Golder Associates Inc.

180 Grand Avenue, Suite 250
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Golder Associates

June 19, 1998

Our Ref.: 973-7187.100/100

Ms. Susan Hugo
Alameda County Health Care Services Agency
Department of Environmental Health
1131 Harbor Bay Parkway, Room 250
Alameda, California 94502

Subject: Work Plan for Removal, Onsite Transfer and Offsite Disposal of Asbestos-containing Soils, 2200 Powell Street, Emeryville, California

Dear Ms. Hugo:

Golder Associates Inc., (Golder) has prepared this Work Plan on behalf of Spieker Properties for the subject site. In this Work Plan we have presented the scope of work, health and safety plan and waste management plan for the removal, onsite transfer and offsite disposal of recently discovered asbestos-containing soils at the site. A Site Location Map is shown in Figure 1 and a Site Plan is shown in Figure 2.

During April 1998, while excavating for placement of irrigation water pipelines in existing landscaped islands at the site, contractors retained by Spieker Properties encountered soils containing gray fibrous material. Approximately 150 cubic yards of soils were excavated from the landscaped islands and stockpiled at the site. At the request of Spieker Properties, Golder collected soil samples from the excavated soil stockpiles and analyzed for asbestos. Asbestos was suspected to be present as soils encountered in exploratory boreholes drilled by others previously in the random fill materials at the site, contained asbestos at various locations. Results of analyses indicated that asbestos was present in soil samples. Currently these soils are stockpiled at the site and are covered with plastic liners.

Spieker Properties is also planning to remove two 10,000 gallon underground storage tanks (UST) at the site. A Closure plan for the removal of these USTs was approved by the Alameda County Health Care Services Agency (ACHCSA) in March 1998. Spieker Properties requested that Golder pursue the option of backfilling the recently encountered asbestos-containing soils into the UST excavation once they have been removed. On May 27, 1998, Golder submitted a letter to Regional Water Quality Control Board (RWQCB) requesting their approval to translocate the asbestos-containing soils to the UST location (a copy of this letter is included as Attachment A). Also included with this letter is a letter from RWQCB which has indicated that they are the appropriate agency for handling regulatory activities at the site. On June 4, 1998 Golder submitted a letter to RWQCB documenting their approval to translocate asbestos-containing soils to the UST location (a copy of this letter is included as Attachment B).

At this time we are submitting a copy of this work plan to ACHCSA and Bay Area Air Quality Management District (BAAQMD) for review and approval of the field work. Permission to translocate asbestos-containing soils has already been granted by the designated lead agency RWQCB.

pg 2 - additional excavation
in landscaped islands
~~pg 3 = offsite disposal~~ ✓

add notification to
ACDEH prior to any
digging/trenching
at the site.

1) Mapping - exposed areas
2) UST during transport to
disposal facility -
will not create
any airborne soil-containing
pollution

SCOPE OF FIELD WORK

The scope of field work will be performed by an asbestos abatement contractor retained by Spieker Properties that is licensed to work with asbestos-containing materials. The contractor will obtain appropriate permits and provide agency notifications prior to performing the field work. Golder will document the field activities and provide sampling and monitoring during the field work. Following the removal of the USTs, the scope of work will be as follows:

1. Translocating soils from landscaped islands and backfill in former UST location
2. Additional excavation of soils in landscaped islands and offsite disposal

Health and Safety Measures During the Field Work

The scope of work listed above will be performed according to appropriate regulations governing asbestos abatement, worker and public health and safety and engineering controls. These health and safety and engineering controls include but may not be limited to the following:

- Public egress and ingress will be controlled through the use of barriers and mandated signs,
- Work will be scheduled during non-working hours to limit disturbance to surrounding businesses and public,
- Security officers will be appointed to limit disruption to project activities,
- Documentation will be obtained to verify that asbestos abatement-trained workers as defined in 40 CFR Part 763 perform work on this project,
- Asbestos workers will be fitted in Tyvek suits and HEPA respirators during the project,
- All workers will be documented as having completed appropriate Asbestos Hazard Emergency Response Act (AHERA) training as well as passing the respirator fit test,
- Workers will wear appropriate health and safety gear,
- Decontamination facilities will be set up for workers, equipment and work areas,
- Air monitoring will be performed inside and outside the work area , and
- Soils and plastic barriers will be wetted to prevent asbestos fibers from becoming airborne.

Translocating Soils from Landscaped Islands and Backfill in Former UST Location

Currently approximately 150 cubic yards of soils are stockpiled and covered with plastic liners at the landscaped islands at the site. These soils will be translocated to the former location of USTs and backfilled appropriately. During the field work, a Golder asbestos certified consultant will document the field activities and perform air monitoring in the area of the work.

Prior to moving the soils in the landscaped islands plastic liners will be removed and soils will be wetted down. Once the soils have been wetted down sufficiently, soils will be moved to the UST area using a front end loader to limit soils disturbance and potential asbestos fiber release.

During the placement of soils in the UST excavation, soils will be wetted continuously as they are being placed in the excavation. Soils will be placed in approximately one-foot lifts, and will be compacted to preset specifications using a backhoe equipped with a compactor. Soil wetting will be performed during soil compaction procedure. Approximately two-foot thick cap of clean soils will be placed over the asbestos-containing soils in the UST area.

As discussed in this report earlier, permits to remove USTs at the site are already in place. Prior to removing the USTs, soils from the top of the USTs will be analyzed for asbestos. In the event soils above the USTs are found to be impacted with asbestos, the soils will be wetted down sufficiently to limit exposure of asbestos fibers into the air. Excavated soils will be placed in stockpiles and covered with plastic liners; these soils may be replaced in UST excavation or disposed at off-site location appropriately.

Additional Excavation of soils in Landscaped Islands and Offsite Disposal

Spieker Properties is proposing to remove approximately top one-foot of soils from all landscaped islands shown in Figure 2 and replaced with clean cap of soils imported from offsite. This is being performed to facilitate growth of landscape plants and to limit possible future worker and public exposure to the residual asbestos-containing soils that may be present in the landscaped islands. Additionally, excavation will be performed at various locations in the landscaped islands for planting palm trees. During the field work a Golder certified asbestos consultant will document the field activities and perform air monitoring in the area of the work. Additionally Golder will document the offsite disposal of soils using the appropriate hazardous waste manifest.

We estimate a total of approximately 800 cubic yards of soils will be excavated for the removal of top one foot of soils and for the placement of palm trees in the landscaped islands. Soils generated will be manifested and disposed at a landfill permitted to accept asbestos-containing waste. Excavation will be performed using a backhoe, and prior to performing excavation soils will be sufficiently wetted. Excavated soils will be placed in appropriately lined dump trucks. During the process of excavating the soils and placing in dump trucks, water will be sprayed as appropriate to limit the exposure of possible asbestos fibers into the air. Once a dump truck has reached its loading capacity, soils in the dump truck will be appropriately covered and secured and hauled to licensed offsite facility. Upon completion of proposed excavation in the landscaped islands, clean soils brought from offsite will be placed and compacted appropriately in the landscaped islands.

EXCAVATION MANAGEMENT PLAN

For future use and worker notification, Spieker Properties will develop an Excavation Management Plan. This plan will include, at a minimum, measures for:

- Preparation of site specific health and safety plans
- Capping exposed areas with buildings, asphalt concrete and clean fill in landscaped areas
- Procedures for handling potentially hazardous materials
- Procedures for notification to workers.

In summary, Spieker Properties is planning to transport and use stockpiled soils from the landscaped islands to backfill the UST pit. This plan was approved by the RWQCB who has indicated that they are the appropriate agency for handling regulatory activities at the site.

At this time we are requesting ACHCSA and the AQMD to provide an expedient review and approval of this work plan in order to allow Spieker Properties to perform work in timely manner and meet their schedule for completing the project. In case you have questions regarding this letter, please call us at (510) 239 9000.

Sincerely,

GOLDER ASSOCIATES INC.

Kevin A. Roberts, C.A.C., R.E.A.
Project Environmental Scientist

Charles Almestad, R.G, C.Hg.
Associate

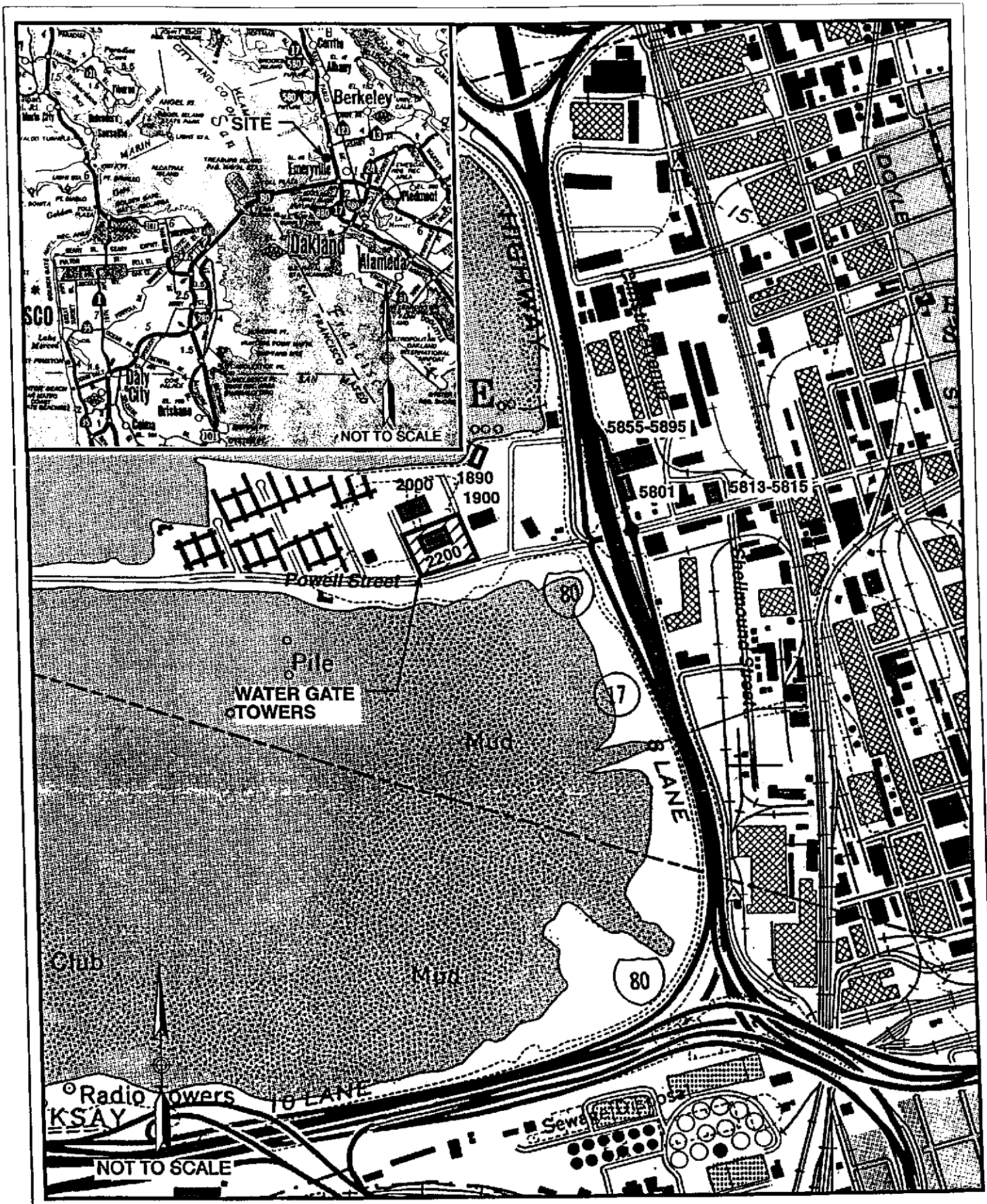
KAR/CA/mcs

Attachments:

Figure 1 – Site Location Map
Figure 2 – Site Plan

Attachment A – Golder Report to RWQCB dated May 27, 1998
Attachment B – Golder Letter to RWQCB dated June 4, 1998

cc: Jeff White, Spieker Properties, Emeryville, California
Ravi Arulanantham, RWQCB, Oakland, California
Dennis Baker, BAAQMD, San Francisco, California



REFERENCE: USGS MAP, OAKLAND WEST QUADRANGLE
1959, PHOTOREVISED 1980.

