QUARTERLY SUMMARY REPORT Alameda County September 1989

ARCO Service Station No. 2152 22141 Center Street Castro Valley, California

Brief History

- March 10, 1988, a vapor/vent line leak was detected in an unleaded gasoline system during annual tank testing at the site. The system was reportedly repaired.
- April 6, 1988, the system passed retest. An underground Storage Tank Unauthorized Release (Leak) Report and results of tank testing were sent from Brown and Caldwell to Alameda County Division of Environmental Health on June 7, 1988.
- April 1989, Applied GeoSystems observed the drilling of three soil borings (B-1 through B-3) to a maximum depth of approximately 45 feet, as part of a site assessment prior to tank replacement. Soil samples collected from the borings at depths from approximately 5 to 45 feet indicated levels of total petroleum hydrocarbons (TPH) ranging from nondetectable to 6 parts per million (ppm), with the exception of one sample collected at a depth of 5 feet from boring B-3, which indicated 460 ppm TPH. See attached Plate P-1 for boring locations and selected site features, and attached Table 1 for laboratory results of soil samples. Ground water was not encountered (Applied GeoSystems Report No. 69013-1, dated May 26, 1989).

Work Performed - Third Ouarter 1989

Four 6,000-gallon and one 12,000-gallon underground product storage tanks were removed from the site by Paradiso Construction Company (Paradiso) in August 1989. Soil samples collected by Applied GeoSystems from beneath the tanks at a depth of approximately 14 feet indicated TPH concentrations from less than 2 ppm to 1,400 ppm in the soil in the north end of the tank pit. The north end of the pit was excavated to a depth of approximately 19 to 22 feet which was the limit of the equipment on site. Samples collected at this depth showed concentrations of TPH in the soil to be less than 2 ppm to 3,800 ppm. Soil samples collected from beneath the tanks at the south end of the pit showed concentrations of TPH in the soil to be 2 ppm to 12 ppm or less. Two soil samples were collected from beneath the vapor recovery system at approximate depths of 14 feet and 22 feet. Laboratory analysis of these samples indicate TPH concentrations of 2,300 ppm and 37,000 ppm respectively. Product line piping was removed and soil samples were collected from

the trenches. Laboratory analysis of these soil samples indicate TPH concentrations of 2 ppm to 190 ppm or less. Excavated soil was aerated onsite by Paradiso. Composite samples were collected by Applied GeoSystems and the soil was transported to a Class III landfill in Novato, California.

Future Work - Fourth Quarter 1989

- Submit report summarizing work performed to date and the results of the work to the regulatory agencies.
- Initiate preparation of a Work Plan for future work at the site, including evaluating potential impact to ground water.

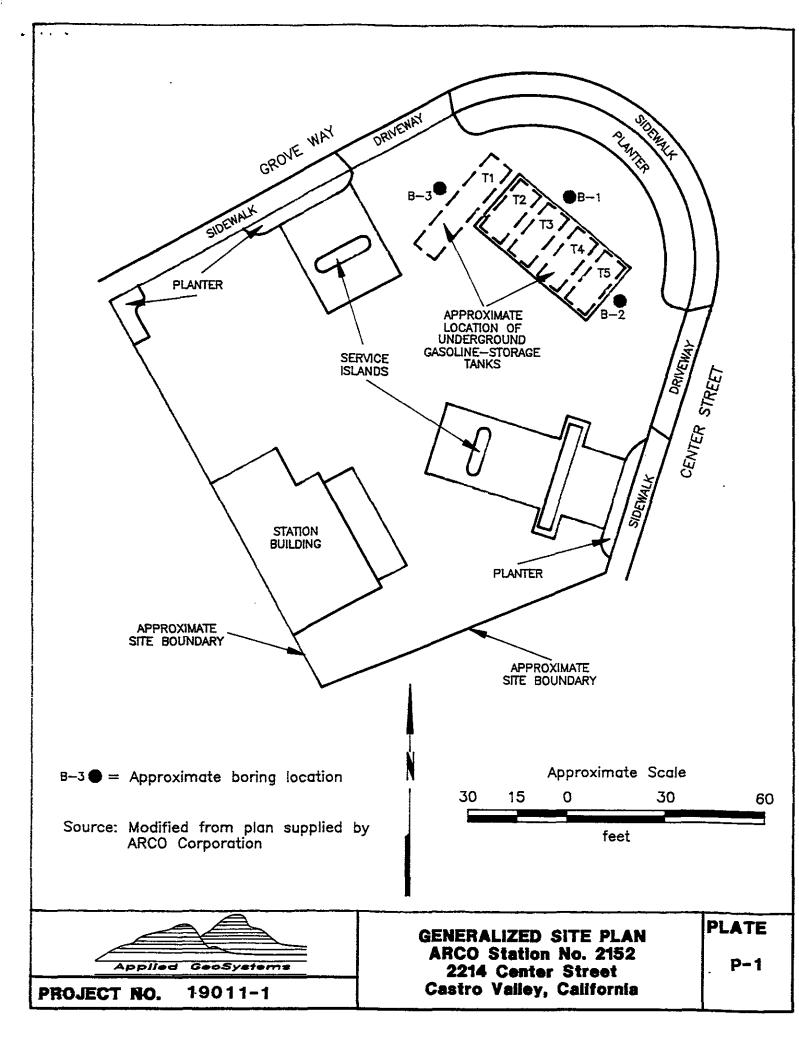
TABLE 1 RESULTS OF LABORATORY ANALYSIS OF SOIL SAMPLES ARCO Station No. 2152 2214 Center Street Castro Valley, California

