

**SUPPLEMENTAL SITE ASSESSMENT
WORK PLAN**

September 8, 1993

**FORMER MOBIL STATION 04-H6J
1024 Main Street
Pleasanton, California**

Alton Project No. 30-0065

Prepared For:

**MOBIL OIL CORPORATION
2063 Main Street, #501
Oakley, California 94561**

By:

**ALTON GEOSCIENCE
5870 Stoneridge Drive, Suite 6
Pleasanton, California 94588**

September 8, 1993

Mobil Oil Corporation
2063 Main Street, #501
Oakley, California 94561

ATTN: MS. CHERINE FOUTCH

**SITE: FORMER MOBIL STATION 04-H6J
1024 MAIN STREET
PLEASANTON, CALIFORNIA**

**RE: SUPPLEMENTAL SITE ASSESSMENT
WORK PLAN**

Dear Ms. Foutch:

Alton Geoscience submits this supplemental site assessment work plan for former Mobil Station 04-H6J, located at 1024 Main Street in Pleasanton, California (Figure 1).

1.0 OBJECTIVES

The planned site assessment activities will be performed to:

- further characterize the lateral extent of dissolved-phase hydrocarbons, if any, beneath the site and offsite to the northwest, northeast, and southeast; and
- perform vacuum extraction tests on both the shallow (20-25 fbg) and deep (30-35 fbg) vadose zone.

2.0 SITE DESCRIPTION

Present Site Use: The site is an inactive service station (Figure 2).

Past Site Use: The site was a gasoline service station until 1989. All former underground storage tanks were removed in 1989; all associated dispenser islands and product lines were also removed and replaced.

Future Site Use: There are currently no known plans to redevelop the site.

Adjacent Property: Private residences are located adjacent to the site to the east; rail road tracks are located to the north. Across Stanley Boulevard to the south is an abandoned Union 76 Service Station presently under investigation. Retail businesses are located to the west.

Geography: The site is located approximately 1.75 miles east of Highway 680 at an elevation of 348 feet above mean sea level (NGVD-1929).

Regional Geology: The site is located within the Livermore Valley Basin. This area is underlain by unconsolidated to semiconsolidated Quaternary sediments. These sediments are predominantly stream channel, fluvial and alluvial deposits composed of gravel, sand, silt, and clay (ACWD-Zone 7, 1989).

Regional Hydrogeology: The site is located within the Amador Subbasin of the Livermore Valley Ground Water Basin. The main surface water drainage areas in the Amador Subbasin are the Arroyo Valle and the Arroyo Mocho, both of which flow into the Arroyo de la Laguna, which is on the western edge of the subbasin. There are 3 municipal water supply wells within 0.5 mile of the site. Monitoring wells maintained by the City of Pleasanton are located approximately 250 feet to the south of the site. The estimated depth to regional ground water is 40 feet below grade (fbg) and the regional ground water flow direction is directed toward the north and northeast (ACWD-Zone 7, 1993).

Ground Water Quality and Usage: Ground water in the basin is designated as beneficial for domestic use. The nearest municipal production wells, 16L2, 16L5, and 16L7 are located approximately 945 feet north of the site. These wells were drilled to a depths of 151, 685, and 647 fbg, respectively.

3.0 CURRENT SITE CONDITIONS

- Eleven onsite and three offsite borings were drilled at the site between March 1990 and January 1992.
- Nine onsite and one offsite ground water monitoring wells are present at the site.

- Ground water was encountered at a depth of 44 fbg; the static water level is approximately 44 fbg. Ground water is presently approximately 35 fbg due to high precipitation during the 1992 and 1993 winter months. The ground water gradient is approximately 0.15 foot per foot to the east. The ground water gradient direction at this site varies from northwest to southeast as determined from previous ground water monitoring events. Ground water flow direction is potentially influenced from Kaiser Sand & Gravel mining operation discharge (up to 5670 gallons per minute in 1991 water year) into the Arroyo Valle, an intermittent stream approximately 250 feet south of the subject site (ACWD-Zone 7, 1991).
- Adsorbed-phase hydrocarbons have been detected in the vicinity of the former tank cavity and former pipeline trenches and extend to near-surface ground water. The lateral extent of adsorbed-phase hydrocarbons is adequately characterized.
- Free product has been detected in the vicinity of MW-2 and dissolved-phase hydrocarbons have been detected in the vicinity of MW-2, MW-4, and MW-9. The lateral extent of free product is characterized. The dissolved-phase hydrocarbons are not fully characterized.

4.0 PLANNED SITE ASSESSMENT ACTIVITIES

4.1 PRE-FIELD WORK ACTIVITIES

Ground water monitoring well permits and site access agreements will be acquired prior to drilling.

Underground Service Alert (USA) will be notified approximately 10 days prior to field activities, and a geophysical survey will be performed to mark underground utilities at the proposed drilling locations.

