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**FACSIMILE TRANSMITTAL**

Date: 01/31/95 Fax No.: 510/337-9335

To: Tom Peacock  
Alameda County Health Agency

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Number of Pages (including this transmittal): 5

Comments:

Tom,

Attached find parts of our draft report for recent ground water monitoring at the Tribune UST site, 2302 Valdez Street (the entire report is fairly bulky, including both Phase I and Phase II activities). Please call me if you need additional info. See you at 2:30 this afternoon.

Thanks!

JIM

## 1.1 Site Background

The following site background was assembled from review of the following reports by Dames & Moore: (1) July 18, 1990 Phase II Soil and Groundwater Investigation, Former Oakland Tribune Garage, Oakland, California; and (2) Phase I Soil and Groundwater Investigation, Former Oakland Tribune Garage, September 20, 1989.

On February 23, 1988, Clayton Environmental Consultants (CEC) removed two underground storage tanks (USTs), including one 750-gallon waste oil tank and one 8,000-gallon gasoline tank, from a common excavation beneath the Valdez Street sidewalk adjacent from the west side of the project site building (see Figure 3). Due to elevated concentrations of fuel hydrocarbons and Total Oil and Grease (TOG) in soil samples taken beneath the tanks, the tank cavity was overexcavated down to 17.5 feet below grade (approximate ground water depth) and backfilled with imported fill. One soil sample taken at the west end of the overexcavation cavity, beneath the former gasoline UST, contained no detectable levels of gasoline constituents at 18.5 feet in depth. One soil sample taken at the east end of the overexcavation cavity, beneath the former waste oil UST, at depth of 18.5 feet below surface grade contained no detectable fuel hydrocarbons and 12,000 ppm of TOG.

On February 29, 1988, CEC removed a floor sump located north from the hydraulic lifts, and approximately 30 cubic yards of soil was overexcavated down to a depth of about 15 feet below surface grade. Soil samples taken from the excavation cavity at depths of 13 feet and 15 feet below grade contained 440 ppm and 5500 ppm, respectively, of total petroleum hydrocarbons as gasoline (TPH-G), and 610 ppm and 2100 ppm of TOG, respectively. The excavation was backfilled with imported fill material and resurfaced to match existing grade.

In August 1988, CEC installed three two-inch diameter ground water monitoring wells (MW-1, MW-2 and MW-3) within the building at the project site (see Figure 3 for well locations). As part of a soil boring investigation conducted by Dames & Moore in August 1989, four of 12 soil borings were converted to four-inch diameter ground water monitoring wells (MW-4 through MW-7). On May 14, 1990, Dames & Moore installed two additional monitoring wells (MW-8 and MW-9) southwest and south (crossgradient and downgradient) from the project site building. Laboratory analytical results from one sampling event from MW-8 and MW-9, two sampling events from MW-4 through MW-7, and three sampling events from MW-1, MW-2 and MW-3, indicated low levels of gasoline constituents in ground water in MW-1, MW-2 and MW-9.

## 5.2 Results of Quarterly Monitoring

### 5.2.1 Hydrologic Conditions and Ground Water Gradient

No hydrocarbon sheens were observed in purged ground water from any of the nine wells. Slight to moderate hydrocarbon odors were exhibited in purged water from wells MW-1 and MW-9. Ground water flow direction, as depicted on Figure 3, is towards the

south. Ground water elevation data are included in Table 1.

**Table 2  
WELL ELEVATION DATA  
Oakland Tribune UST Site**

Well Number	Sampling Date	Elevation of Top of Casing	Depth to Water (ft)	Water Table Elevation
MW-1	01/18/96	22.87	14.33	8.54
MW-2	"	22.59	14.36	8.23
MW-3	"	22.51	13.98	8.53
MW-4	"	22.65	14.30	8.35
MW-5	"	22.44	14.09	8.35
MW-6	"	21.76	14.37	7.39 <sup>3</sup>
MW-7	01/19/96	22.00	13.30	8.74
MW-8	"	22.00	14.29	7.71
MW-9	"	19.98	12.25	7.73

- 1 - Elevations relative to mean sea level datum.
- 2 - Depth to ground water from top of casing.
- 3 - Pressurized well.

**5.1.2 Analytical Results**

Ground water samples from MW-1, MW-2, MW-4, MW-7, MW-8 and MW-9 were analyzed for total petroleum hydrocarbons as gasoline (TPH-G) and benzene, toluene, ethylbenzene and xylenes (BTEX). In addition, all samples except MW-2 were analyzed for TPH as diesel and motor oil (TPH-D/MO). Table 2 summarizes these analytical results. Laboratory data reports and chain-of-custody records are contained in Appendix R.

