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

Date April 26, 1999

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 December 1, 1998 to February 1999 – 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 Report

Dai welling

THE SAN JOAQUIN COMPANY INC.

1120 HOLLYWOOD AVENUE, SUITE 3, OAKLAND, CALIFORNIA 94602

QUARTERLY STATUS AND GROUNDWATER-QUALITY MONITORING

REPORT

DECEMBER 1, 1998 to FEBRUARY 28, 1999

208 Jackson Street, Oakland, California

Prepared for: SNK Development Inc

April 1999

Project No 9401 114

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 December 1, 1998 to February 28, 1999.

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

Between 1946 and 1947, a steel-framed building, approximately 2,450 ft² in plan area, 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 some time after the site formerly known as 205 Madison Street was developed for Marine Steel, presumably during the period when it served as a truck-rental facility, four underground storage tanks were installed on that property. These included 10,000-gallon and 8,000-gallon gasoline tanks and 10,000-gallon and 2,000-gallon diesel tanks.

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.

In September 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, an experienced contractor holding a Class A license with hazardous waste endorsement issued by the California State Contractor's License Board (CSCLB) to implement the remediation.

The remediation was conducted in compliance with a work plan approved by the ACHCS. (SJC, 1998. ACHCSA, 1998b, 1998c) 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 at that time. (ACHCSA, 1998a)

The remediation work plan calls for two groundwater-quality monitoring wells to be installed, one down gradient from and one cogradient to the area of the site where the subsurface had been affected by fuel hydrocarbons. These wells are to be used to monitor groundwater quality for a period of one year, at which time a risk analysis will be made based on the prevailing conditions and closure of the site will be considered.

ACTIVITY DURING THE REPORTING PERIOD

Following is a summary of activity related to the subject site for the period December 1, 1998 to February 28, 1999

Site Redevelopment

As noted above, all active remediation work within the boundaries of the site was completed in November 1998 and, with the approval of the ACHCSA, the site was released for redevelopment on December 3, 1998. During the reporting period, permits for demolition all remaining structures on the property were obtained from the City of Oakland and that work was initiated.

Installation of Groundwater-quality Monitoring Wells

As called for by the remediation work plan, on December 30, 1998, two groundwater-quality monitoring wells were installed down gradient from and cogradient to the area of the site where the subsurface had been affected by fuel hydrocarbons. These wells were designated Well MW-6 and Well MW-7. They are located as shown on Figure 2.

The City of Oakland granted a minor encroachment permit for installation of the wells in the public street. They were installed under the permit and oversight of the City of Oakland and the permit of the Alameda County Public Works Agency (ACPWA). Boring and well construction operations were performed by Gregg Drilling and Testing Inc. (Gregg), which holds the requisite C57 license issued, by the CSCLB. Gregg used a rubber-crawler mounted drilling rig equipped with 8-in diameter hollow stem augers to make the well borings, each of

which was continuously logged by a California-licensed geotechnical engineer. Each well has a total depth of 15.5 ft. Both wells are formed from machine-slotted, 2 in.- diameter Schedule 40 casing assemblies with No. 2-16 Monterey sand filter packs and 2-ft bentonite seals. Copies of the boring logs and the well construction details are included in Appendix A. The wells were developed by false bailing and pumping.

Each well was equipped with a dedicated, 1.5 in diameter Schedule 40 PBC bailer, which was suspended in the well by a nylon cord.

Soil Sampling

While the borings for the monitoring wells were being drilled, the drilling equipment was used to recover a soil sample in clean, 1.875-in diameter, brass tubes from a depth approximately 5 ft beneath the ground surface and at approximate 5-foot intervals thereafter to the bottom of each hole.

After each use, the sampling tools were thoroughly cleaned and rinsed in a five-percent solution of trisodium phosphate before being reused. Separate sets of clean augers were used in the separate borings to avoid the possibility of cross-contamination.

Following sample recovery, each sample tube was cleaned externally, its ends covered with aluminum foil and closed with tightly-fitting plastic caps. The caps were secured with adhesiveless tape. Each sample tube was then labeled for identification, entered into chain-of-custody control and packed on chemical ice for transport within 24 hours to Chromalab Inc.'s (Chromalab) laboratory in Pleasanton, California and held there in cold storage.

Each of soil samples submitted to the laboratory was analyzed for the following suite of analytes

<u>Analyte</u>	Method of Analysis
Total Petroleum Hydrocarbons (quantified as Diesel)	EPA Method 3500/8015
Total Petroleum Hydrocarbons (quantified as Gasoline)	EPA Method 5030/8015
Benzene	EPA Method 8020
Toluene	EPA Method 8020
Ethyl Benzene	EPA Method 8020
Total Xylene Polymers	EPA Method 8020

Chromalab's laboratory is certified by the California Environmental Protection Agency, Department of Toxic Substances Control (DTSC) to perform the above-cited analyses.