4.2 DRILLING AND SOIL SAMPLING

As many as one onsite and two offsite ground water monitoring wells will be drilled to depths of approximately 55 fbg (Figure 2). In addition, as many as 2 vapor monitoring and 2 vapor extraction wells will be drilled to depths of 35 and 55 fbg, respectively. Drilling will be performed using a hollow-stem auger drill rig. Soil samples will be collected at 5-foot intervals in ground water monitoring wells and continuously in vapor wells for soil description, field hydrocarbon vapor testing, and possible laboratory analysis. Refer to Appendix A for general field procedures.

Select soil samples will be analyzed for the following:

- total petroleum hydrocarbons as gasoline (TPH-G) using the California Department of Health Services (DHS) Method (EPA Method 8015 modified for gasoline);
- benzene, toluene, ethylbenzene, and total xylenes (BTEX) using EPA Method 8020;
- total organic carbon;
- particle size analysis (ASTM D422); and
- bulk density.

4.3 MONITORING WELL CONSTRUCTION

Ground water and vapor monitoring wells will be constructed using 4-inch-diameter PVC casing with expected screened intervals from 25 to 55 fbg and 20 to 25 fbg, respectively. The proposed vapor extraction well in the vicinity of MW-2 will be constructed using a 6-inch-diameter PVC casing with expected screened intervals at 20 to 25 fbg and 30 to 55 fbg. Well construction details and development procedures are outlined in Appendix A. Well construction details including screened intervals may vary based on field observations.

4.4 ELEVATION SURVEY AND FLUID-LEVEL MONITORING

Well top elevations will be surveyed relative to a city benchmark to the nearest 0.01 foot by a licensed surveyor. Fluid levels in the monitoring wells will be measured to obtain data regarding the depth to ground water and presence of free product, if any. Field procedures are described in Appendix A.

4.5 GROUND WATER SAMPLING

Ground water samples will be collected from both newly installed and existing monitoring wells which do not contain free product, in accordance with EPA protocol (Appendix A).

Ground water samples will be analyzed for the following:

- TPH-G using the DHS Method (EPA Method 8015 modified for gasoline); and
- BTEX using EPA Method 8020/602.

All laboratory analyses will be performed by a state-certified laboratory. Chain of Custody protocol will be followed for all samples selected for analysis, thus providing a continuous record of sample possession prior to actual analysis.

4.6 SOIL AND GROUND WATER DISPOSAL

Soil generated during drilling activities will be stored onsite in Department of Transportation (DOT) approved drums. Purged ground water will be stored onsite in DOT drums and transported by vacuum truck for disposal. Waste manifests will be prepared for proper transport and disposal.

4.7 SUPPLEMENTAL SITE ASSESSMENT REPORT

A report on the supplemental site assessment activities will include boring logs, laboratory analysis results, well construction details, well permits, findings, and conclusions.

5.0 SITE SAFETY PLAN

A site safety plan designed to promote project personnel safety and preparedness during the activities described in this work plan is included in Appendix B.

6.0 LIST OF ATTACHMENTS

- References
- Figure 1: Vicinity Map
- Figure 2: Site Plan
- Appendix A: General Field Procedures
- Appendix B: Site Safety Plan

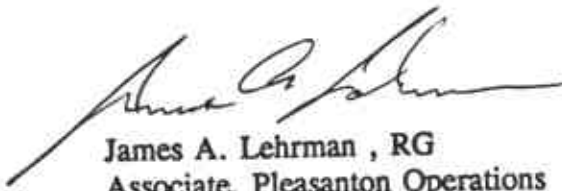
If you have any questions regarding this work plan, please call us at (510) 734-8134.

