Golder Associates inc.

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



TRANSMITTAL LETTER

TO:

Ms. Susan Hugo

Alameda County Health Care Services Agency

Department of Environmental Health 1131 Harbor Bay Parkway, Room 250

Alameda, California 94502

DATE:

September 18, 1998

PROJECT NO.:

973-7187.400

SENT BY:

Rajeev Cherwoo

✓ Mail

Hand Carried

Overnight Express

Other

Under Separate Cover

Enclosed

Quantity	Item	Description
1 Copy	Report	Removal of Two 10,000 Gallon Capacity Under Ground Storage Tanks Watergate Towers Property, 2200 Powell Street, Emeryville, California

Remarks:

Please call if you have any questions.

Per:

Page 1 of 1

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Golder Associates Inc.

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



REMOVAL OF TWO 10,000 GALLON CAPACITY
UNDERGROUND STORAGE TANKS
WATERGATE TOWERS PROPERTY
2200 POWELL STREET
EMERYVILLE, CALIFORNIA

Prepared for:

Spieker Properties

Prepared by:

Golder Associates Inc. Oakland, California

Rajeev Cherwoo Project Engineer Charles Almestad, R.G., C. HG.

Associate

September 18, 1998

973-7187

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1. INTRODUCTION

Golder Associates, Inc. (Golder) prepared this report on behalf of Spieker Properties, for Watergate Towers Property, 2200 Powell Street, Emeryville, California. This report documents our field observations and results of sampling performed during the removal of two 10,000-gallon capacity underground storage tanks (UST) at the site in July 1998. A site location map is shown on Figure 1. A site plan including locations of two USTs (UST#1 and UST#2) and two fuel dispensers (FD#1 and FD#2) is shown in Figure 2.

2. 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 Watergate Office Complex, the first development of the site consists of three multi-story commercial office buildings (Towers I, II and III) on the north side of Powell Street in Emeryville, California. Two 10,000 gallon capacity USTs were installed at the site in 1984-1985.

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. Among other chemical constituents, petroleum hydrocarbons were detected in water samples collected from all ground water monitoring wells, and their presence is 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."

During late 1996 and 1997, Golder performed a Phase I study at the site on behalf of Spieker Properties who was planning to purchase the property. Among other agencies, 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 the site was not a 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.

During the last part of 1997, Spieker Properties retained Golder to provide environmental consulting services for the removal of two 10,000 gallon capacity USTs located to the south of Tower III at the site. Based on the information provided by Spieker Properties, these USTs and associated piping had been passing the tightness tests and were not suspected to be leaking. In December 1998, Spieker Properties contracted with ICONCO of Oakland, California for the removal of the two USTs. In January 1998, ICONCO submitted a closure plan to the Alameda County Health Care Services Agency (ACHCSA). Along with the closure plan Golder submitted a letter dated January 29, 1998, to ACHCSA summarizing site background conditions. In this letter Golder proposed immediate backfilling of the pit after the removal of USTs. Golder also proposed no over-excavation of UST pit

and in-place abandonment of the fuel piping inside the parking garage. This closure plan was approved by the ACHCSA on March 11, 1998.

During April 1998, while excavating trenches for the placement of irrigation water pipelines in the landscaped islands at the site, contractors retained by Spieker Properties encountered soils containing gray fibrous materials. Results of soil samples collected by Golder from excavated soils indicated that presence of asbestos. In June 1998, Golder prepared a Work Plan for the excavation and disposal of asbestos-containing soils from the site and to cap the excavated areas by placing non-woven geotextile fabric and fill soils at the top. This Work Plan was approved by ACHCSA, RWQCB, and Bay Area Air Quality Management District (BAAQMD). Spieker Properties retained a certified asbestos abatement contractor, Marcor Remediation Inc. (Marcor) of San Leandro, California, to perform excavation, soil disposal and capping of excavated area. During July and August, 1998, Marcor performed excavation of shallow soils suspected to contain asbestos in landscaped area and USTs area at the site. Details of this work will be documented in a separate report.

