		0.00	5		0.01			
Mercury	Soil	mg/kg	-	0.3		0.00	0.4		0.00	20	-	0.08	0.29		0.00	0.42		0.00	-		
Molybdenum	Soil	mg/kg	_	ND<5		0.00	ND<1		0.00	ND<1		V.00	ND<1		0.00	ND<1		UAA			
Nickel	Soil	mg/kg	-	68		0.00	20		0.00	45		0.00	51		0.00	49		0.00	-		
Silver	Soil	mg/kg		ND<5		0.00	ND<0.5		0.00	ND<0.5		Vivo	ND<1		V.00	ND<1		0.00	-		
Thallium	Soil	mg/kg		ND<5			ND<1			ND<1			ND<10			ND<10					
Vanadium	Soil	mg/kg		26		0.00	25		0.00	18		0.00	18		0.00	16		0.00	-		
Zinc	Soil	(mg/kg)		42		0.00	220		0.00	780		0.00	33		0.00	30		0.00			
Petroleum Compounds		8. 8.																0.00			
Benzene	Soil	mg/kg	2.3	ND<0.003			-			-			0.15	0.07		ND<0.005					
Benzene	Water	ug/L	303	-			-						55	0.18	0.00	25	0.08	0.00	0.5	0.00	0.00
TPH-Diesel**	Soil	mg/kg		26		0.03	530		0.53	240		0.24	ND<1	0.49		ND<1	0.00	0.00	-	0.00	
Ethyl Benzene	Soil	mg/kg		ND<0.003			-		0.00	-		3,2,1	0.78		0.00	ND<0.005					
Ethylbenzene	Water	ug/L					-			_	1		2.1		0.00	1.1		0.00	ND<0.5		
TPH-Gasoline**	Soil	mg/kg		ND<1			-						5.9		0.01	ND<1					
Hydrocarbons (oil and grease)	Soil	mg/kg		ND<50			-			-			-			_					
Toluene	Soil	mg/kg		ND<0.003									0.01		0.00	ND<0.005			-		
Toluene	Water	ug/L					-						0.9		0.00	0.6		0.00	0.7		0.00
m,p-Xylenes	Soil	mg/kg	-				-			-			-			-					
m,p-Xylenes	Water	ug/L					-						-			-					
o-Xylene	Water	ug/L					-														
Total Xylenes	Soil	mg/kg		ND<0.009			-			-			0.43		0.00	ND<0.005					
Xylenes, Total	Water	ug/L					-						4.2			2.4			0.6		
Unknown Hydrocarbons	Soil	mg/kg					-						10			5					
Semivolatile Organic Compoun	ds		i de distriction			Annobrodo coa															
2-Methylnaphthalene	Soil	mg/kg	-										-								
Acenaphthene	Soil	mg/kg	-				-			-											
Acenaphthylene	Soil	mg/kg	-	-			-			-			-								
Anthracene	Soil	mg/kg	-	-															-		
Benzo(a)anthracene	Soil	mg/kg	3.9																		
Benzo(a)pyrene	Soil	mg/kg	0.39	-																	
Benzo(b)fluoranthene	Soil	mg/kg	3.9	-									-			-					
Benzo(g,h,i)perylene	Soil	mg/kg		-									-			-					
Benzo(k)fluoranthene	Soil	mg/kg	3.9	-														1			
Chrysene	Soil	mg/kg	39															-			
Dibenzo(a,h)anthracene	Soil	mg/kg	0.39	-	2011-010-0		-			-			-			-					
Fluoranthene	Soil	mg/kg		-			-									-			-		
Fluorene	Soil	mg/kg															V-		-		
Indeno(1,2,3,-cd)pyrene	Soil	mg/kg	3.9	-						-											
Naphthalene	Soil	mg/kg		-			-			-						-			-		
Phenanthrene	Soil	mg/kg		-												-			-		
Pyrene	Soil	mg/kg																			
TOTAL ESTIMATED RISK OR	HAZARD	INDEX			3.76E-07	0.05		1.52E-07	0.59		1.01E-06	0.69		8.58E-07	0.04		2.56E-07	0.02		1.65E-09	0.00
																					and the same of th

<sup>\*</sup> Concentration based on Bay Area background

<sup>\*\*</sup> PRG based on appearance, not risk

### TABLE 2 HUMAN HEALTH RISK EVALUATION -- PARK USER SCENARIO FORMER CRYER BOAT YARD

SAMPSINGE   Company   Co	DATE				F (1 /07			5/1/97			5/1/97			5/1/97	Г		5/1/97		
Part	DATE		-		5/1/97				1			1			1			1	
Second   S									1			1			1			1	
March   Marc		-	_	B 4 11								1			1			1	
Controlly   Cont	Site Area			Park Use	Port			Port			rort		1	Port		1	Port		
Accord		MATRIX	UNITS	Carcinogenic Park PRG			Carcinogenic			Carcinogenic			Carcinogenic			Carcinogenic		Carcinogenic PRG Ratio	Non- Carcinogenic PRG Ratio
Apostock   Sold   Perc   March   14	Metals																		
Definition   Self   Page/15   1-7               -	Antimony																-		
Berythmen   Seal   mg/kg   17	Arsenic*		mg/kg	14													-		
Commons   Scal   Pag/18   270   -       -       -       -       -	Barium		mg/kg																
Constraint   Seal   mg/kg   2700	Beryllium		mg/kg	1.7										-					
Cabal	Cadmium		mg/kg	Contract of the last of the la				-						-			-		
Copper	Chromium	Soil	mg/kg	2,700										-			-		
Liast	Cobalt	Soil		-															
Mercury	Copper	Soil	mg/kg	-				The second second second second											0.00
Mobile delivery   Mobile   M	Lead		mg/kg	-									<del> </del>						0.20
Nickel   Sol   mg/kg   -   -			mg/kg	-	0.286		0.00			0.00			0.00			0.00			0.00
Silver																			
Traillamen																			
Vanadium			mg/kg																
Enterior   Soil   Impg/Hg   Soil   Imp				-															
Personne   Soil   mg/kg	Vanadium		mg/kg	-							-			-			_		
Emzane	Zinc	Soil	(mg/kg)					**											
Penzame   Water   Ug/L   303	Petroleum Compounds			8.181,010,004		0.0000000000000000000000000000000000000			3-06			16 (15)	-5.05		11111111111111				
TPH-Descent	Benzene	Soil	mg/kg	2.3													-		
Ethyl Benzene	Benzene	Water	ug/L	303				-	2-424		-			-					
Ethylbenzene	TPH-Diesel**	Soil	mg/kg	-	-			-											
TPF1-Casoline**	Ethyl Benzene	Soil	mg/kg	-															
Elydrocarbons (cil and gresse)   Soil   mg/kg	Ethylbenzene	Water	ug/L					-	200		-			-			-		
Toluene Soil mg/kg	TPH-Gasoline**	Soil	mg/kg																
Foluene   Water   wg/L	Hydrocarbons (oil and grease)	-	mg/kg																
m_p-Xylenes	Toluene			-															
Mater   Ug/L	Toluene	Water	ug/L	-															
Extraction   Water   Ug/L																			
Total Xylenes				-				-						-			-		
Xylenes, Total   Water   Unknown Hydrocarbons   Soil   mg/kg																			
Unknown Hydrocarbons   Soil   mg/kg	Total Xylenes													-					
Semivolatile Organic Compounds   2-Methylnaphthalene   Soil   mg/kg																			
Z-Methylnaphthalene			mg/kg	-															
Acenaphthene   Soil   mg/kg	Semivolatile Organic Compoun	ids																	
Acenaphthylene   Soil   mg/kg																	_		
Anthracene   Soil   mg/kg   3.9													-						
Benzo(a)anthracene   Soil   mg/kg   3.9																			
Benzo(a)pyrene   Soil mg/kg   0.39																			
Benzo(g,h,i)perylene   Soil mg/kg   3.9													-					-	
Benzo(g,h,i)perylene   Soil   mg/kg													-						
Benzo(k)fluoranthene   Soil   mg/kg   3.9													-				-		
Chrysene   Soil   mg/kg   39											_			_					
Dibenzo(a,h)anthracene   Soil   mg/kg   0.39								57.1											
Fluoranthene   Soil   mg/kg																			
Fluorene         Soil         mg/kg																			
Indeno(1,2,3,-cd)pyrene         Soil         mg/kg         3.9																			
Naphthalene         Soil         mg/kg					-														
Phenanthrene Soil mg/kg																			
Pyrene   Soil   mg/kg																			
TOTAL ESTIMATED RISK OR HAZARD INDEX - 0.00E+00 0.37 0.00E+00 0.42 0.00E+00 0.24 0.00E+00 0.01 0.00E+00	TOTAL ESTIMATED RISK OR	R HAZARI	DINDEX			0.00E+00	0.37		0.00E+00	0.42		0.00E+00	0.24		0.00E+00	0.01		0.00E+00	0.20

<sup>\*</sup> Concentration based on Bay Area background

<sup>\*\*</sup> PRG based on appearance, not risk

# TABLE 2 HUMAN HEALTH RISK EVALUATION -- PARK USER SCENARIO FORMER CRYER BOAT YARD

DATE				F (12 (07			F /10 /07			4 /27 /00			4/27/98		-	4 (07 (00		
SAMPLE NUMBER				5/13/97	-		5/13/97 2AB	- 10		4/27/98 SB-14			4/2//98 SB-15			4/27/98 SB-15		
				1AB	-		ZAD	1									2	1
DEPTH (FT)			n. 1 11		-		C	1	17	0.5			0.5			1.5		
Site Area			Park Use	Steam Valve			Steam Valve			Port			Port		ı	Port		
						Non-			Non-			Non-			Non-			Non-
COMPOUND	A S A TOUR	108:070	Carcinogenic Park PRG		Carcinogenic PRG Ratio	Carcinogenic PRG Ratio		Carcinogenic PRG Ratio	Carcinogenic PRG Ratio		Carcinogenic PRG Ratio	Carcinogenic PRG Ratio		Carcinogenic PRG Ratio	Carcinogenic PRG Ratio		Carcinogenic PRG Ratio	Carcinogenic PRG Ratio
Metals	MATRIX	UNITS	FAIR FRG		FAG RAUO	FRG Raud		F KG Katio	1 KG KABO		I NG NAUG	I NG NAIIO		FRG RAUU	FRG Kauo		FRG RAUO	I KG Rauo
	Soil																	
Antimony		mg/kg	14	-											-			
Arsenic*	Soil	mg/kg																
Barium Beryllium	Soil Soil	mg/kg	1.7	-	-								-					
	Soil	mg/kg	1.7		<del> </del>													
Cadmium Chromium	Soil	mg/kg	2,700	-	-					76	0.03		150	0.06		62	0.02	
Cobalt	Soil	mg/kg			<del>                                     </del>		-				0.03		150	0.06		- 62	0.02	
	Soil	mg/kg mg/kg		-						3700		0.12	1100		0.03	35		0.00
Copper Lead	Soil	mg/kg			<del>                                     </del>					640		0.76	450		0.54	16		0.02
Mercury	Soil	mg/kg		-			_			16		0.06	1.8		0.01	53		0.02
Molybdenum	Soil				<b> </b>							0.00			0.01			0.20
Nickel	Soil	mg/kg mg/kg			<del>                                     </del>													
Silver	Soil	mg/kg mg/kg			<del>                                     </del>					-								
Thallium	Soil	mg/kg																
Vanadium	Soil	mg/kg																
Zinc	Soil	(mg/kg)	_				_			950		0.00	450		0.00	50		0.00
Petroleum Compounds	COM	(111,67,46)								300		0.00			0.00	50		0.00
Benzene	Soil	mg/kg	2.3	-			-			-			-					
Benzene	Water	ug/L	303	ND<0.5			ND<0.5			-								
TPH-Diesel**	Soil	mg/kg	-				-			4800		4.80	300		0.30	4700		4.70
Ethyl Benzene	Soil	mg/kg										1.00			0.00			
Ethylbenzene	Water	ug/L	_	ND<0.5			ND<0.5											
TPH-Gasoline**	Soil	mg/kg	-				-			-								
Hydrocarbons (oil and grease)	Soil	mg/kg																
Toluene	Soil	mg/kg					-						-					
Toluene	Water	ug/L	-	0.92		0.00	0.79		0.00	_			-			-		
m,p-Xylenes	Soil	mg/kg	-				-											
m,p-Xylenes	Water	ug/L								-			-					
o-Xylene	Water	ug/L	-				_			_			-			-		
Total Xylenes	Soil	mg/kg					-											
Xylenes, Total	Water	ug/L	-	1.4			1.5						-					
Unknown Hydrocarbons	Soil	mg/kg	-				-			-			-					
Semivolatile Organic Compound	ds																	
2-Methylnaphthalene	Soil	mg/kg	-				-			-			-					
Acenaphthene	Soil	mg/kg	-	-			-			-			-			ND<1.0		
Acenaphthylene	Soil	mg/kg	-	-						-						ND<1.0		
Anthracene	Soil	mg/kg	-				-			-			-			ND<1.0		
Benzo(a)anthracene	Soil	mg/kg	3.9	-		197901.2011 97	-	N 19		-			-			1.2	0.31	
Benzo(a)pyrene	Soil	mg/kg	0.39	-			-			-			-			1.4	3.59	
Benzo(b)fluoranthene	Soil	mg/kg	3.9				-			-						2.3	0.59	
Benzo(g,h,i)perylene	Soil	mg/kg		-						-						ND<1.0		
Benzo(k)fluoranthene	Soil	mg/kg	3.9	-			-			-								
Chrysene	Soil	mg/kg	39	-			_			-			-			1.5	0.04	
Dibenzo(a,h)anthracene	Soil	mg/kg	0.39	-			-			-						ND<1.0		
Fluoranthene	Soil	mg/kg														4.4		0.00
Fluorene	Soil	mg/kg		-			-			-						ND<1.0		
Indeno(1,2,3,-cd)pyrene	Soil	mg/kg	3.9	-			-			-						ND<1.0		
Naphthalene	Soil	mg/kg														ND<1.0		
Phenanthrene	Soil	mg/kg					-			-			-			1.9		0.00
Pyrene	Soil	mg/kg	-	-			-			-						3.7		0.04
TOTAL ESTIMATED RISK OR	HAZARD	INDEX			0.00E+00	0.00		0.00E+00	0.00		2.81E-08	5.74		5.56E-08	0.88		4.55E-06	4.96

