



**RIEDEL ENVIRONMENTAL
SERVICES, INC.**

San Francisco Region:
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March 19, 1990

*Included are copies of
disposal records for
5 x 18 yds of soil to
Liquid Waste Management Inc.
Mckinstry, CA 93251*

**Mr. Roger Hildahl
350 South Center Street, Suite 590
Reno, Nevada 89501-2148**

**Reference: Final Report
Broadway and Lawton Avenue Site
Oakland, California
RES Project No. 4205-9001**

Dear Mr. Hildahl:

Riedel Environmental Services, Inc. (RES) is pleased to submit this report documenting the remediation of the small area of contaminated soil at the above-referenced site in Oakland, California. In accordance with RES' site assessment report dated February 1, 1990, 114.32 tons of soil were removed and two soil samples collected and analyzed.

Soil Excavation

Figure 1 shows the area of soil that was removed using a backhoe on March 9, 1990. Soil was removed until bedrock was encountered at the bottom of the pit. Bedrock was reached at approximately ten feet in the south half of the pit and at eight feet in the north half of the pit. Bedrock was encountered at two feet in a small area in the pit's northwest corner. A small trench dug near the center of the site also revealed very shallow bedrock at approximately two feet.

Excavation revealed the presence of an underground fuel tank pump, the base plate of a waste-oil tank and several pieces of piping. It is assumed that the above-described items were buried after demolition of the service station and are responsible for the residual hydrocarbons detected during the assessment phase of this investigation.

All spoils were piled onto and covered with 10-mil plastic sheeting until its removal to the Liquid Waste Management landfill, a Class II disposal facility, on March 13, 1990. Copies of the Non-Hazardous Waste Data Forms are attached. For safety reasons, the pit was partially backfilled to a depth of less than five feet.

Soil Sampling Procedures

Two soil samples, S4 and S5, were collected at the locations shown on Figure 1. Samples were collected using gloves and a hand trowel which were cleaned with a non-phosphate

detergent and rinsed with distilled water between sample locations. The samples were sealed into brass sleeves with aluminum foil and plastic end cap, placed in a cooler with ice packs to maintain a maximum temperature of 4°C, and delivered directly to a State-certified hazardous materials testing laboratory. Chain of custody documentation is included with this report.

Laboratory Analytical Procedures and Results

The soil samples were analyzed for the presence of Total Petroleum Hydrocarbons (TPH) as gasoline and BTEX compounds by EPA Methods 5030, 8015 and 8020, and waste oil and grease by EPA Method 413.1 (gravimetric). No TPH, BTEX compounds or waste oil and grease were detected. Therefore, based on the analytical results, all soil contamination identified in the previous investigation has been removed and properly disposed of.

We appreciate the opportunity to perform this work and look forward to working with you on future projects. If you have any questions or require additional information, please feel free to contact us.

Sincerely,

RIEDEL ENVIRONMENTAL SERVICES, INC.

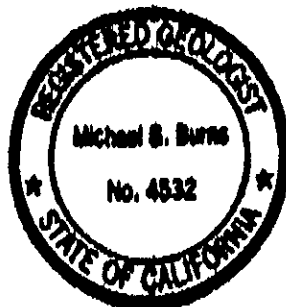
Laurie Stenberg

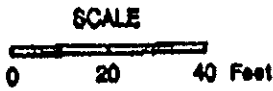
Laurie Stenberg
Project Geologist

Michael G. Burns

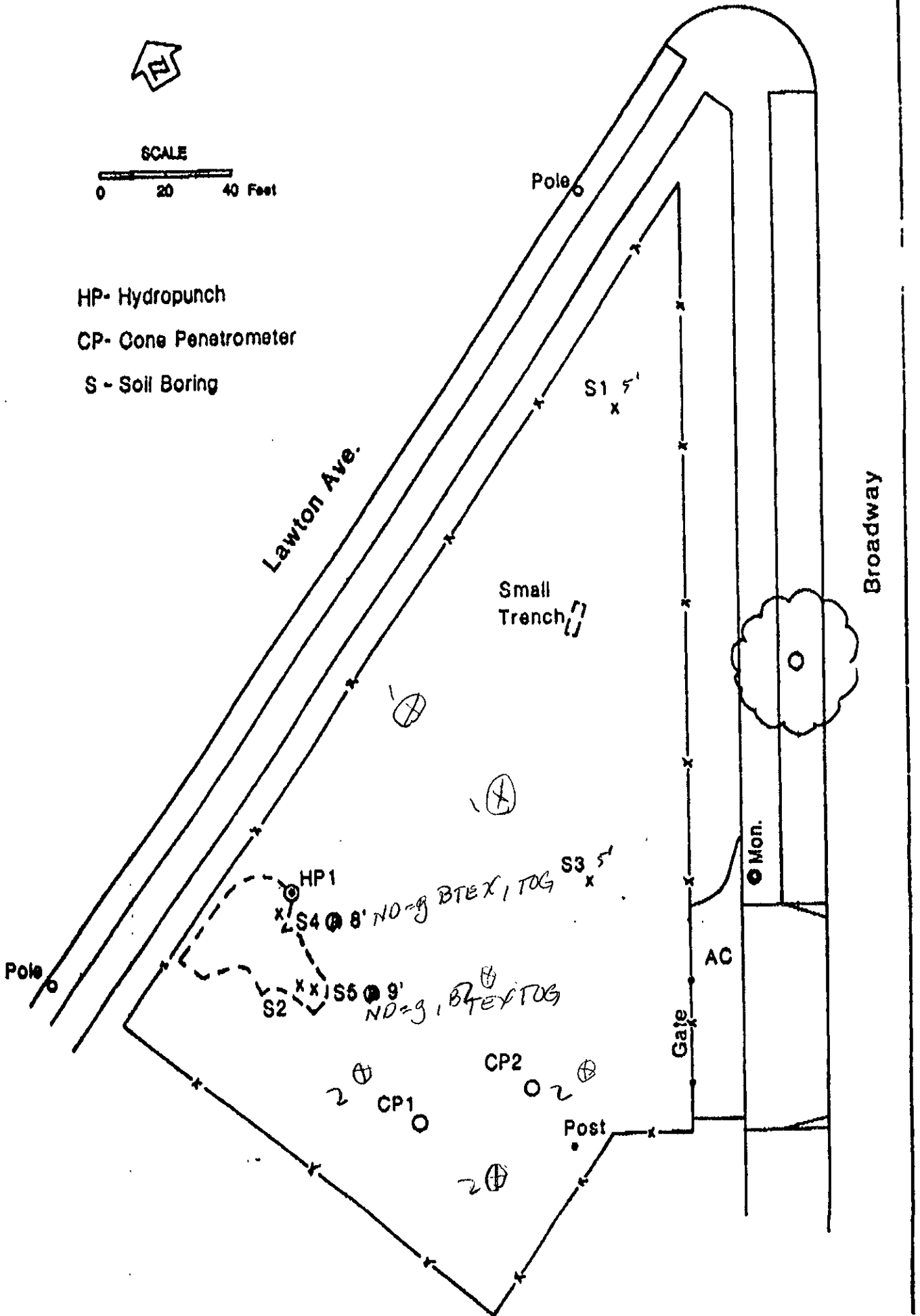
Michael G. Burns
Geosciences Manager
R.G. 4532

Attachments





HP- Hydropunch
CP- Cone Penetrometer
S - Soil Boring



Site Plan