

11:37 am, Jun 20, 2007

Alameda County Environmental Health



June 18, 2007

Jerry Wickham, P.G. Hazardous Materials Specialist ALAMEDA COUNTY ENVIRONMENTAL HEALTH SERVICES 1131 Harbor Bay Parkway, Suite 250 Alameda, California 94502-6577

Project No. 33107-007526.00

Subject: Addendum to Subsurface Investigation Report Clorox Services Company, 7280 Johnson Drive, Pleasanton, CA SLIC Fuel Leak Case No. RO0002859

Dear Mr. Wickham:

Bureau Veritas North America, Inc. (Bureau Veritas) is submitting this Addendum to the April 2, 2007 Subsurface Investigation Report on behalf of Clorox Services Company (Clorox) for the subject site. This Addendum includes available information related to the following issues requested by Alameda County Environmental Health (ACEH) in its May 7, 2007 letter:

- Provide confirmation that the five groundwater monitoring wells (MW-1 through MW-5) installed at the subject site have been decommissioned.
- ACEH files do not include information on a fuel leak investigation related to the 1989 underground storage tank (UST) removal. Submit data and reports for site investigation activities and the five monitoring wells related to the three USTs removed in 1989.

We are providing the requested information primarily based on public file reviews we performed in June 2006 to obtain information related to previous investigations at the site at the following agencies: Livermore Pleasanton Fire Department, ACEH, the Regional Water Quality Control Board, and the City of Pleasanton.

Decommissioning of Five Monitoring Wells

Groundwater monitoring well MW-1 was installed by Kleinfelder in December 1988 during a UST investigation at the Site. MW-1 was destroyed by Paradiso Mechanical in December 1989 during the removal of three USTs at the subject site. Information regarding the destruction of MW-1 was described in the following reports which are included in Attachment 1: August 16, 1993 letter from Dillingham Construction to the Pleasanton Fire Department and multiple Data Reports from Kleinfelder.

Bureau Veritas North America, Inc.

6920 Koll Center Parkway, Suite 216 Pleasanton, CA 94566 Main (925) 426-2600 Fax (925) 426-0106 www.us.buzeauveritas.com



Jerry Wickham Alameda County Environmental Health June 18, 2007 Page 2

Project Number 33107-007526.00

Bureau Veritas contacted the Zone 7 Water Agency to request a copy of a decommissioning report. Zone 7 stated that its electronic database indicated MW-1 was destroyed, but Zone 7 did not have a copy of the decommissioning report. Zone 7 said they would request a copy of the report from Kleinfelder. As of the date of this Addendum, Zone 7 has not received a report from Kleinfelder nor provided Bureau Veritas with additional information.

Groundwater monitoring wells MW-2 through MW-5 were installed by Kleinfelder in October 1990. Groundwater monitoring wells MW-2 through MW-5 were decommissioned in December 2006 under a permit issued by Zone 7. A copy of the February 2007 report documenting the decommissioning of groundwater monitoring wells MW-2 through MW-5 is included in Attachment 2.

Data and Reports for Site Investigation Activities and Five Monitoring Wells Related to the Three USTs Removed In 1989

During the agency file reviews, we found the reports listed below contained soil and groundwater investigation data related to the USTs and the groundwater monitoring wells. Copies of the reports listed below are included in Attachment 1.

- August 29, 1989 Underground Tank Closure Plan
- May 24, 1990 Data Report Well Point Sampling Activities
- January 28, 1991 Supplemental Soil and Ground Water Investigation
- November 11, 1992 Data Report for Fourth Quarterly Ground Water Sampling Event
- July 6, 1993 Data Report for Sixth Quarterly Ground Water Sampling Event
- August 16, 1993 Request for Closure
- December 9, 1993 UST Case Closure letter from the RWQCB

<u>Closing</u>

If you have any questions, please contact me at (925) 426-2681 or Mr. Chet Green of Clorox at (925) 425-6624. I declare, under penalty of perjury, that the information contained in this report is true and correct to the best of my knowledge.

Sincerely,

Michael J. Zimmerman, P.E., R.E.A. Manager, Environmental Compliance Environmental Services

MJZ/mjz

Met

Craig Pelletier, P.G. Project Manager Environmental Services



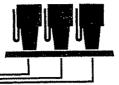
Attachments cc: Chet Green, Clorox Services Company

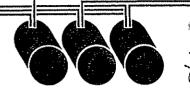


ATTACHMENT 1

INVESTIGATION REPORTS RELATED TO 1989 UST REMOVAL

PARADISO CONSTRUCTION CO. GENERAL & PETROLEUM CONTRACTORS





 $\begin{array}{c} \text{Date} & \underline{9/29/04} & \text{by} & \underline{0.4} & \underline$

UNDERGROUND TANK CLOSURE PLAN

Please consider this document a Proposed Closure Plan for the removal of an underground storage tanks, with associated piping. The tanks are located at Dillingham Construction, 7280 Johnson Drive, Pleasanton, CA. The tanks are used to store gasoline.

Tank Owner:	John Sales Dillingham Construction 5960 Inglewood Drive Pleasanton, CA 94566	n Corporation
Size of tanks:	(1) 8,000 gallon (1) 8,000 gallon (1) 500 gallon	Age: 5 yrs. Age: 5 yrs. Age: 5 yrs.

Tank Type:

Steel

Removal Reason: Not used

Any residual liquid will be pumped out prior to tank removal by H & H Ship Service, 220 China Basin, San Francisco, (415)543-4835, TSD #38-001-78. Material, if any, will be manifested on-site and transported by a registered hazardous waste hauler to an appropriate licensed hazardous waste disposal facility, H & H Ship Service, EPA ID #CAD004771168.

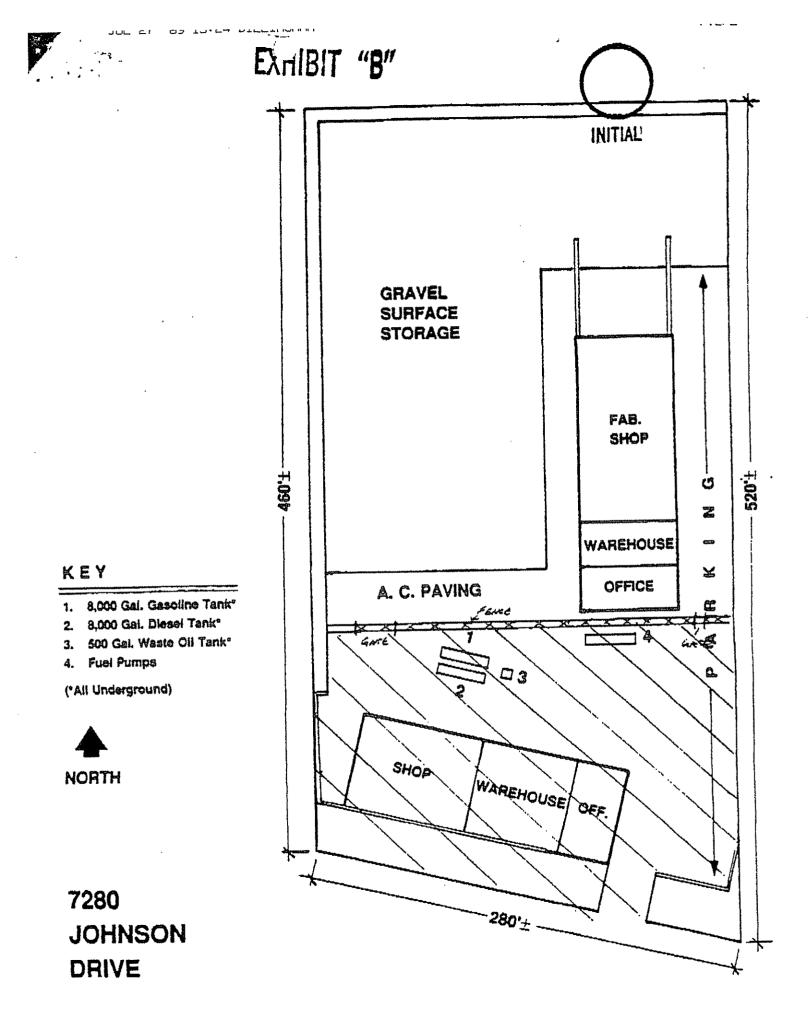
All vapors will be purged from tanks 1 hour prior to removal and when transported, by using 50 pounds carbon dioxide (dry ice) per 1,000 gallon tank capacity.

Tanks and associated piping will be removed by Paradiso Construction Co., 9220 "G" Street, Oakland , CA (415)562-5511.

Tanks and associated piping will be transported and/or decontaminated by H & H Ship Service. It is then transported to Levine Metals, Richmond for scraping.

Clean excavated material will be stockpiled on-site for use in backfilling the excavation.

Upon the removal of the tank and associated piping, soil samples will be taken and analyzed by Trace Analysis Lab, State Certificate #122, Hayward, CA (415)783-6960.



who was

KLEINFELDER

May 24, 1990 File: 10-1944-02

Mr. John Sales Director of Equipment Dillingham Construction, Inc. P.O. Box 1089 Pleasanton, CA 94566

SUBJECT: Data Report - Well Point Sampling Activities, Dillingham Construction Site, 7280 Johnson Drive, Pleasanton, California

Dear Mr. Sales:

Kleinfelder is pleased to submit this data report summarizing results of the well point sampling conducted around Dillingham Construction's former underground storage tank area, at 7280 Johnson Drive in Pleasanton, California (Plate 1)

BACKGROUND

Dillingham Construction operated three underground storage tanks at a site located at 7280 Johnson Drive which they are currently leasing from the Clorox Company and subleasing to Regional Ambulance. The three tanks were used to store gasoline, diesel fuel and waste oil. The gasoline tank was suspected of leaking based on pressure test results. However, Dillingham felt the source of the pressure leak was in vent lines and not in the product lines or the tank.

In December 1988 Kleinfelder was contracted to conduct an assessment of soil and water quality surrounding three underground storage tanks at the site. Field activities included drilling of four borings around the tanks for the collection of soil samples. Additionally, one boring was completed as a ground water monitoring well. Soil samples collected from above ground water in borings B-2 and MW-1 (Plate 2) were found to contain gasoline at concentrations of 120 and 2.2 parts per million (ppm) respectively. Benzene, toluene, total xylenes and ethylbenzene (BTXE) were also detected in the two soil samples at concentrations ranging from 32 to 2,800 parts per billion (ppb). The water sample collected from MW-1 was found to contain gasoline at 0.5 ppm, benzene at 29 ppb, toluene at 89 ppb, total xylenes at 150 ppb and ethylbenzene at 32 ppb.

In December 1989 Dillingham Construction contracted with Paradiso Construction Company to remove the three underground storage tanks. During removal of the tanks water was entering the excavation. The source of the water was unknown at that time.

In January 1990 the tenants at the site determined that water was leaking from a ruptured water line at rates up to 50,000 gallons per day. The water leak was from a supply line located between the Regional Ambulance Building and a building to the north (Plate 2).

The need for an additional ground water quality assessment was discussed during a site meeting with Regional Water Quality Control Board and Pleasanton Fire Department

(119) 10-1944-02-165

personnel on January 22, 1990. Because of the water line rupture, hydrocarbons may have migrated in a variety of directions. Therefore, well points were selected as a cost effective means of collecting water samples around the tank excavation. Additionally, it was decided that once the water had been removed from the tank excavation, closure samples would be collected from the excavation and the stockpiled soils would be characterized with discrete samples.

When the leak was finally repaired and the excavation pumped out, additional soils were removed and soil samples collected by Paradiso Construction. Soil samples were collected on February 14, 1990. Four soil samples were collected from depths between 14 and 15 feet below grade in each of the corners of the tank excavation. The two samples collected from the diesel tank side of the excavation were analyzed for total petroleum hydrocarbons (TPH) as diesel and BTXE. One of those samples, collected near the waste oil tank was also analyzed for oil and grease. The two soil samples collected from the gasoline tank side of the excavation were analyzed for TPH as gasoline and BTXE.

Additional soil samples were collected by Paradiso from the pump and pump line areas, and stockpiled soils. The pump and pump line area samples were collected from the base of their respective excavations. Samples collected from beneath the pump lines were analyzed for TPH as gasoline and BTXE. Samples collected from beneath the pumps were analyzed for TPH as both gasoline and diesel and for BTXE.

We understand that Paradiso Construction used the sampling method outlined in the "Draft Staff Recommendations for Stockpile Characterization", issued January 12, 1990 by the RWQCB. Four discrete samples were collected from the approximately 80 cubic yards of soil stockpiled at the site. The two samples collected from soils excavated from the diesel tank side of the excavation (south side) were analyzed for TPH as diesel and BTXE. Additionally, one sample collected from soils excavated from the diesel tank side of the excavated from the gasoline tank side of the excavation (north side) were analyzed for TPH as diesel tank side of the excavated from the diesel tank side of the excavation near the waste oil tank was also analyzed for oil and grease. The two samples collected from soils excavated from the gasoline tank side of the excavation (north side) were analyzed for TPH as gasoline and BTXE.

A complete copy of Paradiso Construction's sample location map and analytical results along with a copy of the RWQCB's stockpiled soil sampling recommendations are included in Appendix B of this report.

The four excavation closure samples were found to contain toluene at concentrations ranging from 37 to 81 ppb. No other hydrocarbons or volatile organic compounds were detected in the tank pit closure samples. Toluene and xylenes were detected (at 58 and 5 ppb respectively) in the soil sample (PB2) collected from the west end of the pump island excavation. The sample collected from the east end of the pump island excavation was found to contain toluene at a concentration of 590 ppb. No hydrocarbons were detected in the two samples collected from the product line excavation. Two of the stockpiled soil samples collected from soils excavated from the diesel tank side (south side) of the excavation were found to contain toluene at concentrations of 17 and 100 ppb. No hydrocarbons were detected in the two samples collected in the two samples collected in the two samples collected from the diesel tank side (north side) of the excavation.