<sup>\*</sup> Concentration based on Bay Area background

<sup>\*\*</sup> PRG based on appearance, not risk

#### TABLE 2 HUMAN HEALTH RISK EVALUATION -- PARK USER SCENARIO FORMER CRYER BOAT YARD

							* 105 (no			1 (07 (00			1 (07 (00			1 /20 /00		
DATE	-	_		4/27/98			4/27/98			4/27/98 SB-17			4/27/98 SB-17		11	4/28/98 SB16A		
SAMPLE NUMBER				SB-16			SB-16							1				
DEPTH (FT)				0.5			2.0			0.5			3.0		8	1.5		
Site Area			Park Use	Port			Port			Port			Port			Port		
						Non-			Non-			Non-			Non-			Non-
			Carcinogenic		Carcinogenic			Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic
COMPOUND	MATRIX	UNITS	Park PRG		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRC Ratio	PRG Ratio		PRG Ratio	PRG Ratio
Metals																		
Antimony	Soil	mg/kg	-				-			-			-					
Arsenic*	Soil	mg/kg	14													-		
Barium	Soil	mg/kg		-												-		
Beryllium	Soil	mg/kg	1.7				-		2.020									Ĺ
Cadmium	Soil	mg/kg					11.00									-		
Chromium	Soil	mg/kg	2,700	210	0.08		92	0.03		65	0.02		68	0.03		-		
Cobalt	Soil	mg/kg	-										-			-		1
Copper	Soil	mg/kg	_	1700		0.05	1700		0.05	6700		0.21	600		0.02	-		
Lead	Soil	mg/kg	-	250		0.30	3100		3.69	800		0.95	150		0.18	-		
Mercury	Soil			8.2		0.03	6.0		0.02	4.4		0.02	0.91		0.00	-		
	-	mg/kg				0.05	- 0.0		0.02			0.02			0.00			
Molybdenum	Soil	mg/kg	-							-								
Nickel	Soil	mg/kg																
Silver	Soil	mg/kg	-	-						-			-			-		
Thallium	Soil	mg/kg	-				-			-			-					
Vanadium	Soil	mg/kg	-				-			-						-		
Zinc	Soil	(mg/kg)	-	950		0.00	1700		0.01	7500		0.03	510		0.00	-		
Petroleum Compounds																		
Benzene	Soil	mg/kg	2.3	-			-			-			ND<0.005			-		
Benzene	Water	ug/L	303				-						ND<0.5					
TPH-Diesel**	Soil	mg/kg								-			-			1500		1.50
Ethyl Benzene	Soil	mg/kg	_				-			-			ND<0.005			-		
Ethylbenzene	Water	ug/L					_						ND<0.5					
TPH-Gasoline**	Soil	mg/kg	-	-			-			_			ND<1.0			-		[
Hydrocarbons (oil and grease)	Soil	mg/kg	_						******	-			_			-		
Toluene	Soil	mg/kg					_						0.0069		0.00			
Toluene	Water												ND<0.5			_		
	Soil	ug/L	-										ND<0.005			_		
m,p-Xylenes		mg/kg	-										110 (0.000					
m,p-Xylenes	Water	ug/L								-								
o-Xylene	Water	ug/L																
Total Xylenes	Soil	mg/kg	-				-											
Xylenes, Total	Water	ug/L					-											
Unknown Hydrocarbons	Soil	mg/kg														-		
Semivolatile Organic Compoun	ids																	
2-Methylnaphthalene	Soil	mg/kg		-						-								
Acenaphthene	Soil	mg/kg		-						-						ND<0.25		
Acenaphthylene	Soil	mg/kg	-	-						-			-			ND<0.25		
Anthracene	Soil	mg/kg		-												ND<0.25		
Benzo(a)anthracene	Soil	mg/kg	3.9	_									-			ND<0.25		<u> </u>
Benzo(a)pyrene	Soil	mg/kg	0.39							-						ND<0.25		
Benzo(b)fluoranthene	Soil	mg/kg	3.9							-						0.53		
Benzo(g,h,i)perylene	Soil	mg/kg					-									ND<0.25		
Benzo(k)fluoranthene	Soil	mg/kg	3.9															
Chrysene	Soil	mg/kg	39	_												ND<0.25		
Dibenzo(a,h)anthracene	Soil	mg/kg	0.39							-						ND<0.25		
	Soil	mg/kg	0.39				-									0.39		0.00
Fluoranthene											<b></b>					ND<0.25		0.00
Fluorene	Soil	mg/kg								-					-	ND<0.25		
Indeno(1,2,3,-cd)pyrene	Soil	mg/kg	3.9	-						-			-					
Naphthalene	Soil	mg/kg					-	-		-						ND<0.25		
Phenanthrene	Soil	mg/kg					-									ND<0.25		0.01
Pyrene	Soil	mg/kg		-						-			-			0.67		0.01
TOTAL ESTIMATED RISK OR	HAZADE	INDEX			7.78E-08	0.39		3.41E-08	3.77		2.41E-08	1.21		2.52E-08	0.20		0.00E+00	1.51

<sup>\*</sup> Concentration based on Bay Area background

<sup>\*\*</sup> PRG based on appearance, not risk

#### TABLE 2 HUMAN HEALTH RISK EVALUATION -- PARK USER SCENARIO FORMER CRYER BOAT YARD

DATE				8/12/98			8/12/98		-
SAMPLE NUMBER				SV-10			SV10		
DEPTH (FT)				2.5			5.5		
Site Area			Park Use	Steam Valve			Steam Valve		
Site Area			Tank Osc	Steam varve			Steam varve		
			Carcinogenic		Carcinogenic	Non- Carcinogenic		Carcinogenic	Non- Carcinogenic
COMPOUND	MATRIX	UNITS	Park PRG		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio
Metals									
Antimony	Soil	mg/kg	-						
Arsenic*	Soil	mg/kg	14						
Barium	Soil	mg/kg	-						
Beryllium	Soil	mg/kg	1.7						
Cadmium	Soil	mg/kg					-		
Chromium	Soil	mg/kg	2,700	46	0.02		49	0.02	
Cobalt	Soil	mg/kg							
Copper	Soil	mg/kg	-	85		0.00	36		0.00
Lead	Soil	mg/kg	-	250		0.30	74		0.09
Mercury	Soil	mg/kg		0.26		0.00	0.096		0.00
Molybdenum	Soil	mg/kg							
Nickel	Soil	mg/kg		-			-		
Silver	Soil	mg/kg							
Thallium	Soil	mg/kg							
Vanadium	Soil	mg/kg							
Zinc	Soil	(mg/kg)		160		0.00	100		0.00
Petroleum Compounds							Bridge Bridge		
Benzene	Soil	mg/kg	2.3	ND<0.005			0.57	0.25	0.08
Benzene	Water	ug/L	303				770	2.54	0.01
TPH-Diesel**	Soil	mg/kg		100		0.10	28		0.03
Ethyl Benzene	Soil	mg/kg		0.0074		0.00	0.063		0.00
Ethylbenzene	Water	ug/L				0.00	210		
TPH-Gasoline**	Soil	mg/kg		1.3		0.00	9.9		0.01
Hydrocarbons (oil and grease)	Soil	mg/kg	-			U.D.U	- "		0.01
Toluene	Soil	mg/kg		0.0064		0.00	0.02		0.00
Toluene	Water	ug/L		- 0.0001		0.00	10		0.00
m,p-Xylenes	Soil	mg/kg		0.008		0.00	0.014		0.00
m,p-Xylenes	Water	ug/L		0.000		0.00	110		0.00
o-Xylene	Water	ug/L					5.6		
Total Xylenes	Soil	mg/kg	-				- 5.0		
Xylenes, Total	Water	ug/L		_					
Unknown Hydrocarbons	Soil	mg/kg		-					
Semivolatile Organic Compour		1116/26							
2-Methylnaphthalene	Soil	mg/kg		_			_		
Acenaphthene	Soil	mg/kg mg/kg	_	ND<0.05			ND<0.05		
Acenaphthylene	Soil	mg/kg	-	0.140			ND<0.05		
Anthracene	Soil	mg/kg		ND<0.05			ND<0.05		
Benzo(a)anthracene	Soil	mg/kg	3.9	ND<0.05			ND<0.05		
	Soil		0.39	ND<0.05			ND<0.05		
Benzo(a)pyrene	Soil	mg/kg	3.9	0.120	0.03		ND<0.05		
Benzo(b)fluoranthene	Soil	mg/kg	3.9	ND<0.05	0.05		ND<0.05		
Benzo(g,h,i)perylene		mg/kg	3.9	IND<0.05			1417<0.02		
Benzo(k)fluoranthene	Soil Soil	mg/kg	3.9	0.062	0.00		ND<0.05		
Chrysene  Dibanacia blanthacana		mg/kg	0.39	ND<0.05	0.00		ND<0.05		
Dibenzo(a,h)anthracene	Soil	mg/kg							
Fluoranthene	Soil	mg/kg		ND<0.05		-	ND<0.05		
Fluorene	Soil	mg/kg		ND<0.05			ND<0.05		
Indeno(1,2,3,-cd)pyrene	Soil	mg/kg	3.9	ND<0.05			ND<0.05		0.00
Naphthalene	Soil	mg/kg		ND<0.05			0.170		0.00
Phenanthrene	Soil	mg/kg		ND<0.05		0.00	ND<0.05		
Pyrene	Soil	mg/kg		0.060		0.00	ND<0.05		
TOTAL ESTIMATED RISK OF	HAZARI	INDEX			4.94E-08	0.40	ND<0.05	2.81E-06	0.22