FIGURE 1
SITE LOCATION MAP
2200 POWELL STREET, EMERYVILLE, CA

PROJECT NO. 973-7167 DRAWING NO. 8256 DATE 11/8/07 DRAWN BY DVR

Golder Associates

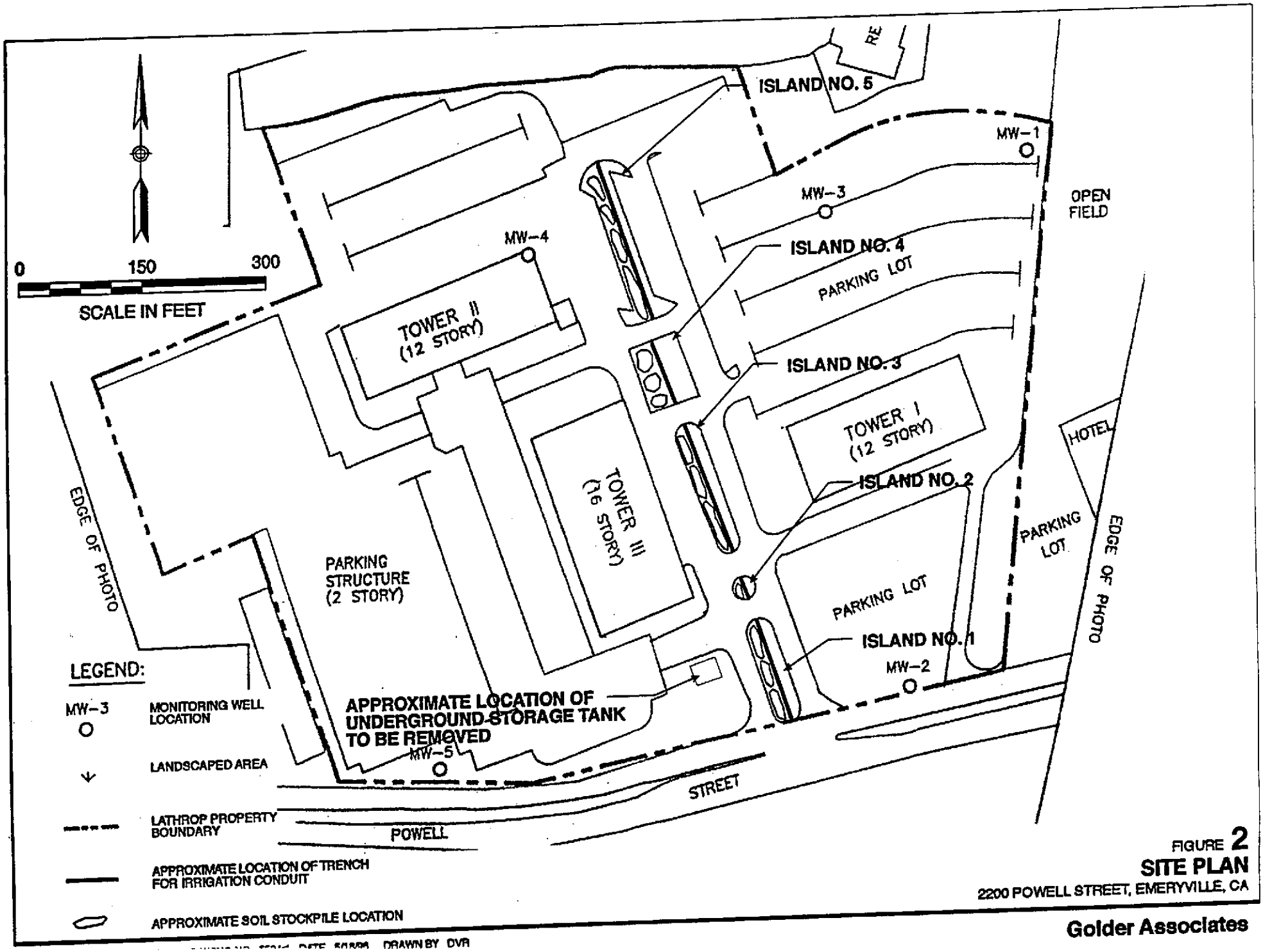


FIGURE **2**

SITE PLAN

2200 POWELL STREET, EMERYVILLE, CA

Golder Associates

ATTACHMENT A

Golder Report to RWQCB dated May 27, 1998

Golder Associates Inc.

180 Grand Avenue, Suite 250
Oakland, CA USA 94612
Telephone (510) 239-9000
Fax (510) 239-9010

May 27, 1998

Our Ref.: 973-7187

Mr. Curtis Scott
Regional Water Quality Control Board (RWQCB)
San Francisco Bay Region
2101 Webster Street, #500
Oakland, California 94612

RE: ASBESTOS CONTAINING SOILS
WATERGATE OFFICE COMPLEX
2200 POWELL STREET, EMERYVILLE, CALIFORNIA

Dear Mr. Scott

Following our telephone conversation with Mr. Alan Friedman on May 14, 1998, we have prepared this letter on behalf of Spieker Properties, the owners of the Watergate Office Complex in Emeryville, California. The Watergate Office Complex consists of three multi-story commercial office buildings (Towers I, II and III) on the north side of Powell Street. The site location is shown in Figure 1, and the site plan is shown in Figure 2.

This letter was prepared to seek approval for the placement of asbestos containing soil into an underground storage tank (UST) excavation (which will be capped) on-site as opposed to off-site disposal. These asbestos containing soils were encountered at the site during trenching for placement of irrigation conduit.

SITE BACKGROUND

Historically the site was a part of San Francisco Bay. Beginning in the 1940s, and until the mid 1960s the site and the surrounding area was filled. Impoundment dikes of soil, rocks and debris were constructed on bay tidelands, and then the area within the dikes was filled with materials including construction debris, foundry casing sands and slag, soil and industrial wastes. In approximately 1968, the property was purchased by F. P. Lathrop and the entire site and the surroundings were capped with engineered fill, pavement and structural foundation slabs. The existing buildings constitute the first development of the site.

In 1989, Woodward-Clyde Corporation (WCC) performed Phase I, II and III environmental assessments at the site. Five ground water monitoring wells were installed around the property. A range of chemical constituents were detected in soil and ground water samples collected from the site. Available WCC boring logs illustrating the types of construction related materials which were encountered during drilling are included as Appendix A. Among other chemical constituents, petroleum hydrocarbons were detected in water samples collected from all ground water monitoring wells, and their presence was attributed to the fill material placed in the diked areas. WCC concluded that there is no significant threat to human health and the environment because the site is capped with engineered fill, and the concentrations are not of sufficient magnitude.

During late 1996 and early 1997, Golder performed a Phase I environmental assessment at the site on behalf of Spieker Properties who was planning to purchase the property. Golder consulted with the Regional Water Quality Control Board (RWQCB) San Francisco Bay Region regarding the need for further action at the Watergate Office Complex. RWQCB staff reviewed the WCC reports and aerial photographs and concluded that based on the information they reviewed, the site was not a significant concern to them. The RWQCB staff considered the site to be an area of "random fill" and therefore not subject to reporting requirements under the California Code of Regulations, Title 23, Chapter 15. Further, the RWQCB indicated that since the site is located adjacent to the San Francisco Bay, their agency is the appropriate agency for handling regulatory activities associated with the site. A letter dated December 30, 1996 from RWQCB summarizing their opinions is included as Appendix B.

RECENT SITE ACTIVITIES

Since acquiring the site in early 1997, Spieker Properties has been performing construction work at the site including remodeling building interiors, trenching for irrigation conduit and re-landscaping. As a part of these upgrades, Spieker Properties will also be removing two existing USTs from the site. Reportedly, these double-walled USTs were installed at the site in 1984-1985 and have been passing tightness tests.

Underground Storage Tanks Removal

During January 1998, a contractor retained by Spieker Properties submitted a Closure Plan to Alameda County Health Care Services Agency (ACHCSA) for the removal of two 10,000 gallon capacity double walled USTs from the site. Along with this Closure Plan Golder submitted a letter to ACHCSA presenting the site background information. In this letter Golder pointed out that soils and ground water beneath the site and in the surrounding area are known to contain petroleum hydrocarbon as a result of the random fill materials. Therefore, Golder proposed no over excavation to be performed after the removal of USTs to assess or remove potentially affected fill material at the site. Golder also proposed to backfill the excavation immediately after the removal of USTs, which will avoid collection of ground water in the excavation and thus save significant costs associated with dewatering and disposal. This closure plan was approved by the ACHCSA in March 1998. Spieker Properties is planning to remove these USTs in the near future.

Trenching for Irrigation Conduits

During April 1998, Spieker Properties requested that Golder inspect soil stockpiles that their contractors had excavated during trenching operations for the installation of irrigation conduits. Approximate location of irrigation trenches is shown in Figure 2.

Golder staff observed that approximately 100 cubic yards of soils were excavated during the irrigation trenching operation and stockpiled at the site. Golder staff observed gray fibrous material present in the stockpiled soils at the site. Golder recommended that these soil stockpiles be wetted down and covered with plastic liners. On April 2, 1998 one composite soil sample was collected from these stockpiled soils and on April 16, 1998, 20 additional soil samples were collected from these stockpiled soils for asbestos analysis. Samples were transported to R. J. Lee Group, Inc. in San Leandro, California for the analysis of asbestos by polarized light microscopy (PLM). Analytical results indicated that asbestos was present in 13 out of 21 soil samples at or above 1 percent. The analytical results are enclosed as Appendix C.

On April 16, 1998, one additional soil sample was collected from the southern-most landscaped island for landfill acceptance determination (profiling). This soil sample was transported to Curtis & Tompkins, Ltd., in Berkeley, California for analyses of toxicity characteristics leaching potential (TCLP) for semi volatile organic compounds (SVOC) by EPA Method 8270, TCLP volatile organic compounds (VOC) by EPA Method 8260, California Assessment Manual (CAM) 17 Metals by EPA Method 7000 series, total petroleum hydrocarbons (TPH) quantified as gasoline, TPH quantified as diesel, and Total recoverable petroleum hydrocarbons quantified as oil and grease. Results of sampling performed for landfill acceptance indicate that TPH quantified as gasoline, semi-volatile organic compounds and volatile organic compounds were not reported above laboratory detection limits. TPH quantified as diesel was reported at 66 milligrams per kilogram (mg/kg) and total oil and grease was reported at 650 mg/kg. Metals were reported at concentrations well below total threshold limit concentrations (TTLC). The laboratory report for landfill acceptance analysis is enclosed in Appendix C.

RECOMMENDATIONS

We have obtained preliminary cost estimates to dispose of 100 cubic yards of asbestos affected soil at a landfill. Estimated costs for disposing soils off-site are very high (up to approximately $200,000). Given that the soils surrounding the UST excavation contain similar asbestos containing construction fill materials, we propose that Spieker properties be granted permission to place stockpiled soils at the bottom of the UST cavity following UST removal. The asbestos containing soils would be covered by an approximately two foot cap of clean imported soil to reduce future exposure to these soils.

The soils will be moved on site under controlled conditions and in accordance with appropriate regulations including OSHA and BAAQMD. We understand that these soils should be removed from their current location as soon as possible, therefore, your expedient response and approval in this matter will be appreciated.

If you have any questions, comments, or require additional information regarding this proposal, please call the undersigned at (510) 239-9000.

Sincerely,

GOLDER ASSOCIATES INC.