DISCUSSION OF EXCAVATION ACTIVITIES

Ground water at the site was first encountered at depths of approximately 17 to 18 feet below grade during drilling activities in 1988. Soils in the 15 to 17 foot depth interval varied from moist to wet. When left open, water levels in the borings would slowly rise. Water levels would generally stabilize at approximately 14.5 to 15 feet below grade. All soils at the site consist of silty clays and clays. At this time it is uncertain whether ground water is under semi-confined conditions or simply very slow to enter the borehole. It appears that the excavation closure samples were collected at or near the top of ground water. Therefore, the toluene detected in the final closure samples may be from ground water borne contamination.

Toluene detected in the excavation closure samples were at concentrations below the maximum contaminant level (MCL) for primary drinking water (2000 ppb) and below the Department of Health Services Action Level (100 ppb). Based on these observations and after discussions with Mr. Rick Heitel of the RWQCB and Mr. Rick Mueller of the Pleasanton Fire Department, it was decided to backfill the excavation and continue on with a ground water investigation. Additionally, it was decided that the stockpiled soils would be hauled to Benicia and used as road base material on roads and parking areas at Dillingham's equipment yard.

WELL POINT SURVEY

The well point survey was conducted on March 14, 1990. Well point installation and sampling was conducted by NET Pacific, Inc. Samples were analyzed onsite by NET Pacific's mobile laboratory.

Upon arriving at the site monitoring well MW-1 was found to have been covered with pea gravel and was inaccessible. Therefore, a sample could not be collected or water levels measured in the well. Therefore, the target depth for the well points was selected at 17 to 18 feet below grade based on observations made during drilling in 1988. A total of 8 well points were installed around the tank excavation. Locations of the well points are shown on Plate 2.

The well points consisted of 0.75-inch diameter (ID) galvanized steel pipe which had been thoroughly cleaned with detergent and steam. The well points were pneumatically driven with stainless steel insert pipe extending 6 to 18-inches beyond the galvanized outer pipe. When the well points were driven to the desired depths the stainless steel insert was removed. Water was then to have been purged and samples collected using small stainless steel bailers. However, site specific conditions complicated the collection of water samples.

Soils beneath the site consist predominantly of clays and silty clays. The clays were apparently sufficiently tight or were smeared by driving the well points so that water would not enter the well points (even under applied vacuum) in all the points except P-4 (Plate 2). Two points (P-1 and P-2) were incrementally driven to depths of 23.5 and 36 feet below grade in unsuccessful attempts to find free flowing water at deeper depths. Therefore, wet soil samples were collected in lieu of water samples from most of the well points. The soil stainless insert to the prescribed depth interval. The stainless steel insert was then removed and the well point checked for water. If a water sample was unobtainable, then the outer galvanized pipe with soils. The galvanized pipe was then removed and the pipe with soils. The galvanized pipe was then removed and the pipe cut and sealed with aluminum foil prior to submittal to the mobile laboratory.

The soil sample collected from P-3 was from a depth of 13 feet below grade. This well point was first driven to 18 feet without ground water being encountered. When attempting to collect a soil sample the well point broke. Another well point was then driven adjacent to the first one. The well point again broke when attempting to collect a soil sample. However, the broken end of the well point (at 13 feet below grade) did fill up with soil. This soil was analyzed and data has been included in this report.

ANALYTICAL RESULTS

Samples were analyzed for total petroleum hydrocarbons (TPH) expressed as gasoline (modified EPA Method 8015), and benzene, toluene, total xylenes and ethylbenzene (EPA Method 602/8020). Analytical results are summarized in Table 1. Complete laboratory reports are included in Appendix A.

Gasoline was detected only in well point P-5 (2.5 ppm). The highest detected concentrations of benzene, toluene, total xylenes and ethylbenzene were also detected in P-5 (24, 38, 230 and 86 ppb respectively). P-1 which was collected adjacent to P-5, but from a depth of 23.5 feet and was not found to contain detectable hydrocarbons. Well points P-4, P-7 and P-8 were found to contain lower concentrations of benzene and total xylenes (benzene at 4.3 to 19 ppb; total xylenes at 2.3 to 14 ppb). Well point P-6 contained total xylenes at a concentration of 18 ppb. No hydrocarbons were detected in P-3 and no samples were analyzed from P-2.

DISCUSSION OF WELL POINT SURVEY

Well point data collected during this phase of work suggest that shallow ground water around the tank area has been impacted. Primary areas impacted appear to be to the south and east of the former tanks.

Because of tight clays beneath the site well points do not perform well for the collection of water samples. The wet soil samples used in this phase of work can be expected to approximate concentrations in ground water. However, these concentrations should be confirmed with actual ground water sample analyses. Additionally, the horizontal extent of contamination to the south of the tank and pump island areas will have to be assessed. This may require installation of a well either in the building or to the south of the building.

LIMITATIONS

This report was prepared in general accordance with the accepted standard of practice which exists in Northern California at the time the investigation was performed. It should be recognized that definition and evaluation of environmental conditions is a difficult and inexact art. Judgements leading to conclusions and recommendations are generally made with an incomplete knowledge of the conditions present. More extensive studies, including additional environmental investigations, can tend to reduce the inherent uncertainties associated with such studies. If the Dillingham Construction wishes to reduce the uncertainty beyond the level associated with this study, Kleinfelder should be notified for additional consultation.

Our firm has prepared this report for the Dillingham Construction's exclusive use for this particular project and in accordance with generally accepted engineering practices within the area at the time of our investigation. No other representations, expressed or implied, and no warranty or guarantee is included or intended.



TABLE 1

Well Point Sampling Results Concentrations in ppb (µg/kg; µg/l)^a 7280 Johnson Drive Pleasanton, California

KLEINFELDER

Well Point	Sample MATRIX	Sample Depth (feet)	TPH ^b (gasoline)	Benzene	Toluene	Total Xylenes	Ethylbenzene
P-1	Wet Soil	23.5	ND	'ND	ND	ND	ND
P-3	Wet Soil	13	ND	ND	ND	ND	ND
P-4	Water	17	ND	4.3	ND	2.3	ND
P-5	Wet Soil	18	2,500	24	38	230	86
P-6	Wet Soil	18	ND	ND	ND	18	ND
P-7	Wet Soil	18	ND	19	ND	14	ND
P-8	Wet Soil	18	ND	5	ND	11	ND
Detection Limit ^c		, , , , , , , , , , , , , , , , , , ,	1000(50)	5(0.5)	5(0.5)	5(0.5)	5(0.5)

NOTES:

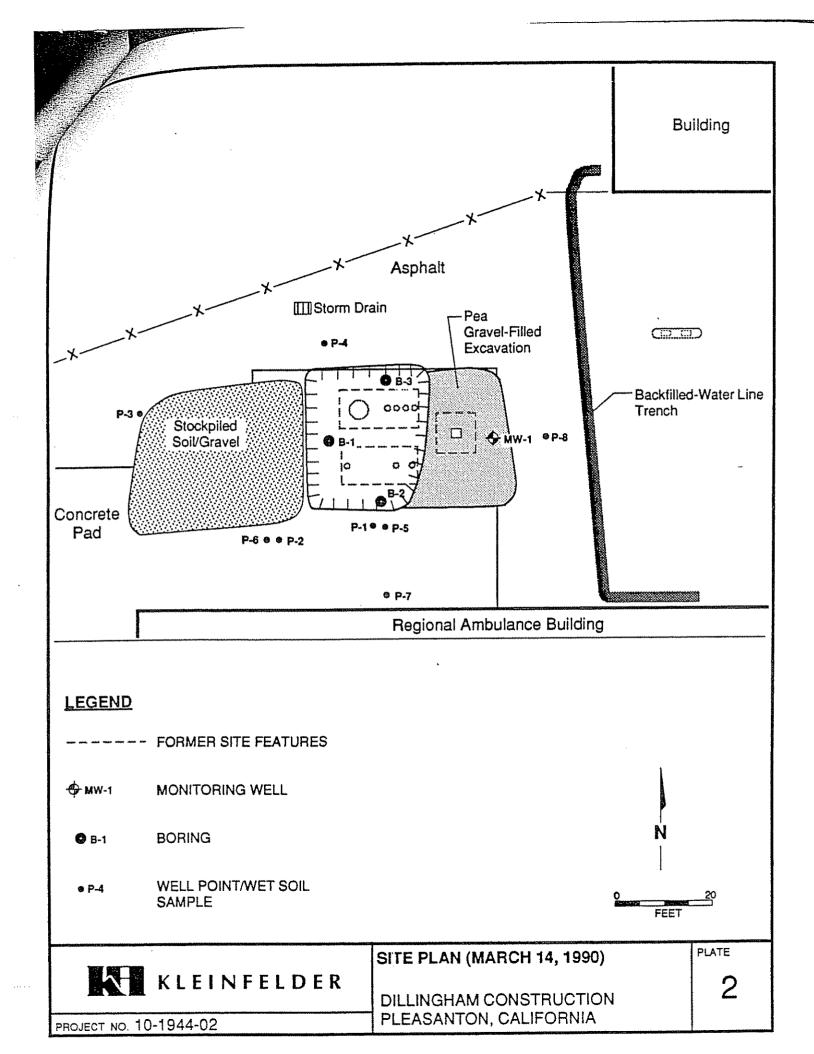
a

b

Call and a second set of a second second

С ND

Units: soil μ g/kg, water μ g/l Total Petroleum Hydrocarbons Detection Limit for Water Sample Shown in Parenthesis Not Detected at or Above Laboratory Reporting Limit



KLEINFELDER

SUPPLEMENTAL SOIL AND GROUND WATER INVESTIGATION DILLINGHAM CONSTRUCTION, INC. PLEASANTON, CA

. .

January 28, 1991

1 INTRODUCTION

This report describes work conducted by Kleinfelder, Inc. (Kleinfelder) for Dillingham Construction on their property located at 7280 Johnson Drive in Pleasanton, California (see Plate 1). The investigation focused on soil and ground water quality in the vicinity of an underground storage tank (UST) vault that was located on the property. Three USTs used to store gasoline, diesel, and waste oil (one UST for each product) were located in the tank vault. The locations of the building on site, a former pump island, former underground fuel storage tanks, monitoring wells, and other important site features are shown on Plate 2.

1

2 PROJECT SUMMARY

2.1 PREVIOUS INVESTIGATIONS

In December 1988, at the request of Dillingham Construction, Inc., Kleinfelder conducted an assessment of soil and ground water quality in the vicinity of three underground storage tanks (USTs). The tanks were located in a single tank vault on the Dillingham property at 7280 Johnson Drive, Pleasanton, California. The USTs were used for storage of gasoline, diesel, and waste oil. Kleinfelder's investigation consisted of drilling four soil borings and completing one of the borings as a monitoring well. Laboratory analysis indicated that the soil and ground water samples analyzed contained detectable concentrations of gasoline. Subsequently, in <u>December 1989</u>, <u>Dillingham Construction contracted Paradiso</u> Construction to remove the <u>USTs</u>.

During UST removal an unusually large quantity of ground water (up to 50,000 gallons per day) was noted to be entering the excavation. The source of the water was found to be a broken water pipe located just east of the tank vault. After repairing the water pipe, petroleum hydrocarbon contaminated soils were excavated from the tank vault. Closure samples were then collected by Paradiso Construction to assess residual concentrations of petroleum hydrocarbons in the tank excavation. Low concentrations of toluene were detected in the closure soil samples.

In May of 1990, a ground water probe survey was conducted as part of additional site study by Kleinfelder. The purpose of the study was to assess the potential impact of petroleum hydrocarbon soil contamination on ground water. During the ground water probe survey the presence of fine-grained soils (low permeability) hampered efforts to collect ground water samples. Consequently, the bulk of the samples collected and analyzed were saturated soil samples. Based on the results of laboratory analysis, soil samples collected at a depth of approximately 18 feet (first water occurs at 14 to 16 feet) contained detectable concentrations of fuel petroleum hydrocarbons (gasoline). Laboratory results from the ground water probe survey are included in this report as Table 3. The soil sample collected at 18 feet in ground water probe P-5 contained 2,500 micrograms/liter (ug/l) of total petroleum hydrocarbons reported as gasoline (TPHg). This was the highest concentration detected in the samples analyzed. As shown on Plate 2, ground water probe P-5 was located roughly three feet south of the former tank vault excavation.

A complete discussion of the previous site work summarized above is presented in Kleinfelder's reports 10-1944-01 dated January 31, 1989, and 10-1944-02, dated May 24, 1990.

2.2 CURRENT INVESTIGATION

In order to further assess the potential presence of ground water contamination in the vicinity of the former USTs four soil borings were drilled. Each of the borings was completed as a monitoring well. Monitoring wells MW-2, MW-3, and MW-4, were placed adjacent to the former tank vault (see Plate 2). Monitoring well MW-5 was placed approximately 40 feet south of the former tanks to provide additional water level data and to evaluate water quality in that area of the site.

The results of laboratory analysis of soil and ground water samples indicate that detectable concentrations of fuel petroleum hydrocarbons are present in ground water adjacent to the former tank vault.

3 RESULTS AND CONCLUSIONS

The following results and conclusions are presented based on the scope of work described in this report. Site features, the locations of monitoring wells, sampling points, boring logs, and analytical summaries are included in the Tables, Plates and Appendices of this report, and may serve as a reference for the following results and conclusions.

3.1 RESULTS - SOILS

Soil samples from borings/monitoring wells MW-2 at 14.5 feet and MW-3 at 15 feet were analyzed for total petroleum hydrocarbons quantified as gasoline (TPHg), and benzene, ethylbenzene, toluene, and xylenes (BETX). As shown in Table 1, concentrations of TPHg or BTEX were not detected at or above the laboratory detection limits.

3.2 **RESULTS - GROUND WATER**

Monitoring well MW-2 was located within two feet of Kleinfelder's previous ground water probe location P-5. The ground water sample collected from MW-2 contained 0.9 milligrams per liter (mg/l) of TPHg. The sample also contained detectable concentrations of the following compounds: 57 ug/l of benzene, 1 ug/l of toluene, 110 ug/l of ethylbenzene, and 3 ug/l of total xylenes (see Table 1).