<sup>\*</sup> Concentration based on Bay Area background

<sup>\*\*</sup> PRG based on appearance, not risk

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DATE SAMPLE NUMBER	-				2/13/91			2/13/91			2/13/91			2/13/91			2/13/91 3			2/13/91 4		1
DEPTH (FT) Site Area	-		Worker	Scenario	Steam Valve			3.5			1			3.5	J		1.5			1.5		I
Site Area			vvorker	Non-	Steam vaive		Non-	Steam Valve		Non-	team Valv	/e	Non-	Steam Valv	ve	Non-	team Valv	/e		team Valv	/e	51
			Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic		Carcinogenic	Non- Carcinogenic		Carcinogenic	Non- Carcinogenic
COMPOUND	MATRIX	UNITS	PRG	PRG	5-16060	PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio
Metals			de mala de																			
Antimony	Soil	mg/kg	-	750	ND<5			ND<5			ND<5			ND<5			14		0.02	ND<5		
Antimony	Water	ug/L		15				-									-			-		
Arsenic*	Soil	mg/kg	14	480	2.8	0.20	0.01	ND<2.5			ND<2.5			ND<2.5			5.9	0.42	0.01	3.1	0.22	0.01
Barium	Soil	mg/kg		100,000	36		0.00	55		0.00	100		0.00	57		0.00	50	Sector Control	0.00	62		0.00
Beryllium	Soil	mg/kg	1.2	3,700	ND<0.5			ND<0.5			ND<0.5			ND<0.5			ND<0.5			ND<0.5		
Cadmium	Soil	mg/kg	9	930	2		0.00	1.4		0.00	2.1		0.00	1		0.00	4.2		0.00	2.3		0.00
Chromium	Soil	mg/kg	450		36	0.08		27	0.06		27	0.06		30	0.07		39	0.09		47	0.10	
Cobalt	Soil	mg/kg	-	29,000	5.7		0.00	3.4		0.00	9		0.00	7		0.00	10		0.00	7.7		0.00
Copper Lead	Soil Soil	mg/kg		70,000 1,000	20 ND<2.5		0.00	24 ND<2.5		0.00	75 24		0.00	31 ND<2.5		0.00	1700 550		0.02	230		0.00
Mercury	Soil	mg/kg mg/kg	-	56	ND<0.1			ND<0.1			0.2		0.02	0.2		0.00	0.6		0.01	21		0.02
Molybdenum	Soil	mg/kg		9,400	ND<0.1			ND<0.5			ND<0.5		0.00	ND<0.5		0.00	ND<0.5		0.01	ND<0.5		0.04
Nickel	Soil	mg/kg		37,000	19		0.00	23		0.00	32		0.00	34		0.00	65		0.00	35		0.00
Silver	Soil	mg/kg		9,400	16		0.00	ND<1			ND<1		0.00	ND<1		0.00	ND<1		0.00	5.8		0.00
Thallium	Soil	mg/kg		150	ND<5			ND<5			ND<5			ND<5			ND<5			ND<5		
Vanadium	Soil	mg/kg	-	13,000	20		0.00	14		0.00	15		0.00	11		0.00	25		0.00	22		0.00
Zinc	Soil	(mg/kg)	_	100,000	42		0.00	69		0.00	120		0.00	50		0.00	220		0.00	120		0.00
Petroleum Compounds																						
Benzene	Soil	mg/kg	1.4	24	-															-		
Benzene	Water	ug/L	73.9	16,700	-			ND<1.0						-			ND<1.0					
TPH-Diesel**	Soil	mg/kg			-			3600			5000			-						-		
Ethyl Benzene Ethylbenzene	Soil Water	mg/kg		1,100 SAT	-			 ND<1.0									 ND<1.0					$\vdash$
TPH-Gasoline**	Soil	ug/L mg/kg		5A1				ND<1.0						-	-		ND<1.0					<b></b>
TPH-Gasoline**	Water	ug/L									-			-								
Hydrocarbons (oil and grea	Soil	mg/kg			-			640			840			-								
Toluene	Soil	mg/kg		54.5													***			-		
Toluene	Water	ug/L		85,000	-			ND<1.0									ND<1.0				1974 And 1999 Charles and 11 and 12	
m,p-Xylenes	Soil	mg/kg		107	-			-			-			-			-					
m,p-Xylenes	Water	ug/L		SAT															10.21.130.151.1.25	-		
o-Xylene	Water	ug/L		SAT																		
Total Xylenes	Soil	mg/kg		4,500							-			-			-					
Xylenes, Total	Water Soil	ug/L		SAT				ND<1.0			-			-			ND<1.0			-		
Unknown Hydrocarbons		mg/kg	-					-						-			-					
Semivolatile Organic Com 2-Methylnaphthalene	Soil	ma (ka	-					_						-			_			1		
Acenaphthene	Soil	mg/kg mg/kg		28,000	-						-			-								
Acenaphthylene	Soil	mg/kg		28,000																		
Anthracene	Soil	mg/kg	-	220,000										-								
Benzo(a)anthracene	Soil	mg/kg	3.6	_				-			_			-			-					
Benzo(a)pyrene	Soil	mg/kg	0.36	***																-		
Benzo(b)fluoranthene	Soil	mg/kg	3.6	-																-		
Benzo(g,h,i)perylene	Soil	mg/kg	-	-	-			-			-											
Benzo(k)fluoranthene	Soil	mg/kg	3.6	-	-			-			-											
Chrysene	Soil	mg/kg	360					-			-								40	-	A Maria	
Dibenzo(a,h)anthracene	Soil	mg/kg	0.36																	-		
Fluoranthene	Soil	mg/kg		37,000																		
Fluorene	Soil	mg/kg		22,000	-			-			-											
Indeno(1,2,3,-cd)pyrene Naphthalene	Soil Soil	mg/kg	3.6	1,900										-								
Naphthalene	Water	mg/kg ug/L		490																		$\overline{}$
Phenanthrene	Soil	mg/kg		490																		
Pyrene	Soil	mg/kg		26,000																		$\overline{}$
TOTAL ESTIMATED RISI						2.80E-07	0.01		6.00E-08	0.00		6.00E-08	0.04		6.67E-08	0.01		5.08E-07	0.63		3.26E-07	0.08
						2000 07	0.01		3.002.00	0.00		3,002,00	0.04		3.07 25 00	5154		210000 07	0.00		3.20207	0.00

<sup>\*</sup> Concentration based on Bay Area background
\*\* No PRG available; risk addressed by constituent compounds

DATE				2/13/91			2/13/91			2/13/91			2/13/91			3/5/93			3/16/93			3/16/93
SAMPLE NUMBER				5			5			6			mposite:20			B-1			B-1			B-4
DEPTH (FT)				1			4			10		5	601.0, & 601	.0		2.0-2.5			4.0-4.5			2.5-3.0
Site Area			Worker	team Valv	re	S	team Val	ve 1	S	team Valv	re .		team Valv		5	Steam Val	ve		Steam Valve			Steam Valve
						Non-			Non-			Non-			Non-			Non-			Non-	
			Carcinogenic			Carcinogenic		Carcinogenic	Carcinogenic		Carcinogenic						Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic	
COMPOUND	MATRIX	UNITS	PRG		PRG Ratio	PRG Ratio	7.000	PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio	0000000000	PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio	
Metals																						
Antimony	Soil	mg/kg		ND<5			ND<5			ND<5			-			ND<5			ND<5			- 11
Antimony	Water	ug/L	-	-			-					0.01	-			8	0.57	0.02	2	0.14	0.00	3
Arsenic*	Soil	mg/kg	14	4.9	0.35	0.01	ND<2.5		0.00	5.8	0.41	0.01	-			32	0.57	0.02	280	0.14	0.00	120
Barium	Soil	mg/kg		120		0.00	100		0.00	77		0.00	-			ND<0.5		0.00	ND<0.5		0.00	ND<0.5
Beryllium	Soil	mg/kg	1.2	ND<0.5			ND<0.5		0.00	ND<0.5		0.01	<del></del>			ND<1			ND<1			ND<1
Cadmium	Soil	mg/kg	9 450	3.4	0.06	0.00	1.1 33		0.00	5.1 31	0.07	0.01	-			40	0.09		18	0.04		23
Chromium Cobalt	Soil Soil	mg/kg	430	7.5	0.06	0.00	7.7		0.00	10	0.07	0.00	-			ND<10	0.05		ND<10	0.01		10
Copper	Soil	mg/kg mg/kg		770		0.01	25		0.00	490		0.01	-			18		0.00	18		0.00	23
Lead	Soil	mg/kg	_	190		0.19	2.9		0.00	190		0.19				9		0.01	9		0.01	7
Mercury	Soil	mg/kg		0.5		0.01	ND<0.1			ND<0.1						ND<0.5			ND<0.5			ND<0.5
Molybdenum	Soil	mg/kg	-	ND<0.5			ND<0.5			ND<0.5			-			ND<10			ND<10			ND<10
Nickel	Soil	mg/kg	_	33		0.00	54		0.00	22		0.00				23		0.00	17		0.00	22
Silver	Soil	mg/kg	-	ND<1			ND<1			ND<1						ND<5			ND<5			ND<5
Thallium	Soil	mg/kg		ND<5			ND<5		2.02	ND<5		0.00	-			ND<5		0.00	ND<5		0.00	ND<5
Vanadium	Soil	mg/kg	-	19		0.00	9.7		0.00	25 130		0.00				41		0.00	42		0.00	54
Zinc	Soil	(mg/kg)		350		0.00	45		0.00	130		0.00				41		0.00	42		0.00	34
Petroleum Compounds	Call	0	1.4													_						-
Benzene Benzene	Soil Water	mg/kg ug/L	73.9										-			_						-
TPH-Diesel**	Soil	mg/kg	73.5				3			-						-						
Ethyl Benzene	Soil	mg/kg											-									-
Ethylbenzene	Water	ug/L	-	-																		
TPH-Gasoline**	Soil	mg/kg	-				-									-						-
TPH-Gasoline**	Water	ug/L	-		900		-			-			-									-
Hydrocarbons (oil and great	Soil	mg/kg	-				ND<50									***			-			
Toluene	Soil	mg/kg														-			-			<del>  </del>
Toluene	Water	ug/L		-																		
m,p-Xylenes m,p-Xylenes	Soil Water	mg/kg ug/L											-									
o-Xylene	Water	ug/L		-									-									-
Total Xylenes	Soil	mg/kg	-							-			-	Svacovenic					-			
Xylenes, Total	Water	ug/L								-						_			-			-
Unknown Hydrocarbons	Soil	mg/kg	-	-		de la companya de la				1			-	7								-
Semivolatile Organic Com	pounds																					
2-Methylnaphthalene	Soil	mg/kg								-			0.380						-			
Acenaphthene	Soil	mg/kg											ND<0.330			-			-			
Acenaphthylene	Soil	mg/kg											ND<0.330						-		-	-
Anthracene	Soil	mg/kg								-			ND<0.330 ND<0.330									-
Benzo(a)anthracene	Soil Soil	mg/kg mg/kg	3.6 0.36							-			ND<0.330									
Benzo(a)pyrene Benzo(b)fluoranthene	Soil	mg/kg mg/kg	3.6			77.2				-			0.24	0.07								-
Benzo(g,h,i)perylene	Soil	mg/kg		-						-			ND<0.330	4.4.					-			-
Benzo(k)fluoranthene	Soil	mg/kg	3.6							-			ND<0.330						-			
Chrysene	Soil	mg/kg	360							1			ND<0.330	)		-						
Dibenzo(a,h)anthracene	Soil	mg/kg	0.36										ND<0.330	)								-
Fluoranthene	Soil	mg/kg	-										0.24		0.00				-			-
Fluorene	Soil	mg/kg	-							-			0.19		0.00				-			
Indeno(1,2,3,-cd)pyrene	Soil	mg/kg	3.6							-			ND<0.330								-	-
Naphthalene	Soil	mg/kg											ND<0.330	,					-			-
Naphthalene	Water	ug/L											0.26				-		<del>                                     </del>	<b> </b>		-
Phenanthrene Pyrene	Soil Soil	mg/kg mg/kg											0.18		0.00	-						-
TOTAL ESTIMATED RIS			-	-	4.08E-07	0.23		0.00E+00	0.01		4.83E-07	0.22	0.20	6.67E-08	0.00		6.60E-07	0.03		1.83E-07	0.02	
TOTAL BUINATED RIS	I OK IIA	JAMP HADE			£.00.E-07	Vian		3.002.00	0.02	-	210020				1					'	-	-