Disposal of Drill Cuttings and Development Water

The drill cuttings generated from the borings were retained in a wheelbarrow at each well head before being transported to a concrete-paved area of the site. There, the cuttings, which amounted to no more than twelve cubic feet, were spread and left to aerate.

The development water generated by the well construction operations was temporarily contained in a 50-gallon drum at the drilling site and disposed by decanting it to a non-draining, concrete-paved area of the site, from which it evaporated.

On January 9, 1999, a sample of the aerated cutting was obtained by quartering the material, removing a 0.5 cubic foot sample from each quarter, compositing the quarter, and driving a brass tube into the composite until it was completely full of soil. The tube was then closed, labeled and placed under chain of custody control in the manner previously described. It was delivered to Chromalab's laboratory where it was analyzed for TPH(d), TPH(g) and BTEX compounds The analytical results showed that of the foregoing suite of analytes, the sample contained only TPH(d) at a concentration of 12 mg/Kg. This is an order of magnitude below the clean-up criterion set by the remediation work plan for diesel in soil. Accordingly, the treated drill cuttings were combined with other treated soil on the site and, eventually, will be incorporated into the site's engineered backfill.

Note: On November 23, 1998, in compliance with the approved work plan and shortly before the site was released for redevelopment, monitoring wells MW-2 and MW-3 were closed by pressure grouting. This work was also performed by Gregg under the permit of the ACPWA. All other wells previously installed on the site had been closed, under permit, by excavation from the subsurface during the progress of the site remediation work.

Results of Analyses of Soil Samples

The results of the analyses of the soil samples are presented in Table 1. Copies of he Certificates of Analysis issued by the laboratory together with the associated chain of custody records can be found in Appendix B.

With the exception of diesel at the very low concentration of 3.5 mg/Kg in the sample recovered from a depth of 5 ft., no components of fuel hydrocarbons were detected in the samples of soil recovered from MW-6 That is consistent with the location of that well, which is close to the southwestern limit of the area of the subsurface that was affected by the release of fuels from the underground tanks previously located on the site.

The analyses of samples of soil from the boring drilled for monitoring well MW-7 show that components of fuel hydrocarbons are present in significant concentrations beneath the subsurface at that location. Gasoline is present in the soil beneath the street paving down to a depth of approximately five feet, where its concentration is 3300 mg/Kg. Although no diesel was detected at that depth, it was found at a concentration of 1900 mg/Kg at a depth of ten feet. Moderate to low concentrations of BTEX compounds were detected in the samples recovered from five and ten feet beneath the ground surface While no gasoline or diesel was detected in the sample recovered from a depth of 15.5 ft, traces of Toluene at 0.024 mg/Kg, Ethylbenzene at 0.017 mg/Kg and Total Xylene Polymers at 0.098 mg/Kg were detected at that depth.

The above data from the boring from monitoring well MW-7 are consistent with previously gathered site characterization data. That well is located down the groundwater gradient from the site boundary near the intersection of Second and Madison Streets. (See Figure 2 for location.) When hydrocarbon-affected soil was excavated from that corner of the site, it was necessary to excavate to depths of 10 to 12 feet beneath the ground surface to reach soil in which no traces of components of fuel hydrocarbons could be detected.

Groundwater-quality Monitoring

The first round of groundwater sampling and analysis employing wells MW-6 and MW-7 was conducted on January 9, 1999.

To initiate the sampling program, the depth to groundwater in both of the monitoring wells (MW-6 and MW-7) 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 2.

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 of them. 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, jars and bottles were then tightly closed, labeled for identification, entered into chain-of-custody control, and packed on chemical ice for transport to Chromalab's laboratory in Pleasanton, California for analysis.

Sample Analyses

Following receipt at the laboratory, each groundwater water sample was analyzed for the following suite of analytes.

<u>Analyte</u>	Method of Analysis
Total Petroleum Hydrocarbons (quantified as Diesel)	EPA Method 8015
Total Petroleum Hydrocarbons (quantified as Gasoline)	EPA Method 8015
Benzene	EPA Method 602

Toluene

EPA Method 602

Ethyl Benzene

EPA Method 602

Total Xylene Polymers

EPA Method 602

Results of Groundwater Analyses

The results of the analyses of the samples of groundwater recovered from monitoring well MW-6 and MW-7 are presented in Table 3.

A trace of xylene polymers at the very low concentration of 1.7 µg/L was found in the sample from monitoring well MW-6, but no other detectable components of fuel hydrocarbons were detected in that well. This is consistent with well MW-6's location close to the outer fringe of the underground plume of groundwater affected by hydrocarbons released at the site.