The ground water sample collected from monitoring well MW-3 contained benzene at a concentration of 0.6 ug/l. This monitoring well is located at the northwestern corner of the excavation.

Ground water samples collected from monitoring wells MW-4 and MW-5 did not contain of TPHg or BTXE compounds at or above the laboratory detection limits. These wells are located approximately 10 feet east of the tank vault excavation and 40 feet south of the tank vault excavation, respectively.

4

3.3 CONCLUSIONS

- 1. Water level data suggests that the local ground water flow direction may be towards the west-southwest. Water levels may be locally affected by irrigation on site and off site and the Alamo Canal which is located west of the site. The potentiometric surface beneath the site appears to be non-planar.
- 2. Based on soil types, depth to water encountered during the drilling program, and stabilized water levels, we estimate that ground water beneath the site exists under semi-confined conditions. Extensive aquifer characterization was not included within this scope of services.
- 3. Detectable concentrations of fuel hydrocarbons were present in ground water samples collected from the two monitoring wells closest to the former tank vault, MW-2 and MW-3. In general, it appears that the majority of residual concentrations of petroleum hydrocarbons detected in ground water extends southerly from the former tank vault. Low concentrations of benzene were detected a few feet northwest of the former tank vault.
- 4. The site is underlain primarily by fine silts and clays. Given the fine-grained soil encountered and the slow recovery of monitoring well during development it appears that soil permeability in the screened intervals is low.

R

4 RECOMMENDATIONS

The following recommendations were prepared based on our conclusions presented above:

1. A copy of this report should be sent in a timely fashion to the following agency:

California Regional Water Quality Control Board 1800 Harrison Street, Suite 700 Oakland, California 94610

- 2. Ground water collected from monitoring wells MW-2 and MW-3 during development and sampling contain variable concentrations of petroleum hydrocarbons. This water was contained in D.O.T.-approved drums, labelled, sealed, and stored on site. The contents of the drums should be considered hazardous materials and disposed of appropriately.
- 3. A quarterly ground water sampling and analysis program should be implemented at the site for a minimum of one year. Ground water from all monitoring wells should be analyzed for TPH as gasoline with a distinction for BTXE compounds (EPA Test Method 8015/8020).

(*

7 CHEMICAL ANALYSIS

7.1 INTRODUCTION

A total of two soil samples and four ground water samples collected during the field program were submitted to the analytical laboratory. All analyses were conducted by Med-Tox Associates, Inc. Laboratory, a California State-certified analytical laboratory located in Pleasant Hill, California.

A summary of the analytical data is shown in Table 1. A complete copy of the laboratory analytical report and chain-of-custody documents are included as Appendix B.

7.2 ANALYTICAL METHODS

Soil and ground water samples collected during this investigation were analyzed for TPH quantified as gasoline (TPHg) with a distinction for the volatile aromatic compounds benzene, toluene, xylene, and ethylbenzene (BTXE). The analytical test method was EPA 8020/5030 (purge and trap). One soil sample was submitted for total organic carbon analysis. The analytical test method used was EPA 410.4. One duplicate ground water sample from MW-4 was submitted for quality assurance/quality control (QA/QC).

7.3 ANALYTICAL SUMMARY - SOILS

Monitoring well MW-2 was located approximately 5 feet south of the former tank vault excavation and within two feet of ground water probe P-5 (previous Klienfelder study). A soil sample collected during drilling from a depth of approximately 14.5 feet below grade in did not contain TPHg or BTEX in concentrations at or above the laboratory detection limits. The sample was analyzed for total organic carbon and found to contain 5,100 milligrams per kilogram (mg/kg).

(*)

7.4 ANALYTICAL SUMMARY - GROUND WATER

- 1. The ground water sample collected from MW-2 contained 0.9 mg/l of TPHg. The sample also contained detectable concentrations of the following compounds: 57 ug/l benzene, 1 ug/l toluene, 110 ug/l ethylbenzene, and 3 ug/l total xylenes.
- 2. The ground water sample collected from monitoring well MW-3 did not contain TPHg in a concentration at or above the laboratory detection limit. However, the sample did contain 0.6 micrograms per liter (ug/l) of benzene. This monitoring well is located at the northwest corner of the former tank vault excavation.
- 3. Ground water samples collected from monitoring wells MW-4 and MW-5 did not contain concentrations of TPHg or BTEX at or above the laboratory detection limits. These wells are located 15 feet east and 40 feet south of the former tank vault excavation, respectively.

 $\boldsymbol{\omega}$

8 LOCAL HYDROGEOLOGY

The total depth explored during this study was approximately 25 feet below grade. Soils beneath the site range from clays to silty clays. Stabilized water levels recorded prior to well sampling were approximately 14.4 to 16.6 feet below grade. Based on soil types and ground water levels, we estimate that ground water may exist under semi-confined conditions, although aquifer analysis was not included within this work. Ground water recharge was relatively slow in all wells. Some wells dewatered during development even with a modest pumping rate of 0.25 gallons per minute.

The local ground water flow direction is estimated to be towards the west-southwest. Water surface elevations for the November 7, 1990 water level survey are included on Plate 3.

TABLE 1

SUMMARY OF ANALYTICAL LABORATORY DATA

			Water Samples			
Compound	MW-2	MW-3	MW-4	MW-5	Detection Limit	Reporting Units
7	57	0.6	ND	ND	0.3	μg/l
Benzene		ND	ND	ND	0.3	$\mu g/l$
Toluene	1		ND	ND	1	μg/1
Ethylbenzene	110	ND				
Xylenes, Total	3	ND	ND	ND	1	μg/l
Purgeable Hydrocarbons	0.9	ND	ND	ND	0.05	mg/l
As: Gasoline						

Soil Samples

Compound	MW-2 @ 14.5 feet	MW-3 @ 15 feet	Detection Limit	Reporting Units
Benzene Toluene Ethylbenzene Xylenes, Total	ND ND ND ND	ND ND ND ND	1 1 1 3	μg/kg μg/kg μg/kg μg/kg
Purgeable Hydrocarbons As: Gasoline	ND	ND	0.1	mg/kg
Total Organic Carbon	5,100		250	mg/kg

Notes: ND = Not Detected

 $\mu g/l = micrograms per liter$ mg/l = milligrams per liter $\mu g/kg = micrograms per kilograms$

mg/kg = milligrams per kilograms

TABLE 2

MONITORING WELL COLLAR ELEVATIONS AND MEASURED WATER LEVELS

Monitoring Well	Collar Elevation (feet, MSL)	Depth to Water (feet)	Water Surface Elevation (feet, MSL)
MW-2 MW-3 MW-4 MW-5	327.37 326.36 327.41 327.30	16.59 14.40 15.36 15.51	310.78 311.96 312.05 311.79
Notes:			
MSL - Mean Sea Leve	1		
Collar Elevation Surve	y by: Johnson Land Su 419 Mason Stree Vacaville, CA 95	t, Suite 214	
Benchmark Used:	City of Pleasanto Reference Eleva	on Datum - PT 905, Nail & Tag, ation - 322.46 feet	Johnson Dr.,
Water levels measured	l on: November 7, 199	90	

TABLE 3

Ground Water Probe Sampling Results Concentrations in ppb (µg/kg; µg/l)^a 7280 Johnson Drive Pleasanton, California

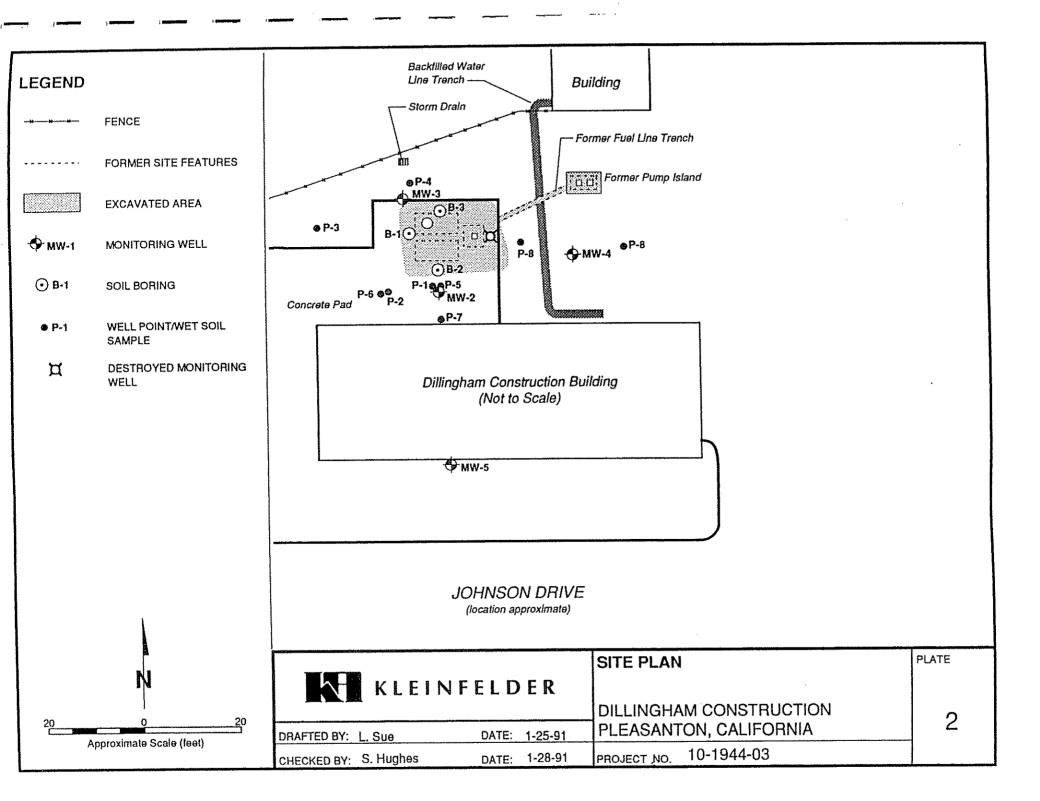
Ground water	Sample probeMatrix	Sample Depth (feet)	TPH ^b (gasoline)	Benzene	Toluene	Total Xylenes	Ethylbenzene
P-1	Wet Soil	23.5	ND	'ND	ND	ND	ND
P-3	Wet Soil	13	ND	ND	ND	ND	ND
P-4	Water	17	ND	4.3	ND	2.3	ND
P-5	Wet Soil	18	2,500	24	38	230	86
P-6	Wet Soil	18	ND	ND	ND	18	ND
P-7	Wet Soil	18	ND	19	ND	14	ND
P-8	Wet Soil	18	ND	5	ND	11	ND
Detection Limit ^c			1000(50)	5(0.5)	5(0.5)	5(0.5)	5(0.5)

NOTES:

Ð

а	Units: soil µg/kg, water µg/l
b	Total Petroleum Hydrocarbons
c	Detection Limit for Water Sample Shown in Parenthesis
ND	Not Detected at or Above Laboratory Reporting Limit
Source:	Kleinfelder Report 10-1944-02, dated May 24, 1990.

(149)10-1944-03-008





Project Dillingham Construction		Boring No.
Number 10-1944-03		
Total Depth 25.5 feet	Sheet 2 of 2	MW-2

Designated Purpose(s) of Log

Site Characterization

Logged by	Date:	Plate
L. Larsen	10-24-90	
Drafted by	Date:	
L. Sue	11-6-90	
Supervised by		
L. Venburg		



Project Dillingham Construe	ction	Boring No.
Number 10-1944-03		
Total Depth 24.5 feet	Sheet 2 of 2	MW-3

Depth (feet)	Sample Number	Sample Type	Recovery (%)	Blaws/Ft.	OVA (ppm) reading/background	uscs	Description		Remarks	Well	Construction
	Continuous Core					GP	Aggregate concrete Subbase - GRAVELLY SAND - light gray with light brown mottles, moist to wet, soft	NOSC			
2						CL	CLAY - olive gray (5Y 5/2), dense, moist, moderateluy plastic, uniform color, slightly sticky, earthy odor	NOSC			
4	•				0.0/0.0		trace local silt from 5 to 10 feet				
6	52065		100 50	18 24	0.0/0.0 0.0/0.0 0.0/0.0			NOSC			
8	•		100	23	0.0/0.0 0.0/0.0	:	very dry faint orange brown mottles at 8 feet trace very fine red-brown roots at 9 feet				
10	52064		100	29	0.0/0.0 0.0/0.0		color change to dark olive gray (5Y 3/2), increasing moisture, density and plasticity with depth, trace fine roots and root holes, earthy odor	NOSC			
12			100	35 29	0.0/0.0 0.0/0.0 0.0/0.0	CL/ ML	Thin lenses of SITLY CLAY - dark olive gray (5Y 3/2) with light gray (2.5Y 7/2) mottles, locally dry, sticky	NOSC			
14	52063		100	40	0.0/0,0 0.0/0.0 0.0/0.0				11-7-90 <u>\</u>		
16	•		100	25	0.0/0.0 0.0/0.0	ML	CLAYEY SILT - very dark gray (5Y 3/1), very moist, pistic,homogeneous color, trace very fine	NOSC	10-23-90, 13:00 <u>√</u>		
18	52061 Sieve		100	3	0.0/0.0 0.0/0.0 0.0/0.0	CU/ ML	sand from 16 to 17.5 feet SILTY CLAY - mottled light and dark gray, wet to moist, uniform texture, locally silty	NOSC	10-20-30, 10.00		
20 —	52062		100 100	24 31	0.0/0.0 0.0/0.0						
22			100	23	0.0/0.0 0.0/0.0 0.0/0.0	ML	CLAYEY SILT - mottled light and dark gray, moist	NOSC			
24	• •										
26 -											
28											
30											

Designated Purpose(s) of Log

i.