Rajeev Cherwoo
Project Engineer

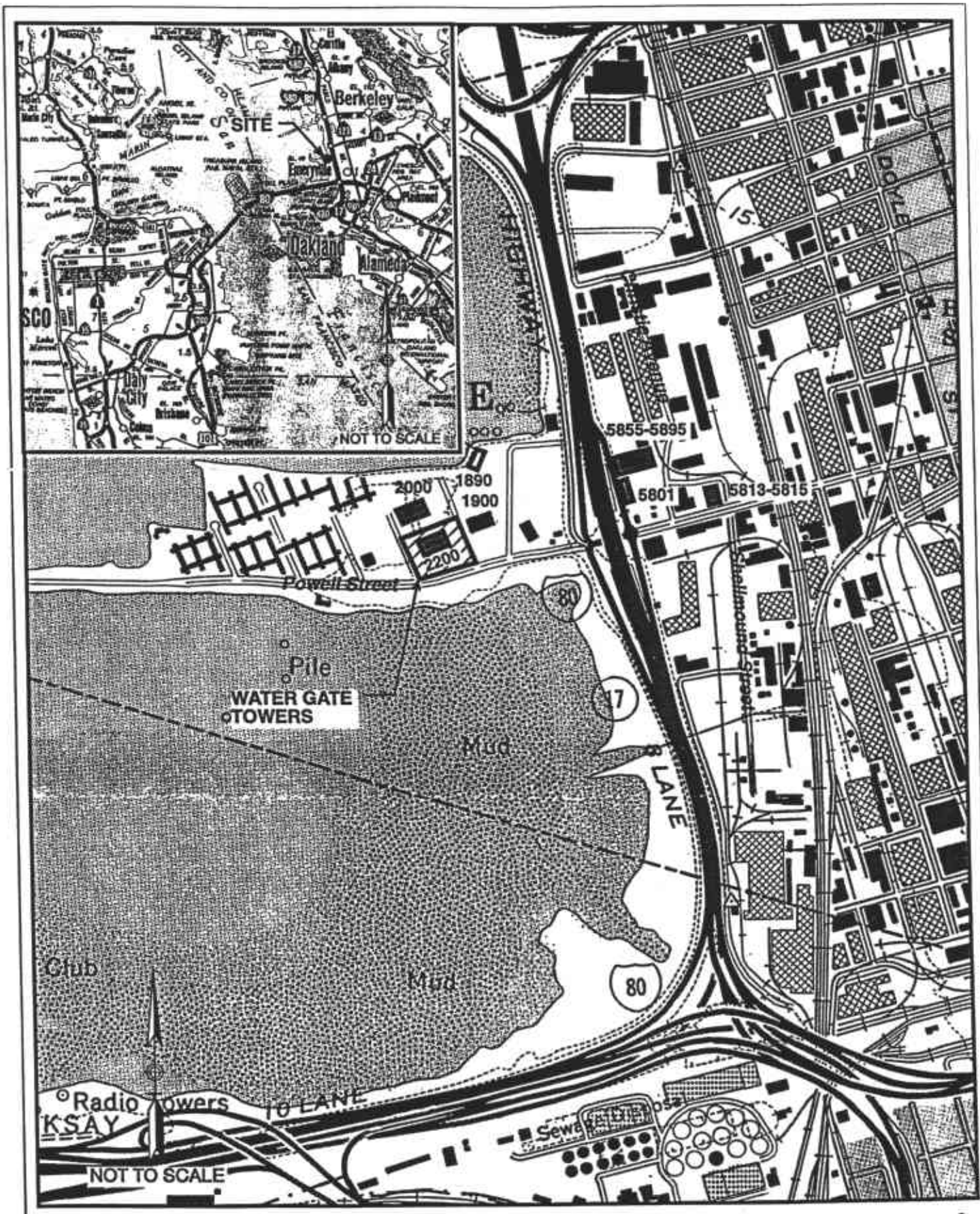
Charles H. Almestad, R.G, C.Hg.
Associate

RC/CA/mcp

Attachments:

Figure 1	Site Location
Figure 2	Site Plan
Figure 3	Approximate Location of Stockpiled Soil Samples Collected for Asbestos Analysis
Appendix A	WCC Boring Logs
Appendix B	Letter from RWQCB dated December 30, 1996
Appendix C	Laboratory Reports of Asbestos Analysis of Soil Samples and Landfill Profiling Soil Samples Collected in April 1998

cc: Jeff White, Spieker Properties (w/attachments)



REFERENCE: USGS MAP, OAKLAND WEST QUADRANGLE
1959, PHOTOREVISED 1980.

FIGURE 1
SITE LOCATION MAP
2200 POWELL STREET, EMERYVILLE, CA

PROJECT NO. 873-7157 DRAWING NO. 6256 DATE 11/6/97 DRAWN BY DVR

Golder Associates

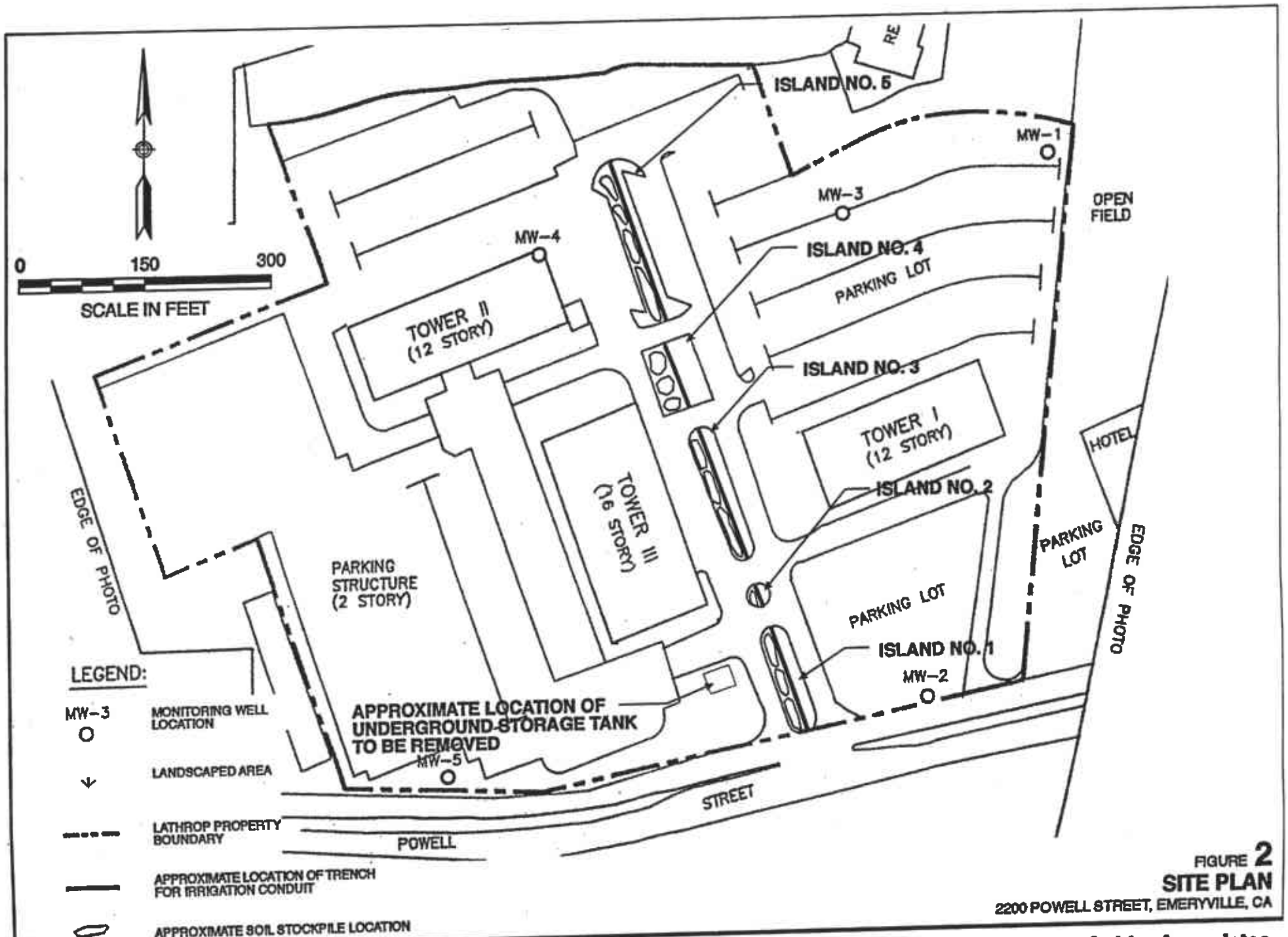


FIGURE **2**

SITE PLAN

2200 POWELL STREET, EMERYVILLE, CA

Golder Associates

PROJECT NO. 973-7187.100.100 DRAWING NO. 6504r1 DATE 5/15/96 DRAWN BY DVR

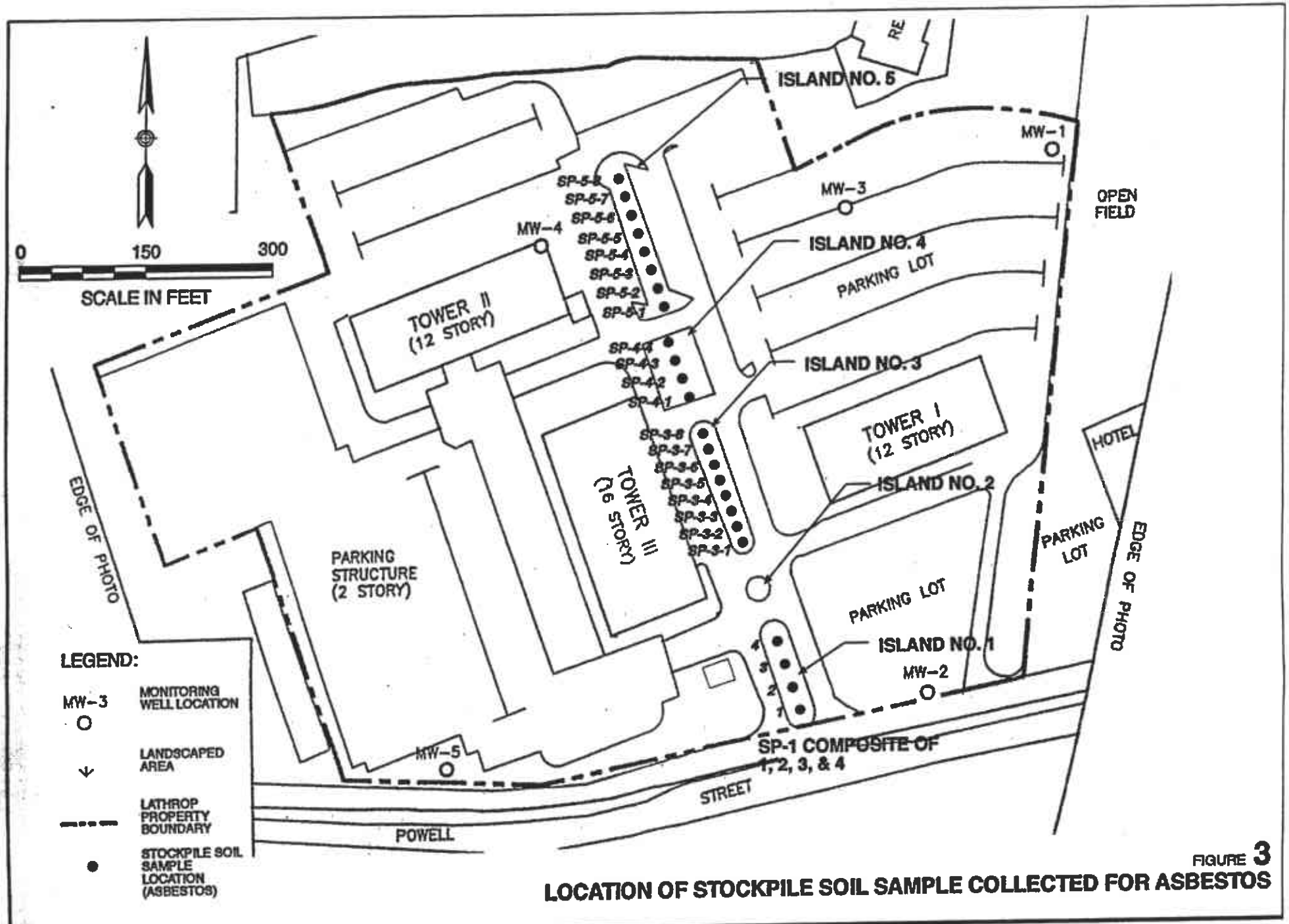


FIGURE 3

LOCATION OF STOCKPILE SOIL SAMPLE COLLECTED FOR ASBESTOS

PROJECT NO. 973-7187.100.100 DRAWING NO. 5504 DATE 4/24/98 DRAWN BY DVR

Golder Associates

APPENDIX A

WCC Boring Logs

Woodward-Clyde Consultants

PROJECT NAME: Lathrop Property NO. 8810235A

BORING LOCATION	MW-1	ELEVATION AND DATUM	
DRILLING AGENCY	Datum Exploration	DRILLER Jim / Gary	DATE STARTED / DATE FINISHED January 13,1989
DRILLING EQUIPMENT	CME - 75	COMPLETION DEPTH 26.5'	SAMPLER 2"California Modified Type
DRILLING METHOD	8" Hollowstem Augers	DRILL BIT CME Carbide	NO. OF SAMPLES DIST. N/A / UNDIST. N/A
SIZE AND TYPE OF CASING	2" PVC	WATER LEVEL FIRST 8 1/2'	COMPL. N/A / 24 HRS. N/A

TYPE OF PERFORATION	0.010" Slotted	FROM	5	TO	25	Ft.	LOGGED BY: Chuck Rambo
SIZE AND TYPE OF PACK	Lonestar #2/12 Monterey Sand	FROM	4	TO	25	Ft.	CHECKED BY: Alan Lattanner
TYPE OF SEAL NO. 1	Bentonite Pellets	FROM	2.5	TO	4	Ft.	
NO. 2	Neat Cement	FROM	0	TO	2.5	Ft.	