Sincerely,

ALTON GEOSCIENCE



Ron A. Scheele
Staff Geologist



James A. Lehrman , RG
Associate, Pleasanton Operations



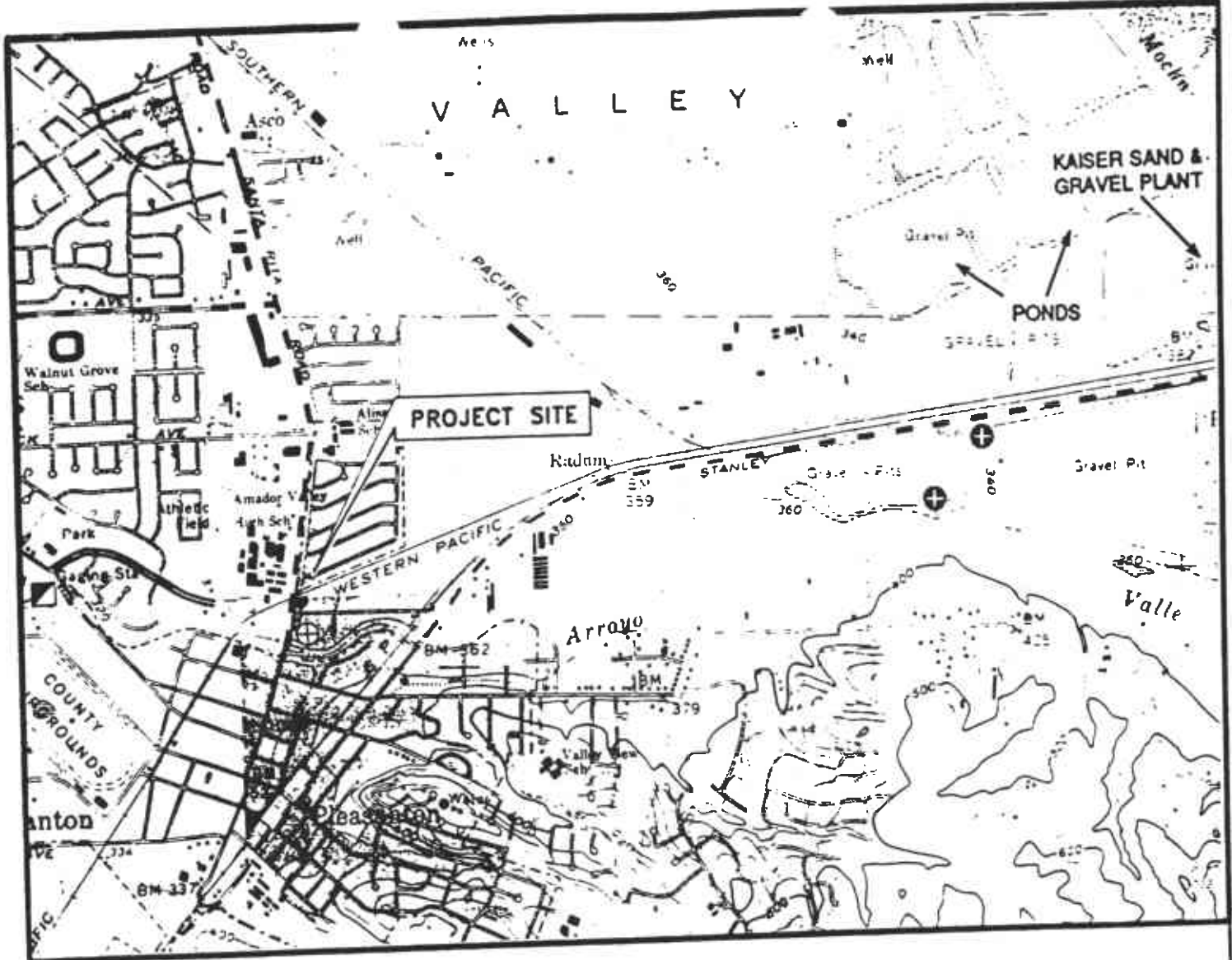
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REFERENCES

Alameda County Flood Control and Water Conservation District, Zone 7. June 24, 1992. Memorandum: Spring 1993 Ground Water Contour Map, .

Alton Geoscience. July 31, 1992. Supplemental Site Investigation Report. Pleasanton, California, 14pp plus appendices.

United States Geological Survey, 1961 (Photorevised 1980), Livermore and Dublin Quadrangles, 7.5 Minute Series, USGS, Denver, Colorado.



LEGEND

- ▣ U.S.G.S. Gauging Station
- ⊕ City of Pleasanton Monitoring Well
- ⊕ Kaiser Discharge to Arroyo Valle



