



April 17, 2003

Job# pending

Mr. Don Hwang, Hazardous Materials Specialist  
Alameda County Environmental Health Services  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502-9335

Alameda County  
APR 23 2003  
Environmental Health

**Work Plan**  
**2003 Monitoring Program**  
**Auto Pro Site**  
**5200 Telegraph Avenue**  
**Oakland, California**

Dear Mr. Hwang:

MACTEC Engineering & Consulting (MACTEC; formerly known as Harding ESE) is pleased to present this Workplan for the 2003 monitoring program for the AutoPro site located at 5200 Telegraph Avenue in Oakland, California. This Work Plan has been prepared on behalf of TriStar Partnership and is based on the tasks requested in the December 24, 2002, letter from the Alameda County Health Care Services, Environmental Health Services Department (County) and our telephone discussion with the County on February 24, 2003. In this letter, the County requested a Work Plan to address specific tasks. The scope of work described below is to address these requests.

## **SCOPE OF WORK**

### **Quarterly Monitoring Program**

The quarterly monitoring program will be conducted as follows:

- The monitoring network will include AutoPro Wells MW-1 through MW-5, and Chevron Wells MW-2 and MW-3.
- The wells will be purged and sampled using MACTEC and regulatory approved protocols. Prior to purging, water levels in the wells will be measured and the surface of the water will be inspected for a hydrocarbon layer or sheen. The wells will then be purged by pumping or bailing with a PVC bailer three well volumes. During purging, pH, conductivity, temperature, and turbidity of the purged water will be monitored.
- Groundwater samples will be collected immediately following purging. If applicable, wells with floating product present upon completion of purging will not be sampled. If the well becomes dry during purging, it will be allowed to recover sufficiently for sampling. Samples

will be collected with disposable Teflon bailers or stainless steel bailers and decanted into appropriate sample containers provided by the subcontract laboratory.

- Samples will be analyzed for total petroleum hydrocarbon (TPH) as gasoline, diesel, and motor oil; benzene, toluene, ethylbenzene, and xylenes (BTEX), and the fuel oxygenates methyl tertiary butyl ether (MTBE), tertiary amyl methyl ether (TAME), ethyl tertiary butyl ether (ETBE), di-isopropyl ether (DIPE), tertiary butyl alcohol (EDC), ethylene dibromide (EDB), ethylene dichloride (EDC), and ethanol. As noted in the County letter, any of the fuel oxygenates not detected in the initial round of sampling can be dropped from the program in the subsequent quarters.
- Quarterly reports will be prepared documenting the sampling of the wells, presenting the analytical results in tabular format, and discussing the results. As requested by the County, a rose diagram graphically depicting historical and current hydraulic gradients will be included.
- The tops of the well screens are below the depth to groundwater. An evaluation of the effect this has on the detected concentrations, hydrographs showing the relationship between the screen interval and the water table, and recommendations for how to augment or validate the data will be included in the first quarterly monitoring report.

### **Backfill Sampling**

A one-time sampling of the backfill in nearby sewer and storm drain lines will be conducted to assess whether the trenches have acted as preferential conduits. Because of the high volume of traffic in the intersection of Telegraph and Claremont, the drilling will be scheduled for early on a Sunday morning. Planning activities will include drilling, encroachment, and lane closure permits, a traffic control plan, and notifications of City personnel (city public works, city police, County, etc.).

Based on the results of the utility survey included in the Harding ESE First Quarter 2002 Groundwater Monitoring Report, dated May 20, 2002, we will install a boring and collect a groundwater sample from the sewer line backfill and one from the storm drain line backfill at the locations shown on Plate 1. The borings will be advanced to groundwater using a direct-push drill rig equipped with 1-7/8-inch-diameter, hollow, drive rod. Upon reaching the target depth in each boring, a grab groundwater sample will be collected using a disposable Teflon bailer or stainless steel bailer. The water will be decanted into the appropriate sample containers, which will be provided by the analytical laboratory. The sealed sample containers will be labeled with unique sample numbers and placed into a cooler with ice packs with the appropriate chain of custody documentation. The samples will be analyzed for the same chemicals compounds included in the monitoring program for the wells. The results of the backfill analysis will be included in the next quarterly report.

