THE SAN JOAQUIN COMPANY INC.
1120 HOLLYWOOD AVENUE, SUITE 3, OAKLAND, CALIFORNIA 94602

Alameda County Health Care Services Agency
Environmental Protection Division
1131 Harbor Way Parkway, Suite 250
Alameda, California 94502-6577

Date: July 15, 2000

Our Reference: 9401.114

Attn. Mr. Larry Seto

SUBJECT: **Quarterly Status Report – 208 Jackson Street, Oakland, California**

Dear Mr. Seto:

At the request of the property owner, SNK Development Inc., we transmit herewith a copy of our: *Quarterly Status and Groundwater-quality Monitoring Report, March 1, 2000-May 31, 2000 – 208 Jackson Street, Oakland, California.*

If you have any questions, please call me at **(510) 336-1772.**

Sincerely,

D. J. Watkins
President
The San Joaquin Company Inc.

Enc: Quarterly Status and Groundwater-quality Monitoring Report

THE SAN JOAQUIN COMPANY INC.
1120 HOLLYWOOD AVENUE, SUITE 3, OAKLAND, CALIFORNIA 94602

QUARTERLY STATUS AND GROUNDWATER-QUALITY MONITORING REPORT

MARCH 1, 2000 – MAY 31, 2000

208 Jackson Street, Oakland, California

Prepared for:

SNK DEVELOPMENT INC

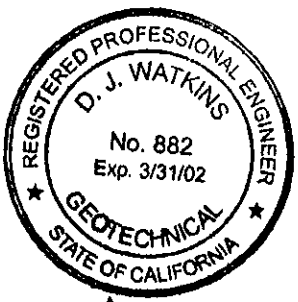
July 2000

Project No. 9401.114

TELEPHONE: OAKLAND, CALIFORNIA (510) 336-9118 TRACY, CALIFORNIA (209) 832-2910

PROFESSIONAL CERTIFICATION AND LIMITATIONS

This report was prepared under the direction of the engineer whose seal and signature appear below. The work was performed in accordance with generally accepted standards of engineering practice based on information available to us at the time of its preparation and within the limits of the scope of work directed by the client. No other representation, expressed or implied, and no warranty or guarantee is included or intended as to professional opinions, recommendations, or field or laboratory data provided.



D.J. Watkins, Ph.D., P.E.
Geotechnical Engineer
The San Joaquin Company Inc.

INTRODUCTION

This status report is for the property at 208 Jackson Street, Oakland, California. It covers the period from March 1, 2000 to May 31, 2000.

SITE LOCATION

The subject property is situated at 208 Jackson Street, Oakland, California. That location is shown on Figure 1. Figure 2 is a site plan showing the location of groundwater-quality monitoring wells that have been installed on the site.

BACKGROUND

Site History

Between 1946 and 1947, a steel-framed building was constructed at the corner of Second and Madison Streets for the Marine Steel Company (**Marine Steel**). Associated with this building was a storage yard that extended northeast along Madison Street. At that time, the Marine Steel site had the address 205 Madison Street.

Subsequent to its initial occupancy by Marine Steel, the site at 205 Madison Street was occupied by a variety of businesses that included used machinery and scrap metal dealers. At some time prior to 1963, the metal building and property at that address was used by a truck-rental business. At an unknown date, presumably when the truck rental business occupied the site, four underground storage tanks were installed on that property. These included a 10,000-gallon and an 8,000-gallon gasoline tank and a 10,000-gallon and a 2,000-gallon diesel tank.

In January 1963, ownership of the site at 205 Madison Street passed to the John Morell Company (**Morell**), which incorporated it into its meatpacking facility at 208 Jackson Street. In 1970, Morell sold all of its property at 208 Jackson Street, but the site continued in use as a meatpacking facility with a succession of owners, the last of which was the East Bay Packing Company (**East Bay Packing**).

In May 1990, all four tanks were removed from the property by East Bay Packing. Testing at the bottom of the tank pits showed that soil and groundwater beneath the tanks was affected by components of fuel hydrocarbons.

In November 1990, the 208 Jackson Street property was purchased by Mr. Tzu Ming Chen and Mrs. Chih Chin Lin Chen (**the Chens**), the owners of Wo Lee Food, which used the property for production, packaging and distribution of Asian specialty foods. In the period between 1990 and 1998, under the direction and oversight of the California Regional Water Quality Control Board – San Francisco Bay Region (**RWQCB**) and the Alameda County Health Care Services Agency, Environmental Health Services Division (**ACHCSA**), the

Chens retained a series of consultants to characterize the site and monitor groundwater quality in the affected area.

On October 22 1998, SNK Development Inc. (**SNK**) purchased the 208 Jackson Street property from the Chens and immediately retained The San Joaquin Company Inc. (**SJC**) to develop a remediation plan that would permit redevelopment of the property. SNK also contracted with Dietz Irrigation of Tracy, California, to implement the remediation.

The remediation was conducted in compliance with a work plan approved by the ACHCSA. (SJC, 1998. ACHCSA, 1998a, 1998b.) The remediation work involved excavation of soil from beneath the affected part of the site, treatment of the soil on site, and restoration of the remedial excavation.

On-site remediation work was completed in November 1998 (Dietz Irrigation, 1998) and, with the concurrence of the ACHCSA, the site was released for redevelopment on December 3, 1998. (ACHCSA, 1998c)

All previously existing groundwater-quality monitoring wells present on the site were closed when the hydrocarbon-affected soil was remediated. As called for by the remediation work plan, two new off-site monitoring wells - Nos. MW-6 and MW-7 - were installed on December 30, 1998 at the locations shown on Figure 2. A first round of groundwater-quality monitoring using these wells was completed on January 9, 1999 (The San Joaquin Company Inc 1999a); a second round followed on April 25, 1999 (The San Joaquin Company Inc 1999b); a third round was completed on July 24, 1999 (The San Joaquin Company Inc 1999c) and a fourth round on October 24, 1999 (The San Joaquin Company Inc 1999d).

