August 14, 1996

Mr. Larry Cummins
The RREEF Funds
1301 Dove Street, #460
Newport Beach, California 92660

RE: PHASE II SOIL SCREENING TESTS
COAL CREEK SHOPPING CENTER
NEWCASTLE, WASHINGTON
ATC PROJECT NO. 87600.7604

Dear Mr. Cummins:

At the request of RREEF, ATC Environmental, Inc. (ATC) performed a limited Phase II subsurface soil investigation at the Daniel's Dry Cleaner, located in the Coal Creek Shopping Center, Newcastle, Washington. This project was a focused investigation to determine if subsurface soil quality has been adversely affected specifically by past and current storage, and use of dry cleaning solvents (perchloroethylene / tetrachloroethylene) by the commercial dry cleaning operation which occupies the tenant space at the shopping center.

Summary of Findings

Three (3) soil borings were advanced on the exterior of the dry cleaners; one near the sewer line exiting the tenant space, one at the connection of the tenant line to the main branch, and one near the back of the tenant space where used filters have been stored. Soil samples were collected from approximately four to six feet below grade. A Geoprobe™ was utilized to collect soil borings and cause minimal impact to the paved areas. Inside the building two (2) cores were made through the slab foundation so soil samples could be obtained near the floor drain and along the sewer line. Soil samples were collected directly below the floor slab and approximately four feet below grade in each boring. A hand auger and slide hammer soil core sampler were used to obtain samples in the building interiors.

All of the soil samples were submitted to Columbia Analytical Services in Kelso, Washington for analysis by EPA Method 8010-Halogenated Volatile Organics. Laboratory results indicated that levels of tetrachloroethylene in six (6) of the seven soil samples exceeded the Method Reporting Limit (MRL) for the contaminant. Additionally, Trichlorofluoromethane (CFC 11) and 1, 1-Dichloroethane were detected in the remaining sample. This sample was non-detect for tetrachloroethylene.

3347 Seaview Ave NW • Seattle WA 98107 • (206) 781-1449 • FAX (206) 781-1543

Scope of Work Completed

On June 4, 1996, Cascade Sawcutting retained by ATC, cored two 8" holes into the slab foundation near the floor drain and along the sewer line in the interior of the dry cleaners. The investigation design and oversight was performed by Mr. Terrence McDunner, Senior Project Manager with ATC. Once the cement cores were removed, ATC used a slide hammer soil core sampler to collect a sample just below the floor grade. Each interior sample was collected in a 6" brass sample liner. To collect a soil sample approximately four feet below grade, an AMS 3" hand auger was used to reach the desired depth. Once that depth was reached, the slide hammer sampler was used again to collect the below grade soil sample.

ATC retained Geotech Inc, to complete the exterior soil borings at the project sites on June 4, 1996. A 2" drill bit was attached to the Geoprobe™ by the contractor to penetrate the paved area and drilled down to the desired depth. Once the required depth was reached, a direct-push sampler was attached to the unit and driven into the opening to collect a soil core, in disposable butyrate plastic liners, in 3.5' sections. The augers, slide hammer samplers, drill bits and the direct-push samplers were decontaminated by ATC and the contractor prior to commencing with the drilling project, and between each soil boring location. Decontamination procedures consisted of the following:

- water/alconox wash
- water rinse
- second water/alconox wash
- second water rinse

ATC performed continuous monitoring of the quality of soil cores through visual observation, evidence of unusual odors and by using a portable photoionization detector (PID). The PID provides qualitative measurements of volatile organic vapors emanating from sample media. The lower level of derection of the instrument used was 1 part per million (ppm). The following analysis procedure was implemented to obtain PID measurements:

- calibrate instrument in accordance with manufacturer instructions
- place sample in an 4-ounce glass jar supplied by the environmental laboratory
- place small amount of soil in disposable ziplock baggie and seal
- after 30 seconds, open seal slightly, insert PID intake nozzle and record measurement

A total of five (5) soil borings were drilled and seven (7) soil samples obtained at the dry cleaners.