Upon conclusion of the boring program, all boreholes will be backfilled to the surface with grout.

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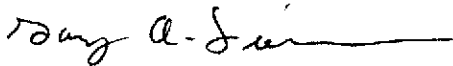
## SCHEDULE

The Work Plan will be implemented upon approval from the County and the drilling activities would take place within three weeks of Work Plan approval assuming availability of drilling contractors. Quarterly groundwater monitoring will also be initiated within three weeks of Work Plan approval. The first quarterly groundwater monitoring report which will include the results of the backfill investigation and the well screen evaluation would be completed within 5 weeks after receiving final analytical results.

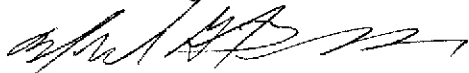
If you have any questions, please contact Gary Lieberman at (415) 884-3158.

Yours very truly,

**MACTEC ENGINEERING AND CONSULTING, Inc.**



Gary A. Lieberman  
Senior Geologist



Michael G. Burns, CHG  
Principal Geologist

GAL/MGB;klb/KB59723.DOC-SDC

Plate 1 – Site Map

cc: Mr. Ondrej Kojnok, TriStar Partnership

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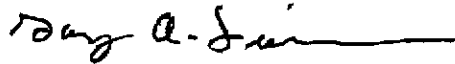
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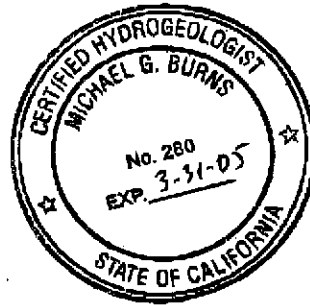
Yours very truly,

