



STID 5774

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FROM: Robert Kitay

NUMBER OF PAGES TO FOLLOW: 7

*****PLEASE PHONE IF THE MESSAGE WAS RECEIVED INCOMPLETE*****

COMMENTS:

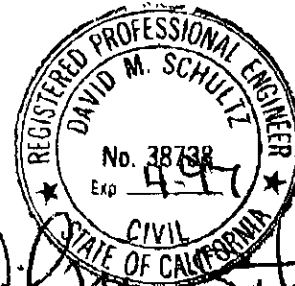
*1/11/96
 Talked to Robert Kitay
 (ASE) re: WP (1/10/96)
 approved.
 will drill tomorrow
 1/12/96
 JHug*



January 10, 1996

WORKPLAN
for a
SOIL AND GROUNDWATER ASSESSMENT
at
Former Kelley Auto Parts
4400 Telegraph Avenue
Oakland, California

Submitted by:
AQUA SCIENCE ENGINEERS, INC.
2411 Old Crow Canyon Road, #4
San Ramon, CA 94583
(510) 820-9391



INTRODUCTION

This submittal outlines Aqua Science Engineer's, Inc. (ASE) workplan for a soil and groundwater assessment the former Kelley Auto Parts located at 4400 Telegraph Avenue in Oakland, California (Figure 1). The proposed site assessment activities were initiated by Ms. Mildred Fisher, owner of the property, as required in a letter from the Alameda County Health Care Services Agency (ACHCSA) dated December 29, 1995 (Appendix A).

PROPOSED SCOPE OF WORK (SOW)

Based on the requirements of the ACHCSA, ASE's proposed SOW is as follows:

- 1) Prepare a site safety plan;
- 2) Obtain a subsurface drilling permit from the Alameda County Flood Control and Water Conservation District (Zone 7) and an excavation permit from the City of Oakland to drill in the city right of way;
- 3) Drill three soil borings in the locations shown on Figure 2, and collect soil samples for analyses;
- 4) Collect groundwater samples from the downgradient boring;
- 5) Backfill the borings with neat cement to the ground surface;
- 6) Collect groundwater samples from the on-site groundwater monitoring well;
- 7) Analyze the soil and groundwater samples at a CAL-EPA certified analytical laboratory;
- 8) Prepare a report detailing the methods and findings of this assessment.

Details of the assessment are presented below.

TASK 1 - PREPARE A SITE SAFETY PLAN

Based on the site history and the analytical results of the soil and groundwater samples collected during the previous site investigation, ASE has prepared a site-specific safety plan. A nearby hospital is designated in

the site safety plan as the emergency medical facility of first choice. A copy of the site specific Health and Safety Plan is appended to this report (Appendix B).

TASK 2 - OBTAIN NECESSARY PERMITS

ASE will obtain a drilling permit from the Alameda County Flood Control and Water Conservation District (Zone 7). ASE will also obtain an excavation permit from the City of Oakland to drill in the city's right of way. ASE will also notify Underground Service Alert (USA) to have underground utility lines marked in the site vicinity.

TASK 3 - DRILL THREE SOIL BORINGS AT THE SITE

ASE will drill three soil borings at the locations shown on Figure 2. One boring will be located in each of the two tank backfill locations. In addition, one boring will be located southwest of the former tank locations in the anticipated downgradient direction. This groundwater flow direction is based on a review of files for the Chevron Service Station located at 5100 Telegraph Avenue which is the closest site on record at the Regional Water Quality Control Board (RWQCB). The borings will be drilled using a Geoprobe drill rig. The drilling will be directed by a qualified ASE geologist. Undisturbed soil samples will be collected at least every 5-feet, at lithographic changes, and from just above the water table for subsurface hydrogeologic description and possible chemical analysis. The samples will be described by the ASE geologist according to the Unified Soil Classification System. The samples will be collected in brass tubes using a drive sampler advanced ahead of the boring as the boring progresses. Each sample will be immediately removed from the sampler, trimmed, sealed with Teflon tape and plastic caps, secured with duct tape, labeled with the site location, sample designation, date and time the sample was collected, and the initials of the person collecting the sample. The samples will be placed into an ice chest containing wet ice for delivery under chain of custody to a CAL-EPA certified analytical laboratory.

Soil from the remaining tubes not sealed for analysis will be removed for hydrogeologic description and will be screened for volatile compounds with an organic vapor meter (OVM). The soil will be screened by emptying soil from one of the tubes into a plastic bag. The bag will be sealed and placed in the sun for approximately 10 minutes. After the hydrocarbons have been allowed to volatilize, the OVM will measure the vapor through a small hole, punched in the bag. These OVM readings will be used as a

screening tool only since these procedures are not as rigorous as those used in an analytical laboratory.