Source: U.S.G.S. Map
Dublin/Livermore
Quadrangles
California
7.5 Minute Series

SITE VICINITY MAP

Former Mobil Station 04-H6J
1024 Main Street
Pleasanton, California







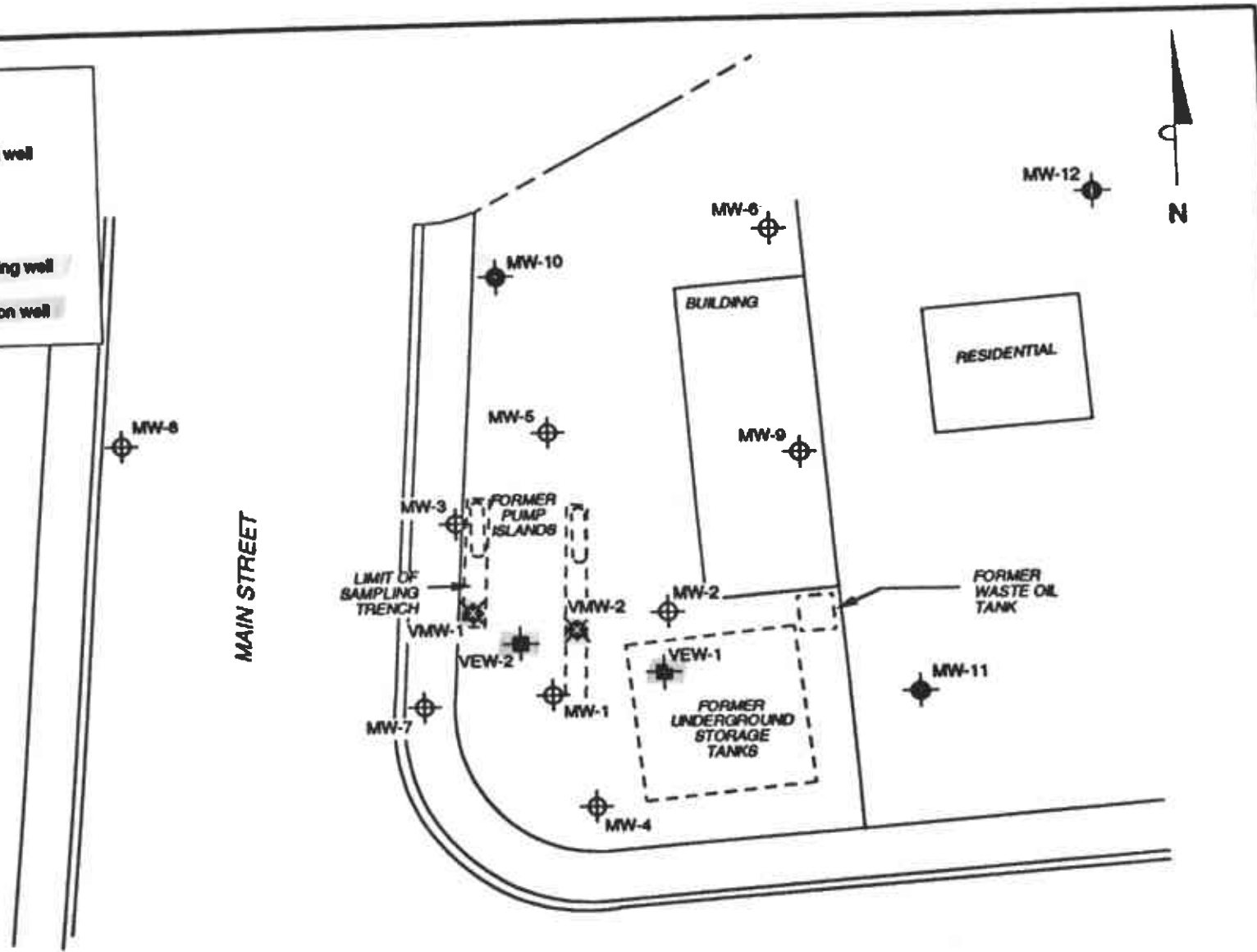
ALTON GEOSCIENCE
Pleasanton, California

Project No. 31-0065

FIGURE 1

LEGEND

-  MW-3 Ground water monitoring well
-  MW-11 Proposed ground water monitoring well
-  VMW-2 Proposed vapor monitoring well
-  VEW-2 Proposed vapor extraction well



SITE PLAN

Former Mobil Station 04-H6J
1024 Main Street
Pleasanton, California



FIGURE 2

APPENDIX A
GENERAL FIELD PROCEDURES

APPENDIX A

GENERAL FIELD PROCEDURES

A description of the general field procedures used during site investigation and monitoring activities is presented below. For an overview of protocol, refer to the appropriate section(s).

DRILLING AND SOIL SAMPLING

Soil borings are drilled using continuous-flight, hollow-stem augers. Borings that are not completed as monitoring wells are grouted to within 5 feet of the ground surface with a cement/bentonite slurry. The remaining 5 feet is filled with concrete.

Soil samples are obtained for soil description, field hydrocarbon vapor screening, and possible laboratory analysis. Soil samples are retrieved from the borings by one of two methods: 1) continuously, using a 5-foot-long, continuous-core barrel sampler advanced into the soil with the lead auger; sample tubes are driven into the core with a mallet, or 2) at 2.5- or 5-foot intervals, using a standard split-spoon sampler lined with four 1.5-inch-diameter stainless steel or brass sample inserts. The split-spoon sampler is driven approximately 18 inches beyond the lead auger with a 140-pound hammer dropped from a height of 30 inches.

For hand auger borings and hand-held, power-driven auger borings, soil samples are retrieved using a hand-driven slide hammer lined with a 1.5-inch-diameter stainless steel sample tube.

During drilling activities, soil adjacent to the laboratory sample is screened for combustible vapors using a combustible gas indicator (CGI) or equivalent field instrument. For each hydrocarbon vapor screening event, a 6-inch-long by 2.5-inch-diameter sample insert is filled approximately 1/3 full with the soil sample, capped at both ends, and shaken. The probe is then inserted through a small opening in the cap, and a reading is taken after approximately 15 seconds and recorded on the boring log. The remaining soil recovered is removed from the sample insert or sampler, and described in accordance with the Unified Soil Classification System. For each sampling interval, field estimates of soil type, density/consistency, moisture, color, and grading are recorded on the boring logs.