Depth (feet)	DESCRIPTION	Graphic Log: Lithology	Graphic Log: Piezometer installation	Water Content	Piezometer Data	Samples: Drive Number	Samples: Sample Number	Samples: Recov. (feet)	Samples: Blow Counts	REMARKS (Drill Rate, Fluid Loss, Odor, etc.)
0	FILL - CLAYEY SAND (SC) -brown -very moist -with fine roots									
	FILL - SILTY CLAY (CL) -dark gray -moist -with concrete rubble									
5	FILL - TAR PAPER -dark reddish brown -very hard					1			8 50	
10	FILL - SILTY CLAY (CL) -gray -with concrete and wood rubble					2			1 1 2	
15	-pink -with asbestos -very soft				15 ppm	3			2 1 2	OVA = 2 ppm
20	SILTY CLAY (CL) -dark gray -with shell fragments					4			1 1 1	
25	-with gravel -light gray -moist -stiff					5			6 8 10	
30	Bottom of boring at 26 1/2' Augered to 25'									
35										

FIELD LOG OF BORING NO. MW-1 SHEET 1 OF 1

Woodward-Clyde Consultants

PROJECT NAME: Lathrop Property NO. 8810235A

BORING LOCATION	MW-2	ELEVATION AND DATUM	
DRILLING AGENCY	Datum Exploration	DRILLER Jim / Gary	DATE STARTED / DATE FINISHED January 12,1989
DRILLING EQUIPMENT	CME - 75	COMPLETION DEPTH 25'	SAMPLER 2"California Modified Type
DRILLING METHOD	8" Hollowstem Augers	DRILL BIT CME Carbide	NO. OF SAMPLES DIST. N/A; UNDIST. N/A
SIZE AND TYPE OF CASING	2" PVC	WATER LEVEL FIRST 10.5'	COMPL. N/A; 24 HRS. N/A
TYPE OF PERFORATION	0.010" Slotted FROM 5 TO 25 FT.	LOGGED BY: Chuck Rambo	CHECKED BY: Alan Lattanner
SIZE AND TYPE OF PACK	Lonestar #2/12 Monterey Sand FROM 4 TO 25 FT.		
TYPE OF SEAL	NO. 1 Bentonite Pellets FROM 2.5 TO 4 FT.		
	NO. 2 Neat Cement FROM 0 TO 2.5 FT.		

DEPTH (feet)	DESCRIPTION	GRAPHIC LOG: Lithology	GRAPHIC LOG: Piezometer Installation	Water Content	Piezometer Data	SAMPLES: Drive Number	SAMPLES: Sample Number	SAMPLES: Recov. (Feet)	SAMPLES: Blow Count	REMARKS (Drill Rate, Fluid Loss, Odor, etc.)
0	FILL - SILTY SAND (SM) -with clay -with gray gravel -brown -moist					1	1 2 3 4		4 5 8	OVA = 0 ppm
5	FILL - SILTY CLAY (CL) -with sand lenses -black					2	1 2 3 4		12 16 9	OVA = 8 ppm from the drum of cuttings Petroleum Odor from the drums
10	-with concrete and wood debris			Water Level		3	3 4		6 4 7	
15	-with roofing paper, asphalt shingles, and wood debris					4	1 2 3 4		14 15 10	OVA = 50 ppm from the drum of cuttings
20	SILTY CLAY (CH) -dark gray -moist -very soft					5	1 2 3 4		1 2 3	OVA = 0 ppm
25	Bottom of boring at 25'									
30										
35										

FIELD LOG OF BORING NO. MW-2 SHEET 1 OF 1

Woodward-Clyde Consultants

PROJECT NAME: Lathrop Property NO. 8810235A

BORING LOCATION	MW-3	ELEVATION AND DATUM	
DRILLING AGENCY	Datum Exploration	DRILLER	Jim / Gary
DATE STARTED / DATE FINISHED	January 13,1989		
DRILLING EQUIPMENT	CME - 75	COMPLETION DEPTH	21 1/2'
SAMPLER	2"California Modified Type		
DRILLING METHOD	8" Hollowstem Augers	DRILL BIT	CME Carbide
NO. OF SAMPLES	DIST. N/A	UNDIST. N/A	
SIZE AND TYPE OF CASING	2" PVC	WATER LEVEL	FIRST 12'
COMPL. N/A	24 HRS. N/A		
TYPE OF PERFORATION	0.010" Slotted	FROM 5 TO 21.5 FL.	
SIZE AND TYPE OF PACK	Lonestar #2/12 Monterey Sand	FROM 4 TO 21.5 FL.	
TYPE OF SEAL	NO. 1 Bentonite Pellets	FROM 2.5 TO 4 FL.	
	NO. 2 Neat Cement	FROM 0 TO 2.5 FL.	
LOGGED BY:	Chuck Rambo	CHECKED BY:	Alan Lattanner

DEPTH (feet)	DESCRIPTION	GRAPHIC LOG: Lithology	GRAPHIC LOG: Piezometer Installation	Water Content	Piezometer Data	SAMPLES: Drive Number	SAMPLES: Sample Number	SAMPLES: Recov. (Feet.)	SAMPLES: Blow Counts	REMARKS (Drill Rate, Fluid Loss, Odor, etc.)
0	FILL - SILTY CLAY (CL) -brown -moist -with sand -dark gray									
5						1			3 9 10	OVA = 0 ppm
10	FILL - ASBESTOS (FIBERGLASS?) -pink and white fibers -very soft					2			2 1 1	OVA = 9 ppm No Odor
15	SILTY CLAY (CL) -dark grey -moist -very soft -with shells -"Bay Mud"					3			8 1 1	OVA = 2 ppm
20						4			2 3 3	OVA = 0 ppm
21 1/2	Bottom of boring at 21 1/2'									
25										
30										
35										

FIELD LOG OF BORING NO. MW-3 SHEET 1 OF 1

Woodward-Clyde Consultants

PROJECT NAME: Lathrop Property NO. 8810235A

BORING LOCATION	MW-4			ELEVATION AND DATUM			
DRILLING AGENCY	Datum Exploration	DRILLER	Jim / Gary	DATE STARTED / DATE FINISHED	January 13,1989		
DRILLING EQUIPMENT	CME - 75			COMPLETION DEPTH	26.5'	SAMPLER	2"California Modified Type
DRILLING METHOD	8" Hollowstem Augers	DRILL BIT	CME Carbide	NO. OF SAMPLES	DIST. N/A	UNDIST.	N/A
SIZE AND TYPE OF CASING	2" PVC			WATER LEVEL	FIRST 8 1/2'	COMPL. N/A	24 HRS. N/A
TYPE OF PERFORATION	0.010" Slotted	FROM 10 TO 25 FL.		LOGGED BY: Chuck Rambo		CHECKED BY: Alan Lattanner	
SIZE AND TYPE OF PACK	Lonestar #2/12 Monterey Sand	FROM 8 TO 25 FL.					
TYPE OF SEAL	NO. 1 Bentonite Pellets	FROM 6 TO 8 FL.					
	NO. 2 Neat Cement	FROM 0 TO 6 FL.					

DEPTH (feet)	DESCRIPTION	GRAPHIC LOG: Lithology	GRAPHIC LOG: Piezometer Installation	Water Content	Piezometer Data	SAMPLES: Drive Number	SAMPLES: Sample Number	SAMPLES: Recov. (Feet.)	SAMPLES: Blow Counts	REMARKS (Drill Rate, Fluid Loss, Odor, etc.)
0	FILL - SANDY CLAY (CL) -black -moist									
	FILL - SILTY CLAY (CL) -with sand -light gray -with debris					1			3 4 8	
5					5	2			5 5 7	
	-with roofing shingles									
				1/8/89						
10					10	3			8 5 8	
	FILL - LINOLEUM & TAR PAPER -with asphalt									
15					15	4			50/6"	
	-with wood and fiberglass shingles									
20					20	5			50 40	
	SILTY CLAY (CL) -dark grey -moist -very soft -with shells -"Bay Mud"									
25					25	6			1 1 1	
	Bottom of boring at 27'									
30					30					
35					35					

FIELD LOG OF BORING NO. MW-4 SHEET 1 OF 1

Woodward-Clyde Consultants

PROJECT NAME: Lathrop Property NO. 8810235A

BORING LOCATION	MW-5	ELEVATION AND DATUM	
DRILLING AGENCY	Datum Exploration	DRILLER Jim / Gary	DATE STARTED / DATE FINISHED January 16,1989
DRILLING EQUIPMENT	CME - 75	COMPLETION DEPTH 25'	SAMPLER 2"California Modified Type
DRILLING METHOD	8" Hollowstem Augers	DRILL BIT CME Carbide	NO. OF SAMPLES / DIST. N/A / UNDIST. N/A
SIZE AND TYPE OF CASING	2" PVC	WATER LEVEL / FIRST 9' to 10'	COMPL. N/A / 24 HRS. N/A
TYPE OF PERFORATION	0.010" Slotted	FROM 5 TO 25 FT.	LOGGED BY: Carl Parten
SIZE AND TYPE OF PACK	Lonestar #2/12 Monterey Sand	FROM 4 TO 25 FT.	CHECKED BY: Alan Lattanner
TYPE OF SEAL	NO. 1 Bentonite Pellets	FROM 1 TO 4 FT.	
	NO. 2 Neat Cement	FROM 0 TO 1 FT.	

DEPTH (feet)	DESCRIPTION	GRAPHIC LOG: Lithology / Piezometer installation	Water Content	Piezometer Data	SAMPLES: Drive Number / Sample Number / Recov. (Feet) / Blow Counts	REMARKS (Drill Rate, Fluid Loss, Odor, etc.)
0	FILL - SILTY CLAY (CH) -gray -damp -medium stiff					
5	FILL - CLAYEY SAND (SC) -gray -well sorted -damp -medium dense				1 / 8 / 8 / 7	OVA = 1000+ ppm Slight Sour Odor
	-moist		water			OVA Readings while drilling 500 - 900 ppm
10	FILL - CLAYEY SAND (SC) -gray -wet -loose -with sandstone fragments to 1"				2 / 5 / 5 / 8	No recovery Redrove with Standard Pen. Sampler
15	FILL - CLAYEY SAND (SC) to SANDY CLAY (CL) -the majority of the sample consists of tar paper and roofing scraps				3 / 8 / 18 / 40	OVA = 20 to 30 ppm Hydrocarbon Odor
20	SILTY CLAY (CH) -gray to black -wet -soft -"Bay Mud"				4 / 15 / 15 / 1	OVA = 50 to 100 ppm Hydrocarbon Odor
25	Bottom of boring at 25'					
30						
35						

FIELD LOG OF BORING NO. MW-5 SHEET 1 OF 1

APPENDIX B

Letter from RWQCB dated December 30, 1996

San Francisco Bay
Regional Water
Quality Control
Board

2101 Webster Street
Suite 500
Oakland, CA 94612
(510) 286-1255
FAX (510) 286-1380

Pete Wilson
Governor

December 30, 1996
File No.: 2223.09 (SA)
SMS Case File

Spieker Properties
4900 Hopyard Road, Suite 120
Pleasanton, California 94588

Attention: Mr. John Winther

RE: Properties at 5801, 5855-5895 Christie Avenue, 5813-5815 Shellmound Street, and the Watergate Towers Complex property, Emeryville, Alameda County.