ļ

Site Characterization

Logged by	Date:	Plate
L. Larsen	10-24-90	
Drafted by	Date:	
L, Sue	11-26-90	
Supervised by		
L. Venburg		



ction	Boring No.
Sheet	MW-4
	Sheet

Depth (feet)	Sample Number	Sample Type	Recovery (%)	Blows/Ft.	OVA (ppm) reading/background	uscs	Description	Remarks	Well Construction
	Continuous Core	_				GP	Aggregate concrete Subbase - SANDY GRAVEL - dry, loose	NOSC	
2						CL	CLAY - olive gray (5Y 5/2), moist, stiff, very densa, slightly sticky, homogeneous color and texture, no roots or root holes, decayed organic odor	NOSC	
6	52042		100	29	0.0/0.0 0.0/0.0				
8					0.0/0.0		trace silt, very faint mottled color, very stiff, very fine roots, earthy odor	NOSC	
12	52043		100	26	0,0/0.0		SILTY CLAY - dark olive gray (5Y 3/2) with	NOSC	
14 — 	52041		100	35	0.0/0.0 0.0/0.0		distinct light gray (2.5Y 7/2) mottles, slightly moist, very stiff, dense, low plasticity, slightly sticky, red-beige roots and very fine root holes	11-7-90	
18	52040		100 100	33 22	0.0/0.0 0.0/0.0 0.0/0.0 0.0/0.0	MU	CLAYEY SILT - clive gray (5Y 4/2), very moist to locally wet, stiff, dense	10-24-90, 09:15 ∑ NOSC	
20			100	-	0.0/0.0 0.0/0.0 0.0/0.0 0.0/0.0		CLAYEY SILT - light gray with dark gray mottles,	puiled auger up 5 feet; noted 3 feet of water in boring at 09:40 NOSC	
22						ML	damp, stiff, friable		
28 — - 30 —									

Designated Purpose(s) of Log

Site Characterization

 Logged by
 Date:
 Plate

 L. Larsen
 10-24-90
 Date:

 Dratted by
 Date:
 11-27-90

 Supervised by
 L. Venburg
 L. Venburg



Project Dillingham Constru	uction	Boring
Number 10-1944-03		
Total Depth	Sheet	MW-5
25.0 feet	2 of 2	

Depth (feet)	Sample Number	Sample Type	Recovery (%)	Blows/Ft.	OVA (ppm) reading/background	uscs	Description		Remarks	Well	Construction
	Continuous Core 52038		100	37	1000	l B V	Bark chips — landscaped area Landscaping fill - SANDY GRAVEL - dry to damp, loose, earthy odor CLAY - olive gray (5Y 5/2), faintly mottled, damp to moist, slightly friable, minor reddish brown roots and fine root holes, trace silt and fine sand, earthy odor	NOSC			
8 - 10 - 12 - 14 -	52037		100	24	1000 1000		color change to dark olive gray (5Y 3/2), moist, very dense, moderately plastic, cohesive, slightly sticky, homogeneous texture and color, no silt and sand, earthy odor SILTY CLAY - dark olive gray (5Y 3/2) with distinct pronounced light gray (25 Y 7/2) mottles, damp to slightly moist, medium density, low	NOSC			
16 — 18 — 20 —	52036		100	34 18 21	1000 1000 1000 1000 1000 1000	CU ML MU CL	damp to signity most, medium density, low plasticity, slightly friable, abundant very fine red and beige root and root holes small shell fragments from 16 to 17 feet CLAYEY SILT - very dark gray (5Y 3/1), very moist to wet, dense, very plastic, very sticky homogeneous color and texture, moisture in pore spaces, trace fine grained sand	NOSC	11-7-90 포 10-24-90, 12:40 포		
22 — 22 — 24 —						ML/ CL	CLAYEY SILT - light gray (2.5Y 7/2) with dark olive gray (5Y 3/2) mottles, damp to moist, very stiff, medium dense, friable	NOSC			
26 — 28 — 30 —											

Designated Purpose(s) of Log

Site Characterization

 Logged by
 Date:
 Plate

 L. Larsen
 10-24-90
 Plate

 Drafted by
 Date:
 11-6-90

 Supervised by
 L. Venburg
 Venburg

к. 1

÷

KLEINFELDER

November 11, 1992 File 10-1944-04

Mr. John Sales Dillingham Construction, Inc. P.O. Box 1089 Pleasanton, California 94566

SUBJECT: Data Report for Fourth Quarterly Ground Water Sampling Event, 7280 Johnson Drive Site, Pleasanton, California

. .

Dear Mr. Sales:

Kleinfelder is pleased to submit the fourth quarterly ground water sampling report summarizing the results of ground water sampling activities at the above referenced site (shown on Plate 1). The scope of services provided conform to those described in our proposal 10-YP1-221, dated December 2, 1991. These services include:

- Collection of ground water samples from monitoring wells MW-2, MW-3, MW-4, and MW-5.
- Analysis of the ground water samples using EPA-approved test methods for total petroleum hydrocarbons in the gasoline range (TPHg); and the gasoline constituents benzene, toluene, total xylenes, and ethylbenzene (BTXE).
- Preparation of this report.

The data presented in this report are evaluated in reference to the baseline data established during the first, second, and third quarterly sampling events.

SITE BACKGROUND

As part of an underground storage tank investigation, Kleinfelder installed a monitoring well at your 7280 Johnson Drive site in December, 1988. A sample collected from the well (MW-1) was found to contain gasoline and benzene, toluene, xylenes, and ethylbenzene (BTXE), which are constituents of gasoline. Well MW-1 was destroyed during tank removal operations.

In March 1990, Kleinfelder conducted a modified well point survey in an attempt to assess the extent of ground water contamination. Soil conditions beneath the site made it difficult to collect water samples from most of the well points at the site. Wet soil samples were therefore collected and analyzed. Analysis of the wet soil samples indicated the presence of hydrocarbons in ground water to the south, east, and immediately north of the tanks.

In October and November 1990, as part of an additional soil and ground water investigation of the site, Kleinfelder installed four monitoring wells on the site. The monitoring well locations were based on the results of the well point survey. After construction, a well elevation survey was conducted and the wells were developed and sampled. Detectable concentrations of fuel hydrocarbons were present in ground water samples collected from monitoring wells MW-2 and MW-3. A copy of the report on the additional soil and ground water investigation was forwarded to the Regional Water Quality Control Board (RWQCB).

Inasmuch as Clorox Company (as land owner) has requested that any soil/ground water impacts be cleaned up prior to the expiration of your lease of the property in 1995, you have elected to initiate quarterly ground water sampling to evaluate current ground water conditions beneath the property. This report presents results of the fourth quarterly round of sampling.

FIELD ACTIVITIES

On July 2, 1992, during the third ground water sampling round, the Kleinfelder technician noted that the well cover and waterproof cap protecting well MW-2 had been damaged. Surface runoff had apparently entered the well casing after it was damaged and this runoff had affected ground water quality in the well, evidenced by the analytical results of ground water samples collected at that time. The well was temporarily repaired, enough to prevent further introduction of surface runoff to the well, and on July 24, 1992 Kleinfelder submitted a proposal to repair the well top. On August 26, 1992 a Kleinfelder technician repaired the well in a more permanent manner.

The fourth quarterly sampling event occurred on September 25, 1992. A Kleinfelder technician performed measuring, purging and sampling activities. Water level measurements were made prior to purging and sampling of any of the monitoring wells using a conductivity based water level indicator. These measurements are listed in Table 1. The wells were then purged and sampled using dedicated disposable bailers. During purging, ground water was monitored for the parameters pH, electrical conductivity, temperature, and turbidity. A minimum of four well volumes were purged to allow the parameters to stabilize, with the exception of MW-2 which dewatered after over 3.5 well volumes were purged. Final values for these parameters are summarized on Table 2.

After the well was purged, the ground water sample was decanted into clean sample containers; samples to be submitted for total petroleum hydrocarbons contained 2 ml hydrochloric acid for sample preservation. The VOA vials were labeled and placed on ice for delivery to a state-certified analytical laboratory. The samples were delivered on the same day and were accompanied by chain-of-custody documentation. All sample containers were provided by the analytical laboratory.

Quality assurance/quality control (QA/QC) samples were also prepared and submitted during this sampling round. A duplicate ground water sample was collected from monitoring well MW-2, to provide for an assessment of laboratory precision.

Ground water and QA/QC samples were submitted for analysis for TPHg, (EPA Method 5030) and BTXE (EPA Method 8020).

WATER LEVEL MEASUREMENTS AND HYDRAULIC GRADIENT

When comparing July 2, 1992, water level data to September 25, 1992, ground water elevations increased in wells MW-2 (by 0.03 feet), MW-3 (by 0.6 feet), and MW-4 (by 0.52 feet). The ground water elevation decreased by 1.4 feet in well MW-5. The July 1992

(78)10-1944-04(C92321)

measurements indicated a low mound of ground water in the area of MW-2; however, September measurements indicate this mound is present in the MW-4 area. The approximate hydraulic gradient magnitude in the south direction is approximately 0.05 feet/foot. There is not enough data to calculate the northward gradient magnitude.

Some variability is seen in ground water gradient directions beneath the site when comparing the gradient directions measured in the past four quarterly sampling events. The reason for the variations is not apparent at this time. The ground water levels and the ground water gradient direction contour lines for data collected on September 25, 1992 are shown on Plate 1.

ANALYTICAL RESULTS AND CONCLUSIONS

No TPHg or BTXE was measured at or above laboratory detection limits in the ground water samples collected in the fourth quarter sampling event. Duplicate samples were collected from well MW-2, (ground water samples collected in the third sampling round contained concentrations of TPHg and BTXE). The duplicate MW-2 samples did not contain TPHg or BTXE at or above laboratory detection limits. Analytical results of the four quarterly sampling events are summarized on Table 3. The laboratory generated data sheets and the chain of custody documentation for this sampling round are included as Appendix A.

With the exception of the MW-2 sample collected on July 2, 1992, no constituents of concern have been detected in ground water samples collected at the site in four rounds of quarterly sampling. The sample collected from MW-2 that contained VOCs appeared to be an aberration, probably due to the protective well casing being broken and runoff from the street running into the well. The well seal in MW-2 was repaired on August 26, 1992, prior to the fourth round of sampling. This most recent analysis of MW-2 ground water samples (collected on September 25, 1992) failed to detect any VOCs, suggesting that ground water beneath the site has not been impacted as a result of the broken seal.

Kleinfelder recommends that Dillingham submit a copy of this report to the RWQCB and Alameda County Health Agency for their review and comment. It is our opinion that data collected over the past year is sufficient to conclude that ground water beneath the site is not impacted by petroleum compounds as a result of previous site activities. Pending concurrence of this opinion by the RWQCB, we recommend that quarterly sampling be discontinued.

LIMITATIONS

This report was prepared in general accordance with the accepted standard of practice which exists in Northern California at the time the investigation was performed. It should be recognized that definition and evaluation of environmental conditions is a difficult and inexact art. Judgments leading to conclusions and recommendations are generally made with an incomplete knowledge of the conditions present. More extensive studies, including additional environmental investigations, can tend to reduce the inherent uncertainties associated with such studies. If the Client wishes to reduce the uncertainty beyond the level associated with this study, Kleinfelder should be notified for additional consultation.

Our firm has prepared this report for the Client's exclusive use for this particular project and in accordance with generally accepted engineering practices within the area at the time of our investigation. No other representations, expressed or implied, and no warranty or guarantee is included or intended. This report may be used only by the client and only for the purposes stated, within a reasonable time from its issuance. Land use, site conditions (both onsite and offsite) or other factors may change over time, and additional work may be required with the passage of time. Any party other than the client who wishes to use this report shall notify Kleinfelder of such intended use. Based on the intended use of the report, Kleinfelder may require that additional work be performed and that an updated report be issued. Non-compliance with any of these requirements by the client or anyone else will release Kleinfelder frem any liability resulting from the use of this report by any unauthorized party.

If you have any questions or comments regarding this report, please do not hesitate to call either of the undersigned.

Sincerely,

KLEINFELDER, INC. Carol n Boyles Staff Hydrogeblogist

John E. Romie, R.G. Project Manager

CB/JER:dpb

(78)10-1944-04(C92321)

4

Copyright 1992 Kleinfelder, Inc.

TABLE 1

WATER LEVEL MEASUREMENTS DILLINGHAM CONSTRUCTION PLEASANTON, CALIFORNIA

Date	MW-2	MW-3	MW-4	MW-5
12-23-91	310.56	311.01	310.92	310.96
03-17-92	312.99	312.87	312.90	313.18
07-02-92	312.08	311.39	311.98	311.85
09-25-92	312.11	311.99	312.50	310.45
Datum Elevation	327.37	326.36	327.41	327.30

Note: All ground water levels are expressed as elevation in feet above mean sea level.