<sup>\*</sup> Concentration based on Bay Area background
\*\* No PRG available; risk addressed by constituent compounds

DATE	I		I			9/27/93	T		9/27/93			9/27/93	T		9/27/93			9/27/93			3/30/95	
SAMPLE NUMBER						Boring 1	1		Boring 2			Boring 3	1		Boring 5			Boring 6	1		SB-1	1
DEPTH (FT)				l			1						1					-	1		5	1
Site Area			Worker			Steam Valve			Steam Valv	l e		Steam Valve	ا و		Steam Valv	P		Steam Val	J ve		Port	1
					Non-	Diction Visite		Non-			Non-	O COLOR	Ĭ	Non-			Non-	I I		Non-		
			Carcinogenic	Carcinogenic			Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic		Carcinogenio			Carcinogenic			Carcinogenic			Carcinogenic
COMPOUND	MATRIX	UNITS	PRG	PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio			PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio
Metals																						
Antimony	Soil	mg/kg	v 1=		0.01	-			ND<5			ND<5			ND<5			ND<5			9	
Antimony	Water	ug/L	-						-													
Arsenic*	Soil	mg/kg	14	0.21	0.01				3	0.21	0.01	4	0.29	0.01	ND<1			5	0.36	0.01	10	0.71
Barium	Soil	mg/kg			0.00				56		0.00	54		0.00	34		0.00	54		0.00	190	
Beryllium	Soil	mg/kg	1.2			**			ND<0.5			ND<0.5			ND<0.5			ND<0.5			0.2	0.17
Cadmium	Soil	mg/kg	9						ND<0.5			0.6	0.07	0.00	ND<0.5			ND<0.5			5.5	0.61
Chromium	Soil	mg/kg	450	0.05					52	0.12		77	0.17		38	0.08		51	0.11		280	0.62
Cobalt	Soil	mg/kg			0.00				12		0.00	11		0.00	7		0.00	12		0.00	32	
Copper	Soil	mg/kg			0.00				18		0.00	30		0.00	6		0.00	12		0.00	3900	
Lead	Soil	mg/kg			0.01				ND<5			8		0.01	ND<5			ND<5		0.04	530	
Mercury	Soil Soil	mg/kg							ND<0.5 ND<5			0.13		0.00	ND<0.5			0.3		0.01	2.3	
Molybdenum Nickel	Soil	mg/kg			0.00				76		0.00	ND<5		0.00	ND<5		0.00	ND<5	-	0.00	5 110	
Silver	Soil	mg/kg mg/kg			0.00				ND<5		0.00	ND<5		0.00	ND<5		0.00	ND<5		0.00	ND<0.5	$\vdash$
Thallium	Soil	mg/kg mg/kg	-						ND<5			ND<5			ND<5			ND<5			ND<0.5	$\vdash$
Vanadium	Soil	mg/kg			0.00				36		0.00	36		0.00	37		0.00	26		0.00	45	
Zinc	Soil	(mg/kg)			0.00				51		0.00	64		0.00	23		0.00	42		0.00	1600	
Petroleum Compounds		(-8/-8/									0.00			0.00			Cito			GIEG	2500	
Benzene	Soil	mg/kg	1.4			0.14	0.10	0.01	0.013	0.01	0.00	ND<0.003			ND<0.003			ND<0.003	3			
Benzene	Water	ug/L	73.9			-			-			-										
TPH-Diesel**	Soil	mg/kg				89			ND<10			ND<10			ND<10			26			-	
Ethyl Benzene	Soil	mg/kg	-			0.38		0.00	0.021		0.00	ND<0.003			ND<0.003		====	ND<0.003	3			
Ethylbenzene	Water	ug/L	-			-			-			-						-				
TPH-Gasoline**	Soil	mg/kg				17			ND<1			ND<1			ND<1			ND<1			-	
TPH-Gasoline**	Water	ug/L	-			-			-			-						-			-	
Hydrocarbons (oil and grea	Soil	mg/kg				ND<50			73			ND<50			ND<50			ND<50			-	
Toluene	Soil	mg/kg				1.1		0.02	0.075		0.00	ND<0.003			ND<0.003			ND<0.003	3		-	
Toluene	Water	ug/L	-						-													
m,p-Xylenes	Soil Water	mg/kg				-			-									-			-	
m,p-Xylenes o-Xylene	Water	ug/L																			-	
Total Xylenes	Soil	ug/L mg/kg				1.6		0.00	0.084		0.00	ND<0.009			ND<0.009			ND<0.009	9			
Xylenes, Total	Water	ug/L						0.00	0.004		0.00					<u> </u>			,			
Unknown Hydrocarbons	Soil	mg/kg	-			-						-						-				$\overline{}$
Semivolatile Organic Com		8: 8																				
2-Methylnaphthalene	Soil	mg/kg							-			-						-				
Acenaphthene	Soil	mg/kg																-			-	
Acenaphthylene	Soil	mg/kg															10			5.		
Anthracene	Soil	mg/kg	-						-			-										
Benzo(a)anthracene	Soil	mg/kg	3.6									-					L	-			-	
Benzo(a)pyrene	Soil	mg/kg	0.36																			
Benzo(b)fluoranthene	Soil	mg/kg	3.6																			
Benzo(g,h,i)perylene	Soil	mg/kg	1.5												-			-			-	
Benzo(k)fluoranthene	Soil	mg/kg	3.6									-			-			-			-	
Chrysene	Soil	mg/kg	360									-									-	$\vdash$
Dibenzo(a,h)anthracene	Soil	mg/kg	0.36																			
Fluoranthene	Soil Soil	mg/kg							-			-			-							
Fluorene Indeno(1,2,3,-cd)pyrene	Soil	mg/kg	3.6									-			-						-	
Naphthalene	Soil	mg/kg mg/kg	3.6																		-	
Naphthalene	Water	ug/L				-								-								
Phenanthrene	Soil	mg/kg	-																<del>                                     </del>			
Pyrene	Soil	mg/kg	-									-										
TOTAL ESTIMATED RISE				2.65E-07	0.03		1.00E-07	0.03		3.39E-07	0.01		5.23E-07	0.03		8.44E-08	0.00		4.70E-07	0.02		2.11E-06
								5.00					2.00.07	5.50		3	0.00		02. 07	U.U.E		3.11.00

<sup>\*</sup> Concentration based on Bay Area background
\*\* No PRG available; risk addressed by constituent compounds

DATE					3/30/95			3/30/95			3/30/95			3/30/95	Г		3/30/95			3/30/95		
DATE SAMPLE NUMBER	_				SB-1			SB-2	-		SB-2			SB-3			SB-3			SB-4		
					2.5			5	1		2.5			5	1		2.5			4		
DEPTH (FT) Site Area	-		Worker		Port		-	Port			Port			Port	1		Port			Port		
Site Alea			WOIKE	Non-	1010		Non-	7010		Non-			Non-			Non-			Non-			Non-
			Carcinogenic	Carcinogenic		Carcinogenic			Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic		Carcinogenic			Carcinogenic	Carcinogenic		Carcinogenic	
COMPOUND	MATRIX	UNITS	PRG	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio	100000000	PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio
Metals								activities and														
Antimony	Soil	mg/kg		0.01	3		0.00	6		0.01	3		0.00	24		0.03	14		0.02	2		0.00
Antimony	Water	ug/L												-								
Arsenic*	Soil	mg/kg	14	0.02	ND<1			6	0.43	0.01	ND<1			5	0.36	0.01	6	0.43	0.01	ND<1		
Barium	Soil	mg/kg		0.00	110		0.00	280		0.00	61		0.00	170		0.00	130		0.00	160		0.00
Beryllium	Soil	mg/kg	1.2	0.00	0.3	0.25	0.00	0.5	0.42	0.00	0.2	0.17	0.00	0.2	0.17	0.00	0.1	0.08	0.00	0.4		
Cadmium	Soil	mg/kg	9	0.01	ND<0.5			2.1	0.23	0.00	ND<0.5	0.10		2.6	0.29	0.00	0.6	0.07	0.00	ND<0.5	0.15	
Chromium	Soil	mg/kg	450	0.00	54	0.12	0.00	150	0.33	0.00	47 10	0.10	0.00	410 27	0.91	0.00	94 16	0.21	0.00	59 8	0.13	0.00
Cobalt	Soil	mg/kg		0.00	11 49		0.00	42 9100		0.00	110		0.00	3100		0.04	1300		0.00	34		0.00
Copper Lead	Soil Soil	mg/kg mg/kg		0.06	29		0.00	230		0.13	59		0.06	520		0.52	300		0.30	13		0.01
Mercury	Soil	mg/kg mg/kg		0.04	ND<0.1		0.03	2.1		0.04	0.1		0.00	1.1		0.02	0.5		0.01	ND<0.1		
Molybdenum	Soil	mg/kg		0.00	ND<1			3		0.00	1		0.00	2		0.00	ND<1			ND<1		
Nickel	Soil	mg/kg		0.00	50		0.00	87		0.00	30		0.00	140		0.00	58		0.00	67		0.00
Silver	Soil	mg/kg			ND<0.5			ND<0.5			ND<0.5			ND<0.5			ND<0.5			ND<0.5		
Thallium	Soil	mg/kg		0.03	ND<1			9		0.06	ND<1			4		0.03	ND<1			ND<1	e cive s	
Vanadium	Soil	mg/kg		0.00	39		0.00	73		0.01	37		0.00	39		0.00	37		0.00	37		0.00
Zinc	Soil	(mg/kg)		0.02	93		0.00	1200		0.01	120		0.00	1700		0.02	520		0.01	69		0.00
Petroleum Compounds																						
Benzene	Soil	mg/kg	1.4					-											-	-		
Benzene	Water	ug/L	73.9		18					-	18						460			24		
TPH-Diesel** Ethyl Benzene	Soil Soil	mg/kg mg/kg															400	<b></b>				
Ethyl benzene Ethylbenzene	Water	ug/L			-												_					
TPH-Gasoline**	Soil	mg/kg															**					
TPH-Gasoline**	Water	ug/L	-					-												-		
Hydrocarbons (oil and grea	Soil	mg/kg												-								
Toluene	Soil	mg/kg																				
Toluene	Water	ug/L						-														
m,p-Xylenes	Soil	mg/kg																				
m,p-Xylenes	Water	ug/L																				
o-Xylene	Water	ug/L						-														
Total Xylenes Xylenes, Total	Soil Water	mg/kg ug/L									-											
Unknown Hydrocarbons	Soil	mg/kg															-					
Semivolatile Organic Com		mg/ kg																				
2-Methylnaphthalene	Soil	mg/kg						-						-			-					
Acenaphthene	Soil	mg/kg	-				engayoung consistent accom-							-			**					
Acenaphthylene	Soil	mg/kg	j=-					-														
Anthracene	Soil	mg/kg						-									-			-		
Benzo(a)anthracene	Soil	mg/kg	3.6					-						-								
Benzo(a)pyrene	Soil	mg/kg	0.36																			$\vdash$
Benzo(b)fluoranthene	Soil	mg/kg	3.6					_									-			-		
Benzo(g,h,i)perylene	Soil	mg/kg			-												_					
Benzo(k)fluoranthene	Soil	mg/kg	3.6		-													-				
Chrysene	Soil	mg/kg	360 0.36								-									-		
Dibenzo(a,h)anthracene Fluoranthene	Soil	mg/kg	0.36		-				-													$\vdash$
Fluorantnene	Soil	mg/kg mg/kg															-					
Indeno(1,2,3,-cd)pyrene	Soil	mg/kg	3.6											-	V					-		
Naphthalene	Soil	mg/kg	3.0					-						-						-		
Naphthalene	Water	ug/L			-			-						-						-		
Phenanthrene	Soil	mg/kg						-						-								
Pyrene	Soil	mg/kg						-			-									-		
TOTAL ESTIMATED RIS	K OR HA		-	0.72		3.70E-07	0.04		1.41E-06	0.50		2.71E-07	0.07		1.72E-06	0.68		7.87E-07	0.37		1.31E-07	0.02