EXCAVATION SOIL SAMPLING

Excavation soil samples are collected either by driving a stainless steel sample tube directly into freshly uncovered soil, or from the backhoe bucket by driving the sample tube into a relatively coherent and undisturbed portion of soil within the bucket. Excavated soil is temporarily stockpiled onsite. Stockpile samples are collected by shoveling below the surface of the pile and inserting a steel sample tube into the soil.

SOIL SAMPLE HANDLING

Soil sample handling follows the same basic protocol for both drilling and excavation activities. Upon retrieval, soil samples are immediately removed from the sampler, sealed with Teflon sheeting and polyurethane caps, and wrapped with tape. Each sample is labeled with the project number, boring/well number, sample depth, geologist's initials, and date of collection. After the samples have been labeled and documented in the chain of custody record, they are placed in a cooler with ice at approximately 4 degrees Celsius ($^{\circ}\text{C}$) prior to and during transport to a state-certified laboratory for analysis. Samples not selected for immediate analysis may be transported in a cooler with ice and archived in a frostless refrigerator at approximately 4°C for possible future testing.

MONITORING WELL INSTALLATION

Monitoring wells are constructed of 4-inch-diameter, flush-threaded Schedule 40 PVC blank and screened (0.020-inch slot size) casing. Vapor extraction wells are constructed of either 4-inch- or 6-inch-diameter, flush threaded Schedule 40 PVC blank and screened (0.020-inch slot size) casing. Where possible, the screened interval will extend at least 10 feet above, and 10 to 20 feet below, the top of the ground water table. The annular space surrounding the screened casing is backfilled with No. 3 Monterey sand (filter pack) to approximately 2 feet above the top of the screened section.

During well construction, the filter pack is completed by surging with a rig-mounted surge block. A 3-foot-thick bentonite annular seal is placed above the filter pack. The remaining annular space is grouted with Portland cement and/or bentonite grout to the surface. Utility access boxes are installed slightly above grade. Locking, watertight caps are installed to prevent unauthorized access to the well, and limit infiltration of surface fluids.

FLUID LEVEL MONITORING

Fluid levels are monitored in the wells using an electronic interface probe with conductance sensors. The presence of liquid-phase hydrocarbons is verified using a hydrocarbon-reactive paste. The depth to liquid-phase hydrocarbons and water is measured relative to the well box top or top of casing. Well box or casing elevations are surveyed to within 0.02 foot relative to a county or city bench mark.

GROUND WATER PURGING AND SAMPLING

Ground water monitoring wells are purged and sampled in accordance with standard regulatory protocol. Typically, monitoring wells that contain no liquid-phase hydrocarbons are purged of ground water prior to sampling so that fluids sampled are representative of fluids within the formation. Temperature, Ph, and specific conductance are typically measured after each well casing volume has been removed. Purging is considered complete when these parameters vary less than 10% from the previous readings, or when four casing volumes of fluid have been removed. Samples are collected without further purging if the well does not recharge within 2 hours to 80% of its volume before purging.

The purged water is either pumped directly into a licensed vacuum truck or temporarily stored in labeled drums prior to transport to an appropriate treatment or recycling facility. If an automatic recovery system (ARS) is operating at the site, purged water may be pumped into the ARS for treatment.

Ground water samples are collected by lowering a 1.5-inch-diameter, bottom-fill, disposable polyethylene bailer just below the static water level in the well. The samples are carefully transferred from the check-valve-equipped bailer to 1-liter and 40-milliliter glass containers. The sample containers are filled to zero headspace and fitted with Teflon-sealed caps. Each sample is labeled with the project number, well number, sample date, and sampler's initials. Samples remain chilled at approximately 4°C prior to analysis by a state-certified laboratory.

CHAIN OF CUSTODY PROTOCOL

Chain of custody protocol is followed for all soil and ground water samples selected for laboratory analysis. The chain of custody form(s) accompanies the samples from the sampling locality to the laboratory, providing a continuous record of possession prior to analysis.

DECONTAMINATION

Drilling and Soil Sampling

Drilling equipment is decontaminated by steam cleaning before being brought onsite. The augers are also steam cleaned before each new boring is commenced. Prior to use, the sampler and sampling tubes are brush-scrubbed in a Liqui-nox and potable water solution and rinsed twice in clean potable water. Sampling equipment and tubes are also decontaminated before each sample is collected to avoid cross-contamination between borings.

Ground Water Sampling

Purging and sampling equipment that could contact well fluids is either dedicated to a particular well or cleaned prior to each use in a Liqui-nox solution followed by two tap water rinses.