The sampling round that was conducted on October 24, 1999 was the last round called for by the remediation work plan.

A formal report of corrective action was submitted to the ACHCSA on November 22, 1999 (The San Joaquin Company 1999e). The report documented the environmental history of the site, including the work performed for the site remediation, with tabulations of all geotechnical and geochemical data gathered from the subject site since the leakage from the underground storage tanks previously located on the property, together with engineering assessments and evaluations of that data.

Following ACHCSA review of the report of corrective action and the results of the groundwater-quality monitoring conducted through October 24, 1999, San Joaquin Company staff meant with Mr. Larry Seto, the ACHCSA representative. He requested that additional groundwater monitoring be conducted on a six-month schedule. However, it was agreed that following the first round of sampling under the new schedule, which would occur in April, 2000, the status of the site would be further evaluated its formal closure considered.

ACTIVITY DURING THE REPORTING PERIOD

Following is a summary of activity related to the subject site for the period from March 1, 2000 through May 31, 2000.

Groundwater-quality Monitoring

A round of groundwater sampling using monitoring wells MW-6 and MW-7 was conducted on April 20, 2000.

To initiate the sampling program, the depth to groundwater in both of the monitoring wells was measured using a conductivity probe. The water table elevations were computed relative to mean sea level (MSL). These measurements and the computed groundwater-table elevations are recorded in Table 1. In the period between October 24, 1999 and April 20, 2000, the groundwater table had risen almost 1.5 feet.

After the depth to groundwater in each well had been measured, they were purged by pumping a minimum of five well volumes of water from each. The purge water was decanted into 5-gallon pails, which, when full, were emptied onto a non-draining, paved area of the site, from which it evaporated.

After both wells had been purged, the depth to groundwater in each was measured again, prior to sampling, to ensure that a representative sample would be obtained. In both cases, the water levels in the wells had fully recovered between the time of purging and the time of sampling.

Groundwater samples were then recovered from the wells using the dedicated PVC bailers with which they had been equipped when they were constructed. Water was decanted from the bailers using a valved, decanting spigot to fill completely clean, laboratory-supplied glassware. The sample vials and jars were then tightly closed, labeled for identification, entered into chain-of-custody control, and packed on chemical ice for transportation to Chromalab Inc.'s (**Chromalab**) laboratory in Pleasanton, California for analysis.

Sample Analyses

Following receipt at the laboratory, the groundwater samples was analyzed for the following suite of analytes.

Analyte	**Method of Analysis**
Total Petroleum Hydrocarbons (*quantified as Diesel*)	EPA Method 8015
Total Petroleum Hydrocarbons (quantified as Gasoline)	EPA Method 8015M

Benzene	EPA Method 8015M
Toluene	EPA Method 8015M
Ethyl Benzene	EPA Method 8015M
Total Xylene Polymers	EPA Method 8015M
Methyl-tertiary Butyl Ether (MTBE)	EPA Method 8260A

Results of Groundwater Analyses

The results of the analyses of the samples of groundwater recovered from monitoring wells MW-6 and MW-7 on April 20, 2000 are presented in Table 2, which also includes the results from the earlier rounds of groundwater sampling.

As can be seen in Table 2, and as was reported in the Quarterly Report for the period March 1, 1999 to May 31, 1999 (The San Joaquin Company Inc. 1999b), diesel, gasoline and all of the BTEX compounds were detected in the sample recovered from well MW-6 on April 26, 1999, although none - with the exception of a trace of xylene polymers - had been detected in water previously recovered from that well. That result was unexpected. Additional samples were recovered during the sampling round conducted on July 25, 1999 and submitted to Curtis & Tompkins' laboratory in Berkeley, California where they were independently analyzed as a quality-assurance measure. The results of Curtis & Tompkins analyses are shown on the lower part of Table 2.

As was discussed in the quarterly report for June 1 to August 31, 1999 (The San Joaquin Company Inc. 1999c), when differences in the reporting protocols for analytical results that do not exactly match the laboratories' standards for fuel hydrocarbons such as gasoline and diesel are taken into account, the results obtained by Curtis & Tompkins were in substantial agreement with those obtained by Chromalab. Thus, the quality assurance analyses performed by Curtis & Tompkins demonstrated the substantial validity of the primary analyses performed by Chromalab.

The sample of groundwater recovered from monitoring well MW-6 on July 24 contained no detectable concentrations of the BTEX compounds. This result is compatible with the result obtained for that well on January 9, showing that the elevated concentrations of BTEX compounds that were detected in the sample recovered on April 25 had been eliminated. Similarly, although not entirely eliminated, the concentrations of diesel and gasoline in the sample recovered on July 25 had fallen markedly from the concentrations present on April 25, which had unexpectedly appeared following the January 9 sampling round, when there had been no detectable concentrations of either diesel or gasoline in the sample recovered from MW-6.

On October 24, 1999, analyses of the sample of groundwater recovered from MW-6 detected the presence of 140 µg/L of total petroleum hydrocarbons quantified as diesel, 370 µg/L of total petroleum hydrocarbons quantified as gasoline, and benzene at 0.73 µg/L. There were no detectable concentrations of toluene, ethyl benzene, or total xylene polymers. MTBE was detected at 950 µg/L.