<sup>\*</sup> Concentration based on Bay Area background
\*\* No PRG available; risk addressed by constituent compounds

DATE				3/30/95			3/30/95			3/30/95			3/30/95	T		10/14/96			10/14/96	T	
SAMPLE NUMBER				SB-5			SB-6			SB-7			SB-8	1		WELL #1			WELL #2	1	
DEPTH (FT)				1.5			1.5			5			3.5	1		3.5	1		3.5	1	
Site Area			Worker				Port	1		Port	1		Port	1		Steam Valve			Steam Valve		
Disc Files			77 CI REI	TOIL		Non-	101		Non-	1011		Non-			Non-	Oteam varve		Non-	Steam varve		Non-
			Carcinogenic		Carcinogenic	Carcinogenic		Carcinogenic	Carcinogenic		Carcinogenic	CHEST CONTRACTORS		Carcinogenic	Carcinogenic		Carcinogenio	Carcinogenic		Carcinogenic	Carcinogenic
COMPOUND	MATRIX	UNITS	PRĞ		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio
Metals																					
Antimony	Soil	mg/kg		3		0.00	12		0.02	12		0.02	14		0.02	ND<5			ND<5		
Antimony	Water	ug/L	-																		
Arsenic*	Soil	mg/kg	14	2	0.14	0.00	14	1.00	0.03	26	1.86	0.05	5	0.36	0.01	6.1	0.44	0.01	ND<5		
Barium	Soil	mg/kg	-	24		0.00	75		0.00	66		0.00	99		0.00	41		0.00	37		0.00
Beryllium	Soil	mg/kg	1.2	ND<0.1			ND<0.1			ND<0.1			0.2	0.17	0.00	0.28	0.23	0.00	0.28	0.23	0.00
Cadmium	Soil	mg/kg	9	ND<0.5			1.5	0.17	0.00	7.5	0.83	0.01	ND<0.5			ND<0.25			ND<0.25		
Chromium	Soil	mg/kg	450	26	0.06		16	0.04		240	0.53		48	0.11		28	0.06		24	0.05	
Cobalt	Soil	mg/kg		6		0.00	12		0.00	9		0.00	13		0.00	7.4		0.00	7.1		0.00
Copper	Soil	mg/kg	-	51		0.00	1100		0.02	6500		0.09	500		0.01	10		0.00	14		0.00
Lead Mercury	Soil Soil	mg/kg	=	33 0.4		0.03	220 20		0.22	720 25		0.72 0.45	280 0.6		0.28	3.9 0.29	-	0.00	5 0.42		0.01
Molybdenum	Soil	mg/kg mg/kg		ND<1		0.01	ND<1		0.36	25		0.45	ND<1		0.01	0.29 ND<1		0.01	ND<1		0.01
Nickel	Soil	mg/kg		20		0.00	45		0.00	29		0.00	79		0.00	51		0.00	49		0.00
Silver	Soil	mg/kg		ND<0.5		0.00	ND<0.5			ND<0.5		5.55	ND<0.5			ND<1			ND<1		
Thallium	Soil	mg/kg		ND<1			ND<1			ND<1			ND<1			ND<10			ND<10		
Vanadium	Soil	mg/kg	-	25		0.00	18		0.00	9		0.00	48		0.00	18		0.00	16		0.00
Zinc	Soil	(mg/kg)		220		0.00	780		0.01	1300		0.01	200		0.00	33		0.00	30		0.00
Petroleum Compounds																					
Benzene	Soil	mg/kg	1.4													0.15	0.11		ND<0.005		
Benzene	Water	ug/L	73.9	-									-			55	0.74	0.00	25	0.34	0.00
TPH-Diesel**	Soil	mg/kg	-	530			240			360			84			ND<1			ND<1		
Ethyl Benzene	Soil	mg/kg														0.78		0.00	ND<0.005		
Ethylbenzene TPH-Gasoline**	Water	ug/L	=	-			-								-	2.1 5.9			1.1 ND<1		
TPH-Gasoline**	Water	mg/kg ug/L														20,000			3,400		
Hydrocarbons (oil and gre		mg/kg	_																		
Toluene	Soil	mg/kg														0.01		0.00	ND<0.005		
Toluene	Water	ug/L											-			0.9		0.00	0.6		0.00
m,p-Xylenes	Soil	mg/kg	-	-						-			-						-		
m,p-Xylenes	Water	ug/L														-					
o-Xylene	Water	ug/L	-										-			-					
Total Xylenes	Soil	mg/kg		-									-			0.43		0.00	ND<0.005		
Xylenes, Total	Water	ug/L		-												4.2			2.4		
Unknown Hydrocarbons	Soil	mg/kg	-	-			-			-			-			10			5		
Semivolatile Organic Con																					
2-Methylnaphthalene	Soil	mg/kg	-	-												-			-		
Acenaphthene	Soil Soil	mg/kg	-																		-
Acenaphthylene Anthracene	Soil	mg/kg mg/kg								-			-						-		
Benzo(a)anthracene	Soil	mg/kg	3.6																		
Benzo(a)pyrene	Soil	mg/kg	0.36	-															-		
Benzo(b)fluoranthene	Soil	mg/kg	3.6	-				<del></del>											-		
Benzo(g,h,i)perylene	Soil	mg/kg	-	-			0.00			-			-			-			-8		
Benzo(k)fluoranthene	Soil	mg/kg	3.6	-			-			-			-			-			-		
Chrysene	Soil	mg/kg	360													-					
Dibenzo(a,h)anthracene	Soil	mg/kg	0.36													-					
Fluoranthene	Soil	mg/kg					-			-			- 1			-			-		
Fluorene	Soil	mg/kg	-	-			-			-			-			-			-		
Indeno(1,2,3,-cd)pyrene	Soil	mg/kg	3.6				-									-					-
Naphthalene	Soil	mg/kg					-			-									-		
Naphthalene	Water	ug/L	-				-									-			-		<del></del>
Phenanthrene Purana	Soil Soil	mg/kg																			
Pyrene TOTAL ESTIMATED RIS		mg/kg	-		2.01E-07	0.05		1.20E-06	0.65		3.22E-06	1.35		6.30E-07	0.34		1.58E-06	0.03		6.25E-07	0.02
	OR HA	THE HADE			2.012-07	v.03		1.40E-00	0.00		J.44E-00	1.33		U.JUE-U/	0.04		1.000-00	0.03		U.Z./E-U/	0.02

<sup>\*</sup> Concentration based on Bay Area background
\*\* No PRG available; risk addressed by constituent compounds

DATE				10/14/96			5/1/97			5/1/97			5/1/97	Γ		5/1/97			5/1/97		
DATE SAMPLE NUMBER				10/14/96 WELL#4			SB-9			SB-9			SB-10	1	8	SB-10	1		SB-11	1	1
				TT DELETT									0.5	1		3	1		0.4	1	1
DEPTH (FT)						-	0.5 Port			3 Port			Port	1		Port	1		Port	1	
Site Area			Worker	: Steam Valve			Port			ron		Non-	FOR		Non-	FOR		Non-	TOIL		Non-
			Carringgania	Element of a term	Carcinogenic	Non- Carcinogenic		Carcinogenic	Non- Carcinogenic		Carcinogenic			Carcinogenic	Carcinogenic		Carcinogenic			Carcinogenic	
COMPOUND	MATRIX	UNITS	Carcinogenic PRG		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio
Metals			1 2.55																		
Antimony	Soil	mg/kg											-								
Antimony	Water	ug/L	-	-									-			-					
Arsenic*	Soil	mg/kg	14							-											
Barium	Soil	mg/kg	-							-			_								
Beryllium	Soil	mg/kg	1.2										-							2 72000	
Cadmium	Soil	mg/kg	9																		
Chromium	Soil	mg/kg	450										-								
Cobalt	Soil	mg/kg	-										-			-					
Copper	Soil	mg/kg	-		Marie 1990		164		0.00	108		0.00	1130		0.02	1140		0.02	95.6		0.00
Lead	Soil	mg/kg					308		0.31	27.7		0.03	321		0.32	1740		1.74	196		0.20
Mercury	Soil	mg/kg	-	1 8 <del></del> 2			0.286		0.01	0.0764		0.00	0.638		0.01	0.378		0.01	0.17		0.00
Molybdenum	Soil	mg/kg	-	-									-								
Nickel	Soil	mg/kg		**												-					
Silver	Soil	mg/kg	-										-	-							$\vdash$
Thallium	Soil	mg/kg	-																		
Vanadium	Soil	mg/kg											_	-		-					
Zinc	Soil	(mg/kg)								-											
Petroleum Compounds	Soil	/1	1.4	-						-			-								
Benzene Benzene	Water	mg/kg ug/L	73.9	0.5	0.01																
TPH-Diesel**	Soil	mg/kg			0.01		-			8			-			29				11 11 10 10 10 10	
Ethyl Benzene	Soil	mg/kg	-										-								
Ethylbenzene	Water	ug/L		ND<0.5																	
TPH-Gasoline**	Soil	mg/kg											-								
TPH-Gasoline**	Water	ug/L	-	-					TAN 16 10-12-				-			-					
Hydrocarbons (oil and grea	Soil	mg/kg											**			-					
Toluene	Soil	mg/kg											-			-					
Toluene	Water	ug/L		0.7		0.00				-									-		
m,p-Xylenes	Soil	mg/kg	-											-					-		
m,p-Xylenes	Water	ug/L		-															-		
o-Xylene	Water Soil	ug/L	-													-					
Total Xylenes Xylenes, Total	Water	mg/kg ug/L		0.6			-							-		-			-		
Unknown Hydrocarbons	Soil	mg/kg											_								
Semivolatile Organic Com		11167 46																			
2-Methylnaphthalene	Soil	mg/kg								-						-			-		
Acenaphthene	Soil	mg/kg														-					
Acenaphthylene	Soil	mg/kg	-										-			-					
Anthracene	Soil	mg/kg	-							-			-						-		
Benzo(a)anthracene	Soil	mg/kg	3.6							-									-		
Benzo(a)pyrene	Soil	mg/kg	0.36													-			-		-
Benzo(b)fluoranthene	Soil	mg/kg	3.6							-			-			-					
Benzo(g,h,i)perylene	Soil	mg/kg								-								-	-	-	-
Benzo(k)fluoranthene	Soil	mg/kg	3.6					-		-			-		-		-				
Chrysene	Soil	mg/kg	360									-				-	-				
Dibenzo(a,h)anthracene	Soil Soil	mg/kg	0.36	-								-	-				-				
Fluoranthene Fluorene	Soil	mg/kg mg/kg	-													-			-		
Indeno(1,2,3,-cd)pyrene	Soil	mg/kg mg/kg	3.6							-						-					
Naphthalene	Soil	mg/kg	3.0										-								
Naphthalene	Water	ug/L	-							ND<1						ND<1			-		
Phenanthrene	Soil	mg/kg					-			-						-					
Pyrene	Soil	mg/kg	-										-			-					
TOTAL ESTIMATED RISI					6.77E-09	0.00		0.00E+00	0.32		0.00E+00	0.03		0.00E+00	0.35		0.00E+00	1.76		0.00E+00	0.20