**MACTEC ENGINEERING AND CONSULTING, Inc.**



Gary A. Lieberman  
Senior Geologist

  
Michael G. Burns, CHG  
Principal Geologist



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Plate 1 - Site Map

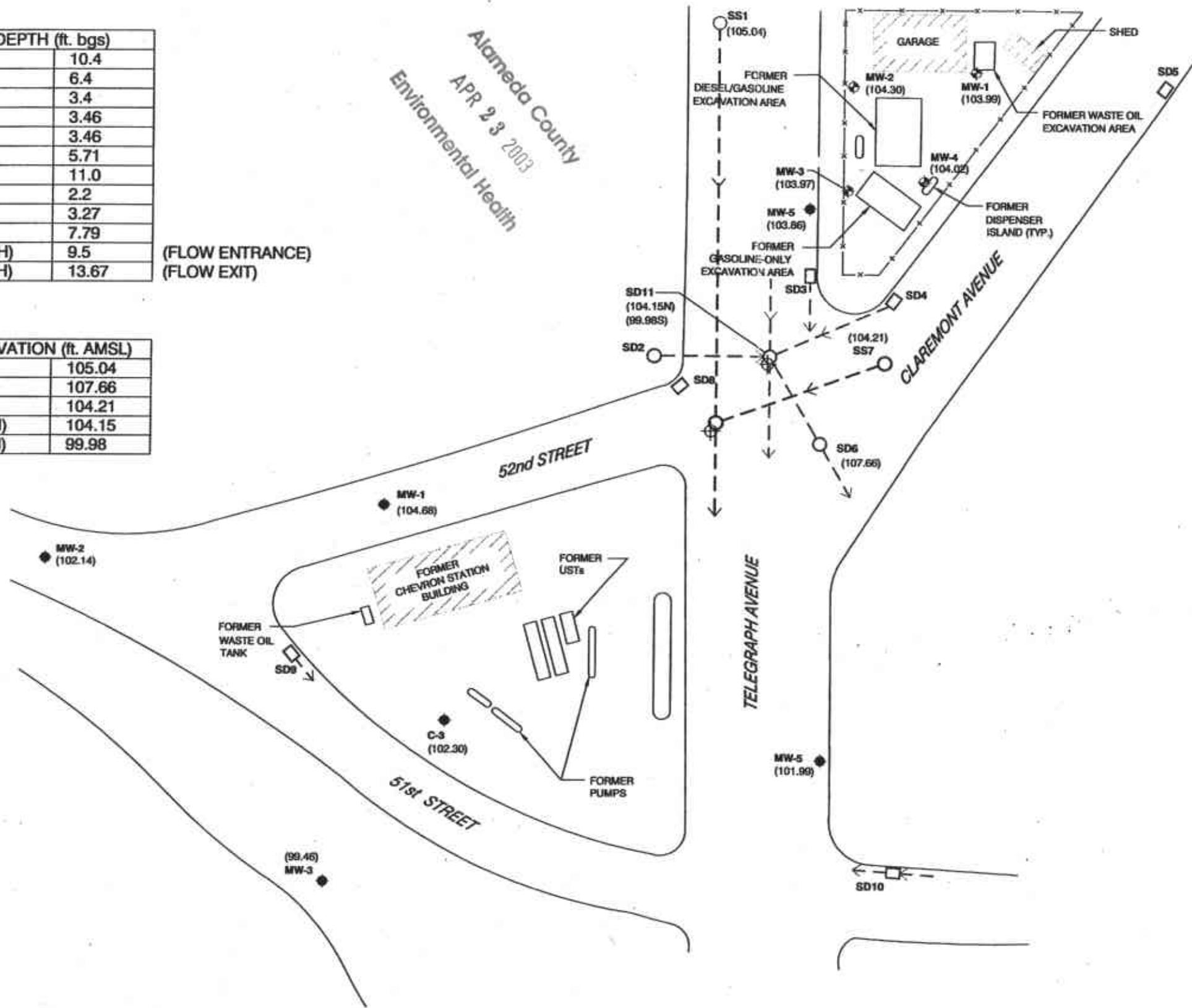
cc: Mr. Ondrej Kojnok, TriStar Partnership

Alameda County  
 Environmental Health  
 APR 23 2003

INVERT DEPTH (ft. bgs)	
SS1	10.4
SD2	6.4
SD3	3.4
SD4	3.46
SD5	3.46
SD6	5.71
SD7	11.0
SD8	2.2
SD9	3.27
SD10	7.79
SD11 (NORTH)	9.5
SD11 (SOUTH)	13.67

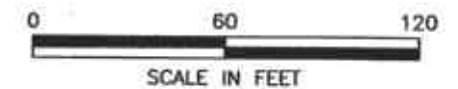
(FLOW ENTRANCE)  
 (FLOW EXIT)

INVERT ELEVATION (ft. AMSL)	
SS1	105.04
SD6	107.66
SS7	104.21
SD11 (NORTH)	104.15
SD11 (SOUTH)	99.98



**LEGEND**

- MW-1 ⊕ GROUND WATER MONITORING WELLS INSTALLED BY QST
- MW-1 ● GROUND WATER MONITORING WELLS INSTALLED FOR CHEVRON
- C-1 ⊙ SOIL BORING BY QST
- AP-1 ⊗ SOIL BORING BY QST
- (101.99) MARCH 22, 2002 GROUNDWATER ELEVATION
- X- FENCE
- - - STORM DRAIN
- - - SANITARY SEWER
- ⊕ PROPOSED SOIL BORING AND GRAB GROUNDWATER SAMPLE LOCATION



SOURCE: CHEVRON SITE BASE MAP FROM CAMBRIA ENVIRONMENTAL TECHNOLOGY, INC.



Site Plan  
 Autopro Inc.  
 5200 Telegraph Avenue  
 Oakland, California

DRAWN: CN  
 JOB NUMBER: PROP03BAYA 216

APPROVED: [Signature]  
 DATE: 3/03

PROP03BAYA 216.DWG 1.0  
 20030314.1219  
 PLATE

REVISED DATE