Consistent with MW-7's location - a short distance down gradient of the area within the site boundaries that was most heavily affected by the releases of gasoline and diesel - the groundwater sample recovered from that well was affected by TPH(d) at 1900 μ g/L, TPH(g) at 7200 μ g/L, Benzene at 410 μ g/L, Toluene at 550 μ g/L, Ethylbenzene at 120 μ g/L and Total Xylene Polymers at 1,200 μ g/L.

The above can be compared to the concentrations of fuel hydrocarbons detected in groundwater from now closed, on-site monitoring well MW-4, which were, when it was last tested on October 1, 1997: TPH(g) at 48,000 μ g/L, Benzene at 5,000 μ g/L, Toluene at 3,800 μ g/L, Ethylbenzene at 3,900 μ g/L and Total Xylene Polymers at 12,000 μ g/L. The direction of groundwater flow beneath the site is to the south and, as shown on Figure 2, well MW-4 was located approximately 25 feet upgradient from off-site monitoring well MW-7.

The order of magnitude decline in the concentrations of components of fuel hydrocarbons between those detected in the sample recovered from well MW-4 on October 1, 1997 and the sample recovered from monitoring well MW-7 on January 9, 1999 is attributed to a combination of factors. The first is the distance from the point at which fuels leaked into the subsurface. Secondly, all contaminated soil was removed from the subsurface, which had previously acted as a source of contamination for down gradient groundwater. Finally, natural attenuation of analyte concentrations have occurred with time due to natural bioremediation, which has been accelerated by the introduction of large quantities of oxygen into the groundwater under the action of the excavation machinery and from rainfall in the 1998-1999 wet season. That precipitation fell on the open remedial excavation in an area that had previous been shielded from precipitation due to its being under buildings and concrete pavement where surface water was directed away from the subsurface by drains.

ENGINEERING REPORTS AND FILINGS

During the reporting period, Well Completion Reports (Form 188) with attached boring logs, depth to groundwater and geochemical data were filed with the DWR and the ACPWA for the following wells, in compliance with Sections 13700 through 13806 of the California Water Code.

Well	Date	Action
MW-2	11/23/98	Closed by Pressure Grouting
MW-3	11/23/98	Closed by Pressure Grouting
WW-4	07/30/98	Destroyed by Excavation
MW-5	08/09/98	Destroyed by Excavation
MW-6	12/30/98	Installed
MW-7	12/30/98	Installed

WORK IN PROGRESS

The following work is in progress:

Groundwater-quality Monitoring

The second round of sampling from groundwater-quality monitoring wells MW-6 and MW-7 is scheduled for April 25, 1999.

Engineer's Report of Remediation

A formal engineer's report of remediation is being prepared that will document the environmental history of the site, including the work performed for the site remediation, and tabulations of all geotechnical and geochemical data gathered from the subject site over the years, together with assessments and evaluations of that data.

REFERENCES

- 1. 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. December 3, 1998.
- 2. 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.
- 3. 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. August 3, 1998

- Dietz Irrigation (1998) Report of Excavation and Treatment of Hydrocarbon Affected Soil – 208 Jackson Street, Oakland, California. November 30, 1998.
- 5. The San Joaquin Company Inc (1998), Remediation Plan 208 Jackson Street, Oakland, California. June 1998 (Revised October 1998).

TABLE 1
208 JACKSON STREET, OAKLAND, CA

RESULTS OF ANALYSES OF SOIL SAMPLES RECOVERED FROM GROUNDWATER-QUALITY MONITORING WELL BORINGS

Well No.	Sample No.	Date Sampled	Depth BGS ft.	TPHd (diesel) mg/Kg	TPHg (gasoline) mg/Kg	Benzene mg/Kg	Toluene mg/Kg	Ethyl- benzene mg/Kg	Total Xylenes mg/Kg
MW-6		12/30/1998 12/30/1998 12/30/1998	4.5 10.0 15.0	3.5 ND ND	ND ND ND	ND ND ND	ИD ИD DИ	ND ND ND	ND ND ND
MW-7	MW7-5.0 MW7-10.0 MW7-15.5	12/30/1998 12/30/1998 12/30/1998	5 10 15.5	ND 1900 ND	3300 ND ND	ND 0.015 ND	130 0.033 0.024	110 0.019 0.017	590 0.13 0.098

Notes: (1) ND = Not Detected above the Method Detection Limit (MDL).