Dear Mr. Winther:

This letter contains San Francisco Bay Regional Water Quality Control Board (RWQCB) Staff's views on the environmental conditions at the above subject properties. We understand Spieker properties is considering acquisition of the properties. RWQCB Staff discussed the properties with representatives of Speiker Properties and Lathrop Properties at two meetings held on November 6, 1996, and December 3, 1996. Based on the meetings and review of information presented to us, we have the following views regarding the environmental conditions at the properties.

Properties at 5801, 5855-5895 Christie Avenue (Christie Avenue properties) and 5813-5815 Shellmound Street

1. The properties, located east of Interstate I-80, are within the area of the Emeryville Brownfield's Initiative. Historically the properties were owned by Fiberboard Corporation and it's predecessors. Environmental conditions beneath the Christie Avenue properties have not been documented. Based on historical information, it appears that the Christie Avenue properties were filled with industrial debris and soil similar to that placed west of Interstate I-80.

2. The Christie Avenue properties have not been under the RWQCB's regulatory oversight and are not listed in the RWQCB's site management system database. However, based on the RWQCB Staff's experiences with other sites in this area, we believe that the risk to human health and the environment is most likely acceptable because the sites are paved and any subsurface hazardous constituents that may be present are essentially in deep soil layers. If subsurface work (e.g.

foundations, utilities etc.) is necessary, a risk management plan that includes plans for the possibility of handling potential hazardous materials is advisable.

3. With regard to groundwater beneath the properties, we do not consider the uppermost groundwater zone a suitable drinking water source. The Brownfield Initiative is a mechanism for the City of Emeryville (COE) and regulatory agencies to acknowledge the regional nature of hazardous constituents in soil and groundwater and deal with them on a regional basis which may include containment, selected risk-based cleanup, and monitoring. The COE plans to enter into a memorandum of understanding with the RWQCB, Department of Toxic Substances Control (DTSC), Environmental Protection Agency (EPA), and potentially other regulatory agencies using a regional monitoring program and risk management practices. Soil issues would remain the responsibility of the property owner or responsible party and groundwater issues would be handled by the city. In the absence of specific pollution sources, the RWQCB would not view groundwater remediation on a site by site basis, as reasonable, except where significant individual pollution sources are present.

4. The 5813-15 Shellmound Street Property is listed as a petroleum release site under the jurisdiction of the Alameda County Department of Environmental Health (ACDEH). Both the RWQCB and the ACDEH are using risk-based approaches to assess the need for remediation at the property.

The Watergate Towers Complex property (located on the west side of Interstate I-80)

1. There are three potential issues with respect to the historical industrial landfilling at the property. These issues include: (a) Health and Safety (b) Use of groundwater for drinking and (c) effects of the landfill materials on the San Francisco Bay.

   a. Health and Safety. Health and safety was addressed in previous reports prepared by Woodward Clyde Consultants and future potential concerns can be adequately addressed with an operations and maintenance plan that includes requirements for subsurface excavation work that might uncover potentially hazardous materials. We believe that there is no unacceptable threat to human health, for the current office/commercial use of the property, as the site is covered with pavement, building floors and asphalt parking lots.

   b. Beneficial Uses of Groundwater. The shallow groundwater at the site is not a current source of drinking water and the probability of its use for domestic purposes is extremely low. In addition, deeper water-bearing zones are not likely to be impacted by vertical migration of hazardous constituents because of the presence of low permeability bay mud underlying the fill materials.

   c. Impacts of Historic Fill Areas on the Bay. The issue of impacts of the fill areas on the San Francisco Bay is uncertain as the RWQCB has not developed or implemented guidelines to measure and assess the potential impacts of historic fill areas to San Francisco Bay. However, given the

current state of knowledge, it is unlikely that the site will come under the oversight of the RWQCB in the future. If and when the RWQCB develops a method to assess potential impacts of historical fill to San Francisco Bay, some additional assessment of potential releases of hazardous constituents from the site to the Bay may be required. It is unlikely that containment systems would be required.

2. The RWQCB staff consider the site to be an area of "random fill" and therefore not subject to reporting requirements under the California Code of Regulations, Title 23, Chapter 15. The site is currently not subject to RWQCB environmental regulatory oversight and that status is not likely to change in the future. The concern with the hazardous constituents in the fill relates primarily to metals contained in the fill and their potential mobility into the Bay. Further assessment of soluble constituents and the potential for their migration from the site to the Bay may be required if and/or when the RWQCB develops methods to assess similar sites around the Bay. The RWQCB recognizes the difficulty in differentiating between the potential contributions of hazardous constituents to the Bay from historical and current sources.

3. Since the site is located adjacent to the San Francisco Bay, any regulatory actions at the site should be based on protection of water quality, environment, and human health. Thus, the RWQCB is the appropriate agency for handling regulatory activities associated with the site.

We hope that this letter clarifies the RWQCB Staff's views on the properties. If you have any questions, please call Sumadhu Arigala at (510)-286-0434.

Sincerely,
Loretta K Barsamian,
Executive Officer

Stephen I. Morse, by DCM
Chief, Toxics Division.

cc: Curtis Scott, Landfills Section, RWQCB

Barbara Cook, DTSC
700 Heinz Avenue, Suite 200
Berkeley, CA 94710-2737

Charles Almestad, Golder Associates
1451 Harbor Bay Parkway, Suite 1000
Alameda, CA 94502

Bruce Klafter, Orrick Herrington & Sutcliffe
Old Federal Reserve Bank Building
400 Sansome Street, San Francisco, CA 94111-3143

APPENDIX C

Laboratory Reports of Asbestos Analysis of Soil Samples and Landfill Profiling Soil Samples Collected in April 1998

RJ Lee Group, Inc.
530 McCormick Street • San Leandro, CA 94577
(510) 567-0480 • FAX (510) 567-0488

April 7, 1998

Mr. Rajeev Cherwoo
Golder Associates Inc.
180 Grand Ave., Ste. 250
Oakland, CA 94612

RE: PLM Standard Asbestos Analysis Results for Samples as Shown on Test Report
RJLeeGroup, Inc. Job No.: AOC804041
Client P.O./Job Number: P98-7034
Client Job Name/Location: Spieker Emeryville

Dear Mr. Cherwoo:

Enclosed are the results from the polarized light microscopy (PLM) asbestos analysis of the above referenced sample(s). Sample(s) were analyzed in accordance with guidelines set forth in the EPA Method for the Determination of Asbestos in Bulk Building Materials, U.S. EPA/600/R-93/116 (7/93 Edition).

Test Report lists each sample identification number, gross sample description, sample location, type(s) and concentration of asbestos, type(s) and concentration of nonasbestos fibers, major components and concentration of nonfibrous material (NFM), sample run date, analyst, sample homogeneity, and a layer breakdown if applicable. All concentrations are given in area percents (visual estimation).

RJ Lee Group, Inc. is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) (NVLAP Participant Number 1208-2) for bulk asbestos fiber analysis (PLM), and by the California Department of Health Services, Environmental Laboratory Accreditation Program (CALELAP) for bulk asbestos analysis. Neither the NVLAP Accreditation of this laboratory nor this report may be used to claim product endorsement by NVLAP or any agency of the United States government.

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the sample(s) covered by this report, RJ Lee Group will store the sample(s) for a period of ninety (90) days before discarding. A shipping and handling fee will be assessed for the return of any sample(s).

If you have any questions on this report or if RJ Lee Group, Inc. can be of further assistance, please do not hesitate to call.

Sincerely,

Stephen S. Yata
Geologist

SSY/sb
Enclosure

Test Report - Golder Associates, Inc.

Polarized Light Analysis Results

Project AOC804041

		Asbestos						Nonasbestos						
nple Number / nple Appearance	Client Sample Number	Chrysotile	Amosite	Crocidolite	Anthophyllite	Tremolite	Actinolite	Cellulose	Mineral Wool	Fibrous Glass	Synthetic Fibers	Other Fibers	NonFibrous Material	Run Date Analyst
66471CPI.	SP-1	-	17 %	-	-	-	-	1 %	-	-	-	-	82 %	4/6/98
y soil						NFM: Qtz, Carb, Opaq, Clay, Fine Grains, Misc. Part.							Homogeneous	PTM

Samples received on: Thursday, April 2, 1998

Authorized Signature _____

Peter McIntyre, Geologist

Date Monday, April 6, 1998

RJ Lee Group, Inc.
Bay Area Lab

530 McCormick Street
San Leandro, CA 94577

Phone (510) 567-0480
Fax (510) 567-0488

AOC 00404.1

CHAIN OF CUSTODY RECORD

PROJ. NO.	SITE/LOCATION
98-7034	Spieker Emeryville

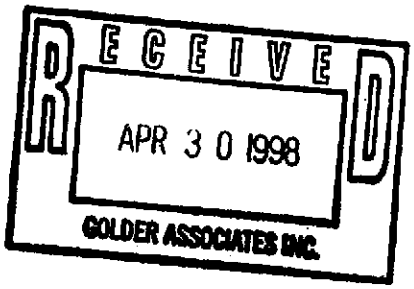
SAMPLERS: (Signature) Layne Clarmon

LAB NO.	DATE	TIME	SAMPLE TYPE	MEDIA	SAMPLE IDENTIFICATION	NO. OF CONTAINERS	AMOUNT/ PRESERVATIVE PLM						SEAL NO.	SEAL INTACT? (Y or N)	REMARKS (with initials)
	04/02	1150	Composit	Soil	SP-1	1 Brass	X								Save Sample after analysis.

Relinquished by: (Signature/Firm)	Date/Time	Received by: (Signature/Firm)	Relinquished by: (Signature/Firm)	Date/Time	Received by: (Signature/Firm)
Layne Clarmon Golder	04/02/98 1155 pm	[signature] Golder		4/2/98 4:30PM	[signature] ORS-Lee Group
Relinquished by: (Signature/Firm)	Date/Time	Received by: (Signature/Firm)	Relinquished by: (Signature/Firm)	Date/Time	Received by: (Signature/Firm)
Relinquished by: (Signature/Firm)	Date/Time	Received by: (Signature/Firm)	Date/Time	Remarks (attachments if necessary)	

RJ Lee Group, Inc.

530 McCormick Street• San Leandro, CA 94577
(510) 567-0480 • FAX (510) 567-0488



April 20, 1998

Mr. Rajeev Cherwoo
Golder Associates Inc.
180 Grand Ave., Ste. 250
Oakland, CA 94612

RE: PLM Standard Asbestos Analysis Results for Samples as Shown on Test Report
RJLeeGroup, Inc. Job No.: AOC804186
Client P.O./Job Number: Spieker Emeryville
Client Job Name/Location: Spieker Emeryville

Dear Mr Cherwoo:

Enclosed are the results from the polarized light microscopy (PLM) asbestos analysis of the above referenced sample(s). Sample(s) were analyzed in accordance with guidelines set forth in the EPA Method for the Determination of Asbestos in Bulk Building Materials, U.S. EPA/600/R-93/116 (7/93 Edition).

Test Report lists each sample identification number, gross sample description, sample location, type(s) and concentration of asbestos, type(s) and concentration of nonasbestos fibers, major components and concentration of nonfibrous material (NFM), sample run date, analyst, sample homogeneity, and a layer breakdown if applicable. All concentrations are given in area percents (visual estimation).

RJ Lee Group, Inc. is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) (NVLAP Participant Number 1208-2) for bulk asbestos fiber analysis (PLM), and by the California Department of Health Services, Environmental Laboratory Accreditation Program (CALELAP) for bulk asbestos analysis. Neither the NVLAP Accreditation of this laboratory nor this report may be used to claim product endorsement by NVLAP or any agency of the United States government.

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to [illegible] by this report, RJ Lee Group will store the sample(s) for a period of ninety (90) days before discarding. A shipping and handling fee will be assessed for the return of any sample(s).

If you have any questions on this report or if RJ Lee Group, Inc. can be of further assistance, please do not hesitate to call.