APPENDIX B
SITE SAFETY PLAN

SITE SAFETY PLAN

Prepared for Activities Performed at:

FORMER MOBIL STATION 04-H6J
1024 Main Street
Pleasanton, California

1.0 INTRODUCTION

This plan has been prepared in conformity with the Alton Geoscience Health and Safety Program. It addresses those activities associated with site assessment and will be implemented during the site investigations and related field work. Compliance with this Site Safety Plan (SSP) is required of all Alton Geoscience personnel and subcontractors who enter the site. The requirements and parameters identified in this SSP will be subject to modification as warranted by existing site conditions or as work progresses. However, no changes will be made without the prior approval of the Site Safety Officer.

2.0 SITE SAFETY OFFICER

The Site Safety Officer (SSO) has overall responsibility for the development, coordination, and implementation of the SSP and its conformity with the Alton Geoscience Corporate Health and Safety Plan. The SSO will also be responsible for field implementation of the SSP. This will include communicating the site-specific requirements to the project personnel, and assuring compliance with the Corporate Health and Safety Plan. In the event that the SSO is unable to perform these duties, the designated Alternate Safety Officer will be responsible.

3.0 SITE PERSONNEL

All project personnel for this site will be responsible for understanding and complying with the SSP requirements. Onsite personnel will have assigned responsibilities. The Project Geologist/Engineer, assigned to supervise field work, will serve as the SSO. The SSO, or a designated alternate, will ensure that onsite personnel have received a copy of this SSP. The SSO will oversee compliance with this SSP. Additionally, the SSO will be responsible for initiating emergency response procedures, if necessary.

Prior to commencement of work, the SSO will conduct a site-specific training session (tailgate meeting) to make personnel aware of potential physical and chemical hazards and safe work practices. Material Safety Data Sheets (MSDS) will be made available.

Onsite personnel must initially complete a 40-hour hazardous materials training course, as required by the Code of Federal Regulations (CFR) 1910.120. Thereafter, personnel are required to annually complete an 8-hour refresher course. Additionally, personnel will be

required to document their full understanding of this SSP before admission to the site, by signing the compliance log at the end of this SSP. Appropriate personal protective equipment will be available and used, as necessary, by onsite project personnel.

4.0 SITE BACKGROUND

Adsorbed-phase and dissolved-phase hydrocarbons have been detected in soil and ground water beneath the site. Ground water is present at a depth of approximately 34 feet below grade.

5.0 POTENTIAL HAZARDS

The activities to be performed are investigative in nature. Physical and chemical hazards that may be encountered onsite include those associated with operating mechanical equipment and dealing with potentially hazardous chemicals. Probably the most immediate hazard is that of physical injury to onsite personnel from machinery. Hydrocarbons in various phases (adsorbed, dissolved, liquid, and/or vapor) may be present in the subsurface at the site. The hazard potential associated with the presence of hydrocarbons includes vapor build-up in, and/or escaping from, well bores, excavations, and contaminated soil stockpiled and moved around the site.

5.1 PHYSICAL HAZARDS

Potential hazards to personal safety at the site include the following:

1. Explosion and fire

Petroleum products are highly flammable. Liquid petroleum product readily vaporizes from standing pools or saturated soil. Ignition sources of any kind (e.g., engines, impact sparking, and heat or arc from inappropriate equipment or instrumentation) pose a major explosion and fire hazard.

2. Injury from operation of drilling and excavation equipment

3. Electrocution from buried or overhead power lines

4. Noise exposure from the operation of heavy equipment

5. Heat stress

6. Cold exposure

8. Biologic hazards

5.2 CHEMICAL HAZARDS

Hazardous chemicals that may be encountered onsite include diesel and gasoline hydrocarbons. These chemicals are volatile, flammable, and moderately to extremely toxic. Potential hazards associated with petroleum hydrocarbons include inhalation, ingestion, and skin absorption of toxic vapors, liquids, or dusts.

Gasoline vapors in high concentrations (greater than 300 parts per million [ppm]) can cause eye, nose, and throat irritation, headaches, dizziness, and anesthesia. Skin contact with liquid gasoline may result in irritation and dermatitis, and absorption of specific toxic petroleum fractions. Toxic petroleum hydrocarbon substances include the following volatile organic compounds (VOC): benzene, toluene, ethylbenzene, and total xylenes (BTEX). Benzene is a suspected human carcinogen and, along with toluene and xylenes, can cause damage to an unprotected individual's liver, kidneys, and central nervous system. Ethylbenzene is a skin irritant in vapor and liquid form.

6.0 HAZARD ASSESSMENT

Consistent efforts will be made throughout the project to evaluate the chemical and physical hazards described above. Fire, explosion, and VOC exposure hazards will be evaluated in the following manner.