Boring HA-1 was located within the dry cleaners tenant adjacent to the drycleaning equipment and the tenant sewer line. Soil sample HA-1A was collected just below the floor slab and HA-1B was collected from a depth of four feet below the floor slab. Both samples were submitted to the laboratory for analysis.

Boring HA-2 was located in the interior of the dry cleaners in the boiler room adjacent to the floor drain. The only floor drain observed in the tenant space was located in the boiler room.

Soil sample HA-2A was collected just below the floor slab and HA-2B was collected from a depth of four feet below the floor slab. Both samples were submitted to the laboratory for analysis.

GP-1 was sited at the exterior of the tenant space east of the building. The boring was located approximately thirty feet east of the exterior perimeter wall and east of a sewer clean-out cover, near the location where the sewer line exits the tenant space. One soil sample was collected from a depth of four (4') feet below grade and submitted to the laboratory for analysis.

Soil boring GP-2 was located at a location which ATC estimated to be adjacent to the junction between the sewer line servicing the dry cleaners and the main sewer servicing the shopping center. ATC used two sewer clean-out covers and a sewer manhole cover to help site the boring location. GP-2 was drilled to a depth of four (4') feet below grade and one soil sample was obtained from this depth for laboratory analysis.

GP-3 was located on the west side of the tenant space adjacent to the waste PCE storage area. GP-3 was drilled to a depth of four (4') feet below grade and one soil sample was collected from this depth for laboratory analysis.

After the drilling was completed and the soil samples were obtained, all the boring holes were filled with bentonite pellets and capped with either quick-setting cement or asphalt.

The soil samples collected for laboratory analysis were placed in laboratory supplied 4 ounce glass jars with Teflon-lined caps. Zero headspace was allowed in the filled sample jars. The filled sample containers were then cooled to 4 degrees centigrade (wet ice) for delivery. All appropriate chain of custody documents were completed by ATC before delivering the samples to the laboratory.

ATC reviewed the on-site dry cleaning operations utilizing RREEF's Recommended Guidelines For Audits At Dry Cleaning Facilities form. Current on-site operations include dry cleaning and laundering services. One waste perchloroethylene drum, approximately 55 gallons in size, was observed outside adjacent to the outside door on the west side of the facility. One dry cleaning machine was observed in the center of the facility. ATC was informed that the equipment has been in in use since approximately 1985. Small black stains were observed on the floor and walls adjacent to the dry cleaning equipment and the drip pan for collection of waste sludge from the dry cleaning process.

Findings of Subsurface Soil Quality Investigation

During the drilling activities, no elevated PID measurements were noted in the soil samples collected from exterior borings GP-1, GP-2 and GP-3. During interior drilling activities no unusual odors or discoloration were noted within the soils. ATC detected no unusual solvent odors or discoloration of any of the soil samples or borings at the facility.

All soil samples collected from the seven soil borings were observed to be dry. No groundwater accumulated at the base of the soil borings. The native soils beneath the project site were found to consist of tan silty sand to grey clayey silty sand.

Discussion of Sample Analysis Results

The seven (7) soil samples were hand delivered to Columbia Analytical Services, Inc. Kelso, Washington for laboratory analysis. The samples were analyzed by EPA Method 8010-Halogenated Volatile Organics which utilizes gas chromatography. This analysis methodology is specific for the compound tetrachloroethylene, commonly referred to as "perc," and other chlorinated solvents usually encountered at dry cleaning facilities.

Laboratory results found levels of tetrachloroethylene above .05 micrograms per kilogram (mg/kg) or parts per million (ppm), the analytical method's reporting limit, in six (6) of the seven soil samples collected at the project site. All of the exterior samples had reportable detection's of PCE. Boring GP-1 had a sample result of 1.0 ppm trichlorofluoromethane (CFC 11) and 1,1-Dichloroethane. Boring GP-2 had sample result of 0.2 ppm PCE. Boring GP-3 had a sample result 0.1 ppm PCE. The sample results from the interior borings were 0.3 ppm at HA-1A, 41 ppm at HA-1B, 0.2 ppm at HA-2A, and 8 ppm at HA-2B. The sample results indicate that levels of tetrachloroethylene and biodegradation products (1,1-dichloroethane) are in the soil within an apparently widespread area beneath the interior and exterior of the project site in areas along the sewer line and in areas of storage. Several of the samples were found to contain levels above the MTCA Method A cleanup level for PCE of 0.5.