TABLE 2 208 JACKSON STREET, OAKLAND, CA

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
MW-7	01/09/99	5.15	4.58	0.57
Notes:	(1) All eleva	ations in fee	et relative to me	an sea level (MS

TABLE 3
208 JACKSON STREET, OAKLAND, CA

RESULTS OF ANALYSES OF SAMPLES FROM GROUNDWATER-QUALITY MONITORING WELLS

Well No.	Date Sampled	TPHd μg/L	TPHg μg/L	Benzene μg/L	Toluene μg/L	Ethyl- benzene µg/L	Total Xylenes μg/L
MW-6	01/09/99	ND	ND	ND	ND	ND	1.70
MW-7	01/09/99	1900	7200	410	550	120	1200

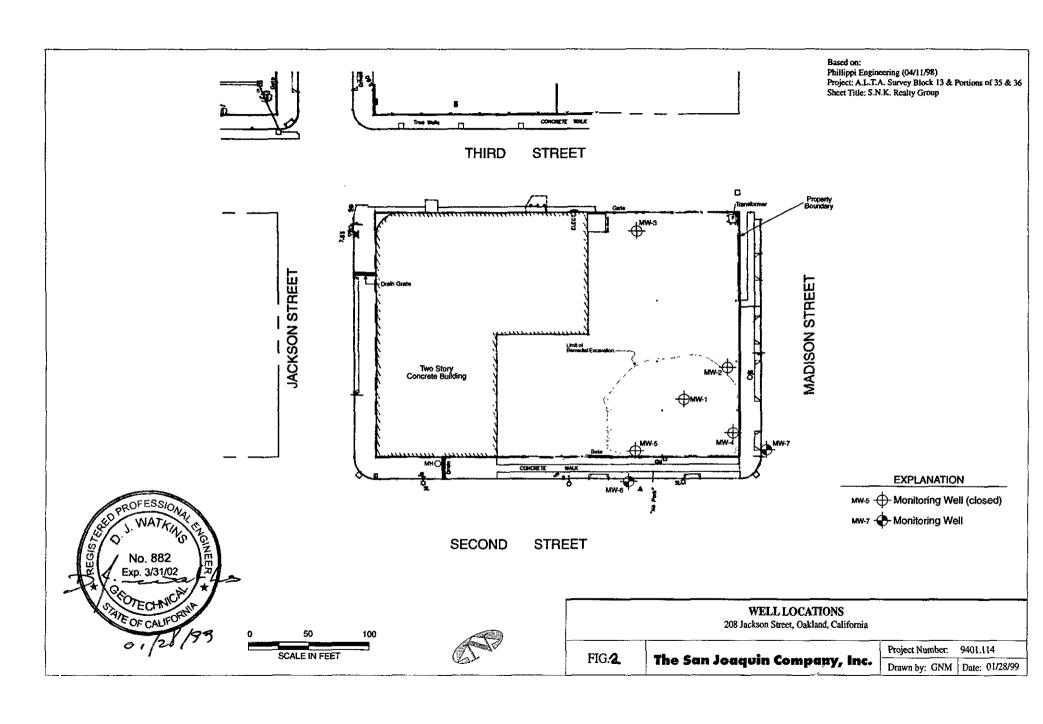
Notes: (1) ND = Not Detected above the Method Detection Limit (MDL).



FIG 1 The San Joaquin Company, Inc.

Project Number: 9401.113

Drawn by: GNM Date: 06/09/98



APPENDIX A

WELL LOGS

The San Joaquin Company, Inc.

Monitoring Well Log

WELL No.: MW-6 Project: Allegro @ Jack London Square Project No.: 9401.114

Owner: SNK Development, Inc. Location: 208 Jackson Street, Oakland, CA

Top of Casing Elevation: 5.63 ft. Surface Elevation: 5.92 ft.

Depth to Water: 4.57 ft.

Date Installed: 12/30/98 Total depth of Boring: 15.5 ft.

Boring Diameter: 8 in.

Well Casing Diameter: 2 in.

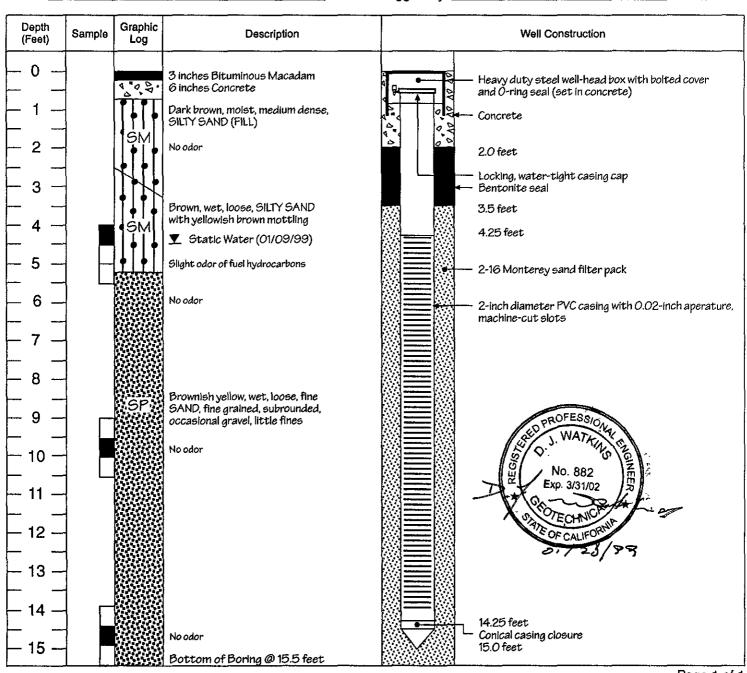
Total depth of Well: 15.0 ft.