Sample Identifier	TPH	В	E	T	X
S-10-B1	ND	ND	ND	ND	ND
S-20-B1	ND	0.11	ND	0.15	0.19
S-25-B1	ND	0.22	0.088	0.34	0.38
S-30-B1	5.1	0.42	0.11	0.89	0.56
S-35-B1	5.1	0.40	0.094	0.72	0.42
S-40-B1	ND	0.10	ND	ND	ND
S-45-B1	ND	ND	ND	ND	ND
S-10-B2	ND	ND	ND	ND	ND
S-20-B2	ND	ND	ND	ND	ND
S-25-B2	ND	ND	ND	ND	ND
S-30-B2	ND	ND	ND	ND	ND
S-5-B3	460	5.1	9.6	34	51
S-10-B3	5.6	ND	ND	0.11	1.0
S-20-B3	ND	ND	0.055	ND	0.068
S-25-B3	ND	ND	0.17	ND	0.16
S-30-B3	ND	ND	ND	ND	ND

Results in parts per million (ppm). TPH: Total petroleum hydrocarbons B:benzene E:ethylbenzene T:toluene X:total xylene isomers

ND: Less than the detection limit of the specified analysis.

Sample identification:



QUARTERLY SUMMARY REPORT Alameda County July 1989

ARCO Service Station No. 2152 22141 Center Street Castro Valley, California

Brief History

- March 10, 1988, a vapor/vent line leak was detected in an unleaded gasoline system during annual tank testing at the site. The system was repaired.
- April 6, 1988, the system passed retest. An underground Storage Tank Unauthorized Release (Leak) Report and results of tank testing were sent from Brown and Caldwell to Alameda County Division of Environmental Health on June 7, 1988.

Work Performed during Second Quarter 1989

- April 1989, Applied GeoSystems drilled three soil borings (B-1 through B-3) to a maximum depth of approximately 45 feet, as part of a site assessment prior to tank replacement. Soil samples collected from the borings at depths from approximately 5 to 45 feet indicated levels of total petroleum hydrocarbons (TPH) ranging from nondetectable to 6 parts per million (ppm), with the exception of one sample collected at a depth of 5 feet from boring B-3, which indicated 460 ppm TPH. See attached Plate P-1 for borings locations and selected site features, and attached Table 1 for laboratory results of soil samples. Ground water was not encountered. The results of this assessment are included in Applied GeoSystems Report No. 69013-1, dated May 26, 1989.

Proposed Work - Third Quarter 1989

- ARCO plans to replace the underground storage tanks during the third quarter of 1989. An environmental investigation will be performed during the tank removal operations, including collecting soil samples from beneath the tanks and product lines, and preparing a report summarizing the results of the investigation for submittal to the Alameda County Health Agency, Regional Water Quality Control Board, and Castro Valley Fire Department.

TABLE 1									
RESULTS	OF	LABORATORY ANALYSIS OF SOIL SAMPLES							
ARCO Station No. 2152									
		2214 Center Street							
		Castro Valley, California							

Sample Identifier	TPH	В	E	T	Х
S-10-B1	ND	ND	ND	ND	ND
S-20-B1	ND	0.11	ND	0.15	0.19
S-25-B1	ND	0.22	0.088	0.34	0.38
S-30-B1	5.1	0.42	0.11	0.89	0.56
S-35-B1	5.1	0.40	0.094	0.72	0.42
S-40-B1	ND	0.10	ND	ND	ND
S-45-B1	ND	ND	ND	ND	ND
S-10-B2	ND	ИД	ND	ND	ND
S-20-B2	ND	ND	ND	ND	ND
S-25-B2	ND	ND	ND	ND	ND
S-30-B2	ND	ND	ND	ND	ND
S-5-B3	460	5.1	9.6	34	<i>,</i> 51
S-10-B3	5.6	ND	ND	0.11	1.0
S-20-B3	ND	ND	0.055	ND	0.068
S-25-B3	ND	ND	0.17	ND	0.16
S-30-B3	ND	ND	ND	ND	ND

Results in milligrams per kilogram (mg/kg), or parts per million (ppm).

TPH: Total petroleum hydrocarbons

B:benzene E:ethylbenzene T:toluene X:total xylene isomers ND: Less than the detection limit of the specified analysis. Sample identification:

S-30-B3
Boring number
Approximate sample depth in feet
Soil sample