TABLE 2

FINAL WELL PURGING DATA SEPTEMBER 25, 1992 DILLINGHAM CONSTRUCTION PLEASANTON, CALIFORNIA

Measurement Type	MW-2	MW-3	MW-4	MW-5
Purge Duration (minutes)	13	16	20	12
Gallons Purged	6	7	7	5
Final pH	6.91	6.61	6.91	6.79
Final Conductivity (umhos/cm)	4,000	5,000	8,000	600
Final Temperature (*C)	18	19 [·]	20	18
Turbidity (NTUs)	1.34	12.88	24.1	9.8
Dewatered During Purging	YES	NO	NO	NO



TABLE 3

SUMMARY OF ANALYTICAL RESULTS DILLINGHAM CONSTRUCTION PLEASANTON, CALIFORNIA

Well Number	Date	Benzene (µg/l)	Toluene (µg/l)	Total Xylenes (µg/l)	Ethylbenzene (µg/l)	Total Petroleum Hydrocarbons as Gasoline (mg/l)
					<0.3	< 0.05
MW-2	12-23-91	< 0.3	<0.3	<1	<0.3	< 0.05
	03-17-92	< 0.3	<0.3	<1	1	11(14)
	07-02-92	<0.3(0.4)	12(12)	4(3)	1(0.7)	<0.05(<0.05)
	09-25-92	<0.3(<03)	<0.3(<0.3)	<1(<1)	<0.3(<0.3)	<0.03(<0.03)
1011/2	12-23-91	<0.3	< 0.3	<1	< 0.3	< 0.05
MW-3	03-17-92	< 0.3	< 0.3	<1	< 0.3	< 0.05
	07-02-92	<0.3	<0.3	<1	< 0.3	< 0.05
•	09-25-92	< 0.3	< 0.3	<1	< 0.3	< 0.05
•	09-2-5-52	1012			,	
MW-4	12-23-91	< 0.3	< 0.3	<1	<0.3	< 0.05
TAT AA	03-17-92	< 0.3	<0.3	<1	< 0.3	< 0.05
	07-02-92	< 0.3	<0.3	<1	<0.3	< 0.05
		-0.0	-0.2	<1	<0.3	< 0.05
MW-5	12-23-91	< 0.3	< 0.3	<1	<0.3	< 0.05
	03-17-92	< 0.3	< 0.3		<0.3	< 0.05
	07-21-92	< 0.3	< 0.3	<1	<0.3	< 0.05
	09-25-92	<0.3	<0.3	· <1	<0.5	0.05

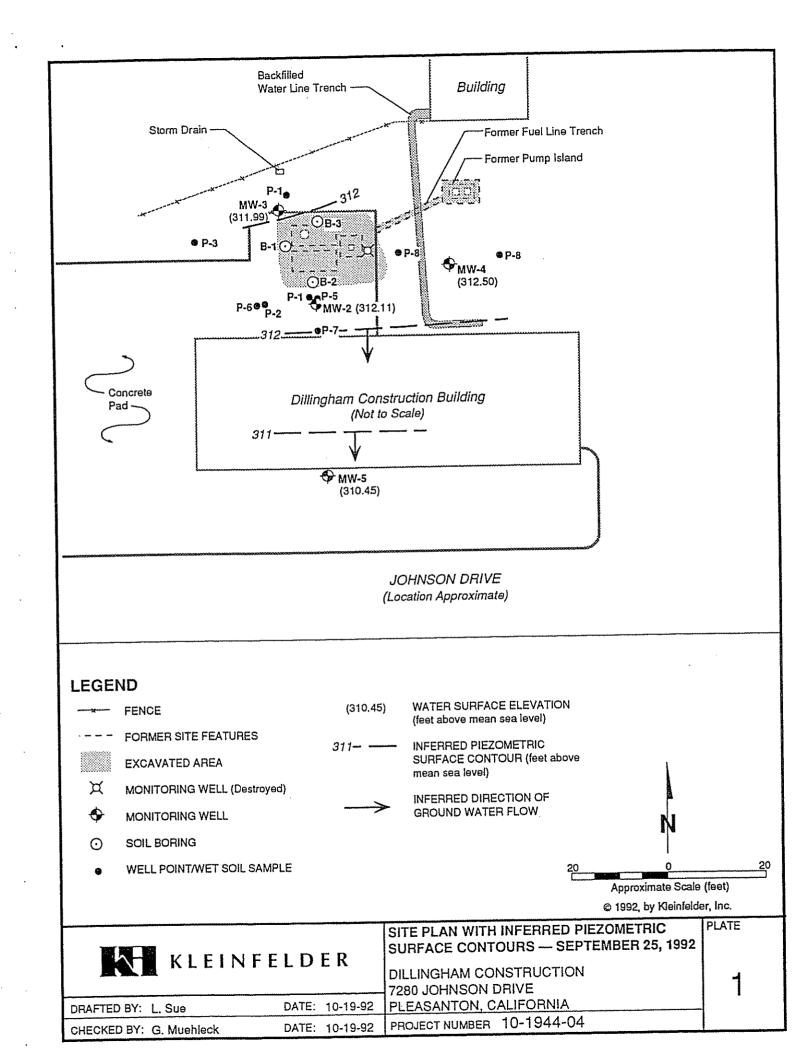
Notes: lg/l = micrograms per liter

mg/l = milligrams per liter

< n = not detected at or above the laboratory detection limit (n) indicated. Results listed in parenthesis are duplicate sample results.



1



An Ecologics Company

DOHS CERTIFICATION NO. E772

Certificate of Analysis

FORMERLY MED-TOX

PAGE 1 OF 7

KLEINFELDER, INC. 2121 N. CALIFORNIA BLVD-SUITE 570 WALNUT CREEK, CA 94596 ATTN: JOHN ROMIE

CLIENT PROJ. ID: 10-1944-04 C.O.C. NO: 1844 P.O. NO: W1068 AIHA ACCREDITATION NO. 332

WORKING COPY

REPORT DATE: 10/13/92 DATE SAMPLED: 09/25/92 DATE RECEIVED: 09/25/92 QUANTEQ JOB NO: 9209248

PROJECT SUMMARY:

On September 25, 1992, this laboratory received five (5) water samples. Samples were received cold and in preserved voa vials.

Client requested the samples to be analyzed for Total Petroleum Hydrocarbons as Gasoline, Benzene, Toluene, Ethyl Benzene and Xylenes content.

Sample identification, methodologies, results and dates analyzed are summarized on the following pages.

All laboratory quality control parameters were found to be within established limits. Batch QC data is included at the end of this report.

f

If you have any questions, please contact Client Services at (510) 930-9090.

Andrew Bradeen, Manager Organic Laboratory

Results FAXed 10/06/92

An Ecologics Company

.

PAGE 2 OF 7

KLEINFELDER, INC.

SAMPLE ID: 60651 CLIENT PROJ. ID: 10-1944-04 DATE SAMPLED: 09/25/92 DATE RECEIVED: 09/25/92 REPORT DATE: 10/13/92 QUANTEQ LAB NO: 9209248-01A QUANTEQ JOB NO: 9209248 DATE ANALYZED: 09/30/92 INSTRUMENT: F

BTEX AND HYDROCARBONS (WATER MATRIX) METHOD: EPA 8020, 5030 GCFID

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Benzene	71-43-2	ND	0.3
Toluene	108-88-2	ND	0.3
Ethylbenzene	100-41-4	ND	0.3
Xylenes, Total	1330-20-7	ND	1

PURGEABLE HYDROCARBONS AS:

Gasoline

-

ND mg/L 0.05 mg/L

ND = Not Detected

An Ecologics Company

PAGE 3 OF 7

KLEINFELDER, INC.

SAMPLE ID: 60649 CLIENT PROJ. ID: 10-1944-04 DATE SAMPLED: 09/25/92 DATE RECEIVED: 09/25/92 REPORT DATE: 10/13/92

•

QUANTEQ LAB NO: 9209248-02A QUANTEQ JOB NO: 9209248 DATE ANALYZED: 09/30/92 INSTRUMENT: F

BTEX AND HYDROCARBONS (WATER MATRIX) METHOD: EPA 8020, 5030 GCFID

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Benzene	71-43-2	ND	0.3
Toluene	108-88-2	ND	0.3
Ethylbenzene	100-41-4	ND	0.3
Xylenes, Total	1330-20-7	ND	1

PURGEABLE HYDROCARBONS AS:

ND mg/L 0.05 mg/L

ND = Not Detected

Gasoline

An Ecologics Company

PAGE 4 OF 7

KLEINFELDER, INC.

SAMPLE ID: 60647 CLIENT PROJ. ID: 10-1944-04 DATE SAMPLED: 09/25/92 DATE RECEIVED: 09/25/92 REPORT DATE: 10/13/92

QUANTEQ LAB NO: QUANTEQ JOB NO: DATE ANALYZED: INSTRUMENT: F	9209248-03A 9209248 09/30/92
---	------------------------------------

BTEX AND HYDROCARBONS (WATER MATRIX) METHOD: EPA 8020, 5030 GCFID

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Benzene	71-43-2	ND	0.3
Toluene	108-88-2	ND	0.3
Ethylbenzene	100-41-4	ND	0.3
Xylenes, Total	1330-20-7	ND	1

PURGEABLE HYDROCARBONS AS:

Gasoline

ND mg/L * 1 mg/L

ND = Not Detected

* Elevated detection limit due to the presence of diesel or kerosene type hydrocarbons.

An Ecologics Company

PAGE 5 OF 7

KLEINFELDER, INC.

SAMPLE ID: 60645 CLIENT PROJ. ID: 10-1944-04 DATE SAMPLED: 09/25/92 DATE RECEIVED: 09/25/92 REPORT DATE: 10/13/92

×.

QUANTEQ LAB NO: 9209248-04A QUANTEQ JOB NO: 9209248 DATE ANALYZED: 10/05/92 INSTRUMENT: F

BTEX AND HYDROCARBONS (WATER MATRIX) METHOD: EPA 8020, 5030 GCFID

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Benzene	71-43-2	ND	0.3
Toluene	108-88-2	ND	0.3
Ethylbenzene	100-41-4	ND	0.3
Xylenes, Total	1330-20-7	ND	1

PURGEABLE HYDROCARBONS AS:

Gasoline

ND mg/L * 1 mg/L

ND = Not Detected

* Elevated detection limit due to the presence of diesel or kerosene type hydrocarbons.

An Ecologics Company

PAGE 6 OF 7

KLEINFELDER, INC.

SAMPLE ID: 60643 CLIENT PROJ. ID: 10-1944-04 DATE SAMPLED: 09/25/92 DATE RECEIVED: 09/25/92 REPORT DATE: 10/13/92 QUANTEQ LAB NO: 9209248-05A QUANTEQ JOB NO: 9209248 DATE ANALYZED: 10/05/92 INSTRUMENT: F

BTEX AND HYDROCARBONS (WATER MATRIX) METHOD: EPA 8020, 5030 GCFID

COMPOUND	CAS #	CONCENTRATION (ug/L)	DETECTION LIMIT (ug/L)
Benzene	71-43-2	ND	0.3
Toluene	108-88-2	ND	0.3
Ethylbenzene	100-41-4	ND	0.3
Xylenes, Total	1330-20-7	ND	1

PURGEABLE HYDROCARBONS AS:

Gasoline

ND mg/L 0.05 mg/L

ND = Not Detected

An Ecologics Company

PAGE 7 OF 7

QUALITY CONTROL DATA

DATE ANALYZED: 10/01/92 SAMPLE SPIKED: 9209245-01B CLIENT PROJ. ID: 10-1944-04 QUANTEQ JOB NO: 9209248

INSTRUMENT: F

MATRIX SPIKE RECOVERY SUMMARY METHOD: EPA 8020, 5030 GCFID (WATER MATRIX)

ANALYTE	Spike Conc. (ug/L)	Sample Result (ug/L)	MS Result (ug/L)	MSD Result (ug/L)	Average Percent Recovery	RPD
Benzene Toluene	15.4 47.9	ND ND	16.4 50.8	16.2 49.8	105.8 105.0	1.2 2.0
Hydrocarbons as Gasoline	500	ND	556	515	107.1	7.7

CURRENT QC LIMITS (Revised 05/14/92)

<u>Analyte</u>	Percent Recovery	<u>RPD</u>
Benzene	(81.4-115.3)	10.2
Toluene	(85.3-112.4)	9.4
Gasoline	(72.0-119.4)	12.8

MS = Matrix Spike MSD = Matrix Spike Duplicate RPD = Relative Percent Difference ND = Not Detected

	KLEIN	FELDEK	R-3,8-3						•					9209248
PROJ. NC ا0-1944-C ۱.P. NO. (P.O. NO ن <i>ن 106</i> 9 DATE	SAMPLERS	: ISignalure/Number)	hns Scott	NO. OF CON- TAINERS	And to	%/??/ %/??/ Ø/0/0/0/0/0/0/0/0/0/0/0/0/0/0/0/0/0/0/								REMARKS
	TIME HH:MM:SS				\mathbf{k}	$\sum_{i=1}^{n}$		_{	\leftarrow		-{	++	-{	STOLLAR THE
9/25/92	1130	60651	OIAB OZAB	2	\bigotimes	\mathfrak{A}						┼╌┼╴		STANDARD TUME
	1244	60647		12	R)	\ominus			┟──┼╴			┼─┼╴		coroches I med
	1300	60645	03AB	2	1	Ň			┠╼╍┠╸			╂╼╍╂╼		
┝─/──	1320	60643	04AB	2	\mathbb{A}	\Im			┠──┼╸			┨──╂─		
}}			05AB		μÐγ	A	-+		┼╌┼			╂╍╍╂╍		
			<u> </u>						┝─┼╴			┼╌┼╴		
									╂╼╍╂╼			┼╌┼╴		
<u> </u>												┼╌┼╴		
<u> </u>	1		<u> </u>	_										
	· · · · · · · · · · · · · · · · · · ·		,						<u> </u>					
				-				-				+	-1	
			<u></u>											
11									†		-†	┼─┼		
₩	-				-								1-	
			•		1				┼──┼╴					
	-													
	<u> </u>]		-		┝┷╾╂								
		· · · · · · · · · · · · · · · · · · ·								-†-				
								1		+				
121	d ly: (Signature)		Peceived by: (Signatu 57 Received by: (Signatu		Ren	narka	Īr	on	 '	Y	50.	、 、 、	B J	Send Results To Jonn Romic KLEINFELDER 2121 N. CALIFORNIA BLVD. SUITE 670 WALNUT CREEK, CA 94596 (415) 938-5810
	si by: (Signature)	DaterTime 9/25/92 13:	(Signature) .	idy by:	- for)				>				
M-60		White Sampl	ai	лг-				ipy To Sh		I · ···	-			Pint Lab Cork Nº 1844



August 16, 1993

.....