On April 20, 2000, analyses of the sample of groundwater recovered from MW-6, as shown in Table 2, detected the presence of 120 µg/L of total petroleum hydrocarbons quantified as diesel. However, on that date, no total petroleum hydrocarbons quantified as gasoline, benzene, toluene or ethylbenzene or total xylene polymers were detected in the sample recovered from MW-6. MTBE was detected at 350 µg/L.

Concentrations of analytes of concern in samples from monitoring well MW-7 had fallen significantly between the sampling round conducted on January 9, 1999 and the sampling round conducted on April 25, 1999. However, by July 25, 1999, although the concentration of diesel was again lower, there was a large increase in the concentration of gasoline and the BTEX compounds in the sample recovered from this well. This increase in concentrations was also unexpected.

Analyses of the sample of groundwater recovered from MW-7 on October 24 detected the presence of 1,300 µg/L of total petroleum hydrocarbons quantified as diesel, 660 µg/L of total petroleum hydrocarbons quantified as gasoline, benzene at 220 µg/L, toluene at 8.8 µg/L, ethyl benzene at 24 µg/L and total xylene polymers at 65 µg/L. No MTBE was detected in the sample recovered from this well.

Analyses of the sample of groundwater recovered from MW-7 on April 20, 2000 (as shown in Table 2) detected the presence of 3400 µg/L of total petroleum hydrocarbons quantified as diesel, 8300 µg/L of total petroleum hydrocarbons quantified as gasoline, benzene at 1400 µg/L, toluene at 380 µg/L, ethyl benzene at 310 µg/L and total xylene polymers at 1100 µg/L. No MTBE was detected in the sample recovered from this well on April 20, 2000, as was the case in previous sampling rounds.

Evaluation of Groundwater Analyses

There are several data trends that can be observed in the results obtained from analyses of samples from monitoring wells MW-6 and MW-7 in the period from January 9, 1999 to April 20, 2000.

No MTBE was detected in the samples recovered from MW-7 on July 25, 1999 (the first sampling round where analysis for this oxygenate was performed) nor on October 24, 1999, while 1,500 µg/L and 950 µg/L were detected, respectively, in the samples recovered on the same date from MW-6. This indicates that groundwater in MW-6 is affected by a different mixture of hydrocarbon fuels than the groundwater in MW-7. It is also significant that, although analyses for MTBE had been performed on samples from the other monitoring wells located on the 208 Jackson Street property in prior years, none had ever been detected in any of those wells.

In addition to the difference related to the presence and absence of MTBE, there are other notable differences in the matrix of data obtained from wells MW-6 and MW-7. Water from MW-6, which had been essentially free of petroleum hydrocarbons on January 9, 1999 was unexpectedly found to be affected by significant concentrations of several of those compounds on April 25, 1999. However, by July 25, 1999, there had been major declines in the concentration of diesel and gasoline in that well and none of the BTEX compounds were present. By the October 24, 1999 sampling round, there had been a minor upward fluctuation in the concentration of diesel in the sample from MW-6, but there was a further, large decrease in the concentration of gasoline. Also, the concentrations of the BTEX compounds, except for a very minor trace of benzene, continued to be undetectable. This data trend strongly suggested that some new mixture of analytes had been introduced into MW-6 between January 9, 1999 and April 25, 1999, but, since the latter date, has been dissipating from the groundwater at that location by natural processes such as dispersion or dilution, and by the purging of the well at each sampling round.

Data from MW-7 shows an unexpected increase in the concentrations of gasoline and the BTEX compounds in the period between April 25, 1999 and July 24, 1999 although, earlier in the year, the trend of the data was declining towards lower concentrations of the analytes of concern. By October 24, 1999, although there was an inconsequential increase in the concentration of diesel detected in the sample from MW-7, there was a very large decrease in the concentration of gasoline and the BTEX compounds, so that the pattern of substantial decrease in the concentrations of all analytes of concern in samples from this well was restored. This data trend suggests that some foreign material may have been introduced into the well in the period between April 25, 1999 and July 25, 1999.

It is interesting to set the data trends described above in the context of re-paving work that occurred on Second Street over the first few months of 1999. Following is a chronological listing of conditions observed in and around the wells during this period.

Sampling Date	Conditions Observed
January 9, 1999	No unusual conditions are observed; paving was undisturbed.
April 25, 1999	Second Street has been scarified and the surficial bituminous macadam surfacing removed. Some stained areas are seen in the vicinity of MW-6. MW-7 well cover is buried under pile of sand- to gravel-sized bituminous macadam debris, but it is otherwise apparently undisturbed.
July 25, 1999	Re-paving is complete around MW-6. Debris has been cleared from the MW-7 well cover, but that cover is found broken and loose in the paving of Madison Street, which has not been re-paved.

> On removal of the dedicated bailer hung in the well casing, it was found that the upper 6 inches of the casing above the top of the bailer was blocked by bituminous macadam debris and there was evidence that some of that material had fallen further down the well to the groundwater table.

Bituminous macadam contains a large number of petroleum hydrocarbon compounds, particularly long carbon-chain compounds. During re-paving operations, other, lighter petroleum compounds are used as solvents and for treatment of existing pavement prior to laying new surfacing. If any of those materials (which are applied in liquid or semi-liquid form), spilled equipment fuels, or pavement debris from street planing operations were introduced into the groundwater-quality monitoring wells, they would cause the type of increase in concentrations of petroleum hydrocarbons that had been observed at the 208 Jackson Street site.

The data trends and field conditions described above strongly support the interpretation that re-paving work performed in that area of the site was the cause of the sudden appearance of components of fuel hydrocarbons in monitoring well MW-6 on April 25, 1999 and the notable increase in the concentrations of components of fuel hydrocarbons in monitoring well MW-7 on July 25, 1999.