6.1 FIRE AND EXPLOSION

A direct-reading portable combustible gas indicator (CGI), which measures VOC concentrations in ppm or as a percentage of the lower explosive limit (LEL), will be used to evaluate the possible formation of flammable atmospheres in and around the work area. Continuous measurements will be obtained at the top of each borehole throughout the drilling operations. Periodic measurements will also be collected in any confined areas that may contain and accumulate combustible vapors.

6.2 EXPOSURE TO VOC

Airborne concentrations of VOC will be monitored with the CGI described above. Measurements will be obtained from the top of each borehole and at stockpiles of soil cuttings.

7.0 HAZARD REDUCTION

7.1 GENERAL PROCEDURES

Underground utilities will be located and identified prior to any operation; power lines and pipelines will be shut down, locked out, and tagged, as appropriate.

Excavation, handling, stockpiling, and backfilling will not be conducted whenever the average wind speed is greater than 15 miles per hour (mph), or when the wind speed instantaneously exceeds 25 mph. During excavation, handling, stockpiling, and backfilling, the working areas, excavated material, and unpaved roadways will be watered down (if necessary) until the surface is moist, and maintained in a moist condition to minimize dust.

Access and egress ramps shall be designed by a qualified soils engineer, and maintained in areas of excavation or trenching greater than 4 feet in depth. The ramps will be positioned so that no more than 25 feet of lateral travel is necessary to access them. The stability of adjacent structures must be determined prior to entering a trench or excavation greater than 4 feet in depth.

Workers shall not be permitted underneath loads handled by excavation or loading equipment. Barriers shall be constructed to keep equipment and personnel away from the edge of the excavation.

No confined space entry is anticipated during the course of these operations. However, if such a situation is encountered, workers are prohibited from entering confined spaces until the company plan dealing with confined spaces is implemented.

7.2 SAFETY INSPECTIONS

Walk-through safety inspections of the work area will be conducted daily before the start of work and as conditions change. The results of these surveys will be communicated to the work crews during regularly scheduled "tailgate" safety meetings. The safety procedures and the day's planned operations will be discussed at these sessions.

7.3 ENVIRONMENTAL CONTROLS

In the event that CGI readings anywhere on the site exceed 10 percent of the LEL, work will be suspended, monitoring will be continued as necessary to isolate the area of concern, and any or all of the following environmental controls will be implemented as appropriate:

- 1. Vapors from pooled petroleum product will be suppressed (if necessary) by spraying with foam, appropriate chemical suppressant, or carbon dioxide in gas form or dry ice.**
- 2. Air movers will be used to ventilate the areas of concentration to below 10 percent LEL.**
- 3. Borings emitting excessive VOC concentrations will be ventilated, capped, or shut in as necessary.**
- 4. Contaminated soil will be covered with clean soil and/or sprayed with water or deodorizing chemicals in order to reduce vaporization of VOC.**
- 5. Drilling equipment will be bonded and grounded during the operations to control ignition sources.**

7.4 ENGINEERING CONTROLS

Access to work areas will be limited by the SSO to essential personnel. Drilling areas will be cordoned off with delineators, barriers, and/or taping. Excavated soil will be stockpiled and covered, or stored in closed drums or roll-off bins. Purged water will be stored in closed drums. Drums and/or roll-off bins containing soil or water will be clearly labeled. Hydrocarbon-affected soil or water will be removed from the site at the earliest opportunity.

7.5 PERSONAL PROTECTIVE EQUIPMENT

Field personnel involved in site assessment and remediation are required to be prepared with the following personal protective equipment:

- Hard hats
- Half-face air purifying respirators with organic vapor cartridges and dust/mist filters
- Safety glasses with side-shields, or splash goggles
- Tyvek coveralls and other suitable work clothing
- Chemical-resistant gloves
- Steel-toe boots or boot covers
- Ear plugs or other suitable hearing protection
- Traffic safety vests

7.6 PROTECTION FROM AIRBORNE TOXIC CHEMICALS

Workers will be required to wear half-face air purifying respirators with organic vapor cartridges under the following circumstances:

1. If the worker is continuously exposed throughout the day to VOC vapors that exceed the permissible exposure level - time-weighted average (PEL-TWA) for gasoline (300 ppm).
2. If the worker is exposed at any time to VOC vapors that exceed the permissible exposure level - short-term exposure limit (PEL-STEL) for gasoline (500 ppm).

Similar precautions will be taken with regard to other toxic chemicals, such as BTEX components. If VOC vapors exceed 1,000 ppm, full-face air purifying respirators with organic vapor canisters will be worn.

7.7 OTHER PHYSICAL HAZARDS

In general, accidents will be prevented by personal protective equipment, environmental controls, engineering controls, and the exercise of reasonable caution during work activities. Other potential hazards and corresponding precautions include the following:

Physical Contact with Contaminated Soil

Workers who must come in direct contact with VOC-contaminated soil or ground water for sampling purposes will be required to wear protective gloves and/or necessary protective clothing to prevent skin contact.