Casing Material: PVC

Drilling Company: Gregg Drilling & Testing, Inc.

Drilling Method: 8-inch Hollow Stem Auger

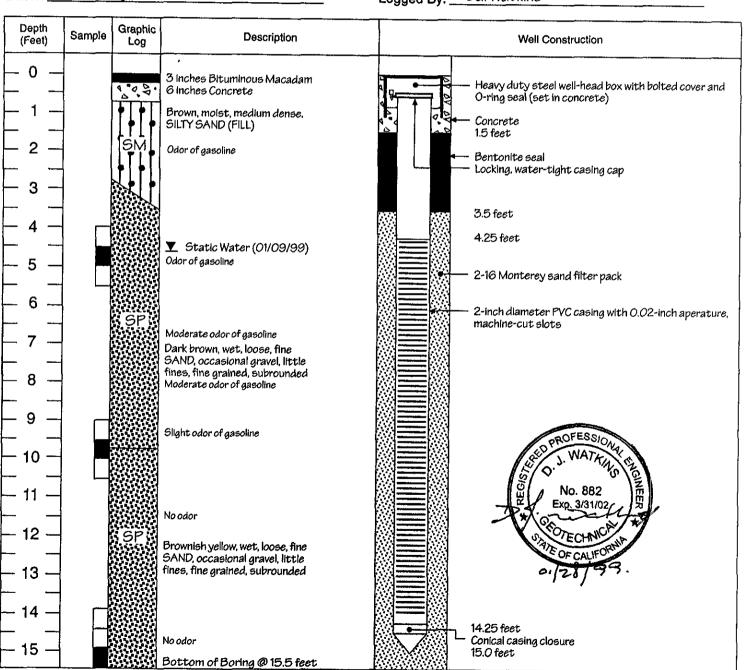
oriller: Trevor Joyner Logged By: Dai Watkins



The San Joaquin Company, Inc.

Monitoring Well Log

WELL No.: MW-7 Project: Allegro @ Jack London Square Project No.: 9401.114 Owner: SNK Development, Inc. Location: 208 Jackson Street, Oakland, CA Top of Casing Elevation: 5.15 ft. Surface Elevation: 5.73 ft. Depth to Water: 4.58 ft. Date Installed: 12/30/98 Total depth of Boring: 15.5 ft. Boring Diameter: __ 8 _ in. Well Casing Diameter: 2 in. Total depth of Well: 15.0 ft. Casing Material: PVC Drilling Company: Gregg Drilling & Testing, Inc. Drilling Method: 8-inch Hollow Stem Auger Trevor Joyner Driller: Logged By: Dai Watkins



APPENDIX B

LABORATORY CERTIFICATES OF ANALYSIS

Environmental Services (SDB)

January 15, 1999

Submission #: 9901105

DIETZ IRRIGATION

Atten: Bernie Dietz

Project: SNK OAKLAND

Received: January 11, 1999

re: 3 samples for TPH - Diesel analysis.

Method: EPA 8015M

Matrix: WATER

Extracted: January 12, 1999

Sampled: January 9, 1999 Run#: 16911 Analyzed: January 12, 1999

Spl#	CLIENT	SPL	ID	DIESEL (ug/L)	LIMIT (ug/L)	BLANK RESULT (ug/L)	SPIKE (%)	FACTOR
224563 224564	MW-6	<u> </u>		N.D. 1900	50 50	N.D. N.D.	73.6 73.6	1 1

Note: Hydrocarbon reported is in the late Diesel Range and does not match our

Diesel Standard.

Matrix: SOIL Extracted: January 12, 1999

Sampled: January 9, 1999 Run#: 16916 Analyzed: January 14, 1999

REPORTING BLANK BLANK DILUTION DIESEL * RESULT LIMIT SPIKE FACTOR CLIENT SPL ID (mq/Kq)(mg/Kg) (mg/Kg) (%) 224565 MW6&7 CUTTINGS 12 1.0 N.D.

Note: Hydrocarbon reported is in the late Diesel Range and does not match our

Diesel Standard.

Cardlyn House

Andlyet

Bruce Havli

Analyst

Environmental Services (SDB)

January 18, 1999

Submission #: 9901105

DIETZ IRRIGATION

Atten: Bernie Dietz

Project: SNK OAKLAND

Received: January 11, 1999

re: One sample for Gasoline BTEX analysis.

Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: MW6&7 CUTTINGS

Spl#: 224565

Matrix: SOIL

Sampled: January 9, 1999

Run#:16909

Analyzed: January 12, 1999

ANALYTE		RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	FACTOR	
GASOLINE		N.D.	1.0	N.D.	90	1	-
BENZENE		N.D.	0.0050	N.D.	82	1	
TOLUENE		N.D.	0.0050	N.D.	83	1	
ETHYL BENZENE	•	N.D.	0.0050	N.D.	83	1	
XYLENES		N.D.	0.0050	N.D.	79	1	

Vincent Vancil

Analyst

Michael Verona

Environmental Services (SDB)

January 18, 1999

Submission #: 9901105

DIETZ IRRIGATION

Atten: Bernie Dietz

Project: SNK OAKLAND

Received: January 11, 1999

re: One sample for Gasoline BTEX analysis.

Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: MW-6

Spl#: 224563

Matrix: WATER

Sampled: January 9, 1999 Run#:17003

Analyzed: January 15, 1999

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK I SPIKE (%)	FACTOR
GASOLINE	N.D.	50	N.D.	90	1
BENZENE	N.D.	0.50	N.D.	103	1
TOLUENE	N.D.	0.50	N.D.	101	1
ETHYL BENZENE	N.D.	0.50	N.D.	100	1
XYLENES	1.7	0.50	N.D.	95	1

Vincent Vancil

Analyst

Michael Verona

Environmental Services (SDB)

January 18, 1999

Submission #: 9901105

DIETZ IRRIGATION

Atten: Bernie Dietz

Project: SNK OAKLAND

Received: January 11, 1999

re: One sample for Gasoline BTEX analysis.

Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: MW-7

Spl#: 224564

Matrix: WATER

Sampled: January 9, 1999 Run#:17004

Analyzed: January 15, 1999

<u>ANALYTE</u>	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK DILUTION SPIKE FACTOR (%)
GASOLINE	7200	1000	N.D.	2020 20
BENZENE	410	10	N.D.	94 20
TOLUENE	550	10	N.D.	94 20
ETHYL BENZENE	120	10	N.D.	98 20
XYLENES	1200	10	N.D.	94 20

Vincent Vancil

Analyst

Michael Verona

SUDD W: JOHNSU REF: GC

Lable lake ucl. Es/10/30

Environmental Services (SDB) (DOHS 1094)

Chain of Custody

PROJ MGR 1/3 DIETZ ANALYSIS REPORT PURCEABLE AROMATICS
BTEX (EPA 602, 8020)
PURCEABLE HALOCARBONS
(EPA 601, 8010) COMPANY DIETE IRRIGATION Zu, Ni ADDRESS SUIT ETCLEVELLY Dr TRACY CA 95376 VOLATILE ORGANICS (EPA 624, 8240, 524.2) BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525) TOTAL OIL & GREASE (EPA 5520, 8+f, E+F) CAM METALS (17) PESTICIDES (EPA 608, 8080) (EPA 608, 8080) SAMPLERS (SIGNATURE) 209-852 2910 H.B. Duet TOTAL LEAD 209 833 1288 SAMPLE ID. X MW MW X X X PROJECT INFORMATION RELINQUISHED BY. SAMPLE RECEIPT RELINQUISHED BY 2. RELINQUISHED BY PROJECT NAME SUK OAK LAND TOTAL NO OF CONTAINERS 10:00 AP (SIGNATURE) **HEAD SPACE** REC'D GOOD CONDITION/COLD PRINTED NAME) PIZ (PRINTED NAME) P.O. # **CONFORMS TO RECORD** STANDARD (COMPANY) (COMPANY) RECEIVED BY RECEIVED BY 2. RECEIVED BY (LABORATORY) SPECIAL INSTRUCTIONS/COMMENTS (SIGNATURE) (PRINTED NAME)

Environmental Services (SDB)

January 11, 1999

Submission #: 9812428

DIETZ IRRIGATION

Atten: Bernie Dietz

Project: SNK-OAKLAND

Received: December 30, 1998

re: 6 samples for TEPH analysis.

Method: EPA 8015M

Matrix: SOIL

Extracted: January 4, 1999 Sampled: December 30, 1998 Run#: 16790

Analyzed: January 5, 1999

Diesel Motor Oil (mg/Kg) (mg/Kg) CLIENT SPL ID

223375 MW6-15.0 N.D.

Extracted: January 4, 1999 Matrix: SOIL

Sampled: December 30, 1998 Run#: 16790 Analyzed: January 6, 1999

Motor Oil Diesel (mg/Kg)(mg/Kg) CLIENT SPL ID Spl#

223377 MW7-10.0 \overline{N} .D. N.D. N.D. N.D.

223378 MW7-15.5

Extracted: January 4, 1999 Matrix: SOIL Analyzed: January 7, 1999 Run#: 16790 Sampled: December 30, 1998

Diesel Motor Oil (mg/Kg) (mg/Kg) Spl# CLIENT SPL ID

*223373 M*W6-4.5 N.D. 3.5 Note: Hydrocarbon reported is in the late Diesel Range and does not match our

Diesel Standard.