Sincerely,

Stephen S. Yata
Geologist

SSY/sb
Enclosure

Test Report - Golder Associates, Inc.

Polarized Light Analysis Results

Project AOC804186

Sample Number / Sample Appearance	Client Sample Number	Asbestos: Chrysotile	Amosite	Crocidolite	Anthophyllite	Tremolite	Actinolite	Nonasbestos: Cellulose	Mineral Wool	Fibrous Glass	Synthetic Fibers	Other Fibers	NonFibrous Material	Run Date / Analyst
1667721CPL Brown soil	SP-3-1	-	<1 %	-	-	-	-	<1 %	<1 %	-	-	-	99+ %	4/17/98 SSY
		NFM: Qtz, Carb, Opaq, Misc. Part.											Homogeneous	
1667722CPL Brown soil	SP-3-2	-	<1 %	-	-	-	-	<1 %	<1 %	-	-	-	99+ %	4/17/98 SSY
		NFM: Qtz, Carb, Opaq, Misc. Part.											Homogeneous	
1667723CPL Brown soil	SP-3-3	-	<1 %	-	-	-	-	<1 %	<1 %	-	-	-	99+ %	4/17/98 SSY
		NFM: Qtz, Carb, Opaq, Misc. Part.											Homogeneous	
1667724CPL Brown soil	SP-3-4	-	<1 %	-	-	-	-	<1 %	<1 %	-	-	-	99+ %	4/17/98 SSY
		NFM: Qtz, Carb, Opaq, Misc. Part.											Homogeneous	
1667725CPL Brown soil	SP-3-5	-	10 %	-	-	-	-	<1 %	<1 %	-	-	-	90 %	4/17/98 SSY
		NFM: Qtz, Carb, Opaq, Misc. Part.											Homogeneous	
1667726CPL Brown soil	SP-3-6	-	8 %	-	-	-	-	<1 %	<1 %	-	-	-	92 %	4/17/98 SSY
		NFM: Qtz, Carb, Opaq, Misc. Part.											Homogeneous	

Samples received on: Friday, April 17, 1998

Authorized Signature

Stephen S. Yata, Geologist

Date Monday, April 20, 1998

RJ Lee Group, Inc.
Bay Area Lab

530 McCormick Street
San Leandro, CA 94577

Phone (510) 567-0480
Fax (510) 567-0488

Test Report - Golder Associates, Inc.

Polarized Light Analysis Results

Project AOC804186

Sample Number / Sample Appearance	Client Sample Number	Asbestos: Chrysotile	Amosite	Crocidolite	Anthophyllite	Tremolite	Actinolite	Cellulose	Nonasbestos: Mineral Wool	Fibrous Glass	Synthetic Fibers	Other Fibers	NonFibrous Material	Run Date / Analyst
1667727CPL Brown soil	SP-3-7	-	5 %	-	-	-	-	<1 %	<1 %	-	-	-	95 %	4/17/98 SSY
						NFM: Qtz, Carb, Opaq, Misc. Part.							Homogeneous	
1667728CPL Brown soil	SP-3-8	-	4 %	-	-	-	-	<1 %	-	<1 %	-	-	96 %	4/17/98 SSY
						NFM: Qtz, Carb, Opaq, Misc. Part.							Homogeneous	
1667729CPL Brown soil	SP-4-1	-	1 %	-	-	-	-	<1 %	<1 %	-	-	-	99 %	4/17/98 SSY
						NFM: Qtz, Carb, Opaq, Misc. Part.							Homogeneous	
1667730CPL Brown soil	SP-4-2	-	2 %	-	-	-	-	<1 %	<1 %	-	-	-	98 %	4/17/98 SSY
						NFM: Qtz, Carb, Opaq, Misc. Part.							Homogeneous	
1667731CPL Brown soil	SP-4-3	-	<1 %	-	-	-	-	<1 %	<1 %	-	-	-	99+ %	4/17/98 SSY
						NFM: Qtz, Carb, Opaq, Gyp, Misc. Part.							Homogeneous	
1667732CPL Brown soil	SP-4-4	-	2 %	-	-	-	-	<1 %	<1 %	-	-	-	98 %	4/17/98 SSY
						NFM: Qtz, Carb, Opaq, Misc. Part.							Homogeneous	

Samples received on: Friday, April 17, 1998

Authorized Signature _____ Stephen S. Kelly, Geologist

Date Monday, April 20, 1998

RJ Lee Group, Inc.
Bay Area Lab

530 McCormick Street
San Leandro, CA 94577

Phone (510) 567-0480
Fax (510) 567-0488

Test Report - Golder Associates, Inc.

Polarized Light Analysis Results

Project AOC804186

Sample Number / Sample Appearance	Client Sample Number	Asbestos: Chrysotile	Amosite	Crocidolite	Anthophyllite	Tremolite	Actinolite	Cellulose	Nonasbestos: Mineral Wool	Fibrous Glass	Synthetic Fibers	Other Fibers	NonFibrous Material	Run Date / Analyst
1667733CPL Brown soil	SP-5-1	-	<1 %	-	-	-	-	<1 %	-	-	-	-	99+ %	4/17/98 PJM
						NFM: Qtz, Carb, Opaq, Mica, Misc. Part.							Homogeneous	
1667734CPL Brown soil	SP-5-2	<1 %	-	-	-	-	-	<1 %	-	-	-	-	99+ %	4/17/98 PJM
						NFM: Qtz, Carb, Opaq, Mica, Misc. Part.							Homogeneous	
1667735CPL Brown soil	SP-5-3	<1 %	1 %	-	-	-	-	<1 %	-	-	-	-	99 %	4/17/98 PJM
						NFM: Qtz, Carb, Opaq, Mica, Misc. Part.							Homogeneous	
1667736CPL Brown soil	SP-5-4	-	-	-	-	-	-	5 %	-	-	-	-	95 %	4/17/98 PJM
						NFM: Qtz, Opaq, Mica, Fine Grains, Misc. Part.							Homogeneous	
1667737CPL Brown soil	SP-5-5	-	4 %	-	-	-	-	1 %	-	-	-	-	95 %	4/17/98 PJM
						NFM: Qtz, Opaq, Mica, Fine Grains, Misc. Part.							Homogeneous	
1667738CPL Brown soil	SP-5-6	-	2 %	-	-	-	-	<1 %	-	-	-	-	98 %	4/17/98 PJM
						NFM: Qtz, Opaq, Mica, Fine Grains, Misc. Part.							Homogeneous	

Samples received on: Friday, April 17, 1998

Authorized Signature _____ Stephen S. Yata, Geologist

Date Monday, April 20, 1998

RJ Lee Group, Inc.
Bay Area Lab

530 McCormick Street
San Leandro, CA 94577

Phone (510) 567-0480
Fax (510) 567-0488

Test Report - Golder Associates, Inc.

Polarized Light Analysis Results

Project AOC804186

Sample Number / Sample Appearance	Client Sample Number	Asbestos: Chrysotile	Amosite	Crocidolite	Anthophyllite	Tremolite	Actinolite	Cellulose	Nonasbestos: Mineral Wool	Fibrous Glass	Synthetic Fibers	Other Fibers	NonFibrous Material	Run Date / Analyst
1667739CPL Brown soil	SP-5-7	-	4 %	-	-	-	-	<1 %	-	-	-	-	96 %	4/17/98 PJM
						NFM: Qtz, Carb, Opaq, Mica, Misc. Part.							Homogeneous	
1667740CPL Brown soil	SP-5-8	<1 %	1 %	-	-	-	-	<1 %	-	-	-	-	99 %	4/17/98 PJM
						NFM: Qtz, Carb, Opaq, Mica, Misc. Part.							Homogeneous	

Samples received on: Friday, April 17, 1998

Authorized Signature

Stephen S. Yata, Geologist

Date Monday, April 20, 1998

RJ Lee Group, Inc.
Bay Area Lab

530 McCormick Street
San Leandro, CA 94577

Phone (510) 567-0480
Fax (510) 567-0488

[redacted] 180 GRAND [redacted] OAKLAND, CA 94610 CHAIN OF CUSTODY RECORD [redacted] 510 [redacted] 2339 [redacted] 7000 [redacted]

PROJ. NO.	SITE/LOCATION
	SPIEKER EMERYVILLE

SAMPLERS: (Signature) Layne Chernow

STA. NO.	DATE	TIME	SAMPLE TYPE	MEDIA	SAMPLE IDENTIFICATION	NO. OF CONTAINERS	AMOUNT/ PRESERVATIVE PLM						SEAL NO.	SEAL INTACT? (Y or N)	REMARKS (with initials)
	04/16	PM	Grab	Soil	SP-3-1	1 bag	X								Results by 04/20/98
					SP-3-2	1	X								
					SP-3-3	1	X								
					SP-3-4	1	X								
					SP-3-5	1	X								
					SP-3-6	1	X								
					SP-3-7	1	X								
					SP-3-8	1	X								
					SP-4-1	1	X								
					SP-4-2	1	X								
					SP-4-3	1	X								
					SP-4-4	1	X								
					SP-5-1	1	X								
					SP-5-2	1	X								
					SP-5-3	1	X								

Relinquished by: (Signature/Firm)	Date/Time	Received by: (Signature/Firm)	Relinquished by: (Signature/Firm)	Date/Time	Received by: (Signature/Firm)
Layne Chernow	04/16/98 4:40PM	C. Spain RSLEE			
Relinquished by: (Signature/Firm)	Date/Time	Received by: (Signature/Firm)	Relinquished by: (Signature/Firm)	Date/Time	Received by: (Signature/Firm)
Relinquished by: (Signature/Firm)	Date/Time	Received by: (Signature/Firm)	Date/Time	Remarks (attachments if necessary)	

CHAIN OF CUSTODY RECORD

PROJ. NO.	SITE / LOCATION
	SPIELER EMERYVILLE

SAMPLERS: (Signature) Layne Chenault

STA. NO.	DATE	TIME	SAMPLE TYPE	MEDIA	SAMPLE IDENTIFICATION	NO. OF CONTAINERS	AMOUNT / PRESERVATIVE PLM						SEAL NO.	SEAL INTACT? (Y or N)	REMARKS (with initials)
	04/16	PM	Grab	Soil	SP-5-4	1 bag	X								Results by 04/20/98
	↓	↓	↓	↓	SP-5-5		X								
					SP-5-6		X								
					SP-5-7		X								
					SP-5-8		X								

Relinquished by: (Signature/Firm)	Date / Time	Received by: (Signature/Firm)	Relinquished by: (Signature/Firm)	Date / Time	Received by: (Signature/Firm)
Layne Chenault	04/16/98 4 PM	Cypress R Lee			
Relinquished by: (Signature/Firm)	Date / Time	Received by: (Signature/Firm)	Relinquished by: (Signature/Firm)	Date / Time	Received by: (Signature/Firm)
Relinquished by: (Signature/Firm)	Date / Time	Received by: (Signature/Firm)	Date / Time	Remarks (attachments if necessary)	

Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878
2323 Fifth Street, Berkeley, CA 94710, Phone (510) 486-0900

ANALYTICAL REPORT

Prepared for:

Golder Associates
180 Grand Ave
Suite 250
Oakland, CA 94612

Date: 04-MAY-98
Lab Job Number: 133232
Project ID: N/A
Location: Spieker Emeryville

Reviewed by: Damara Moore

Reviewed by:

Volatile Organics by GC/MS

Client:	Golder Associates	Analysis Method:	EPA 8260
Location:	Spieker Emeryville	Prep Method:	EPA 5030
Field ID:	SP-1-5	Sampled:	04/16/98
Lab ID:	133232-001	Received:	04/17/98
Matrix:	TCLP Leachate	Extracted:	04/21/98
Batch#:	40392	Analyzed:	04/21/98
Units:	ug/L		
Diln Fac:	0.97		

Analyte	Result	Reporting Limit
Vinyl Chloride	ND	9.7
1,1-Dichloroethene	ND	4.9
2-Butanone	ND	9.7
Chloroform	ND	4.9
Carbon Tetrachloride	ND	4.9
1,2-Dichloroethane	ND	4.9
Benzene	ND	4.9
Trichloroethene	ND	4.9
Tetrachloroethene	ND	4.9
Chlorobenzene	ND	4.9
1,4-Dichlorobenzene	ND	4.9