When monitoring wells MW-6 and MW-7 were first sampled on January 9, 1999, the pavement around the site was in its original condition. By the sampling round conducted on April 25, 1999, the wearing course of the Second Street pavement had been planed away in preparation for re-paving that street. It is evident that some material related to the re-paving work was introduced into MW-6, resulting in the unexpected presence of petroleum hydrocarbons in that well.

By April 25, 1999, the paving contractor had stored paving debris directly on top of the MW-7 casing closure, but the bolted casing cover and well cap had prevented introduction of any of this material into the well. Thus, concentrations of analytes of concern in MW-7 declined compared to those detected in samples recovered previously from this well, as would be expected, due to the beneficial effects of the remediation work that had been performed on the site by that time on the ongoing processes of natural bioremediation and dispersion.

By the July 25, 1999 sampling round, the re-paving of Second Street had been completed and the petroleum compounds introduced into MW-6 by that activity had declined in concentration due to natural dispersion, dilution and the purging of the well during the April and July 1999 sampling rounds. This trend continued through the October 24, 1999 sampling round and the concentrations of the analytes of concern declined further toward the non-detectable concentrations that had prevailed on January 9, 1999.

At some time between April 25, 1999 and July 25, 1999, the MW-7 well cover was damaged and displaced by the bucket of heavy equipment used to load the paving debris that had been

temporarily stored over it. This activity caused debris to fall into the well casing before the paving contractor reset the cover over the well. The material introduced into the well at that time caused the concentration of petroleum hydrocarbons in the groundwater in the gasoline range to rise significantly, thus accounting for the results obtained by the analysis of the sample recovered from MW-7 on July 25, 1999. By October 24, 1999, the effect of this perturbation had passed, so that the results of the analyses of the sample recovered on that date showed that the trend of steadily decreasing concentrations of analytes of concern with time had resumed.

In SJC's opinion, the above scenario is well supported by the sampling data, and we do not interpret the phenomena observed in monitoring well MW-6 in April 1999 and in monitoring well MW-7 in July 1999 to represent a material worsening of groundwater quality in the area of the 208 Jackson Street site.

The results of analyses of the sample of groundwater recovered on April 20, 2000 from MW-6, which is just outside the area of the subsurface affected by hydrocarbons released from the 208 Jackson Street site, show that the steady trend of decline of analytes of concern since the perturbation that occurred sometime in the period between January 9, 1999 and April 25, 1999 continues. As is shown in Table 2, the concentration of total petroleum hydrocarbons quantified as diesel had fallen to 120 μg/L, no concentrations of total petroleum hydrocarbons quantified as gasoline, or of benzene, toluene, ethylbenzene or total xylene polymers were detected, and the concentration of MTBE had fallen to 350 μg/L.

As has been noted previously, if the perturbation that is attributable to the damage to the well casing cover and the introduction of bituminous macadam materials into MW-7 that occurred between April 25, 1999 and July 25, 1999 is discounted, the data presented in Table 2 shows a distinct trend of decreasing concentrations of diesel and gasoline in this well with a falling water table over the period January 9, 1999 to October 24, 1999. However, the results from samples recovered on April 20, 2000 show a noticeable increase in the concentrations of these analytes with an associated increase in BTEX compounds. As can be seen in Table 1, these changes coincide with a significant rise of the groundwater table. MW-7 is located beneath the public street near what had been the most heavily-affected area of the 208 Jackson Street site. Further, the lowered elevation of the groundwater table in the spring and summer of 1999, which were unusually dry, would have been such that groundwater would not have been in contact with the most heavily-affected zone of soil (*i.e.*, the zone close to the typical elevation of the groundwater table). With the coming of the winter rains, the groundwater rose so that it was at a higher elevation than at any time since groundwater-quality monitoring was first initiated in MW-7. Accordingly, it is likely that the rising water table exposed groundwater to contact with more heavily-affected soil than had been the case in the previous dry season. These types of seasonal and rainfall-associated fluctuations in the concentrations of fuel hydrocarbons are commonly seen at sites having characteristics similar to the 208 Jackson Street property.

Engineering Reports and Filings

During the reporting period, the following report was a prepared.

The San Joaquin Company Inc. (2000a), *Quarterly Status Report, December 1, 1999 to February 29, 2000 - 208 Jackson Street, Oakland, California.* March 2000.

WORK IN PROGRESS

In compliance with the guidance provided by the ACHCSA at a meeting held on January 12, 2000, a Closure Report for the property at 208 Jackson Street is being prepared, together with a draft application for site closure for review by the ACHCSA and submission to the RWQCB.

REFERENCES

Alameda County Health Care Services Agency (1998a), Letter: *RE: 208 Jackson Street, Oakland, California 94607*, from Larry Seto (Senior Hazardous Materials Specialist) to Mr. Scott Johnson, SNK Development Inc. August 3, 1998.

Alameda County Health Care Services Agency (1998b), Letter: *RE: 208 Jackson Street, Oakland, California 94607*, from Larry Seto (Senior Hazardous Materials Specialist) to Mr. Scott Johnson, SNK Development Inc. October 21, 1998.

Alameda County Health Care Services Agency (1998c), Letter: *RE: 208 Jackson Street, Oakland, California 94607*, from Larry Seto (Senior Hazardous Materials Specialist) to Mr. Scott Johnson, SNK Development Inc. December 3, 1998.

Dietz Irrigation (1998), *Report of Excavation and Treatment of Hydrocarbon Affected Soil – 208 Jackson Street, Oakland, California*. November 30, 1998 .