Limitations of Subsurface Soil Quality Investigation

ATC has prepared this Subsurface Soil Quality Investigation Report in accordance with the scope of work outlined in ATC's proposal dated February 6, 1996, using reasonable efforts to attempt to identify the presence of subsurface soil contamination in the area of study. This study was a focused investigation and consequently ATC does not warrant that contamination that may exist on the entire property has been discovered, that the property is suitable for any particular purpose or that the property is clean or free of liability.

This report has been prepared solely for the internal use of RREEF and its affiliates and may not be relied upon by an other person for any reason, unless so indicated in writing by RREEF.

Attachments

The following documents are provided as attachments to this report:

- Laboratory report of analysis
- Site Plan depicting soil boring locations
- Soil boring logs
- RREEF dry cleaners audit form

If you have any questions regarding this correspondence, please feel free to call our office.

Sincerely,

ATC ENVIRONMENTAL INC.

Terrence S. McDunner
Senior Project Manager

Michael R. Burt
Branch Manager

SOIL BORING LOG
PHASE II SOIL SCREENING INVESTIGATION
DANIELS DRY CLEANER
COAL CREEK SHOPPING CENTER
NEWCASTLE, WASHINGTON 98107

ATC ENVIRONMENTAL INC.
6347 SEAVIEW AVENUE SW
SEATTLE, WASHINGTON 98107
206-781-1449

HA-1: Drilled inside dry cleaners, approximately 2' east of sewer line adjacent to drycleaning equipment.

SAMPLE DEPTH	COMMENT
(A) 0 ft.	Brown silty sand with cobbles, loose. PID reading: NA. Dry, no odor. Sample retained for laboratory analysis (HA-1A)
(B) 4 ft.	Grey silty clay, dense. PID reading: NA. Dry, no odor. Sample retained for laboratory analysis (HA-1B)

HA-2: Drilled inside dry cleaners, adjacent to the floor drain in the boiler room.

SAMPLE DEPTH	COMMENT
(A) 0 ft.	Brown silty sand with cobbles, loose. PID reading: NA. Dry, no odor. Sample retained for laboratory analysis (HA-2A)
(B) 4 ft.	Grey silty clay, dense. PID reading: NA. Dry, no odor. Sample retained for laboratory analysis (HA-2B)

GP-1: Drilled at exterior of dry cleaners space, approximately 30' to the east of perimeter wall, where the sewer line exits the tenant space.