3. UNDERGROUND STORAGE TANK REMOVAL

3.1 Approvals and Notifications

In January 1998, ICONCO submitted a closure plan to the ACHCSA. ACHCSA approved the closure plan on March 11, 1998. A permit to remove the USTs from Emeryville Fire Department (EFD) was obtained by ICONCO on June 8, 1998. A notification for the removal of USTs was transmitted by facsimile to the BAAQMD by ICONCO on July 2, 1998.

3.2 Sampling and Analysis of Soils Above the Underground Storage Tanks for Asbestos

On June 17, 1998, ICONCO started to excavate soils above the USTs area at the site. During the excavation ICONCO reported to have observed gray fibrous material suspected to be asbestos in soils. ICONCO reported to have terminated the excavation activities and covered the two soil stockpiles generated during the excavation with plastic liners.

On July 1, 1998, Golder staff collected a total of eight grab soil samples from two soil stockpiles at the site. Each soil sample was placed in a plastic bag and transported under chain-of-custody procedures to RJ Lee Group, Inc., of San Leandro, California. Soil samples were analyzed for asbestos by polarized light microscopy (PLM) method. Asbestos was reported in four soil samples above one percent (ranging from 5 percent to 15 percent) and at 1 percent in remaining four soil samples. Analytical laboratory report of asbestos analysis is included as Appendix A.

On July 2, 1998, ICONCO notified the BAAQMD about the presence of asbestos in soils in the USTs area and their proposed plan for work in that area. On July 7, 1998, BAAQMD granted approval (BAAQMD approval number J28228) to ICONCO to proceed with the soil excavation and USTs removal. BAAQMD verbally informed Golder that excavation work during the USTs removal should be performed by an asbestos abatement contractor and waived the requirement of enclosing the work area.

3.3 Excavation of Soils Above Underground Storage Tanks

On July 7, 1998, ICONCO prepared the USTs area for work by installing a six-foot high fence and netting at the north, east and portion of westerly end of the USTs area (Figure 3). The remaining UST area was bounded by trees and shrubs. Signs indicating asbestos abatement work in progress were installed on the fence. Spieker Properties notified tenants of the Watergate Towers complex about the excavation of asbestos containing soils at the site.

Between July 7 and 9, 1998, excavation of soils above the USTs and removal of concrete slab over the USTs was carried out with an track mounted excavator by ICONCO. During excavation, water was sprayed on the soil to suppress the emission of possible asbestos fibers. Excavated soils were stockpiled to the south of the UST area and covered with plastic sheeting (Figure 3). During the soil excavation, a certified asbestos consultant from Golder documented the field work and performed background air sampling to measure the asbestos fiber concentrations outside the work area. Analytical results of background air sampling indicated that asbestos fiber concentrations were within EPA guidelines. Personnel air monitoring was performed by ICONCO to measure the asbestos fiber concentration within the breathing zone of the workers and to evaluate the effectiveness of the personal protective equipment used by the workers. Analytical results indicated that the personal protective equipment used during the project was effective. Results of air sampling performed during the project are presented in Appendix B.

3.4 Underground Storage Tank Removal Observations

On July 8 and 9, 1998, ICONCO removed the fuel dispensers, rinsed and removed the fuel piping, removed equipment associated with the USTs, and removed vent lines. As proposed by Golder in a letter submitted along with the closure plan and approved by the ACHCSA, the fuel pipelines were rinsed and abandoned in-place by capping the ends. A total of approximately 1,350 gallons of rinsate was pumped out of the USTs and transported to Romic Chemical Corporation of Palo Alto, California. Copies of the Uniform Hazardous Waste Manifests for transportation and disposal of USTs rinsate are included as Appendix C. On August 9, 1998, George Warren from EFD and Susan Hugo from ACHCSA were on site to observe removal of USTs. Oxygen and lower explosive levels (LEL) concentrations measured from inside the USTs by ICONCO were higher than concentrations specified by ACHCSA and EFD. Based on higher oxygen and LEL levels it was decided that USTs will be inerted further prior to the removal.