The San Joaquin Company Inc. (2000a), *Quarterly Status Report, December 1, 1999 to February 29, 2000 - 208 Jackson Street, Oakland, California.* March 2000.

The San Joaquin Company Inc. (1999a), *Quarterly Status and Groundwater-quality Monitoring Report, December 1, 1998 to February 29, 1999 - 208 Jackson Street, Oakland, California.* April 1999.

The San Joaquin Company Inc. (1999b), *Quarterly Status and Groundwater-quality Monitoring Report, March 1, 1999 to May 31, 1999 - 208 Jackson Street, Oakland, California.* June 1999.

The San Joaquin Company Inc. (1999c), *Quarterly Status and Groundwater-quality Monitoring Report, June 1, 1999 to August 31, 1999 - 208 Jackson Street, Oakland, California.* August 1999.

The San Joaquin Company Inc. (1999d), *Quarterly Status and Groundwater-quality Monitoring Report, September 1, 1999 to November 30, 1999 - 208 Jackson Street, Oakland, California.* November 1999.

The San Joaquin Company Inc. (1999e), *Corrective Action Report - 208 Jackson Street, Oakland, California.* November 1999.

The San Joaquin Company Inc. (1998), *Remediation Plan - 208 Jackson Street, Oakland, California.* June 1998 (Revised October 1998).

TABLE 1

DEPTHS TO GROUNDWATER

Well No.	Date Measured	Casing Elevation MSL	Groundwater Depth in feet	Groundwater Elevation MSL
MW-6	01/09/99	5.63	4.57	1.06
	04/25/99		4.00	1.63
	07/24/99		4.23	1.40
	10/24/99		5.12	0.51
	04/20/00		3.61	2.02
MW-7	01/09/99	5.15	4.58	0.57
	04/25/99		4.10	1.05
	07/24/99		4.04	1.11
	10/24/99		4.90	0.25
	04/20/00		3.52	1.63

Notes: (1) All elevations in feet relative to mean sea level (MSL).

TABLE 2

RESULTS OF ANALYSES OF SAMPLES FROM GROUNDWATER-QUALITY MONITORING WELLS

Primary Analyses by Chromalab, Inc.

Well No.	Date Sampled	TPHd µg/L	TPHg µg/L	Benzene µg/L	Toluene µg/L	Ethyl-benzene µg/L	Total Xylenes µg/L	MTBE µg/L
MW-6	01/09/99	ND	ND	ND	ND	ND	1.70	n.a.
	04/25/99	140	4500	26	160	9.8	140	n.a.
	07/25/99	89	1400	ND	ND	ND	ND	1500
	10/24/99	140	370	0.73	ND	ND	ND	950
	04/20/00	120	ND	ND	ND	ND	ND	350
MW-7	01/09/99	1900	7200	410	550	120	1200	n.a.
	04/25/99	1800	4500	960	47	ND	730	n.a.
	07/25/99	1200	9100	2000	830	610	2000	ND
	10/24/99	1300	660	220	8.8	24	65	ND
	04/20/00	3400	8300	1400	380	310	1100	ND

Quality Assurance Analyses by Curtis & Tompkins, Ltd.

Well No.	Date Sampled	TPHd µg/L	TPHg µg/L	Benzene µg/L	Toluene µg/L	Ethyl-benzene µg/L	Total Xylenes µg/L	MTBE µg/L
MW-6	07/25/99	190	ND	ND	ND	ND	0.64	2700
MW-7	07/25/99	1100	7200	1900	790	560	1940	ND

Notes: (1) ND = Not detected above the Method Detection Limit (MDL)
(2) n.a. = Not analyzed for this analyte

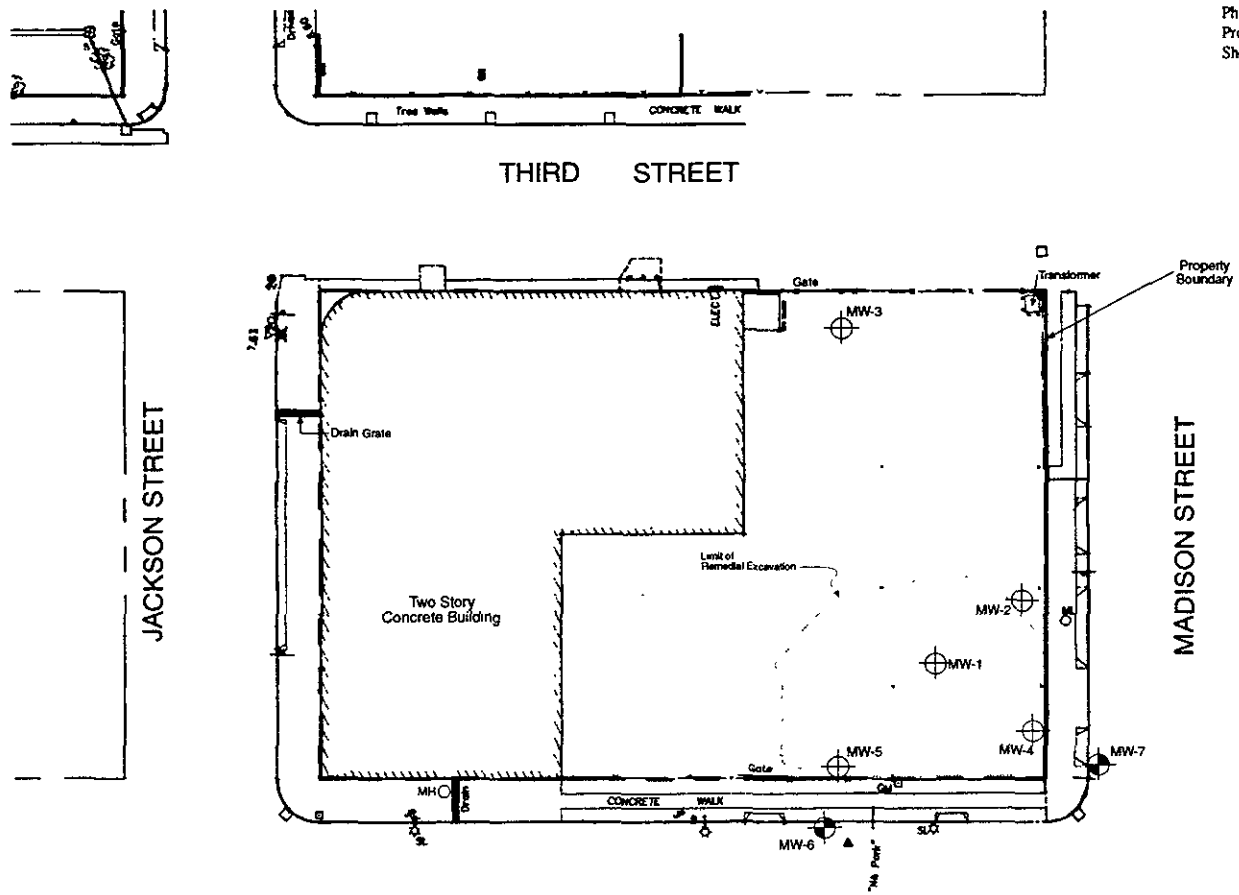
Basemap: AAA; Oakland-Berkeley-Alameda (2/91)