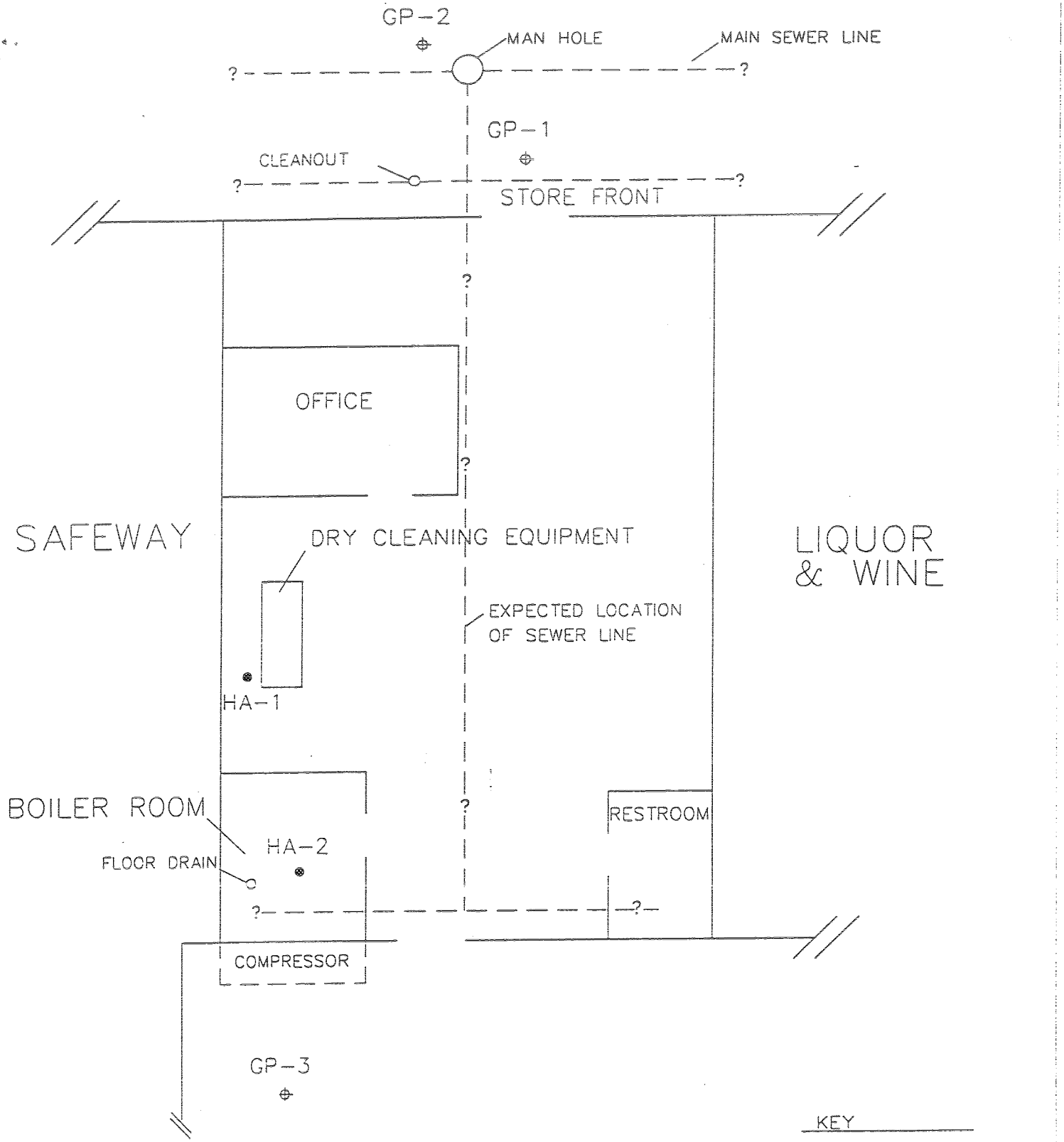
SAMPLE DEPTH	COMMENT
4.0 ft.	Tan silty sand with fines, loose to medium. PID reading: 0 ppm. Dry, no odor. Sample retained for laboratory analysis (GP-1)

GP-2: Drilled at exterior of dry cleaners space, approximately 45' to the west of the perimeter wall, estimated to be at the junction between the sewer line exiting the tenant space and the main sewer servicing the shopping center.

SAMPLE DEPTH	COMMENT
4.0 ft.	Tan silty sand with fines, loose to medium. PID reading: 0 ppm. Dry, no odor. Sample retained for laboratory analysis (GP-2)

GP-3: Drilled on the west side of the tenant space, adjacent to the storage of waste solvent.

SAMPLE DEPTH	COMMENT
4.0 ft.	Tan silty sand with fines, loose to medium. PID reading: 0 ppm. Dry, no odor. Sample retained for laboratory analysis (GP-3)



RREEF

DANIELS DRYCLEANERS
6823 COAL CREEK PKWY SE, NEW CASTLE WA.

ATC ENVIROMENTAL INC.
6347 SEAVIEW AVE. NW
SEATTLE WA 98107

PROJECT NO. 87600.7604/0601 | FIGURE 1