**Table 3**  
**SUMMARY OF GROUND WATER ANALYTICAL RESULTS**  
**Former Oakland Tribune UST Site**

Sample ID	Sampling Date	Concentration (pph)						
		TPH-D	TPH-MO	TPH-G	Benzene	Toluene	Ethylbenzene	Xylenes
MW-1	08/16/98	1	--	--	1.0	0.30	0.40	0.60
	07/27/89	--	--	--	0.10	0.0051	ND(0.001) <sup>2</sup>	0.26
	5/14/90	--	--	--	0.37	0.13	0.17	0.11
	01/18/96	0.99	ND(0.5)	3.3	0.330	0.039	0.10	0.085
MW-2	08/16/98	--	--	--	ND(0.0004)	ND(0.0003)	ND(0.0013)	ND(0.0014)
	07/27/89	--	--	--	0.024	ND(0.001)	ND(0.001)	0.08
	5/14/90	--	--	--	ND(0.03)	0.012	0.12	0.02
	01/18/96	--	--	0.20	ND(0.0005)	0.0008	0.0034	0.0025
MW-3	08/16/98	--	--	--	0.052	0.001	0.0049	0.017
	07/27/89	--	--	--	ND(0.001)	ND(0.001)	ND(0.001)	0.013
	05/14/90	--	--	--	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
	01/18/96	1.2 <sup>3</sup>	2.5	--	--	--	--	--
MW-4	08/15/89	--	--	--	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
	05/14/90	--	--	--	0.22	0.02	0.12	0.18
	01/18/96	0.47 <sup>3</sup>	ND(0.5)	0.42	0.005	0.0006	0.0054	0.0021
MW-5	08/15/89	--	--	--	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
	05/14/90	--	--	--	0.043	0.001	0.0021	0.011
	01/18/96	ND(0.05)	ND(0.5)	--	--	--	--	--
MW-6	08/15/89	--	--	--	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
	05/14/90	--	--	--	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
	01/18/96	ND(0.05)	ND(0.5)	--	--	--	--	--
MW-7	08/15/89	--	--	--	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
	05/14/90	--	--	--	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
	01/18/96	ND(0.05)	ND(0.5)	ND(0.05)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
MW-8	05/18/90	--	--	--	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
	01/18/96	ND(0.05)	ND(0.5)	ND(0.05)	ND(0.0005)	ND(0.0005)	ND(0.0005)	ND(0.0005)
MW-9	05/18/90	--	--	--	0.0095	0.0081	0.0014	0.0054
	01/18/96	0.70 <sup>3</sup>	ND(0.5)	2.4	0.028	0.020	0.028	0.028

1 - Not analyzed for this analyte.  
 2 - Not detected above the value expressed in the parentheses.  
 3 - NET laboratory report states: "The positive result appears to be a lighter hydrocarbon than Diesel."

**6.0 CONCLUSIONS**

This investigation included both a limited Phase I Environmental Assessment and a single ground monitoring event of all nine ground water monitoring wells at the project site.

### 6.1 Impacts From Project Site

Based on our inspection of the project site and on our review of regulatory lists and historical information, it appears that three features at the project site may have impacted the project site environment in the past: (1) The two USTs formerly located at the project site; (2) The former sump located in the northeast corner of the project site building; and (3) The three hydraulic lifts located on the east side of the project site building.

We do not believe that the two USTs formerly located at the project site pose a significant threat to the project site environment for the following reasons: (1) The two USTs were removed from the site; (2) The UST removal cavity was overexcavated to remove hydrocarbon-laden soils; and (3) Historical ground water monitoring data at the site clearly indicates no significant impact to ground water quality from the former USTs.

The floor sump formerly located in the northeast corner of the project site building does not appear to pose a significant threat to the project site environment. The sump was removed and approximately 30 cubic yards of hydrocarbon-laden soil was excavated and removed from the site. Two soil samples taken after these overexcavation activities did contain elevated levels of Total Oil and Grease; however, ground water analytical data from MW-3, located within the backfilled excavation cavity, indicate only minimal desorption of these heavy hydrocarbons from soil into ground water. The nondetectable analytical results from downgradient wells MW-5 and MW-6 further confirm no significant migration of dissolved hydrocarbons in ground water.

The three hydraulic lifts have not been removed and may have impacted soils adjacent to the lifts. Indeed, a soil sample taken at 16 feet in depth during installation of MW-5, located adjacent to the north lift, contained elevated levels of Total Oil and Grease. However, soil samples from soil borings between the north and middle lifts, and between the middle and south lifts, as well as the soil sample from well boring MW-6, contained no detectable hydrocarbons. Furthermore, ground water analytical results from MW-5, MW-6, and downgradient well MW-9 have shown no detectable hydraulic oil range hydrocarbons. Thus, the hydraulic lifts do not appear to pose a significant threat to the project site environment. Note, that the State Water Board has issued guidelines which direct local environmental oversight agencies to disregard hydraulic lifts and hydraulic lift releases.

### 6.2 Impacts From Site Vicinity

Although several sites in the immediate site vicinity are listed on hazardous materials lists, we believe that none of the listed sites pose a significant risk to the project site environment. Furthermore, ground water analytical results from the upgradient monitoring well MW-7 seem to confirm this conclusion.