SITE LOCATION

208 Jackson Street, Oakland, California

FIG 1	**The San Joaquin Company Inc.**	Project Number: 9401.114
		Drawn by: GNM | Date: 11/15/99

Based on:
Philhppi Engineering (04/11/98)
Project: A.L.T.A. Survey Block 13 & Portions of 35 & 36
Sheet Title: S.N.K. Realty Group



REGISTERED PROFESSIONAL ENGINEER
D. J. WATKINS
No. 882
Exp 3/31/02
GEOTECHNICAL
STATE OF CALIFORNIA
01/28/99

0 50 100
SCALE IN FEET

WELL LOCATIONS
208 Jackson Street, Oakland, California

FIG. 2	**The San Joaquin Company Inc.**	Project Number	9401.114
		Drawn by: GNM	Date 01/28/99

San Joaquin Company, Inc.
8617 Etcheverry Drive
Tracy, CA 95376

Attn.: Mr. Bernie Dietz

Project: 9401.114
SNK WOLEE SME Oakland

Dear Bernie,

Attached is our report for your samples received on Thursday April 20, 2000
This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after May 20, 2000 unless you have requested otherwise. We appreciate the opportunity to be of service to you.
If you have any questions, please call me at (925) 484-1919. You can also contact me via email.
My email address is: gcook@chromalab.com

Sincerely,

Gary Cook

Gary Cook

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-04-0321

MTBE - Volatile Organics by GC/MS

San Joaquin Company, Inc.	✉ 8617 Etcheverry Drive Tracy, CA 95376
Attn: Bernie Dietz	Phone: (209) 832-2910 Fax: (209) 833-1288
Project #: 9401.114	Project: SNK WOLEE SME Oakland

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
MW 6	Water	04/20/2000 10:20	1
MW 7	Water	04/20/2000 10:50	2

To: **San Joaquin Company, Inc.**
Attn.: Bernie Dietz

Test Method: 8260A
Prep Method: 5030

MTBE - Volatile Organics by GC/MS

Sample ID:	**MW 6**	Lab Sample ID:	**2000-04-0321-001**
Project:	9401.114 SNK WOLEE SME Oakland	Received:	04/20/2000 13:25
		Extracted:	04/25/2000 10:43
Sampled:	04/20/2000 10:20	QC-Batch:	2000/04/24-02.39
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
MTBE	350	50	ug/L	10.00	04/25/2000 10:43	
Surrogate(s)						
1,2-Dichloroethane-d4	81.3	76-114	%	1.00	04/25/2000 10:43	

To: **San Joaquin Company, Inc.**
Attn.: Bernie Dietz

Test Method: 8260A
Prep Method: 5030

MTBE - Volatile Organics by GC/MS

Sample ID:	**MW 7**	Lab Sample ID:	**2000-04-0321-002**
Project:	9401.114 SNK WOLEE SME Oakland	Received:	04/20/2000 13:25
		Extracted:	04/24/2000 21:29
Sampled:	04/20/2000 10:50	QC-Batch:	2000/04/24-02.39
Matrix:	Water		

Sample/Analysis Flag Irn (See Legend & Note section)

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
MTBE	ND	25	ug/L	5.00	04/24/2000 21:29	
Surrogate(s)						
1,2-Dichloroethane-d4	95.1	76-114	%	1.00	04/24/2000 21:29	

To: **San Joaquin Company, Inc.**
Attn.: Bernie Dietz

Test Method: 8260A
Prep Method: 5030

Batch QC Report
MTBE - Volatile Organics by GC/MS

Method Blank | **Water** | **QC Batch # 2000/04/24-02.39**

MB: 2000/04/24-02.39-001 | Date Extracted: 04/24/2000 14:00

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Methyl tert-butyl ether (MTBE)	ND	5.0	ug/L	04/24/2000 14:00	
Surrogate(s)					
1,2-Dichloroethane-d4	95.8	76-114	%	04/24/2000 14:00	