Noise Exposure

Project personnel entering high-noise areas will be required to wear hearing protection (ear plugs or muffs).

Heat Stress

Heat stress can impair worker coordination and judgement and directly impact health and safety. Heat stress is more likely when personal protective equipment is in use. Project personnel will be provided with beverages, shaded rest areas, and breaks, as needed, to prevent heat stress.

Cold Exposure

To guard against cold injury (frostbite and hypothermia), which is a danger when the temperature and wind-chill factor are low, employees will wear appropriate clothing, have warm shelter readily available, and maintain carefully scheduled work and rest periods.

Biological Hazards

The only biological factors anticipated during operations would be those posed by poisonous plants, insects, animals, and indigenous pathogens. Protective clothing and respiratory equipment can help reduce the chances of exposure. Thorough washing of any exposed body parts and equipment will help protect against infection.

8.0 EMERGENCY RESPONSE

The SSO will have controlling authority during an emergency. In the event that this person is not available, the Alternate Safety Officer will be in charge. Emergency response organizations, locations, and contacts are listed at the end of this SSP.

9.0 GENERAL SAFETY REQUIREMENTS

The following requirements will also be observed:

- The SSO has the authority to correct unsafe site conditions. Accidents, injuries, and potentially unsafe working conditions shall be reported to the SSO immediately.

- Eating, smoking, and drinking will be allowed only in designated offsite areas. Site personnel will wash their hands and faces thoroughly prior to eating or drinking.
- Respirators will be cleaned, sanitized, inspected, and maintained by employees after each use.
- Fire extinguishers will be onsite for use on equipment or small fires only.
- An adequately stocked first aid kit will be onsite during work activities.

Practical engineering and geological information, experience, and accepted practices will be employed, as necessary, to control site safety while carrying out the proposed site assessment and remediation work.

10.0 LIST OF KEY PERSONNEL

Site Safety Officer:

**Eric S. Schaper
Alton Geoscience**

Alternate Safety Officer:

**Mamdouh A. Awwad
Alton Geoscience**

**Supervisor/Offsite Coordinator:
(510) 734-8134**

**Katherine R. Price
Alton Geoscience**

**Client Contact:
(510) 625-1173**

**Cherine Foutch
Mobil Oil Corporation**

EMERGENCY SERVICES

The following list provides the location and telephone number for emergency services in the vicinity of the project site. Directions to medical facilities are included below, and a map is attached at the end of this site safety plan.

<u>LOCATION</u>	<u>TELEPHONE</u>
Emergency Situation:	911
Medical Facilities:	
Kaiser Hospital 7601 Stoneridge Drive Pleasanton, California	(510) 847-5000
Directions:	
NORTH on Santa Rita Road, LEFT onto Stoneridge Drive, go approximately 1.5 miles, hospital on right side.	
Fire Department:	
Pleasanton Fire Department 200 Old Bernal Avenue Pleasanton, California	(510) 484-8114
Police Department:	
Pleasanton Police Department-City Hall 200 Old Bernal Avenue Pleasanton, California	(510) 484-8127
Poison Control Center:	(800) 523-2222
USA Dig Alert:	(800) 642-2444

SITE SAFETY PLAN COMPLIANCE LOG

For Activities Performed at:

FORMER MOBIL STATION 04-H6J
1024 Main Street
Pleasanton, California

I have read and understand this Site Safety Plan and hereby agree to comply with all safety requirements outlined herein.

Signature: _____ Date: _____
Site Safety Officer, Alton Geoscience, Inc.

Signature: _____ Date: _____
Alternate Safety Officer, Alton Geoscience, Inc.

Print Name: _____
Signature: _____ Date: _____
Company: _____ Title: _____

Print Name: _____
Signature: _____ Date: _____
Company: _____ Title: _____

Print Name: _____
Signature: _____ Date: _____
Company: _____ Title: _____

Print Name: _____
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Company: _____ Title: _____

Print Name: _____
Signature: _____ Date: _____
Company: _____ Title: _____

SITE SAFETY PLAN COMPLIANCE LOG
FORMER MOBIL STATION 04-H6J
(Continued)

Print Name: _____
Signature: _____ Date: _____
Company: _____ Title: _____

Print Name: _____
Signature: _____ Date: _____
Company: _____ Title: _____

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Company: _____ Title: _____

Print Name: _____
Signature: _____ Date: _____
Company: _____ Title: _____

SITE SAFETY PLAN COMPLIANCE LOG
FORMER MOBIL STATION 04-H6J
(Continued)

Print Name: _____
Signature: _____ Date: _____
Company: _____ Title: _____

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Signature: _____ Date: _____
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Company: _____ Title: _____