<sup>\*</sup> Concentration based on Bay Area background

<sup>\*\*</sup> No PRG available; risk addressed by constituent compounds

March   Marc	DATE				5/1/97			5/1/97	1		5/1/97			5/1/97			6/12/97			5/13/97			5/13/97
Company   Comp						1			1						1						1		2AB
Second   S						1			1						1						1		
Marcian   Marc				Worker		-			1						1					Steam Valve			Steam Valve
Controlled   Con	Site Atlea			HOIRE	· TOIL		Non-	1011		Non-	700		Non-			Non-			Non-			Non-	
Constraint   Section   Section   Percent   P				Carcinogenio		Carcinogenic			Carcinogenic			Carcinogenic				Carcinogenio			Carcinogenio		Carcinogenic	Carcinogenio	
Antinewy Mere 1961		MATRIX	UNITS	PRG		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio	11 (1000)	PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio	
Agency   Waster   W																							
Marting   Sed   mg/Mg   12   1   1   1   1   1   1   1   1																							-
Berton   Sed   mg/kg   12																	-						
Exprise   Sel   #g/Fig   12							-				-			_							-		
Communication   Communicatio											-												-
Checked   Sel											-												
Caball   Soil   mg/kg					VAE.	-	-																-
Corporation   Sept   Marging     7-79   0.00   694   0.00   394   0.01   156   0.00   528   0.00   0.00																							
Fig.   Soil   mg/kg   -					74.9		0.00	49.4		0.00	394		0.01	136		0.00	5250		0.08				
Model   Mode					1.96		0.00	7.53		0.01	513		0.51	164		0.16							
Mobile depth   Mobile   Mobi	Mercury				0.286		0.01	0.138		0.00	-		0.10	0.726		0.01	1.78		0.03				-
Silver   Soil   mg/kg	Molybdenum										_												
Tailland   Sell   mg/kg																							
Vandelium																					-		
Zanc   Set   (mg/kg)																							
Providence   Soil   mg/kg   1.4																			77.				-
Bearane   Soil   mg/kg		3011	(IIIg/ kg)					0000000000000															
Emerone   Water   Sold   mg/kg   -   23   -     -       -       -		Soil	mg/kg	1.4	-			-			-												
TPH-Discret*																			5	ND<0.5			ND<0.5
Entylename	TPH-Diesel**	Soil		-	23						8300						7.7						-
TPH-Cascine**  Soil org./kg	Ethyl Benzene		mg/kg																				
TPH Casoline*   Water   Wate																	_						ND<0.5
Hybroschons (all and gre   Soil																							-
Toluses					1000																		
Toluene   Water   Wa				-																		-	-
mp-Yylenes						<b></b>														0.92		0.00	0.79
Imp-Sylenes					-												-						
Total Nylenes   Soil   Mayter   ug/L		Water			-						-			-									-
Water   Wate	o-Xylene	Water	ug/L		-			-															
Unknown Hydrocarbons   Soil   mg/kg				-	-																		-
Semivolatile Organic Compounds   2-Methylnaphthalene   Soil   mg/kg																							1.5
2-Methylnaphthalene   Soil   mg/kg			mg/kg		-			-									-						
Acenaphthene   Soil   mg/kg               1.5     0.00       ND<17         Acenaphthylene   Soil   mg/kg         ND<33         ND<33         ND<33         ND<43         ND<43         ND<43         ND<43         ND<47         ND<47         ND<47         ND<47         ND<47         ND<47         ND<47     ND<47     ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47   ND<47																							
Acenaphthylene   Soil   mg/kg       ND<3.3     ND<3.5   ND<4.7     ND<4.7     ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7   ND<4.7													0.00										
Anthracene Soil mg/kg 114 0.00 ND<1.7 ND<1.													0.00										-
Benzo(a)anthracene   Soil mg/kg   3.6					-				1112				0.00							_			
Benzo(a)pyrene   Soil   mg/kg   0.36       0.95   2.64     0.67   1.86												0.39					ND<1.7						
Benzo(b)fluoranthene   Soil   mg/kg   3.6       0.93   0.26     ND<1.7     Benzo(g,h.i)peylene   Soil   mg/kg       0.056     ND<0.33       ND<0.33     ND<0.33     ND<0.33     ND<0.33     ND<0.33     ND<0.33     ND<0.33     ND<0.33     ND<0.33     ND<0.33     ND<0.33     ND<0.33     ND<0.33     ND<0.7   ND<0.7     ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND<0.7   ND								-			0.95	2.64					0.67	1.86			1		-
Benzo(k)fluoranthene   Soil mg/kg   3.6	Benzo(b)fluoranthene	Soil	mg/kg	3.6								0.26								-			
Chrysene   Soil   mg/kg   360       2.8   0.01     ND<1.7     Dibenzo(a,h)anthracene   Soil   mg/kg   0.36       ND<3.3     ND<0.67     Dibenzo(a,h)anthracene   Soil   mg/kg       Soil   mg/kg       Soil   mg/kg       Soil   mg/kg       Soil   mg/kg       Soil   mg/kg       Soil   mg/kg   3.6     ND<0.70     ND<0.70   Soil   mg/kg       ND<0.70     ND<0.70   Soil   mg/kg       ND<0.70   Soil   mg/kg       ND<0.70   Soil   mg/kg       ND<0.70   Soil   mg/kg       Soil   mg/kg       Soil   mg/kg       Soil   mg/kg       Soil   mg/kg       Soil   mg/kg       Soil   mg/kg       Soil   mg/kg       Soil   mg/kg       Soil   mg/kg       Soil   mg/kg       Soil   mg/kg       Soil   mg/k	Benzo(g,h,i)perylene		mg/kg		-																		-
Dibenzo(a,h)anthracene   Soil mg/kg   0.36       ND<3.3     ND<0.67	Benzo(k)fluoranthene				-																		-
Fluoranthene   Soil   mg/kg												0.01									-		
Fluorene Soil mg/kg 1.3 0.00 - 1.6 0.00 - Indeno(1,2,3,cd)pyrene Soil mg/kg 3.6 0.00 - 0.00													0.00						0.00				
Inden(1,2,3,cd)pyrene   Soil mg/kg   3.6																							<del>                                     </del>
Naphthalene												0.10	0.00						0.00				-
Naphthalene         Water         ug/L												5.10										the leading street	
Phenanthrene         Soil         mg/kg           47          8.7             Pyrene         Soil         mg/kg           51         0.00          4.4         0.00																							
Pyrene Soil mg/kg 5.1 0.00 4.4 0.00								-															
			mg/kg								5.1						4.4			-			
TOTAL ESTIMATED RISK OR HAZARD INDE: - 0.00E+00 0.01 0.00E+00 0.01 3.78E-06 0.62 0.00E+00 0.18 1.86E-06 0.25 0.00E+00 0.0	TOTAL ESTIMATED RIS	K OR HA	ZARD INDE			0.00E+00	0.01		0.00E+00	0.01		3.78E-06	0.62		0.00E+00	0.18		1.86E-06	0.25		0.00E+00	0.00	

<sup>\*</sup> Concentration based on Bay Area background
\*\* No PRG available; risk addressed by constituent compounds

DATE			-			E /12 /07			5/13/97			4/27/98			4/27/98			4/27/98			4/27/98
DATE SAMPLE NUMBER	-					5/13/97 3A17			6A17			SB-14			SB-14			SB-14			SB-15
				1		01111			0.111			0.5	1		3.0			7.5	1		0.5
DEPTH (FT) Site Area	-		Worker			Steam Valve			Steam Valve			Port	1		Port			Port			Port
Site Area			WOLKEL	•	Non-	Steam valve		Non-	Steam vaive		Non-	1010		Non-	1010		Non-	1011		Non-	7,010
			Carcinovenic	Carcinogenic			Carcinogenic			Carcinogenic			Carcinogenic			Carcinogenic	Carcinogenic		Carcinogenio	Carcinogenic	4
COMPOUND	MATRIX	UNITS	PRG	PRG Ratio	PRG Ratio	diameter.	PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio	468109	PRG Ratio	PRG Ratio	
Metals																					
Antimony	Soil	mg/kg																-			
Antimony	Water	ug/L				ND<50			59		3.93										
Arsenic*	Soil	mg/kg	14						-			-									
Barium	Soil	mg/kg				-															-
Beryllium	Soil	mg/kg	1.2						-												
Cadmium	Soil	mg/kg	9									-			-			-			
Chromium	Soil	mg/kg	450						-			76	0.17		38	0.08		58	0.13		150
Cobalt	Soil	mg/kg				-			-			-						-			-
Copper	Soil	mg/kg										3700		0.05	62		0.00	38		0.00	1100
Lead	Soil	mg/kg				-			-			640		0.64	16		0.02	21		0.02	450
Mercury	Soil	mg/kg	-	1876/555 187		_						16		0.29	0.83		0.01	0.28		0.01	1.8
Molybdenum	Soil	mg/kg							-			-						-			
Nickel	Soil	mg/kg							-												
Silver	Soil	mg/kg	-			-												-			-
Thallium	Soil Soil	mg/kg	-						-						-			-			
Vanadium	Soil	mg/kg							-			950		0.01	56		0.00	66		0.00	450
Zinc	Son	(mg/kg)	-			-			-			730		0.01	36		0.00	00		0.00	450
Petroleum Compounds Benzene	Soil	ma (ka	1.4			-			-			-			-			_			-
Benzene	Water	mg/kg ug/L	73.9						ND<1												
TPH-Diesel**	Soil	mg/kg							-			4800			220			84			300
Ethyl Benzene	Soil	mg/kg																-			
Ethylbenzene	Water	ug/L							ND<1			-			-						
TPH-Gasoline**	Soil	mg/kg							-			-									-
TPH-Gasoline**	Water	ug/L	-			_			-			-			-			-			
Hydrocarbons (oil and great	Soil	mg/kg							-			-									-
Toluene	Soil	mg/kg				-			-												-
Toluene	Water	ug/L	-		0.00				ND<1			-						-			
m,p-Xylenes	Soil	mg/kg	-									_						-			
m,p-Xylenes	Water	ug/L	-			-			-									-			-
o-Xylene	Water	ug/L	-	<b>_</b>		-			-									-			
Total Xylenes Xylenes, Total	Soil Water	mg/kg ug/L	-						ND<1									-			
Unknown Hydrocarbons	Soil	mg/kg							- NDCI												
Semivolatile Organic Com		mg/kg																			
2-Methylnaphthalene	Soil	mg/kg	-			-			-			-			-			-			-
Acenaphthene	Soil	mg/kg	-									-									-
Acenaphthylene	Soil	mg/kg	-									-						-			
Anthracene	Soil	mg/kg	-						-			-			-			-			-
Benzo(a)anthracene	Soil	mg/kg	3.6						-			-									
Benzo(a)pyrene	Soil	mg/kg	0.36			-			-			-	100000000000000000000000000000000000000								-
Benzo(b)fluoranthene	Soil	mg/kg	3.6			-			-			-			-			-			-
Benzo(g,h,i)perylene	Soil	mg/kg	-			-			-			-			-						-
Benzo(k)fluoranthene	Soil	mg/kg	3.6						-												-
Chrysene	Soil	mg/kg	360						-									-			-
Dibenzo(a,h)anthracene	Soil	mg/kg	0.36			-									-			-			
Fluoranthene	Soil	mg/kg													-			-			
Fluorene	Soil	mg/kg	-			-						-									
Indeno(1,2,3,-cd)pyrene	Soil	mg/kg	3.6			-			-									-			
Naphthalene Naphthalene	Soil Water	mg/kg				 ND<2.5									-						-
Naphthalene Phenanthrene	Soil	ug/L mg/kg				ND<2.5												-			-
Pyrene Pyrene	Soil	mg/kg mg/kg																			-
TOTAL ESTIMATED RIS				0.00E+00	0.00		0.00E+00	0.00		0.00E+00	3.93		1.69E-07	0.99		8.44E-08	0.03		1.29E-07	0.03	
TOTAL ESTIMATED KIS	A OR HA	LAND HADE		V.00E+00	0.00		J.00D+00	0.00		2.002.700	0.70		11072507	U.77		27.2.2.00	5.00				