To: **San Joaquin Company, Inc.** Test Method: 8260A

Attn: Bernie Dietz Prep Method: 5030

Batch QC Report

MTBE - Volatile Organics by GC/MS

Laboratory Control Spike (LCS/LCSD) **Water** **QC Batch # 2000/04/24-02.39**

LCS: 2000/04/24-02.39-002 Extracted: 04/24/2000 13:02 Analyzed 04/24/2000 13:02

LCSD: 2000/04/24-02.39-003 Extracted: 04/24/2000 13:31 Analyzed 04/24/2000 13:31

Compound	Conc. [ug/L]		Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Methyl tert-butyl ether	48.7	51.0	50.0	50.0	97.4	102.0	4.6	65-165	20		
Surrogate(s)											
1,2-Dichloroethane-d4	463	464	500	500	92.6	92.8		76-114			

To: **San Joaquin Company, Inc.**
Attn:Bernie Dietz

Test Method: 8260A
Prep Method: 5030

Legend & Notes

MTBE - Volatile Organics by GC/MS

Analysis Flags

lrn

Reporting limits raised due to high level of non-target analyte materials.

CHROMALAB, INC.
Environmental Services (SDB)

Submission #: 2000-04-0321

Diesel

San Joaquin Company, Inc.
8617 Etcheverry Drive
Tracy, CA 95376
Attn: Bernie Dietz
Phone: (209) 832-2910 Fax: (209) 833-1288
Project #: 9401.114
Project: SNK WOLEE SME Oakland

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
MW 6	Water	04/20/2000 10:20	1
MW 7	Water	04/20/2000 10:50	2

To: **San Joaquin Company, Inc.**
Attn.: Bernie Dietz

Test Method: 8015m
Prep Method: 3510/8015M

Diesel

Sample ID:	**MW 6**	Lab Sample ID:	**2000-04-0321-001**
Project:	9401.114 SNK WOLEE SME Oakland	Received:	04/20/2000 13:25
		Extracted:	04/20/2000 10:14
Sampled:	04/20/2000 10:20	QC-Batch:	2000/04/20-03.10
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	120	50	ug/L	1.00	04/21/2000 16:29	ndp
Surrogate(s)						
o-Terphenyl	93.4	60-130	%	1.00	04/21/2000 16:29	

To: **San Joaquin Company, Inc.**
Attn.: Bernie Dietz

Test Method: 8015m
Prep Method: 3510/8015M

Diesel

Sample ID:	**MW 7**	Lab Sample ID:	**2000-04-0321-002**
Project:	9401.114 SNK WOLEE SME Oakland	Received:	04/20/2000 13:25
		Extracted:	04/20/2000 10:14
Sampled:	04/20/2000 10:50	QC-Batch:	2000/04/20-03.10
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	3400	50	ug/L	1.00	04/21/2000 17:15	ndp
Surrogate(s)						
o-Terphenyl	92.2	60-130	%	1.00	04/21/2000 17:15	

To: **San Joaquin Company, Inc.**
Attn.: Bernie Dietz

Test Method: 8015m
Prep Method: 3510/8015M

Batch QC Report
Diesel

Method Blank | **Water** | **QC Batch # 2000/04/20-03.10**

MB: 2000/04/20-03.10-001 | Date Extracted: 04/20/2000 10:14

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Diesel	ND	50	ug/L	04/21/2000 00:42	
Surrogate(s)					
o-Terphenyl	96.0	60-130	%	04/21/2000 00:42	

To: **San Joaquin Company, Inc.**
Attn: Bernie Dietz

Test Method: 8015m
Prep Method: 3510/8015M

Batch QC Report

Diesel

Laboratory Control Spike (LCS/LCSD) **Water** **QC Batch # 2000/04/20-03.10**

LCS: 2000/04/20-03.10-002 Extracted: 04/20/2000 10:14 Analyzed 04/21/2000 01:16
LCSD: 2000/04/20-03.10-003 Extracted: 04/20/2000 10:14 Analyzed 04/21/2000 02:02

Compound	Conc. [ug/L]		Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Diesel	1020	1080	1250	1250	81.6	86.4	5.7	60-130	25		
Surrogate(s)											
o-Terphenyl	14.6	14.4	20.0	20.0	73.0	72.0		60-130			

To: **San Joaquin Company, Inc.**
Attn:Bernie Dietz

Test Method: 8015m
Prep Method: 3510/8015M

Legend & Notes

Diesel

Analyte Flags

ndp

Hydrocarbon reported does not match the pattern of our Diesel standard

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-04-0321

Gas/BTEX

San Joaquin Company, Inc.	✉ 8617 Etcheverry Drive Tracy, CA 95376
Attn: Bernie Dietz	Phone: (209) 832-2910 Fax: (209) 833-1288
Project #: 9401.114	Project: SNK WOLEE SME Oakland

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
MW 6	Water	04/20/2000 10:20	1
MW 7	Water	04/20/2000 10:50	2

To: **San Joaquin Company, Inc.**

Attn.: Bernie Dietz

Test Method: 8020
8015M

Prep Method: 5030

Gas/BTEX

Sample ID:	**MW 6**	Lab Sample ID:	**2000-04-0321-001**
Project:	9401.114 SNK WOLEE SME Oakland	Received:	04/20/2000 13:25
		Extracted:	04/21/2000 14:27
Sampled:	04/20/2000 10:20	QC-Batch:	2000/04/21-01.01
Matrix:	Water		

Sample/Analysis Flag Irn (See Legend & Note section)