All sampling equipment will be cleaned in buckets with brushes and a TSP or Alconox solution, then rinsed twice with tap water. Rinsates will be contained on-site in 55-gallon DOT 17H drums for future disposal by the client.

TASK 4 - COLLECT GROUNDWATER SAMPLES FROM ONE BORING

A groundwater sample will be collected from the downgradient boring. Drilling will be halted at the water table and a Powerpunch or similar type device will be utilized to collect groundwater samples from the boring. The groundwater samples to be analyzed for total petroleum hydrocarbons as gasoline (TPH-G), methyl t-butyl ether (MTBE), benzene, ethylbenzene, toluene and total xylenes (MBTEX) and volatile organic compounds (VOCs) will be contained in 40-ml volatile organic analysis (VOA) vials without headspace and preserved with hydrochloric acid. The groundwater samples to be analyzed for total petroleum hydrocarbons as diesel, stoddard solvent and paint thinner (TPH-D, TPH-SS and TPH-PT) will be contained in 1-liter amber glass bottles. All samples will be labeled with the site location, sample designation, date and time the samples were collected, and the initials of the person collecting the samples, placed in protective foam sleeves, and cooled in an ice chest with wet ice for transport to a state-certified analytical laboratory under chain-of-custody.

TASK 5 - BACKFILL THE BORINGS WITH NEAT CEMENT

Following collection of the soil and groundwater samples, the boreholes will be backfilled with neat cement placed by tremie pipe.

TASK 6 - COLLECT GROUNDWATER SAMPLES FROM THE SITE MONITORING WELL

ASE will sample the on-site groundwater monitoring well. Prior to purging and sampling, the groundwater surface will be checked for sheen or free-floating hydrocarbons. The thickness of any free-floating hydrocarbons will be measured with an acrylic bailer which will be lowered slowly to the groundwater surface and filled approximately half full for direct observation. The well will then be purged of at least four well casing volumes of groundwater. The temperature, pH and electrical conductivity of evacuated water will be monitored during the well purging, and purging will continue beyond four well casing volumes if these parameters have

not stabilized. Groundwater samples will be collected using a disposable polyethylene bailer. Groundwater will be decanted from the bailer into 40-ml glass volatile organic analysis (VOA) vials and 1-liter amber glass bottles. These samples will be preserved as necessary, labeled with the site location, sample designation, date and time the samples were collected, and the initials of the person collecting the samples. The samples will be placed on ice for transport to the analytical laboratory under chain of custody. Purged groundwater will be stored on-site in sealed and labeled DOT 17H drums for disposal by the client at a later date.

TASK 7 - ANALYZE THE SOIL AND GROUNDWATER SAMPLES

At least one soil sample from each boring as well as each groundwater sample will be analyzed at a CAL-EPA certified analytical laboratory for TPH-G by modified EPA Method 5030/8015, TPH-D, TPH-SS and TPH-PT by modified EPA Method 3510/8015, MBTEX by EPA Method 8020, and VOCs by EPA Method 8010. The soil sample analyzed will be chosen based on field observations such as odors, staining and OVM readings. If no field indications of contamination are present, the unsaturated sample closest to the water table will be analyzed.

TASK 8 - PREPARE A SUBSURFACE ASSESSMENT REPORT

ASE will submit a report outlining the methods and findings of this assessment. The report will be submitted under the seal of state registered civil engineer or geologist. This report will include a summary of all work completed during this assessment including tabulated soil and groundwater analytical results, conclusions and recommendations. Copies of the analytical report and chain of custody will be included as appendices.

SCHEDULE

Drilling is scheduled for January 12, 1996, pending approval of this workplan by the ACHCSA and approval of the necessary permits.

Should you have any questions or comments, please call us at (510) 820-9391.

Respectfully submitted,

AQUA SCIENCE ENGINEERS, INC.

Robert E. Kitay

Robert E. Kitay, R.E.A.
Project Geologist



TELEGRAPH AVENUE

BUILDING

PARKING

ASSUMED GROUNDWATER FLOW DIRECTION




SIDEWALK

44TH STREET

FORMER 550 GALLON UST, REMOVED

FORMER 6,000 GALLON UST, REMOVED

LEGEND

-  EXISTING MONITORING WELL
-  PROPOSED SOIL BORING, SOIL SAMPLE ONLY
-  PROPOSED SOIL BORING, SOIL AND GROUNDWATER SAMPLES



NORTH

SCALE
1" = 20'

PROPOSED SOIL BORING LOCATION MAP

Former Kelley Auto Parts
4400 Telegraph Avenue
Oakland, California

AQUA SCIENCE ENGINEERS, INC. Figure 2