<sup>\*</sup> Concentration based on Bay Area background
\*\* No PRG available; risk addressed by constituent compounds

DATE						4/27/98			4/27/98			4/27/98			4/27/98			4/27/98			4/28/98	
SAMPLE NUMBER						SB-15			SB-16			SB-16			SB-17			SB-17			SB16A	i
DEPTH (FT)						1.5			0.5			2.0			0.5			3.0			1.5	i
Site Area			Worker	:		Port			Port			Port			Port			Port			Port	
					Non-			Non-			Non-			Non-			Non-			Non-		C
COMPOUND	MATRIX	UNITS	Carcinogenic PRG	Carcinogenic PRG Ratio	Carcinogenic PRG Ratio		Carcinogenic PRG Ratio	Carcinogenic PRG Ratio		Carcinogenic PRG Ratio	PRG Ratio		PRG Ratio	Carcinogenic PRG Ratio		Carcinogenic PRG Ratio	Carcinogenio PRG Ratio		Carcinogenic PRG Ratio	Carcinogenic PRG Ratio		Carcinogeni c PRG Ratio
Metals																						
Antimony	Soil	mg/kg										-						-				
Antimony	Water	ug/L	-						-			-			-						-	
Arsenic*	Soil	mg/kg	14						-						-			-				
Barium	Soil	mg/kg																-				
Beryllium	Soil	mg/kg	1.2						-						-			-			-	
Cadmium	Soil	mg/kg	9													211			0.15			
Chromium	Soil	mg/kg	450	0.33		62	0.14		210	0.47		92	0.20		65	0.14		68	0.15			$\overline{}$
Cobalt	Soil	mg/kg			2.02			0.00			0.02	1700		0.02	6700		0.10	600		0.01		
Copper	Soil	mg/kg			0.02	35		0.00	1700 250		0.02	3100		3.10	800		0.10	150		0.15	-	
Lead	Soil	mg/kg	-		0.45	16 53		0.02	250 8.2		0.25	6.0		0.11	4.4		0.08	0.91		0.02	-	
Mercury	Soil Soil	mg/kg			0.03			0.55			0.15			0.11			0.00			0.02		
Molybdenum Nickel	Soil	mg/kg mg/kg													-			-				
Silver	Soil	mg/kg		11-1-11					-									-				
Thallium	Soil	mg/kg	-			-			-			-						-				
Vanadium	Soil	mg/kg	-						-						-			-			-	
Zinc	Soil	(mg/kg)			0.00	50		0.00	950		0.01	1700		0.02	7500		0.08	510		0.01		
Petroleum Compounds																						
Benzene	Soil	mg/kg	1.4			-						-						ND<0.005				
Benzene	Water	ug/L	73.9						-	y-///		-			-			ND<0.5				
TPH-Diesel**	Soil	mg/kg	-			4700			-						-						1500	$\vdash$
Ethyl Benzene	Soil	mg/kg	-			-												ND<0.005				
Ethylbenzene	Water	ug/L	-						-									ND<0.5			-	
TPH-Gasoline**	Soil	mg/kg							-					-	-			ND<1.0 ND<50			-	
TPH-Gasoline**	Water	ug/L				-															-	
Hydrocarbons (oil and great	Soil	mg/kg	-						=									0.0069		0.00	-	
Toluene	Soil Water	mg/kg				-						-						ND<0.5		0.00		
Toluene m,p-Xylenes	Soil	ug/L mg/kg																ND<0.005			-	
m,p-Xylenes	Water	ug/L	-						-												-	
o-Xylene	Water	ug/L				-						-										
Total Xylenes	Soil	mg/kg	-				25.00														-	
Xylenes, Total	Water	ug/L	-						-						2-						-	
Unknown Hydrocarbons	Soil	mg/kg				-						-										
Semivolatile Organic Com	pounds																					
2-Methylnaphthalene	Soil	mg/kg																-				
Acenaphthene	Soil	mg/kg	-			ND<1.0															ND<0.25	
Acenaphthylene	Soil	mg/kg				ND<1.0						-									ND<0.25	
Anthracene	Soil	mg/kg	-			ND<1.0						-						-			ND<0.25	
Benzo(a)anthracene	Soil	mg/kg	3.6			1.2	0.33		-												ND<0.25	
Benzo(a)pyrene	Soil	mg/kg	0.36			1.4	3.89		-									<del>-</del>			0.53	
Benzo(b)fluoranthene	Soil	mg/kg	3.6			2.3 ND<1.0	0.64					-		1				-			ND<0.25	
Benzo(g,h,i)perylene	Soil	mg/kg							-			-		-								
Benzo(k)fluoranthene	Soil	mg/kg	3.6 360			1.5	0.00		-					<b> </b>							ND<0.25	
Chrysene	Soil Soil	mg/kg	0.36			ND<1.0	0.00		-												ND<0.25	
Dibenzo(a,h)anthracene Fluoranthene	Soil	mg/kg mg/kg	0.36			4.4		0.00				_						-			0.39	
Fluorantnene	Soil	mg/kg mg/kg				ND<1.0		0.00	-						-			-			ND<0.25	
Indeno(1,2,3,-cd)pyrene	Soil	mg/kg	3.6			ND<1.0						-			-						ND<0.25	
Naphthalene	Soil	mg/kg				ND<1.0						-						-			ND<0.25	
Naphthalene	Water	ug/L	-																		-	
Phenanthrene	Soil	mg/kg	-		795	1.9			-												ND<0.25	
Pyrene	Soil	mg/kg	-			3.7		0.00				-									0.67	
TOTAL ESTIMATED RIS	K OR HA			3.33E-07	0.50		5.00E-06	0.96	i companyor	4.67E-07	0.43		2.04E-07	3.25		1.44E-07	1.05		1.51E-07	0.18		0.00E+00
TOTAL ESTIMATED RIS	. OK IIA			O-DOL-OF	1 000		5.00M VV		L									-				

<sup>\*</sup> Concentration based on Bay Area background \*\* No PRG available; risk addressed by constituent compounds

DATE					8/13/98			8/13/98			8/13/98			8/12/98			8/12/98			8/12/98	
SAMPLE NUMBER					5V-7			SV-8			5V-8			SV-9			SV-9			SV-10	
					2.5			2.5			6.0			2.5		â.	6.0			2.5	
DEPTH (FT) Site Area			Worker	ļ	Steam Valve			Steam Valve	1		Steam Valve			Steam Valve			Steam Valve			Steam Valve	
Site Area			VVOIKEI	Non-	Steam valve		Non-	Dicam varve		Non-	O.C.		Non-			Non-			Non-		
			Carcinogenic	Carcinogeni		Carcinogenic			Carcinogenic			Carcinogenic	Carcinogenic			Carcinogenic		Carcinogenic	Carcinogenic		Carcinogenio
COMPOUND	MATRIX	UNITS	PRĞ	c PRG Ratio		PRG Ratio	PRG Ratio	e de la companya de	PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio
Metals							North Control														
Antimony	Soil	mg/kg						-													
Antimony	Water	ug/L	-					-			-						-				
Arsenic*	Soil	mg/kg	14		-		0.00							-						-	
Barium	Soil	mg/kg		19-1 5-19	-			_			-										
Beryllium	Soil	mg/kg	1.2		-								,								
Cadmium	Soil	mg/kg	9		-										2.00			0.00			0.10
Chromium	Soil	mg/kg	450		44	0.10		46	0.10		52	0.12		40	0.09		39	0.09		46	0.10
Cobalt	Soil	mg/kg					0.00	18		0.00	28		0.00	10		0.00	15		0.00	85	
Copper	Soil	mg/kg			35 15		0.00	3.7		0.00	10		0.00	6.9		0.00	4.7		0.00	250	
Lead	Soil Soil	mg/kg			0.079		0.02	ND<0.039		0.00	ND<0.038		0.01	0.17		0.00	0.15		0.00	0.26	
Mercury Molybdenum	Soil	mg/kg mg/kg					0.00														
Nickel	Soil	mg/kg			-						-			-						-	
Silver	Soil	mg/kg	-					_								Expect 1	-				
Thallium	Soil	mg/kg	-		-			-			-										
Vanadium	Soil	mg/kg	-									<u> </u>									
Zinc	Soil	(mg/kg)	-		35		0.00	38		0.00	52		0.00	33		0.00	1		0.00	160	
Petroleum Compounds							1000000														
Benzene	Soil	mg/kg	1.4		ND<0.005			ND<0.005			ND<0.005						-			ND<0.005	
Benzene	Water	ug/L	73.9		ND<0.5			1.77			ND<0.5			-						100	
TPH-Diesel**	Soil	mg/kg	-		7.5						 ND<0.005									0.0074	
Ethyl Benzene	Soil	mg/kg	-		ND<0.005 ND<0.5			ND<0.005			ND<0.005			-						0.0074	
Ethylbenzene TPH-Gasoline**	Water Soil	ug/L			ND<0.5			ND<1			ND<1						_			1.3	
TPH-Gasoline**	Water	mg/kg ug/L			ND<50						ND<50			-							
Hydrocarbons (oil and grea		mg/kg	-		-															- 1	
Toluene	Soil	mg/kg	_		ND<0.005			ND<0.005			ND<0.005									0.0064	
Toluene	Water	ug/L			ND<0.5			-			ND<0.5										
m,p-Xylenes	Soil	mg/kg			ND<0.005			ND<0.005			ND<0.005						-			0.008	
m,p-Xylenes	Water	ug/L	1 -		-						-						-				
o-Xylene	Water	ug/L												-			-				
Total Xylenes	Soil	mg/kg	-		-						-								Service Control	-	
Xylenes, Total	Water	ug/L			-												-				
Unknown Hydrocarbons	Soil	mg/kg												-						_	
Semivolatile Organic Com														-			-				
2-Methylnaphthalene	Soil	mg/kg			ND<0.075									-						ND<0.05	
Acenaphthene Acenaphthylene	Soil Soil	mg/kg mg/kg	-		ND<0.075									-			-			0.140	
Anthracene	Soil	mg/kg mg/kg			ND<0.075			-						-						ND<0.05	
Benzo(a)anthracene	Soil	mg/kg	3.6		0.100	0.03					-			-						ND<0.05	
Benzo(a)pyrene	Soil	mg/kg	0.36		0.130	0.36								-						ND<0.05	
Benzo(b)fluoranthene	Soil	mg/kg	3.6		ND<0.075			-						-						0.120	0.03
Benzo(g,h,i)perylene	Soil	mg/kg			0.075			-						-						ND<0.05	
Benzo(k)fluoranthene	Soil	mg/kg	3.6		-						-			-							<b></b>
Chrysene	Soil	mg/kg	360		0.140	0.00														0.062	0.00
Dibenzo(a,h)anthracene	Soil	mg/kg	0.36		0.075	0.21								-			-			ND<0.05 ND<0.05	
Fluoranthene	Soil	mg/kg		0.00	0.350		0.00	-			-			-						ND<0.05	
Fluorene	Soil	mg/kg	-		ND<0.075						-			-				-		ND<0.05	
Indeno(1,2,3,-cd)pyrene	Soil	mg/kg	3.6		ND<0.075									-		-		<del>                                     </del>	-	ND<0.05	
Naphthalene	Soil Water	mg/kg	-		ND<0.075									<del></del>							
Naphthalene Phenanthrene	Soil	ug/L			ND<0.075		<u> </u>	-			-			-						ND<0.05	
Pyrene	Soil	mg/kg mg/kg		0.00	0.380	-	0.00							-						0.060	
TOTAL ESTIMATED RIS				0.00	5,500	6.95E-07	0.02		1.02E-07	0.00		1.16E-07	0.01		8.89E-08	0.01		8.67E-08	0.01		1.36E-07
TOTAL ESTIMATED RIS	A OA HA	LIKE HVE		0.00		0.7015-07	1 0.04		1 2.022 07	1 5.00										-	-