N.D. N.D. 223374 MW6-10.0 223376 MW7-5.0 N.D. N.D.

2.0 50 Reporting Limits N.D.

N.D. Blank Result 80.8 Blank Spike Result (%)

Bruce Havlík

Analyst

Environmental Services (SDB)

January 7, 1999

Submission #: 9812428

DIETZ IRRIGATION

Atten: Bernie Dietz

Project: SNK-OAKLAND

Received: December 30, 1998

re: 1 sample for TEPH analysis.

Method: EPA 8015M

Matrix: SOIL

Extracted: January 4, 1999

Analyzed: January 7, 1999 Sampled: December 30, 1998 Run#: 16790

Diesel Motor Oil (mg/Kg)(mq/Kq)CLIENT SPL ID

 \overline{N} .D. 223373 MW6-4.5 3.5 Note: Hydrocarbon reported is in the late Diesel Range and does not match our

Diesel Standard.

Reporting Limits 1.0 50

N.D. Blank Result N.D. Blank Spike Result (%) 80.8

Environmental Services (SDB)

January 7, 1999

Submission #: 9812428

DIETZ IRRIGATION

Atten: Bernie Dietz

Project: SNK-OAKLAND

Received: December 30, 1998

re: 2 samples for TEPH analysis.

Method: EPA 8015M

Matrix: SOIL

Extracted: January 4, 1999

Analyzed: January 5, 1999

CLIENT SPL ID

Sampled: December 30, 1998 Run#: 16790

Motor Oil Diesel

(mg/Kg) (mq/Kq)

N.D.

Diesel

223375 MW6-15.0

Matrix: SOIL

Extracted: January 4, 1999

N.D.

Sampled: December 30, 1998 Run#: 16790 Analyzed: January 7, 1999

Motor Oil CLIENT SPL ID (mg/Kg)(mq/Kq)223374 MW6-10.0 N.D. N.D. 50 Reporting Limits 1.0 Blank Result N.D. N.D. 80.8 Blank Spike Result (%)

Analyst

Analyst

Environmental Services (SDB)

January 7, 1999

Submission #: 9812428

DIETZ IRRIGATION

Atten: Bernie Dietz

Project: SNK-OAKLAND

Received: December 30, 1998

re: 1 sample for TEPH analysis.

Method: EPA 8015M

Matrix: SOIL

Extracted: January 4, 1999

Analyzed: January 7, 1999 Sampled: December 30, 1998 Run#: 16790

Spl# CLIENT SPL ID	Diesei (mg/Kg)	(mg/Kg)	
223376 MW7-5.0	N.D.	N.D.	
Reporting Limits	2.0	50	
Blank Result	Ŋ.D.	N.D.	
Rlank Spike Result (%)	80.8		

Analyst

Environmental Services (SDB)

January 6, 1999

Submission #: 9812428

DIETZ IRRIGATION

Atten: Bernie Dietz

Project: SNK-OAKLAND

Received: December 30, 1998

re: One sample for Gasoline BTEX analysis.

Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: MW6-4.5

Sp1#: 223373

Matrix: SOIL

Sampled: December 30, 1998 Run#:16800

Analyzed: January 5, 1999

ANALYTE	RESULT (mg/Kg)	LIMIT (mg/Kg)	RESULT (mg/Kg)	SPIKE (%)	FACTOR	
GASOLINE	N.D.	1.0	N.D.	103	1	
BENZENE	N.D.	0.0050	N.D.	93	1	
TOLUENE	N.D.	0.0050	N.D.	86	1	
ETHYL BENZENE	N.D.	0.0050	N.D.	82	1	
XYLENES	N.D.	0.0050	N.D.	86	1	

Vincent Vancil

Analyst

Environmental Services (SDB)

January 6, 1999

Submission #: 9812428

DIETZ IRRIGATION

Atten: Bernie Dietz

Project: SNK-OAKLAND

Received: December 30, 1998

re: One sample for Gasoline BTEX analysis.

Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: MW6-10.0

Sp1#: 223374

Matrix: SOIL

Sampled: December 30, 1998 Run#:16800

Analyzed: January 5, 1999

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK I SPIKE (%)	FACTOR
GASOLINE	N.D.	1.0	N.D.	103	1
BENZENE	N.D.	0.0050	N.D.	93	1
TOLUENE	N.D.	0.0050	N.D.	86	1
ETHYL BENZENE	N.D.	0.0050	N.D.	82	1
XYLENES	N.D.	0.0050	N.D.	86	1

Vincent Vancil

Analyst

Michael Verona

Environmental Services (SDB)

January 6, 1999

Submission #: 9812428

DIETZ IRRIGATION

Atten: Bernie Dietz

Project: SNK-OAKLAND

Received: December 30, 1998

re: One sample for Gasoline BTEX analysis.

Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: MW7-5.0

Spl#: 223376 Sampled: December 30, 1998 Matrix: SOIL

Run#:16803

Analyzed: January 6, 1999

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK DILUTION SPIKE FACTOR (%)	
GASOLINE	3300	200	N.D.	82 20	_
BENZENE	N.D.	12	N.D.	86 20	
TOLUENE	130	12	N.D.	88 20	
ETHYL BENZENE	110	12	N.D.	82 20	
XYLENES	590	12	N.D.	86 20	

Note: Surrogate Recoveries biased high due to Hydrocarbon co-elution.

Vincent Vancil

Analyst

Michael Verona

Environmental Services (SDB)

January 6, 1999

Submission #: 9812428

DIETZ IRRIGATION

Atten: Bernie Dietz

Project: SNK-OAKLAND

Received: December 30, 1998

re: One sample for Gasoline BTEX analysis.

Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: MW7-10.0

Run#:16800 Analyzed: January 4, 1999

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mq/Kg)	BLANK RESULT (mg/Kg)	BLANK I SPIKE (%)	FACTOR
GASOLINE	N.D.	1.0	N.D.	103	1
BENZENE	0.015	0.0050	N.D.	93	1
TOLUENE	0.033	0.0050	N.D.	86	1
ETHYL BENZENE	0.019	0.0050	N.D.	82	1,
XYLENES	0.13	0.0050	N.D.	86	1

Vincent Vancil

Analyst

Michael Verona

Environmental Services (SDB)

January 6, 1999

Submission #: 9812428

DIETZ IRRIGATION

Atten: Bernie Dietz

Project: SNK-OAKLAND

Received: December 30, 1998

re: One sample for Gasoline BTEX analysis.

Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: MW7-15.5

Spl#: 223378 Sampled: December 30, 1998 Run#:16822

Matrix: SOIL

Analyzed: January 5, 1999

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mq/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	104	1
BENZENE	N.D.	0.0050	N.D.	83	1
TOLUENE	0.024	0.0050	N.D.	84	ī
ETHYL BENZENE	0.017	0.0050	N.D.	86	ī
XYLENES	0.098	0.0050	N.D.	86	ī

Vincent Vancil

Analyst

Michael Verona

Environmental Services (SDB)

January 6, 1999

Submission #: 9812428

DIETZ IRRIGATION

Atten: Bernie Dietz

Project: SNK-OAKLAND

Received: December 30, 1998

re: One sample for Gasoline BTEX analysis.

Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: MW6-15.0

Spl#: 223375

Matrix: SOIL

Sampled: December 30, 1998 Run#:16800

Analyzed: January 5, 1999

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	RESULT (mg/Kg)	SPIKE FACTOR (%)	
GASOLINE	N.D.	1.0	N.D.	103 1	
BENZENE	N.D.	0.0050	N.D.	93 1	
TOLUENE	N.D.	0.0050	N.D.	86 1	
ETHYL BENZENE	N.D.	0.0050	N.D.	82 1	
XYLENES	N.D.	0.0050	N.D.	86 1	

Vincent Vancil

Analyst

Michael Verona

SUBN #: 5812428 REP: GC

CLIENT: DIETZ

81/86/99

KEF #:43864

Chain of Custody

DATE 12/30/98 PAGE Environmental Services (SDB) (DOHS 1094) PROJ. MGR BERNIE DIETZ PURCEABLE HALOCARBONS Ź NUMBER OF CONTAINERS PURGEABLE AROMATICS BTEX (EPA 602, 8020) (EPA 625/627, 8270, 525) Zu, BASE/NEUTRALS, ACIDS TOTAL RECOVERABLE
HYDROCARBONS (EPA PRIORITY POLLUTANT VOLATILE ORGANICS (EPA 624, 8240, 524.2) TOTAL OIL & GREASE METALS: Cd, Cr, Pb, CAM METALS (17) (EPA 608, 8080) EXTRACTION (TCLP, STLC) TOTAL LEAD (SID)-527-555 SAMPLERS (SIGNATURE) PESTICIDES SAMPLE ID. SAMPLE RECEIPT PROJECT INFORMATION RELINQUISHED BY 1. RELINQUISHED BY RELINQUISHED BY WATKINS TOTAL NO OF CONTAINERS SUK-OAKLAND PROJECT NUMBER (SIGNATURE) (SIGNATURE) (TIME) HEAD SPACE REC'D GOOD CONDITION/COLD (PRINTED NAME) (PRINTED NAME) (DATE) P.O. # CONFORMS TO RECORD STANDARD (COMPANY) (COMPANY) OTHER RECEIVED BY RECEIVED BY RECEIVED BY (LABORATORY) SPECIAL INSTRUCTIONS/COMMENTS. 6 tubes (SIGNATURE) (SIGNATURE) (TIME) (PRINTED NAME) (PRINTED NAME) (DATE) (COMPANY) (LAB)