Ted Klenk Environmental Health Officer Pleasanton Fire Department 444 Railroad Ave. Pleasanton, California 94566

Subject: Request for Closure, 7280 Johnson Drive Site, Pleasanton, California

Dear Mr. Klenk,

The purpose of this correspondence is to request your review of information pertaining to the above referenced site, and your closure of the site with respect to impacts to ground water related to a past release of fuel hydrocarbons. We believe that data collected over the past two years justifies cessation of monitoring requirements, and documented closure by the City of Pleasanton Fire Department. A brief summary of supporting information is as follows:

- As part of an underground storage tank investigation, a monitoring well was installed at the Johnson Drive site in December, 1988. A sample collected from the well(MW-1) was found to contain gasoline and BTXE. Well MW-1 was destroyed during subsequent tank removal operations.

- In March 1990, a modified well point survey was conducted in an attempt to assess the extent of ground water contamination. Wet soil samples were collected and analyzed, yielding detectable concentrations of hydrocarbons in ground water to the south, east, and immediately north of the former tanks.

- In October and November 1990, as part of an additional soil and ground water investigation of the site, four monitoring wells were installed. Detectable concentrations of fuel hydrocarbons were present in ground water samples collected from monitoring wells MW-2 and MW-3.

- Four rounds of water level measurements and ground water sampling were conducted at the site (in December 1991, and March, July, and September, 1992). Analytical results of water samples collected during the first and second rounds of sampling yielded no detectable concentrations of hydrocarbon compounds analyzed for. During the third (July, 1992) ground water sampling round, however,

our consultant noted that the well cover and waterproof cap protecting well MW-2 had been damaged. A sample collected from the well at this time yielded detectable concentrations of gasoline, toluene, ethylbenzene and xylenes, apparently resulting from surface runoff that had entered the well casing after it was damaged. The well was repaired in August, 1992, and no compounds of concern were detected in the fourth guarter of sampling.

- Subsequent to the fourth quarterly sampling round, the Regional Water Quality Control Board requested that two additional rounds of sampling be conducted in monitoring well MW-2, to confirm that detected compounds found during the third round were caused by the well cover damage. The fifth and sixth rounds of sampling took place in February and May 1993 respectively. Laboratory analysis of the ground water sample collected from monitoring well MW-2 during the fifth and sixth sampling rounds revealed no detectable concentrations of TPHg or BTEX.

Dillingham Construction feels that sufficient evidence exists, in the form of laboratory analytical data, to conclude that ground water is no impacted beneath the site as a result of this earlier release. We would appreciate your review of existing information on the site (our Data Report for the Sixth Quarterly Ground Water Sampling Event, dated July 6, 1993 provides a complete summary table of analytical data). We further request that you prepare appropriate documentation and correspondence to formally inform us of site closure.

If you have any questions on this matter, please do not hesitate to contact me.

Sincerely,

John M. Sales Director of Equipment

cc: Mr. Sumadhu Arigala (California Regional Water Quality Control Board)

Mike Arata, Clorox, Pleasanton

KLEINFELDER

July 6, 1993 File 10-1944-04

RECEIVED

JUL 1 4 1993

Equipment Dept.

Mr. John Sales Dillingham Construction, Inc. P.O. Box 1089 Pleasanton, California 94566

SUBJECT: Data Report for Sixth Quarterly Ground Water Sampling Event, 7280 Johnson Drive Site, Pleasanton, California

Dear Mr. Sales:

Kleinfelder is pleased to submit the sixth quarterly ground water sampling report summarizing the results of ground water sampling activities at the above referenced site (shown on Plate 1). The scope of services provided during this round of sampling are as follows:

- Collection of a ground water sample from monitoring well MW-2.
- Analysis of the ground water sample using Environmental Protection Agency (EPA)approved test methods for total petroleum hydrocarbons in the gasoline range (TPHg); and the gasoline constituents benzene, toluene, total xylenes, and ethylbenzene (BTXE).
- Preparation of this report.

The data presented in this report are evaluated in reference to the baseline data established during the previous quarterly sampling events.

SITE BACKGROUND

As part of an underground storage tank investigation, Kleinfelder installed a monitoring well at your 7280 Johnson Drive site in December, 1988. A sample collected from the well (MW-1) was found to contain gasoline and BTXE. Well MW-1 was destroyed during tank removal operations.

In March 1990, Kleinfelder conducted a modified well point survey in an attempt to assess the extent of ground water contamination. Soil conditions beneath the site made it difficult to collect water samples from most of the well points at the site. Wet soil samples were therefore collected and analyzed. Analysis of the wet soil samples indicated the presence of hydrocarbons in ground water to the south, east, and immediately north of the tanks.

(184)10-1944-04-(R93116)

In October and November 1990, as part of an additional soil and ground water investigation of the site, Kleinfelder installed four monitoring wells on the site. The monitoring well locations were based on the results of the well point survey. After construction, a well elevation survey was conducted and the wells were developed and sampled. Detectable concentrations of fuel hydrocarbons were present in ground water samples collected from monitoring wells MW-2 and MW-3. A copy of the report on the additional soil and ground water investigation was forwarded to the Regional Water Quality Control Board (RWQCB).

Inasmuch as Clorox Company (as land owner) has requested that any soil/ground water impacts be cleaned up prior to the expiration of your lease of the property in 1995, you have elected to initiate quarterly ground water sampling to evaluate current ground water conditions beneath the property.

Our original work scope included completion of four rounds of water level measurements and ground water sampling at the site; these sampling events took place in December, 1991, and March, July, and September, 1992. During the third (July, 1992) ground water sampling round the Kleinfelder technician noted that the well cover and waterproof cap protecting well MW-2 had been damaged. Surface runoff had apparently entered the well casing after it was damaged and this runoff had apparently affected ground water quality in the well, suggested by the analytical results of ground water samples collected during the third sampling round (Table Kleinfelder repaired the well in August, 1992, and no compounds of concern were 1). detected in the fourth quarter of sampling. Subsequent to the fourth quarterly sampling round, however, Mr. Sumadhu Arigala (California Regional Water Quality Control Board) requested that two additional sampling rounds of sampling be conducted in monitoring well MW-2, to confirm that detected compounds found during the third round were caused by the well cover damage. The fifth round of sampling occurred in February, 1993. Laboratory analysis of the ground water sample collected from monitoring well MW-2 during the fifth sampling round revealed no detectable concentrations of TPHg or BTEX. This report presents results of the sixth round of sampling.

FIELD ACTIVITIES

The sixth sampling event occurred on May 18, 1993. A Kleinfelder technician performed measuring, purging and sampling activities. Water level measurements were made at all four wells prior to purging and sampling, using a conductivity based water level indicator. These measurements are listed in Table 2. The wells were then purged and sampled using dedicated disposable bailers. During purging, ground water was monitored for the parameters pH, electrical conductivity, temperature, and turbidity. Over five well volumes were purged to allow the parameters to stabilize. Final values for these parameters are summarized on Table 3.

After the wells were purged, the ground water samples were decanted into clean sample containers; samples to be submitted for total petroleum hydrocarbons contained hydrochloric acid for sample preservation. The sample containers were labeled and placed on ice for delivery to a state-certified analytical laboratory. The samples were delivered on the same day and were accompanied by chain-of-custody documentation. Sample containers were provided by the analytical laboratory.

A quality assurance/quality control (QA/QC) sample, which consisted of a trip blank sample, was also prepared and submitted during this sampling round.

Ground water and QA/QC samples from MW-2 were submitted for analysis for TPHg, (EPA Method 5030) and BTXE (EPA Method 8020).





RESULTS

Water Level Measurements and Hydraulic Gradient

Ground water elevations decreased in all four site wells by as much as 3.16 feet, compared to levels measured in February, 1993. Measurements taken in February and May suggest the presence of a low mound of water in the vicinity of MW-2.

Analytical Results and Conclusions

No TPHg or BTXE was measured at or above laboratory detection limits in the ground water samples collected in the sixth quarter sampling event. Analytical results of the six quarterly sampling events are summarized on Table 1. The laboratory generated data sheets and the chain of custody documentation for this sampling round are included as Appendix A.

With the exception of the MW-2 sample collected on July 2, 1992, no constituents of concern have been detected in ground water samples collected at the site in six rounds of quarterly sampling. The sample collected from MW-2 that contained volatile organic compounds (VOCs) appeared to be an aberration, probably due to the protective well casing being broken and runoff from the street running into the well. As noted previously, the well seal in MW-2 was repaired on August 26, 1992, prior to the fourth round of sampling. The most recent rounds of sampling from MW-2 (collected in September, 1992 and February and May, 1993) failed to detect any VOCs, suggesting that ground water beneath the site has not been impacted as a result of the broken seal.

Kleinfelder recommends that Dillingham submit a copy of this report to the RWQCB and Alameda County Health Agency for their review and comment. It is our opinion that data collected over the past 1.5 years is sufficient to conclude that ground water beneath the site is not impacted by petroleum compounds as a result of previous site activities. Pending concurrence of this opinion by the RWQCB, we recommend that quarterly sampling be discontinued.

LIMITATIONS

This report was prepared in general accordance with the accepted standard of practice which exists in Northern California at the time the investigation was performed. It should be recognized that definition and evaluation of environmental conditions is a difficult and inexact art. Judgments leading to conclusions and recommendations are generally made with an incomplete knowledge of the conditions present. More extensive studies, including additional environmental investigations, can tend to reduce the inherent uncertainties associated with such studies. If the Client wishes to reduce the uncertainty beyond the level associated with this study, Kleinfelder should be notified for additional consultation.

Our firm has prepared this report for the Client's exclusive use for this particular project and in accordance with generally accepted engineering practices within the area at the time of our investigation. No other representations, expressed or implied, and no warranty or guarantee is included or intended.

This report may be used only by the client and only for the purposes stated, within a reasonable time from its issuance. Land use, site conditions (both onsite and offsite) or other factors may change over time, and additional work may be required with the passage of time.

(184)10-1944-04-(R93116)

Any party other than the client who wishes to use this report shall notify Kleinfelder of such intended use. Based on the intended use of the report, Kleinfelder may require that additional work be performed and that an updated report be issued. Non-compliance with any of these requirements by the client or anyone else will release Kleinfelder from any liability resulting from the use of this report by any unauthorized party.

If you have any questions on the content of this report, please do not hesitate to contact us.

Sincerely,

KLEINFELDER, INC.

Lita D. Freeman

Project Manager

John E. Romie, R.G. Senior Project Manager

LDF/JER

(184)10-1944-04-(R93116)

TABLES

TABLE 1

SUMMARY OF ANALYTICAL RESULTS **DILLINGHAM CONSTRUCTION** PLEASANTON, CALIFORNIA

Well Number	Date	Benzene (ug/l)	Toluene (ug/l)	Total Xylenes (ug/l)	Ethylbenzene (ug/l)	Total Petroleum Hydrocarbons as Gasoline (mg/l)
	10/00/01					
MW-2	12/23/91	<0,3	<0.3	</td <td><0.3</td> <td><0.05</td>	<0.3	<0.05
MW-2	03/17/92	<0.3	<0.3	<1	<0,3	<0.05
MW-2	07/02/92	<0.3(0.4)	12(12)	4(3)	.41(0.7)	11(14)
MW-2	09/25/92	<0.3(<0.3)	<0.3(<0,3)	<1(<1)	<0.3(<0.3)	<0.05(<0.05)
MW-2	02/18/93	<0.5(<0.5)	<0.5	<2	<0.5	<0.05
MW-2	05/18/93	<0.5	<0.5	<2	<0.5	<0.05
MW-3	12/23/91	<0.3	<0.3	<1	<0.3	<0,05
MW-3	03/17/92	<0.3	<0,3	<1	<0.3	<0.05
MW-3	07/02/92	<0.3	<0.3	<1	<0.3	<0.05
MW-3	09/25/92	<0.3	<0.3	<1	<0.3	< 0.05
				-	-0,0	-0,05
MW-4	12/23/91	<0.3	<0.3	<1	<0.3	<0.05
MW-4	03/17/92	<0.3	<0.3	<1	<0.3	<0.05
MW-4	07/02/92	<0.3	<0.3	<1	<0.3	<0.05
						0.00
MW-5	12/23/91	<0.3	<0.3	<	<0.3	<0.05
MW-5	03/17/92	<0.3	<0.3	<1	<0.3	<0.05
MW-5	07/02/92	<0.3	<0.3	<1	<0.3	<0.05
MW-5	09/25/92	<0.3	<0.3	<1	<0.3	<0.05

NOTES:

ug/l = micrograms per liter

mg/l = milligrams per liter

<n ==

not detected at or above the laboratory detection limit (n) indicated

Results listed in parentheses are duplicate sample results. (01)10-1944-04 (XL0003)

T-1

TABLE 2

PIEZOMETRIC SURFACE ELEVATIONS DILLINGHAM CONSTRUCTION PLEASANTON, CALIFORNIA

DATE	MW-2	MW-3	MW-4	MW-5
12/23/91	310.56	311.01	310.92	310.96
3/17/92	312.99	312.87	312.9	313.18
7/2/92	312.08	311.39	311.98	311.85
9/25/92	312.11	311.99	312.5	310.45
2/18/93	315.66	314.73	314.88	314.34
5/18/93	312.5	312.21	312.48	311.92
Datum Elevation	327.37	326.36	327.41	327.3

NOTE: All ground water levels are expressed as elevation in feet above mean sea level.

