



- STOCKPILE SCHEDULE:**
- K - STOCKPILED SOIL FROM THE (4) 2,000 GALLON UNDERGROUND STORAGE TANKS.
 - L - STOCKPILED SOIL FROM THE (1) 5,000 GALLON DIESEL UNDERGROUND STORAGE TANKS.
 - M - STOCKPILED SOIL FROM THE (1) 10,000 GALLON GASOLINE UNDERGROUND STORAGE TANK.
 - N - STOCKPILED SOIL FROM THE (3) 500 GALLON GASOLINE UNDERGROUND STORAGE TANKS.
 - O - STOCKPILED SOIL FROM THE (1) 500 GALLON WASTE OIL UNDERGROUND STORAGE TANK.

ALICE STREET

● Proposed Hand Auger Boring
 X Proposed 3" G.W. Monitor Well
 ■ Proposed 15' Soil Boring

AQUA SCIENCE ENGINEERS, INC

FIGURE 1: Site Plan
 at
 250 8th Street
 Oakland, California 94607

SCALE: 1" = 20'

depth of excavation (ft)

2.0 SERVICES TO BE PROVIDED--GROUNDWATER ASSESSMENT

- 1) Prepare a groundwater assessment and monitoring plan for the Alameda County Water District (this may be presented as part of the soil assessment workplan above). Obtain well installation permits.
- 2) Drill three 30 ft. 10 inch diameter borings with a rotary drill rig and hollow stem auger (see Figure for locations). Place drill cuttings in contaminated spoils piles.
- 3) Log borings according to the Unified Soil Classification System.
- 4) Collect soil samples at 5, 10 and 15 ft. (to groundwater). → X
- 5) Install three 30 ft. by four in. diameter PVC groundwater monitoring wells with 12 ft. bentonite/cement seals, locking caps and flush-mounted steel street boxes.
- 6) Develop wells as specified by the Alameda County Water District. Drum purged groundwater for proper disposal by owner.
- 7) Collect groundwater samples from each well.
- 8) Analyze soil and groundwater samples at a Cal EPA Certified Laboratory as follows:

SOIL	TPH G by EPA 5030/8015
	TPH D by EPA 3510/8015
	BTXE by EPA 8020
GROUNDWATER	TPH G by EPA 5030/8015
	TPH D by EPA 3510/8015
	BTXE by EPA 8020
- 9) Survey well head and groundwater elevations for three wells. Determine the groundwater flow direction and gradient.
- 10) Prepare a project report (may be combined with soil assessment report above) which will include:
 - a. Description of project and methods.
 - b. Soil boring and well installation logs.
 - c. Cal EPA Certified Analysis Reports.
 - d. Groundwater gradient, direction and estimated *velocity*

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AQUA SCIENCE ENGINEERS
PROPOSAL FOR SOIL AND GROUNDWATER CONTAMINATION ASSESSMENT
ASE PROPOSAL #XXXXXXXX

To Jerry
& Craig -
Review
careful!

SITE: Exxon Service Station
250 8th Street
Oakland, CA 94607

1.0 SERVICES TO BE PROVIDED--SOILS ASSESSMENT

- 1) Prepare a soil and groundwater assessment workplan for the Alameda County Water District.
- 2) Drill six 15 ft. soil borings (see enclosed Figure for boring locations). Collect soil samples at 5, 10 and 15 ft.
- 3) Drill seven 5 ft. deep hand auger borings in the tank excavations (see enclosed Figure for boring locations). Collect soil samples at 5 ft. (15 ft. below surface elevation).
- 4) Log soil borings according to the Unified Soil Classification System.
- 5) Place all drill cuttings in contaminated spoils piles for proper disposal. Backfill borings with cement slurry.
- 6) Submit a total of 25 soil samples (eight to be analyzed for diesel and 25 for gasoline) to a Cal EPA Certified Laboratory for chemical analysis using:
 - Gasoline...TPH by EPA 5030/8015
BTXE by EPA 8020
 - Diesel....TPH by EPA 3510/8015
BTXE by EPA 8020
- 7) Prepare a project report which will include:
 - a. Description of project and methods.
 - b. Description of previously conducted assessment.
 - c. Soil boring logs.
 - d. Cal EPA certified analysis report.
 - e. Conclusions regarding soil conditions.