Surrogate	%Recovery	Recovery Limits
1,2-Dichloroethane-d4	103	85-121
Toluene-d8	101	92-110
Bromofluorobenzene	102	84-115

EPA 8260 Volatile Organics

Client: Golder Associates
Location: Spieker Emeryville

Analysis Method: EPA 8260
Prep Method: EPA 5030

METHOD BLANK

Matrix: Water
Batch#: 40392
Units: ug/L
Diln Fac: 1

Prep Date: 04/21/98
Analysis Date: 04/21/98

MB Lab ID: QC68923

Analyte	Result	Reporting Limit
Vinyl Chloride	ND	10
1,1-Dichloroethene	ND	5.0
2-Butanone	ND	10
Chloroform	ND	5.0
Carbon Tetrachloride	ND	5.0
1,2-Dichloroethane	ND	5.0
Benzene	ND	5.0
Trichloroethene	ND	5.0
Tetrachloroethene	ND	5.0
Chlorobenzene	ND	5.0
1,4-Dichlorobenzene	ND	5.0

Surrogate	%Rec	Recovery Limits
1,2-Dichloroethane-d4	100	85-121
Toluene-d8	100	92-110
Bromofluorobenzene	105	84-115

EPA 8260 Volatile Organics

Client: Golder Associates
Location: Spieker Emeryville
Analysis Method: EPA 8260
Prep Method: EPA 5030

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Water
Batch#: 40392
Units: ug/L
Diln Fac: 1
Prep Date: 04/21/98
Analysis Date: 04/21/98

BS Lab ID: QC68921

Analyte	Spike Added	BS	%Rec	#	Limits
1,1-Dichloroethene	50	47.09	94		69-137
Benzene	50	49.17	98		87-117
Trichloroethene	50	49.31	99		83-116
Chlorobenzene	50	50.48	101		87-117

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	98	85-121
Toluene-d8	100	92-110
Bromofluorobenzene	100	84-115

BSD Lab ID: QC68922

Analyte	Spike Added	BSD	%Rec	#	Limits	RPD	#	Limit
1,1-Dichloroethene	50	45.9	92		69-137	3		14
Benzene	50	47.84	96		87-117	3		10
Trichloroethene	50	47.83	96		83-116	3		10
Chlorobenzene	50	48.72	97		87-117	4		10

Surrogate	%Rec	Limits
1,2-Dichloroethane-d4	99	85-121
Toluene-d8	101	92-110
Bromofluorobenzene	101	84-115

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 4 outside limits
Spike Recovery: 0 out of 8 outside limits

TVH-Total Volatile Hydrocarbons

Client: Golder Associates
Location: Spieker Emeryville

Analysis Method: EPA 8015M
Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
133232-001	SP-1-5	40410	04/16/98	04/23/98	04/23/98	

Matrix: Soil

Analyte	Units	133232-001
Diln Fac:		1
Gasoline C7-C12	mg/Kg	<1
Surrogate		
Trifluorotoluene	%REC	104
Bromofluorobenzene	%REC	114

TVH-Total Volatile Hydrocarbons

Client: Golder Associates
Location: Spieker Emeryville
Analysis Method: EPA 8015M
Prep Method: EPA 5030

METHOD BLANK

Matrix: Soil
Batch#: 40410
Units: mg/Kg
Diln Fac: 1
Prep Date: 04/22/98
Analysis Date: 04/22/98

MB Lab ID: QC68982

Analyte	Result
Gasoline C7-C12	<1.0

Surrogate	%Rec	Recovery Limits
Trifluorotoluene	100	53-157
Bromofluorobenzene	109	53-157

Lab #: 133232

BATCH QC REPORT

Curtis & Tompkins, Ltd.

TVH-Total Volatile Hydrocarbons

Client: Golder Associates
Location: Spieker Emeryville

Analysis Method: EPA 8015M
Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 40410
Units: mg/Kg
Diln Fac: 1

Prep Date: 04/22/98
Analysis Date: 04/22/98

LCS Lab ID: QC68981

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline C7-C12	10.59	10	106	78-120

Surrogate	%Rec	Limits
Trifluorotoluene	115	53-157
Bromofluorobenzene	138	53-157

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 1 outside limits

TVH-Total Volatile Hydrocarbons

Client:	Golder Associates	Analysis Method:	EPA 8015M
Location:	Spieker Emeryville	Prep Method:	EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID:	ZZZZZZ	Sample Date:	04/09/98
Lab ID:	133124-005	Received Date:	04/09/98
Matrix:	Soil	Prep Date:	04/23/98
Batch#:	40410	Analysis Date:	04/23/98
Units:	mg/Kg dry weight	Moisture:	12%
Diln Fac:	1		

MS Lab ID: QC68983

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Gasoline C7-C12	11.36	<1.136	11.42	101	38-132

Surrogate	%Rec	Limits
Trifluorotoluene	118	53-157
Bromofluorobenzene	142	53-157

MSD Lab ID: QC68984

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Gasoline C7-C12	11.36	11.33	100	38-132	1	26

Surrogate	%Rec	Limits
Trifluorotoluene	120	53-157
Bromofluorobenzene	143	53-157

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

Semivolatile Organics by GC/MS

Client:	Golder Associates	Analysis Method:	EPA 8270B
Location:	Spieker Emeryville	Prep Method:	EPA 3520
Field ID:	SP-1-5	Sampled:	04/16/98
Lab ID:	133232-001	Received:	04/17/98
Matrix:	TCLP Leachate	Extracted:	04/20/98
Batch#:	40389	Analyzed:	04/23/98
Units:	ug/L		
Diln Fac:	1		

Analyte	Result	Reporting Limit
Pyridine	ND	100
2-Methylphenol	ND	100
3,4-Methylphenol	ND	100
2,4,6-Trichlorophenol	ND	100
2,4,5-Trichlorophenol	ND	100
Pentachlorophenol	ND	100
1,4-Dichlorobenzene	ND	100
Hexachloroethane	ND	100
Nitrobenzene	ND	100
Hexachlorobutadiene	ND	100
2,4-Dinitrotoluene	ND	100
Hexachlorobenzene	ND	100

Surrogate	%Recovery	Recovery Limits
2-Fluorophenol	20	17-107
Phenol-d5	28	18-115
2,4,6-Tribromophenol	40	14-121
Nitrobenzene-d5	80	36-115
2-Fluorobiphenyl	80	36-113
Terphenyl-d14	79	17-115

EPA 8270 Semi-Volatile Organics

Client: Golder Associates
Location: Spieker Emeryville
Analysis Method: EPA 8270B
Prep Method: EPA 3520

METHOD BLANK

Matrix: Water
Batch#: 40389
Units: ug/L
Diln Fac: 1
Prep Date: 04/20/98
Analysis Date: 04/22/98

MB Lab ID: QC68910

Analyte	Result	Reporting Limit
Pyridine	ND	100
2-Methylphenol	ND	100
3,4-Methylphenol	ND	100
2,4,6-Trichlorophenol	ND	100
2,4,5-Trichlorophenol	ND	100
Pentachlorophenol	ND	100
1,4-Dichlorobenzene	ND	100
Hexachloroethane	ND	100
Nitrobenzene	ND	100
Hexachlorobutadiene	ND	100
2,4-Dinitrotoluene	ND	100
Hexachlorobenzene	ND	100

Surrogate	%Rec	Recovery Limits
2-Fluorophenol	76	17-107
Phenol-d5	76	18-115
2,4,6-Tribromophenol	70	14-121
Nitrobenzene-d5	85	36-115
2-Fluorobiphenyl	75	36-113
Terphenyl-d14	84	17-115

LR: Over linear range

Curtis & Tompkins Labs

GC/MS BS/BSD Spike Recovery Report for QC[illegible]QC68912

Curtis & Tompkins, Ltd.

Spiked Compound	BS	%Rec	BSD	%Rec	RPD	Lm Rec	RPD	Flags
Pyridine	269	67	274	68	2	10-110	50	
-Methylphenol	282	71	289	72	2	10-110	50	
,4-Methylphenol	581	73	586	73	1	10-110	50	
2,4,6-Trichlorophenol	304	76	309	77	2	10-110	50	
,4,5-Trichlorophenol	285	71	284	71	0	10-110	50	
entachlorophenol	225	56	230	58	2	10-110	44	
1,4-Dichlorobenzene	254	63	261	65	3	38-110	21	
Hexachloroethane	150	37	153	38	2	10-110	50	
itrobenzene	355	89	356	89	0	10-110	50	
exachlorobutadiene	144	36	142	35	2	10-110	50	
2,4-Dinitrotoluene	313	78	323	81	3	40-110	19	
exachlorobenzene	379	95	387	97	2	10-110	50	
2-Fluorophenol	751	75	766	77		17-107		
henol-d5	752	75	747	75		18-115		
,4,6-Tribromophenol	725	72	736	74		14-121		
Nitrobenzene-d5	421	84	421	84		36-115		
2-Fluorobiphenyl	386	77	388	78		36-113		
erphenyl-d14	406	81	409	82		17-115		

TEH-Tot Ext Hydrocarbons

Client: Golder Associates
Location: Spieker Emeryville

Analysis Method: EPA 8015M
Prep Method: CA LUFT
Cleanup Method: 3630-some

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
133232-001	SP-1-5	40390	04/16/98	04/20/98	04/22/98	

Matrix: Soil

Analyte	Units	133232-001
Diln Fac:		2
Diesel C12-C22	mg/Kg	66 YH
Surrogate		
Hexacosane	%REC	87

Y: Sample exhibits fuel pattern which does not resemble standard
H: Heavier hydrocarbons than indicated standard

TEH-Tot Ext Hydrocarbons

Client: Golder Associates
Location: Spieker Emeryville

Analysis Method: EPA 8015M
Prep Method: CA LUFT
Cleanup Method: EPA 3630-some

METHOD BLANK

Matrix: Soil
Batch#: 40390
Units: mg/Kg
Diln Fac: 1

Prep Date: 04/20/98
Analysis Date: 04/23/98

MB Lab ID: QC68914

Analyte	Result
Diesel C12-C22	<1.0

Surrogate	%Rec	Recovery Limits
Hexacosane	101	48-142

TEH-Tot Ext Hydrocarbons

Client: Golder Associates
Location: Spieker Emeryville

Analysis Method: EPA 8015M
Prep Method: CA LUFT
Cleanup Method: EPA 3630-some

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 40390
Units: mg/Kg
Diln Fac: 1

Prep Date: 04/20/98
Analysis Date: 04/22/98

LCS Lab ID: QC68915

Analyte	Result	Spike Added	%Rec #	Limits
Diesel C12-C22	41.8	49.5	84	49-108
Surrogate	**%Rec**	**Limits**		
Hexacosane	91	48-142		

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
Spike Recovery: 0 out of 1 outside limits

TEH-Tot Ext Hydrocarbons

Client: Golder Associates
Location: Spieker Emeryville

Analysis Method: EPA 8015M
Prep Method: CA LUFT
Cleanup Method: EPA 3630-some

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: SP-1-5
Lab ID: 133232-001
Matrix: Soil
Batch#: 40390
Units: mg/Kg
Diln Fac: 2

Sample Date: 04/16/98
Received Date: 04/17/98
Prep Date: 04/20/98
Analysis Date: 04/22/98

MS Lab ID: QC68916

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Diesel C12-C22	49.5	65.86	97.36	64	34-121

Surrogate	%Rec	Limits
Hexacosane	84	48-142

MSD Lab ID: QC68917

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Diesel C12-C22	49.5	100.6	70	34-121	3	36

Surrogate	%Rec	Limits
Hexacosane	81	48-142

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits
RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

Curtis & Tompkins, Ltd.