TABLE 3

FINAL WELL PURGING DATA MAY 18, 1993 DILLINGHAM CONSTRUCTION PLEASANTON, CALIFORNIA

MEASUREMENT TYPE	MW-2
Purge Duration (minutes)	42
Gallons Purged	9
Final pH	7.06
Final Conductivity (umhos/cm)	5,900
Final Temperature (C)	17.5
Turbidity (NTUs)	145
Dewatered During Purging	NO



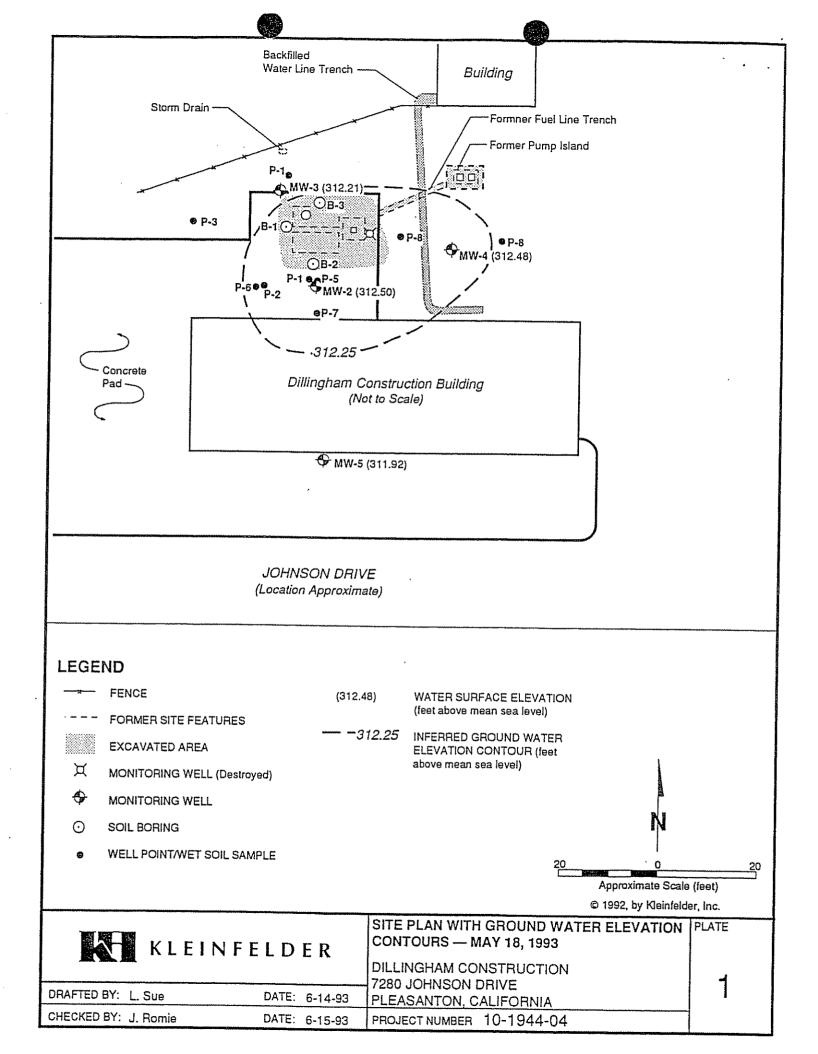


PLATES





APPENDIX A



APPENDIX A

American Environmental Network

an entry in the second s

DOHS Certification: 1172

P

AIHA Accreditation: 94523-001

PAGE 1 OF 5

KLEINFELDER, INC. 2121 N. CALIFORNIA BLVD. SUITE 570 WALNUT CREEK, CA 94596 ATTN: JOHN ROMIE

CLIENT PROJ. ID: 10-1944-04 C.O.C. NO: 2323 REPORT DATE: 05/28/93 DATE SAMPLED: 05/18/93 DATE RECEIVED: 05/18/93 AEN JOB NO: 9305106

PROJECT SUMMARY:

On May 18, 1993, this laboratory received two (2) water samples.

Client requested samples be analyzed for Total Petroleum Hydrocarbons as Gasoline, Benzene, Toluene, Ethylbenzene and Total Xylenes by EPA Methods 8020, 5030 GCFID. Sample identification, results and dates analyzed are summarized on the following pages.

All laboratory quality control parameters were found to be within established limits. Batch QC data is included at the end of this report.

If you have any questions, please contact Client Services at (510) 930-9090.

Larry 4Clein General Manager

Results FAXed 05/26/93

PAGE 2 OF 5

KLEINFELDER, INC.

SAMPLE ID: 60558 CLIENT PROJ. ID: 10-1944-04 DATE SAMPLED: 05/18/93 DATE RECEIVED: 05/18/93 REPORT DATE: 05/28/93 AEN LAB NO: 9305106-01A AEN JOB NO: 9305106 DATE ANALYZED: 05/20-24/93 INSTRUMENT: F

BTEX AND HYDROCARBONS (WATER MATRIX) METHOD: EPA 8020, 5030 GCFID

COMPOUND	CAS #	CONCENTRATION (ug/L)	REPORTING LIMIT (ug/L)
Benzene	71-43-2	ND	0.5
Toluene	108-88-2	NÐ	0.5
Ethylbenzene	100-41-4	ND	0.5
Xylenes, Total	1330-20-7	ND	2

PURGEABLE HYDROCARBONS AS:

Gasoline

ND mg/L 0.05 mg/L

ND = Not Detected

American Environmental Network

PAGE 3 OF 5

KLEINFELDER, INC.

SAMPLE ID: 60560TB CLIENT PROJ. ID: 10-1944-04 DATE SAMPLED: 05/18/93 DATE RECEIVED: 05/18/93 REPORT DATE: 05/28/93 AEN LAB NO: 9305106-02A AEN JOB NO: 9305106 DATE ANALYZED: 05/20/93 INSTRUMENT: F

BTEX AND HYDROCARBONS (WATER MATRIX) METHOD: EPA 8020, 5030 GCFID

COMPOUND	CAS #	CONCENTRATION (ug/L)	REPORTING LIMIT (ug/L)
Benzene	71-43-2	ND	0.5
Toluene	108-88-2	ND	0.5
Ethylbenzene	100-41-4	ND	0.5
Xylenes, Total	1330-20-7	ND	2

PURGEABLE HYDROCARBONS AS:

Gasoline ND mg/L 0.05 mg/L

ND = Not Detected

America Environmental Network

PAGE 4 OF 5

QUALITY CONTROL DATA

AEN JOB NO: 9305106

CLIENT PROJ. ID: 10-1944-04

INSTRUMENT: F

SURROGATE STANDARD RECOVERY SUMMARY METHOD: EPA 8020 (WATER MATRIX)

	SAMPLE IDENT	IFICATION	SURROGATE RECOVERY (PERCENT)
Date Analyzed	Client Id.	Lab Id.	Fluorobenzene
 05/20/93 05/20/93	60558 60560TB	01A 02A	100.7 102.0

CURRENT QC LIMITS

ANALYTE

PERCENT RECOVERY

Fluorobenzene

(70-115)

Ame an Environmental Network

PAGE 5 OF 5

QUALITY CONTROL DATA

DATE ANALYZED: 05/24/93 SAMPLE SPIKED: 9305081-01D CLIENT PROJ. ID: 10-1944-04

•

AEN JOB NO: 9305106

INSTRUMENT: F

MATRIX SPIKE RECOVERY SUMMARY METHOD: EPA 8020, 5030 GCFID (WATER MATRIX)

ANALYTE	Spike Conc. (ug/L)	Sample Result (ug/L)	MS Result (ug/L)	HSD Result (ug/L)	Average Percent Recovery	RPD
Benzene	13.8	ND	15.1	13.9	105.1	8.3
Toluene Hydrocarbons	46.8	ND	50.3	48.5	105.6	3.6
as Gasoline	500	ND	491	461	95.2	6.3

CURRENT QC LIMITS (Revised 05/14/92)

<u>Analyte</u>	<u>Percent Recovery</u>	<u>RPD</u>
Benzene	(81.4-115.3)	10.2
Toluene	(85.3-112.4)	9.4
Gasoline	(72.0-119.4)	12.8

MS = Matrix Spike MSD = Matrix Spike Duplicate RPD = Relative Percent Difference ND = Not Detected

	KLEINI	FELDER R-J	3,5-				7								
PROJ. NO.	PROJECT N/	ME	<u></u>	1			<u> </u>	//	/	/ /	Γ	7	7	7	
0 1144 04				NO.			, y		' /	/			/ /	/ /	MEN 9=0=106
L.P. NO. (P.O. NO.)	- Sugar	Cruce //EEEE	•	OF CON-	4 NAL YC	\$/_5/ _5/_5/	¥							/	
DATE MM/DD/YY	SAMPLE I.D TIME HH:MM:SS	SAMPLE	I.D, .	TAINERS	X	¥	[]			//	<u> </u>	_	\square	L	REMARKS
51913 Va		60558	DIAB	2	X			<u> </u>							
-10-		60560 TB	OZAB	Ζ	X			 -							•
	<u></u>	///////	······································												
	<u> </u>	/			┨──┤						_				
	`\	/					_						 		
	<u> </u>	/										<u> </u>			
	<u> </u>	/						┨							
	\	/					.					┨──			
	/				$\left - \right $			╂━╍┼╸		_					
		V	•		$\left\{ \right\}$			- lai			_			 	
		<u> </u>					_	┼─┼							
	<u>/</u>	<u>`</u>						┥─┤		+	-				·
		<u> </u>		<u> </u>	┼─┤			┼─┼							
	/	<u> </u>							-+						·····
	/							+			-				
		\ <u>\</u>	·······	-			_	┼─┼	-+						
		<u> </u>			┨╌┨			╉╼╋					1		
		<u>}</u>	<u></u>										-		
	/				╁╼┨			╋					1		
Relinquister	1 by: (Signatura)	Date/Time	Received by: (Signature	_ <u>_</u>	Flor	navins Affr	H .	Tuh	 /	Ro	»Mr	<u> </u>	.1		Send Results To KLEINFELDER 2121 N. CALIFORNIA BLVD.
Holinguistion	by: (Signature)	Date/Time	Received by: (Signature	3)		Sta.	x 15.	Tuh al	7.,	Л,	<i>T</i>				SUITE 570 WALNUT CREEK, CA 94596 (510) 938-5810
Relinguished	d by; (Signature)	Date/Time	Received for Laborato (Signature)		Ŧ,										

TABLE 1
RESULTS OF SOIL AND GROUND WATER SAMPLE ANALYSES

and the second s

۲ ۲

	Sample	Total Petroleum Hydrocarbons as Gasoline	Total Petroleum Hydrocarbons as Diesel	Oil & Grease Method 503 A/D	Oil & Grease Method 503E	Benzene	Toluene	Ethylbenzene	Xylenes
Sample	Турс	(ppm)	(ppm)	(ppm)	(ppm)	(ppb)	(ppb)	(ррб)	(ppb)
MW-1-15	Soil	2.2	ND(2)	300	ND(100)	40	32	83	120
3-1-17	Soil	ND(0.2)	ND(0.5)	NT	NT	ND(1)	ND(1)	ND(1)	ND(3)
3-2-17	Soil	120	ND(100)	Nľ	NT	1,400	ND(50)	2,800	2,300
0-3-15	Soit	ND(0.2)	ND(0.5)	Nľ	Nľ	ND(1)	ND(1)	ND(1)	ND(3)
MW-I ^{a/}	Water	0.5	ND(0.3)	7	ND(1)	29	89	32	150

.

ND - Not detected above laboratory detection limit. Detection limit shown in parenthesis

NT - Not tested a/_ No other v

a/ - No other volatile organic compounds were detected in the 624 analysis.

ppm - Parts per million

ppb - Parts per billion

C.* LIFORNIA REGIONAL WAT WAT QUALITY CONTROL BOARD

SAN FRANCISCO BAY REGION 2101, VEBSTER STREET, SUITE 500 OAKLAND, CA 94612 (510) 286-1255

PETE WILSON, Governor



Ger 1 3

Mr. John Sales Dillingham Construction P. O. Box 1089 Pleasanton, CA 94566

December 9, 1993 File No.: 2198.17(UST) RB File No.: 01-0491

Subject: UST case closure for Dillingham Construction, 7280 Johnson Drive, Pleasanton, California.

Dear Mr. Sales:

The Pleasanton Fire Department (PFD) has submitted a report which summarizes the investigation and cleanup of hydrocarbon pollution resulting from leaks associated with an 8000 gallon gasoline, an 8000 gallon diesel and a 550 gallon waste oil Underground Storage Tank, at the above mentioned site. The PFD recommends that the case be closed. Regional Board staff have reviewed the report and concur with the recommendation. Therefore, based on the available information for the above site, no further investigation or cleanup of the hydrocarbon pollution associated with the Tanks is required. Further work may be required if conditions change or a water quality threat is discovered at the site.

Please contact Sumadhu Arigala at (510)-286-0434, if you have any questions.

Sincerely,

Steven R. Ritchie, Executive Officer.

CC: Ted Klenk, PFD



ATTACHMENT 2

WELL CLOSURE REPORT FOR WELL DESTRUCTION PERMIT 26211 [DECOMMISSIONING REPORT FOR GROUNDWATER WELLS MW-2 THROUGH MW-5]



February 9, 2007

Mr. Wyman Hong Water Resources Specialist ZONE 7 WATER AGENCY 100 North Canyons Parkway Livermore, California 94551

Clayton Project No. 33106.006822.00

Subject: Well Closure Report for Well Destruction Permit 26211 Clorox Services Company, Applied Technology Warehouse 7280 Johnson Drive Pleasanton, California

Dear Mr. Hong:

On behalf of Clorox Services Company (Clorox), Clayton Group Services (Clayton), *a Bureau Veritas North America company*, has completed this letter report to document well closures for the subject Clorox facility (Facility). Attachment 1 includes figures showing the Facility location and a site plan showing the well locations.

On November 17, 2006, Clayton submitted a monitoring well destruction permit application to Zone 7 Water Agency (Zone 7) for closure of the wells. On December 4, 2006, Zone 7 approved the permit and the proposed process to pressure grout the wells in place. A copy of Permit 26211 is included in Attachment 2.

Background

On June 13, 2006, Clayton and Clorox visited the site and observed four groundwater monitoring wells located at the Facility (see Figure 2). At the request of Clorox, Clayton subsequently conducted a public records file review at various agencies including the Livermore Pleasanton Fire Department (LPFD) and Regional Water Quality Control Board (RWQCB), to assist in determining the history and status of the monitoring wells.

Five groundwater monitoring wells had been installed onsite and were identified as MW-1 through MW-5 (Figure 2). MW-1 was installed in 1988 and was destroyed during an underground storage tank (UST) removal in 1989. This Report documents the destruction of the four remaining monitoring wells, MW-2 through MW-5. The four groundwater monitoring wells were installed in 1990 to determine the impact of

Bureau Veritas North America, Inc.