<sup>\*</sup> Concentration based on Bay Area background
\*\* No PRG available; risk addressed by constituent compounds

DATE					8/12/98			8/12/98			8/12/98			8/12/98			8/12/98			8/12/98	
SAMPLE NUMBER					SV10			SV-11	]		SV-11			SV-12			SV-12			SV-13	4
DEPTH (FT)					5.5			2.5			5.5			2.5			5.5			2.5	ĺ
Site Area			Worker	•	Steam Valve			Steam Valve			Steam Valve			Steam Valve			Steam Valve			Steam Valve	
				Non-			Non-			Non-			Non-			Non-			Non-		
			Carcinogenio	Carcinogenio		Carcinogenic	Carcinogenic	4	Carcinogenic			Carcinogenic PRG Ratio	Carcinogenio PRG Ratio		Carcinogenic PRG Ratio	Carcinogenio PRG Ratio		PRG Ratio	Carcinogenic PRG Ratio		Carcinogenic PRG Ratio
COMPOUND	MATRIX	UNITS	PRG	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio	000000000000000000000000000000000000000	PRG Ratio	PKG Rado		FRG Rano	FRG Ratio		FKG Kauti	FRG RAUO		FRGRAUG
Metals									11511010					-			-			-	
Antimony	Soil	mg/kg	-		-			-						-			-				
Antimony	Water	ug/L			-			-						<del>-</del>			<del></del>				
Arsenic*	Soil	mg/kg	14		-			-								-				-	
Barium	Soil	mg/kg	-		-			-													
Beryllium	Soil	mg/kg	1.2		-			-						-			-				
Cadmium	Soil	mg/kg	9			0.11		57	0.13		65	0.14		- 66	0.15	-	25	0.06		58	0.13
Cabalt	Soil Soil	mg/kg	450		49	0.11		- 37	0.13			0.14			0.13			0.00			0.15
Cobalt	Soil	mg/kg mg/kg		0.00	36		0.00	16		0.00	18		0.00	24		0.00	7.8		0.00	9.9	
Copper Lead	Soil	mg/kg mg/kg	-	0.00	74		0.07	20		0.02	6.4		0.01	5.9		0.01	2.4		0.00	5.4	
Mercury	Soil	mg/kg		0.00	0.096		0.00	0.11		0.00	0.098		0.00	0.12		0.00	0.052		0.00	0.069	
Molybdenum	Soil	mg/kg		0.00	- 0.070		0.00			0.00							-			-	
Nickel	Soil	mg/kg	-		-			-						-		Name again	-				
Silver	Soil	mg/kg	-		-									-							
Thallium	Soil	mg/kg	-		-		1 10 1 10 mm	-			-						-			-	
Vanadium	Soil	mg/kg													152271111						
Zinc	Soil	(mg/kg)	-	0.00	100		0.00	44		0.00	41		0.00	43		0.00	22		0.00	27	
Petroleum Compounds																					
Benzene	Soil	mg/kg	1.4		0.57	0.41	0.02				-			-							
Benzene	Water	ug/L	73.9		770	10.42	0.05	-						-			-				
TPH-Diesel**	Soil	mg/kg			28			-						-			**			-	
Ethyl Benzene	Soil	mg/kg	-	0.00	0.063		0.00	-												-	$\overline{}$
Ethylbenzene	Water	ug/L			210			-									-			-	
TPH-Gasoline**	Soil	mg/kg			9.9			-						-							-
TPH-Gasoline**	Water	ug/L			7,500			-			-			-						-	
Hydrocarbons (oil and grea	Soil	mg/kg		0.00	0.00		0.00	-						<del>  -</del>			-				
Toluene	Soil	mg/kg		0.00	0.02		0.00	-						-		-	<del>                                     </del>			-	
Toluene	Water Soil	ug/L	-	0.00	0.014		0.00			-	-					<del></del>	_				
m,p-Xylenes	Water	mg/kg ug/L		0.00	110		0.00	-						-						-	
m,p-Xylenes o-Xylene	Water	ug/L ug/L			5.9								1							-	
Total Xylenes	Soil	mg/kg			- 3.7			-						-			-				
Xylenes, Total	Water	ug/L			-			-						-							
Unknown Hydrocarbons	Soil	mg/kg	-								-						-			_	
Semivolatile Organic Com		8/ 8																	0.000		
2-Methylnaphthalene	Soil	mg/kg						-									-				
Acenaphthene	Soil	mg/kg			ND<0.05			-						- 1							
Acenaphthylene	Soil	mg/kg			ND<0.05						-									-	
Anthracene	Soil	mg/kg	-		ND<0.05			-			-						-				
Benzo(a)anthracene	Soil	mg/kg	3.6		ND<0.05			-									-				
Benzo(a)pyrene	Soil	mg/kg	0.36		ND<0.05			-						-			-				
Benzo(b)fluoranthene	Soil	mg/kg	3.6		ND<0.05			-			-									-	
Benzo(g,h,i)perylene	Soil	mg/kg	-		ND<0.05			-			-						-				
Benzo(k)fluoranthene	Soil	mg/kg	3.6					-						-			-				-
Chrysene	Soil	mg/kg	360		ND<0.05			-					-	-						<del></del>	
Dibenzo(a,h)anthracene	Soil	mg/kg	0.36	2	ND<0.05			-			-		-								
Fluoranthene	Soil	mg/kg	-		ND<0.05									<del>  -</del>			<del>                                     </del>				
Fluorene	Soil	mg/kg			ND<0.05 ND<0.05				4	-				<del>-</del>					-		
Indeno(1,2,3,-cd)pyrene	Soil Soil	mg/kg	3.6		0.170		0.00	-			-		<u> </u>	-			<del>                                     </del>			-	
Naphthalene Naphthalene	Water	mg/kg ug/L			150		0.31	<del></del>						-			-				
Phenanthrene	Soil	mg/kg			ND<0.05		0.51	<del>-</del>					-				-			-	
Prienantifrene	Soil	mg/kg mg/kg		0.00	ND<0.05						-			-			-			-	
TOTAL ESTIMATED RIS				0.26	ND<0.05	1.09E-05	0.45	<b>—</b>	1.27E-07	0.02		1.44E-07	0.01		1.47E-07	0.01		5.56E-08	0.00		1.29E-07
TOTAL ESTIMATED RIS	N JK IIA	MAND HADE		0.20	110 10.00	1.072-00	0.40		I III D O	U.U.E.				-							

<sup>\*</sup> Concentration based on Bay Area background

<sup>\*\*</sup> No PRG available; risk addressed by constituent compounds

					0.140.100			0 /12 /00			8/12/98		
DATE					8/12/98 SV-13			8/12/98 SV-14			SV-14		
SAMPLE NUMBER													
DEPTH (FT)					5.5			2.5			5.5		
Site Area			Worker	:	Steam Valve			Steam Valve			Steam Valve		
				Non-		and blooms	Non-	0.00	ELONG UNION	Non-			Non-
600-00-000-00			Carcinogenic				Carcinogenic		Carcinogenic	Carcinogenic	*	PRG Ratio	Carcinogenic PRG Ratio
COMPOUND	MATRIX	UNITS	PRG	PRG Ratio		PRG Ratio	PRG Ratio		PRG Ratio	PRG Ratio		F KG KADO	FRG Ratio
Metals													
Antimony	Soil	mg/kg			-			-			-		
Antimony	Water	ug/L											
Arsenic*	Soil	mg/kg	14		-			-					
Barium	Soil	mg/kg			-			-			-		
Beryllium	Soil	mg/kg	1.2					-					
Cadmium	Soil	mg/kg	9		-			-					
Chromium	Soil	mg/kg	450		46	0.10		52	0.12		39	0.09	
Cobalt	Soil	mg/kg			-						-		
Copper	Soil	mg/kg	-	0.00	10		0.00	21		0.00	14		0.00
Lead	Soil	mg/kg		0.01	3.2		0.00	4.9		0.00	3.7		0.00
Mercury	Soil	mg/kg		0.00	0.063		0.00	0.048		0.00	0.072		0.00
Molybdenum	Soil	mg/kg	-		-								
Nickel	Soil	mg/kg	-					-	200				
Silver	Soil	mg/kg											
Thallium	Soil	mg/kg			-								
Vanadium	Soil	mg/kg											
Zinc	Soil	(mg/kg)		0.00	32		0.00	150		0.00	35		0.00
Petroleum Compounds													
Benzene	Soil	mg/kg	1.4					-					
Benzene	Water	ug/L	73.9										
TPH-Diesel**	Soil	mg/kg						-		tur star version			
Ethyl Benzene	Soil	mg/kg			-								
Ethylbenzene	Water	ug/L	-										
TPH-Gasoline**	Soil	mg/kg											
TPH-Gasoline**	Water	ug/L			-						-		
Hydrocarbons (oil and great	Soil	mg/kg	-					-					
Toluene	Soil	mg/kg						-					
Toluene	Water	ug/L											
m,p-Xylenes	Soil	mg/kg											
m,p-Xylenes	Water	ug/L	177	10000									
o-Xylene	Water	ug/L			-								
Total Xylenes	Soil	mg/kg	-										
Xylenes, Total	Water	ug/L											
Unknown Hydrocarbons	Soil	mg/kg			-								
Semivolatile Organic Con	pounds												
2-Methylnaphthalene	Soil	mg/kg	_		-			-					
Acenaphthene	Soil	mg/kg	-					-					
Acenaphthylene	Soil	mg/kg			-						-		
Anthracene	Soil	mg/kg			-			-			-		
Benzo(a)anthracene	Soil	mg/kg	3.6		-			-			-		
Benzo(a)pyrene	Soil	mg/kg	0.36					-			-		
Benzo(b)fluoranthene	Soil	mg/kg	3.6		-			-			-		
Benzo(g,h,i)perylene	Soil	mg/kg						-					
Benzo(k)fluoranthene	Soil	mg/kg	3.6					-					
Chrysene	Soil	mg/kg	360					-			-		
Dibenzo(a,h)anthracene	Soil	mg/kg	0.36								-		
Fluoranthene	Soil	mg/kg			-			-			-		
Fluorene	Soil	mg/kg						-					
Indeno(1,2,3,-cd)pyrene	Soil	mg/kg	3.6					-					
Naphthalene	Soil	mg/kg	-		-			-			-		
Naphthalene	Water	ug/L											
Phenanthrene	Soil	mg/kg						-					
Pyrene	Soil	mg/kg									-		
TOTAL ESTIMATED RIS	KORHA	ZARD INDE	ŧ	0.01		1.02E-07	0.00		1.16E-07	0.01		8.67E-08	0.01

<sup>\*</sup> Concentration based on Bay Area background
\*\* No PRG available; risk addressed by constituent compounds