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	250	ug/L	5.00	04/21/2000 14:27	
Benzene	ND	2.5	ug/L	5.00	04/21/2000 14:27	
Toluene	ND	2.5	ug/L	5.00	04/21/2000 14:27	
Ethyl benzene	ND	2.5	ug/L	5.00	04/21/2000 14:27	
Xylene(s)	ND	2.5	ug/L	5.00	04/21/2000 14:27	
Surrogate(s)						
Trifluorotoluene	79.8	58-124	%	1.00	04/21/2000 14:27	
4-Bromofluorobenzene-FID	84.2	50-150	%	1.00	04/21/2000 14:27	

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-04-0321

To: **San Joaquin Company, Inc.**

Attn.: Bernie Dietz

Test Method: 8020
8015M

Prep Method: 5030

Gas/BTEX

Sample ID:	**MW 7**	Lab Sample ID:	**2000-04-0321-002**
Project:	9401.114 SNK WOLEE SME Oakland	Received:	04/20/2000 13:25
		Extracted:	04/24/2000 11:14
Sampled:	04/20/2000 10:50	QC-Batch:	2000/04/21-01.01
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	8300	1000	ug/L	20.00	04/24/2000 11:14	
Benzene	1400	10	ug/L	20.00	04/24/2000 11:14	
Toluene	380	10	ug/L	20.00	04/24/2000 11:14	
Ethyl benzene	310	10	ug/L	20.00	04/24/2000 11:14	
Xylene(s)	1100	10	ug/L	20.00	04/24/2000 11:14	
Surrogate(s)						
Trifluorotoluene	63.6	58-124	%	1.00	04/24/2000 11:14	
4-Bromofluorobenzene-FID	73.3	50-150	%	1.00	04/24/2000 11:14	

To: **San Joaquin Company, Inc.**

Attn.: Bernie Dietz

Test Method: 8020
8015M

Prep Method: 5030

Batch QC Report

Gas/BTEX

Method Blank | **Water** | **QC Batch # 2000/04/21-01.01**

MB: 2000/04/21-01.01-001

Date Extracted: 04/21/2000 06:55

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	50	ug/L	04/21/2000 06:55	
Benzene	ND	0.5	ug/L	04/21/2000 06:55	
Toluene	ND	0.5	ug/L	04/21/2000 06:55	
Ethyl benzene	ND	0.5	ug/L	04/21/2000 06:55	
Xylene(s)	ND	0.5	ug/L	04/21/2000 06:55	
Surrogate(s)					
Trifluorotoluene	80.6	58-124	%	04/21/2000 06:55	
4-Bromofluorobenzene-FID	77.8	50-150	%	04/21/2000 06:55	

To: **San Joaquin Company, Inc.**

Test Method: 8020
8015M

Attn: Bernie Dietz

Prep Method: 5030

Batch QC Report

Gas/BTEX

Laboratory Control Spike (LCS/LCSD) **Water** **QC Batch # 2000/04/21-01.01**

LCS: 2000/04/21-01.01-002 Extracted: 04/21/2000 07:30 Analyzed 04/21/2000 07:30

LCSD: 2000/04/21-01.01-003 Extracted: 04/21/2000 08:04 Analyzed 04/21/2000 08:04

Compound	Conc. [ug/L]		Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Gasoline	464	479	500	500	92.8	95.8	3.2	75-125	20		
Benzene	88.7	84.6	100.0	100.0	88.7	84.6	4.7	77-123	20		
Toluene	85.3	80.4	100.0	100.0	85.3	80.4	5.9	78-122	20		
Ethyl benzene	88.1	81.3	100.0	100.0	88.1	81.3	8.0	70-130	20		
Xylene(s)	268	249	300	300	89.3	83.0	7.3	75-125	20		
Surrogate(s)											
Trifluorotoluene	396	380	500	500	79.2	76.0		58-124			
4-Bromofluorobenzene-FI	397	420	500	500	79.4	84.0		50-150			

To: **San Joaquin Company, Inc.**

Attn:Bernie Dietz

Test Method: 8015M
8020

Prep Method: 5030

Legend & Notes

Gas/BTEX

Analysis Flags

lrn

Reporting limits raised due to high level of non-target analyte materials.

51658

2000-04-0321

THE SAN JOAQUIN COMPANY INC.

☐ 8617 Etcheverry Drive, Tracy CA 95376
Voice (209) 832-2910 Fax (209) 833-1288

☒ 1120 Hollywood Ave No 3, Oakland, CA 94602
Voice (510) 336-9118 Fax (510) 336-9119

CHAIN OF CUSTODY / REQUEST FOR ANALYSIS RECORD

Project: SNK Wo LEE Site Oakland
Project No.: 9401.114
Sampling Team: DAI WATKINS / BERNIE DIETZ

Laboratory: CHROMALAB INC.
Carrier: ~~The San Joaquin Company~~
Waybill No.: ~~n/a~~

Sample No.	Type	Sampling Location	Date Sampled	Time Sampled	Analyses Requested	Lab. No.
MW6	H_2O	MONITORING WELL 6	04/20/00	10:30	TPH(G)+BTEX, TPH(D), MTBE BY METHOD 8260A.	
MW7	H_2O	MONITORING WELL 7	04/20/00	10:50		

Sample Hazards: V. Low Components of Fuel Hydrocarbons Priority: Routine ☒ Expedited ☐ Special ☐

Notes:

CUSTODY RECORD	Print Name	Company	Date Received	Time Received	Date Relinquished	Time Relinquished	Signature
Originator	~~Dai Watkins~~	SJC	—	—			
Received/ Relinquished by:	H. B. DIETZ	H.B. Dietz	4/20/00	1:25			
Received/ Relinquished by							
Received/ Relinquished by							
Received at Laboratory by	D. Harrington	CL	4/20/00	1325	—	—	Denise Harrington