SAMPLE ID: SP-1-5
LAB ID: 133232-001
CLIENT: Golder Associates
LOCATION: Spieker Emeryville
MATRIX: Soil

DATE SAMPLED: 04/16/98
DATE RECEIVED: 04/17/98
DATE REPORTED: 04/23/98

California TITLE 26 Metals

Compound	Result (mg/Kg)	Reporting Limit (mg/Kg)	IDF	QC Batch	Method	Analysis Date
Antimony	ND	2.8	1	40355	EPA 6010A	04/22/98
Arsenic	4.0	0.24	1	40355	EPA 6010A	04/22/98
Barium	130	0.47	1	40355	EPA 6010A	04/22/98
Beryllium	0.39	0.094	1	40355	EPA 6010A	04/22/98
Cadmium	0.35	0.094	1	40355	EPA 6010A	04/22/98
Chromium (total)	45	0.47	1	40355	EPA 6010A	04/22/98
Cobalt	12	0.94	1	40355	EPA 6010A	04/22/98
Copper	32	0.47	1	40355	EPA 6010A	04/22/98
Lead	66	0.14	1	40355	EPA 6010A	04/22/98
Mercury	ND	0.080	1	40397	EPA 7471	04/21/98
Molybdenum	ND	0.94	1	40355	EPA 6010A	04/22/98
Nickel	67	0.94	1	40355	EPA 6010A	04/22/98
Selenium	ND	0.24	1	40355	EPA 6010A	04/22/98
Silver	ND	0.47	1	40355	EPA 6010A	04/22/98
Thallium	ND	0.24	1	40355	EPA 6010A	04/22/98
Vanadium	36	0.47	1	40355	EPA 6010A	04/22/98
Zinc	85	0.94	1	40355	EPA 6010A	04/22/98

ND = Not detected at or above reporting limit

Curtis & Tompkins, Ltd.

CLIENT: Golder Associates
JOB NUMBER: 133232

DATE REPORTED: 04/23/98

BATCH QC REPORT
PREP BLANK

Compound	Result	Reporting Limit	Units	IDF	QC Batch	Method	Analysis Date
Antimony	ND	3	mg/Kg	1	40355	EPA 6010A	04/22/98
Arsenic	ND	0.25	mg/Kg	1	40355	EPA 6010A	04/22/98
Barium	ND	0.5	mg/Kg	1	40355	EPA 6010A	04/22/98
Beryllium	ND	0.1	mg/Kg	1	40355	EPA 6010A	04/22/98
Cadmium	ND	0.1	mg/Kg	1	40355	EPA 6010A	04/22/98
Chromium (total)	ND	0.5	mg/Kg	1	40355	EPA 6010A	04/22/98
Cobalt	ND	1	mg/Kg	1	40355	EPA 6010A	04/22/98
Copper	ND	0.5	mg/Kg	1	40355	EPA 6010A	04/22/98
Lead	ND	0.15	mg/Kg	1	40355	EPA 6010A	04/22/98
Mercury	ND	0.1	mg/Kg	1	40397	EPA 7471	04/21/98
Molybdenum	ND	1	mg/Kg	1	40355	EPA 6010A	04/22/98
Nickel	ND	1	mg/Kg	1	40355	EPA 6010A	04/22/98
Selenium	ND	0.25	mg/Kg	1	40355	EPA 6010A	04/22/98
Silver	ND	0.5	mg/Kg	1	40355	EPA 6010A	04/22/98
Thallium	ND	0.25	mg/Kg	1	40355	EPA 6010A	04/22/98
Vanadium	ND	0.5	mg/Kg	1	40355	EPA 6010A	04/22/98
Zinc	ND	1	mg/Kg	1	40355	EPA 6010A	04/22/98

ND = Not Detected at or above reporting limit

Curtis & Tompkins, Ltd.

CLIENT: Golder Associates
JOB NUMBER: 133232

DATE REPORTED: 04/23/98

BATCH QC REPORT
LABORATORY CONTROL SAMPLE

Compound	Spike Amt	Result	Units	% Rec.	QC Batch	Method	Analysis Date
Antimony	25	21.95	mg/Kg	88	40355	EPA 6010A	04/22/98
Arsenic	100	91	mg/Kg	91	40355	EPA 6010A	04/22/98
Barium	100	86.5	mg/Kg	87	40355	EPA 6010A	04/22/98
Beryllium	2.5	2.325	mg/Kg	93	40355	EPA 6010A	04/22/98
Cadmium	2.5	2.21	mg/Kg	88	40355	EPA 6010A	04/22/98
Chromium (total)	10	8.9	mg/Kg	89	40355	EPA 6010A	04/22/98
Cobalt	25	22.5	mg/Kg	90	40355	EPA 6010A	04/22/98
Copper	12.5	11.3	mg/Kg	90	40355	EPA 6010A	04/22/98
Lead	25	22.1	mg/Kg	88	40355	EPA 6010A	04/22/98
Molybdenum	20	18.3	mg/Kg	92	40355	EPA 6010A	04/22/98
Nickel	25	22.05	mg/Kg	88	40355	EPA 6010A	04/22/98
Selenium	100	89.5	mg/Kg	90	40355	EPA 6010A	04/22/98
Silver	5	4.415	mg/Kg	88	40355	EPA 6010A	04/22/98
Thallium	100	89.5	mg/Kg	90	40355	EPA 6010A	04/22/98
Vanadium	25	22.65	mg/Kg	91	40355	EPA 6010A	04/22/98
Zinc	25	23.15	mg/Kg	93	40355	EPA 6010A	04/22/98

Curtis & Tompkins, Ltd.

CLIENT: Golder Associates
JOB NUMBER: 133232

DATE REPORTED: 04/23/98

BATCH QC REPORT
BLANK SPIKE / BLANK SPIKE DUPLICATE

Compound	Spike Amount	BS Result	BSD Result	Units	BS% Rec.	BSD% Rec.	Rec. Limits	RPD %	RPD Limit	QC Batch	Method	Analysis Date
Mercury	2.500	2.636	2.584	mg/Kg	105	103	80-120	2	35	40397	EPA 7471	04/21/98

Lab#: 133232
Page 1 of 1

Curtis & Tompkins, Ltd.

Total Petroleum Hydrocarbons, EPA 418.1

Client: Golder Associates
Location : Spieker Emeryville

Analysis Method: EPA 418.1
Prep Method: EPA 418.1

Sample #	Client ID	Batch#	Sampled	Analyzed	Moisture
133232-001	SP-1-5	40399	16-APR-98	21-APR-98	-
QC68947	Method Blank	40399	-	21-APR-98	-

Analyte: Total Recoverable Hydrocarbons **Matrix:** Soil **Units:** mg/Kg

Sample #	Client ID	Result	Reporting Limit	Dilution Factor
133232-001	SP-1-5	650	25	1
QC68947	Method Blank	ND	25	1

ND = None Detected at or above Reporting Limit

Curtis & Tompkins, Ltd.

Total Petroleum Hydrocarbons, EPA 418.1

Client: Golder Associates
Location : Spieker Emeryville

Analysis Method: EPA 418.1
Prep Method: EPA 418.1

Sample #	Client ID	Batch#	Sampled	Analyzed	Moisture
QC68948	Lab Control Sample	40399	-	21-APR-98	-

Analyte: Total Recoverable Hydrocarbons **Matrix:** Soil **Units:** mg/Kg

Sample #	Sample Type	Spike Amt.	Result	%Recovery	Limits
QC68948	Lab Control Sample	418.0	424.0	101	80-120

Curtis & Tompkins, Ltd.

Total Petroleum Hydrocarbons, EPA 418.1

Client: Golder Associates
Location : Spieker Emeryville

Analysis Method: EPA 418.1
Prep Method: EPA 418.1

Sample #	Client ID	Batch#	Sampled	Analyzed	Moisture
QC68949	MS of 133232-001	40399	16-APR-98	21-APR-98	-
QC68950	MSD of 133232-001	40399	16-APR-98	21-APR-98	-

Analyte: Total Recoverable Hydrocarbons **Matrix:** Soil **Units:** mg/Kg

Sample #	Client ID	Spikeamt	Result	%Rec	Limits	%RPD	Limit
QC68949	MS of 133232-001	418.0	1117	111	75-125		
QC68950	MSD of 133232-001	418.0	1160	121	75-125	4	35
133232-001	SP-1-5		654.0				

CHAIN OF CUSTODY RECORD

1 33232

PROJ. NO.	SITE/LOCATION
	SPIEKER EMERYVILLE

SAMPLERS: (Signature) Rajeev Cherwoo

STA. NO.	DATE	TIME	SAMPLE TYPE	MEDIA	SAMPLE IDENTIFICATION	NO. OF CONTAINERS	AMOUNT/ PRESERVATIVE	TCLP by EPA 8270	TCLP by EPA 8240	CAM 17 Metals	TTLC EPA 8015 (Gasoline)	TTLC EPA Mod. 8015 (Diesel)	SEAL NO.	SEAL INTACT? (Y or N)	REMARKS (with initials)
	04/16	PM	GRAB	Soil	SP-1-5	4	X	X	X	X	X				1 week TAT

Relinquished by: (Signature/Firm)	Date/Time	Received by: (Signature/Firm)	Relinquished by: (Signature/Firm)	Date/Time	Received by: (Signature/Firm)
Rajeev Cherwoo	04/16/98 3:50 PM			4/16/98 5:30	D Moore
Relinquished by: (Signature/Firm)	Date/Time	Received by: (Signature/Firm)	Relinquished by: (Signature/Firm)	Date/Time	Received by: (Signature/Firm)
Relinquished by: (Signature/Firm)	Date/Time	Received by: (Signature/Firm)	Date/Time		

Remarks (attachments if necessary)

Golder Associates (510) 239-9000
fax (510) 239-9010

Results to: Rajeev Cherwoo

ATTACHMENT B

Golder Report to RWQCB dated June 4, 1998

Golder Associates Inc.

180 Grand Avenue, Suite 250
Oakland, CA USA 94612
Telephone (510) 239-9000
Fax (510) 239-9010

June 4, 1998

Our Ref: 973-7187

Mr. Curtis Scott
Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, #500
Oakland, California 94612

Subject: Asbestos Impacted Soils
Watergate Office Complex
2200 Powell Street, Emeryville, California

Dear Mr. Scott

Golder Associates Inc. (Golder), submitted a letter to your attention on May 27, 1998 requesting your approval to move recently excavated asbestos impacted soils from one location at the site to an underground storage tank (UST) excavation at the site. Following submittal of that letter, we had a meeting and several telephone conversations with Mr. Alan Friedman of your office. Mr. Friedman agreed with our request in concept, however, indicated that we should seek the approval from Mr. Ravi Arulanantham at the Regional Water Quality Control Board (RWQCB).

On June 1, 1998, we contacted Mr. Arulanantham by telephone and discussed with him the details that we presented to you in our May 27, 1998 letter. Mr. Arulanantham stated that he is familiar with the environmental conditions of the site and the general area in which the site is located. A summary of relevant findings are listed below:

1. In the 1950s and 1960s, the site was developed by placing fill materials (construction debris, metal slugs, soils containing petroleum hydrocarbons, etc.) in diked areas within former San Francisco Bay tidelands. This fill material was historically placed at the site in order to expand the land surface west of the Highway 80 corridor. This fill material was capped by engineered fill prior to development.

2. The RWQCB has previously determined in a letter to Spieker Properties dated December 30, 1996, that the site does not pose an unacceptable threat to human health, and that the RWQCB is the appropriate agency for handling environmental regulatory activities for the site.

3. Asbestos encountered in soils at the site was not generated from manufacturing or hazardous waste operations (asbestos abatement) at the site.

Based on these findings and the fact that we are proposing to move the excavated soils from one location to another location at the site with similar random fill soils, and a clean soil cap will be placed over the translocated soils, Mr. Arulanantham concurred with recommendations made by Golder and

verbally approved the plan. Mr. Arulanantham directed us to prepare this letter as documentation of his decision and submit the letter to your office for your records.

Based on the approval from Mr. Ravi Arulanantham, we are proceeding with plans to move the recently excavated soils to the UST excavation at the site. We will notify the RWQCB and Bay Area Air Quality Management District (BAAQMD) prior to commencement of work. The work will be carried out under a plan in accordance with Occupational Safety and Health Agency (OSHA) regulations.

If you have any questions regarding this letter, please call us at (510) 239-9000.

Sincerely,

GOLDER ASSOCIATES INC.

Rajeev Cherwoo
Project Engineer

Charles Almestad, R.G, C.Hg.
Associate

RC/CA/mcp

cc: Jeff White, Spieker Properties, Emeryville, California
Ravi Arulanantham, RWQCB, Oakland, California
Kevin Roberts, C.A.C., Golder Associates, Irvine, California