6920 K.oll Center Parkway, Suite 216 Pleasanton, CA 94566 Main (925) 426-2600 Fax (925) 426-0106 www.us.buzeauveritas.com



Mr. Wyman Hong Zone 7 Water Agency February 9, 2007

Project Number 33106-006822.00

Page 3

petroleum hydrocarbons on the soil and groundwater at the Facility, but had not been used since official closure of a UST release was approved by the RWQCB in 1993 (see letter in Attachment 4).

Summary of Well Closure Activities

Clayton notified Mr. Wyman Hong with Zone 7 before work began on the well closure project; Mr. Hong indicated that the field work could proceed without a witness from Zone 7. Clayton retained Environmental Control Associates, Inc. (ECA), a state-licensed (695970-C57) drilling subcontractor to destroy the wells. Photos of the well closure activities are included in Attachment 3. ECA mobilized to the site on December 7, 2006 to conduct the well closure activities.

Each well was observed to be constructed with a 2-inch diameter polyvinyl chloride (PVC) casing. Depth to water was measured to be approximately 17 feet below the top of the casing (TOC) in each well. The bottom of each well was measured at approximately 25.5 feet.

In preparation for grouting, 10-foot sections of 1-inch diameter PVC tremie pipe were connected and inserted into the bottom of each well casing. The tremie pipe was used to direct the grout to the bottom of each casing allowing the displaced water to flow upward within the casing to the surface so that the grout was not diluted.

ECA provided the grout slurry and slowly tremied it to the bottom of each well casing. During grouting, the tremie pipe was periodically raised and sections of the pipe were removed as each casing was filled with grout. Approximately 20 gallons of grout was placed in each well casing. The metal "christy" boxes were chiseled out, and the surface above each filled with concrete to the level of the surrounding grade. The project was completed in one day and demobilization occurred on December 7, 2006.

Closing

All closure activities were completed as described in the permit application approved by Zone 7. Thanks for your assistance with this project. Please contact me at (925) 260-3104 or at <u>beth.hoffman@us.bureauveritas.com</u> or Mike Zimmerman at (925) 426-2681 or at <u>mike.zimmerman@us.bureauveritas.com</u> if you have any questions or if you need additional information.

Sincerely,

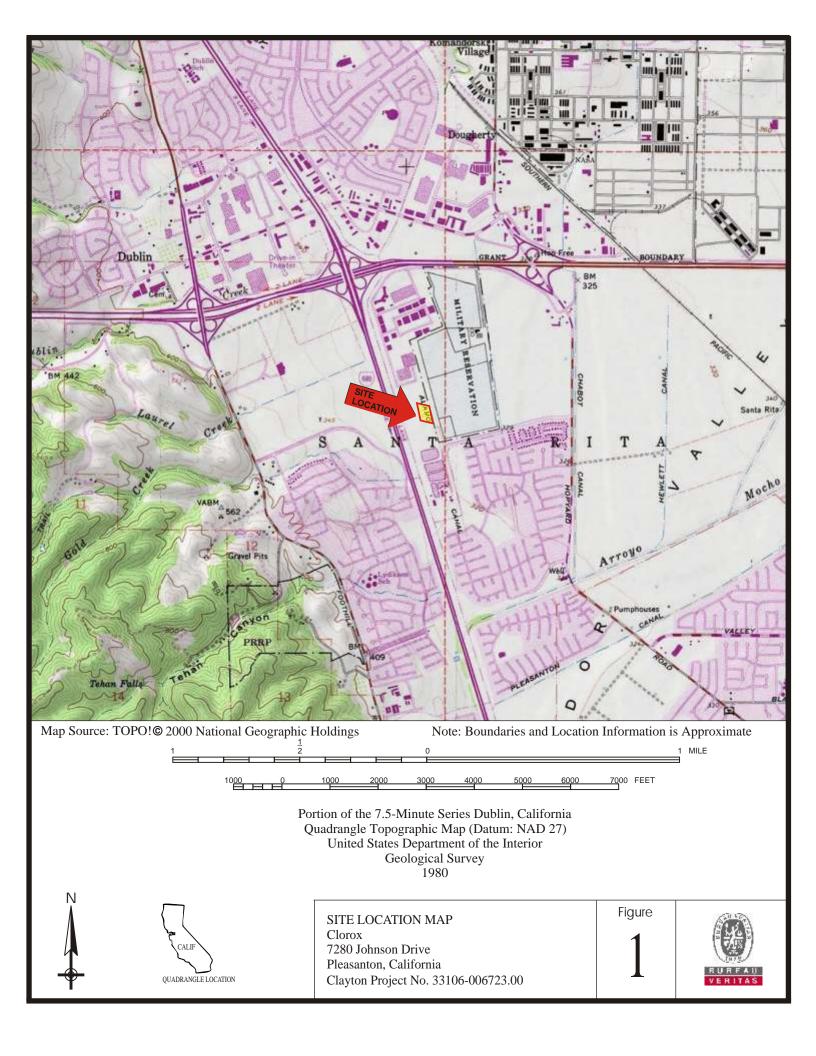
Beth D. Hoffman Project Environmental Consultant Environmental Services

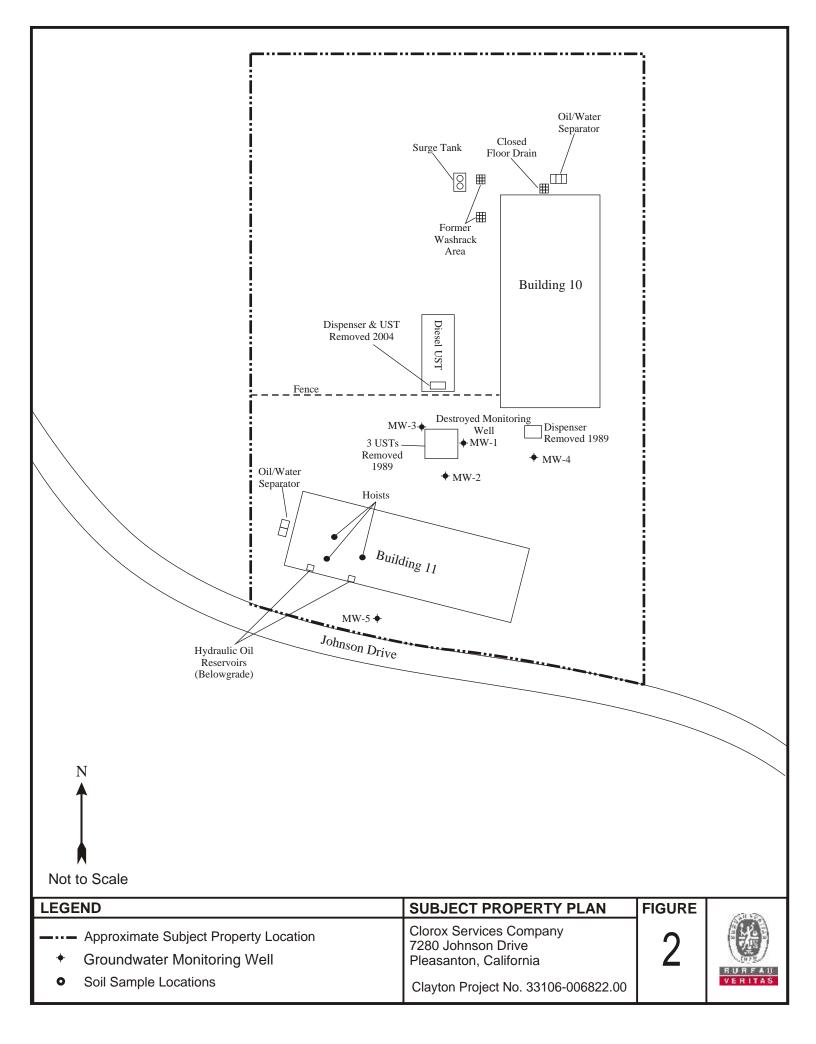
Michael J. Zimmerman, P.E., R.E.A. Senior Project Manager Environmental Services

cc: Chester Green, Clorox Services Company, 7200 Johnson Drive, Pleasanton, California 94588



ATTACHMENT 1 FIGURES







ATTACHMENT 2 WELL CLOSURE PERMIT



ZONE 7 WATER AGENCY

100 NORTH CANYONS PARKWAY, LIVERMORE, CALIFORNIA 94551 VOICE (925) 454-5000 FAX (925) 454-5728

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

FOR OFFICE USE

LOCATION OF PROJECT 7280 Johnson Drive	PERMITNUMBER 26211
Pleasanton, CA	WELLNUMBER 3S/1W-12A2 to 12A5 (MW-2 to MW-5)
	APN941-1300-014-00
California Coordinates Sourceft. Accuracyft. CCNft. CCEft. APN 941-1300-14	PERMIT CONDITIONS
Ariv	(Circled Permit Requirements Apply)
CLIENT NameClorox Services Company Address280 Johnson Dr. Phone925.425.6624 CityPleasantonCAZip94588 APPLICANT NameBeth Hoffman, Clayton Group Services 	 A. GENERAL 1. A permit application should be submitted so as to arrive at the Zone 7 office five days prior to proposed starting date. 2. Submit to Zone 7 within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well projects or drilling logs and location sketch for geotechnical projects. 3. Permit is void if project not begun within 90 days of approval
	date. B. WATER SUPPLY WELLS
TYPE OF PROJECT Geotechnical Investigation Well Construction Geotechnical Investigation Cathodic Protection ·· Water Supply ·· Monitoring ··	 Minimum surface seal thickness is two inches of cement grout placed by tremie. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved.
PROPOSED WELL USE New Domestic Irrigation Municipal Remediation Industrial Groundwater Monitoring Dewatering Other	 An access port at least 0.5 inches in diameter is required on the wellhead for water level measurements. A sample port is required on the discharge pipe near the wellhead. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS
DRILLING METHOD: Mud Rotary ·· Air Rotary ·· Hollow Stem Auger ·· Cable Tool ·· Direct Push ·· Other ···· DRILLING COMPANY_Environmental Control Assoc.,	 Minimum surface seal thickness is two inches of cement grout placed by tremie. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet. GEOTECHNICAL. Backfill bore hole with compacted cuttings or
DRILLER'S LICENSE NO. 695970-C57 exp. 9/3/08	areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings.
Drill Hole Diameterin. Maximum Casing Diameter2in. Depth_25.5ft. Surface Seal Depthft. Number_ <u>MW-2</u> MW-3	E. CATHODIC. Fill hole above anode zone with concrete placed by tremie. F. WELL DESTRUCTION. See attached. SPECIAL CONDITIONS. Submit to Zone 7 within 60 days after the
SOIL BORINGS Number of Borings Maximum MW-4, MW-5 Hole Diameterin. Depthft.	completion of permitted work the well installation report including all soil and water laboratory analysis results.
ESTIMATED STARTING DATE 12/7/06 ESTIMATED COMPLETION DATE 12/7/06	Approved Managent Hold Date 12/4/06
hereby agree to comply with all requirements of this permit and Alameda	Wyman Hong

County Ordinance No. 73-68.

APPLICANT'S SIGNATURE Beth Hoffman Date 11/27/06

ATTACH SITE PLAN OR SKETCH

Zone 7

Water Resources Engineering Groundwater Protection Ordinance

Clorox Services Company 7280 Johnson Drive Pleasanton Wells 35/1W-12A2 (MW-2), 35/1W-12A3 (MW-3), 35/1W-12A4 (MW-4) and 35/1W-12A5 (MW-5) Permit 26211

Destruction Requirements:

- 1. Clean out all bridged or poorly compacted materials to the bottom of the well.
- 2. Sound the well as deeply as practicable and record for your report.
- 3. Pressure grout the casing to two feet below the finished grade or original ground, whichever is the lower elevation.
- 4. Remove the casing, seal, and gravel pack to two feet below the finished grade or original ground, whichever is the lower elevation (optional).
- 5. After the seal has set, backfill the remaining hole with compacted material (optional).

P:\WRE\Wyman\Pressure Grout.wpd



ATTACHMENT 3 PHOTOGRAPHS

Project No.	Description	1					
33106-006822.00	Site Name	Photo Date May 12, 2006					
	1	escription Well MW-4 located northeast of Building 11					
Project No. 33106-006822.00	Description	Applied Technology Warehouse, 7280 Johnson Drive, Pleasanton,	2 Photo Date				

Project No.	Description	3	
33106-006822.00	Site Name	Applied Technology Warehouse, 7280 Johnson Drive, Pleasanton, California	Photo Date May 12, 2006
Project No.	Description	Well MW-5 located south of Building 11 in landscaping area Applied Technology Warehouse, 7280 Johnson Drive, Pleasanton,	4
33106-006822.00	Site Name	Photo Date May 12, 2006	



ATTACHMENT 4 RWQCB NFA LETTER

PAGE1



Mr. John Sales Dillingham Construction P. O. Box 1089 Pleasanton, CA 94566

December 9, 1993 File No.: 2198.17(UST) RB File No.: 01-0491

Subject: UST case closure for Dillingham Construction, 7280 Johnson Drive, Pleasanton, California.

Dear Mr. Sales:

The Pleasanton Fire Department (PFD) has submitted a report which summarizes the investigation and cleanup of hydrocarbon pollution resulting from leaks associated with an 8000 gallon gasoline, an 8000 gallon diesel and a 550 gallon waste oil Underground Storage Tank, at the above mentioned site. The PFD recommends that the case be closed. Regional Board staff have reviewed the report and concur with the recommendation. Therefore, based on the available information for the above site, no further investigation or cleanup of the hydrocarbon pollution associated with the Tanks is discovered at the site.

Please contact Sumadhu Arigala et (510)-286-0434, if you have any questions.

Sincerely.

Steven R. Ritchie, Executive Officer.

CC: Ted Klenk, PFD