On July 10, 1998, George Warren from EFD observed ICONCO measure oxygen and LEL concentrations from inside the USTs. Percent oxygen and LEL concentrations from UST #1 measured at 9.8 and 8, respectively. Percent oxygen and LEL concentrations from UST #2 measured at 8.4 and 5, respectively. These oxygen and LEL concentrations are below the levels specified by ACHCSA and EFD permit requirements, and George Warren from EFD approved the removal of two USTs. Each UST was lifted from the excavation with the excavator and placed on ground and rinsed with water from outside. The USTs appeared to be in good condition; no holes, cracks or leaks were observed at the outer surfaces. Following the removal of USTs depth to ground water was measured in the excavation using a tape measure. Depth to ground water was measured approximately 10-feet bgs along the east wall, 11-feet bgs along the south wall, 12-feet bgs along the west wall. No floating product or sheen was observed in the standing water inside the USTs excavation. Each UST was loaded on flat bed truck and transported to Erickson, Inc., of Richmond, California for disposal. The Uniform Hazardous Waste Manifests for transportation and disposal of USTs are included as Appendix C.

3.5 Confirmation Sampling

On August 10, 1998, soil samples were collected from the former location of fuel dispensers and soil and ground water samples were collected from the USTs excavation. Locations of soil samples collected on August 10, 1998 are shown in Figure 4. Results of soil and ground water samples are summarized in Table 1. The analytical laboratory report is included as Appendix D.

In the location of former fuel dispensers a hand auger was used to drill the borehole to the desired sampling depth. Soils encountered in the location of fuel dispenser FD#1 were sands and gravels. Due to auger refusal at approximately six-inches below ground surface (bgs) the borehole was terminated and soil sample D-1 was collected. Soils encountered in the location of fuel dispenser FD#2 were coarse grain sands. The borehole was extended to the depth of two-feet bgs and a soil sample D-2 was collected. Soil samples were collected in brass tubes, sealed at each end with Teflon sheets and plastic end caps. Samples were placed in an ice chest and delivered to analytical laboratory Curtis and Tompkins, Ltd., of Berkeley, California under chain-of-custody procedures. Each soil sample was analyzed for total petroleum hydrocarbon compounds quantified as gasoline (TPH-G) by EPA Method 8015M, for benzene, toluene, ethylbenzene, and total xylenes (BTEX) by EPA Method 8020 and for lead by EPA Method 6010A. Results of sample analyses are summarized in Table 1 TPH-G and BTEX were reported below laboratory method detection limit in sample D-1. TPH-G and BTEX were reported in sample D-2 (27,000 mg/kg, >25 mg/kg, 160 mg/kg, 130 mg/kg, and 1910 mg/kg respectively). Lead was reported at 7.4 mg/kg and 31 mg/kg in soil samples collected from FD#1 and FD#2, respectively.

Soil samples from the former location of USTs were collected from three side walls (east, south and west walls) at the soil water interface. A sample was not collected from the north wall due to access limitations. The approximate location of soil samples collected from the former location of USTs is shown in Figure 4. Soils from the desired sampling location were collected in the excavator bucket and brought to the ground surface. Soil samples were collected from the excavator bucket in brass tubes by pushing them into the soils. Brass tube filled with soils were sealed at each end with Teflon sheets and plastic end caps. Soil samples were placed in an ice chest and delivered to Curtis and Tompkins, Ltd. under chain-of-custody procedures. Each soil sample was analyzed for TPH-G, BTEX and Lead. Results of soil sample collected from east wall reported TPH-G, BTEX at 5.5 mg/kg, 0.057 mg/kg, 0.047 mg/kg, 0.150 mg/kg, 1.96 mg/kg respectively. TPH-G and BTEX were reported below laboratory method detection limits in soil samples collected from south wall and west wall. Lead was reported at 67 mg/kg, 68 mg/kg and 42 mg/kg in soil samples collected from east, south and west walls respectively.

One ground water sample was collected from the northeast corner of the excavation in appropriate containers using a disposable Teflon bailer. The water sample was placed in an ice chest and delivered to Curtis and Tompkins, Ltd. under chain-of-custody prodecures for analysis of TPH-G and BTEX. Chemical results for the water sample include TPH-G and BTEX at concentrations of 30 mg/l, 1 mg/l, 6.9 mg/kg, 0.380 mg/l, and 4.5 mg/l, respectively.

3.6 Backfilling of Excavation

ICONCO reported that excavation was backfilled on July 10 and 11, 1998, with sands imported from tidewater sands of Oakland, California. The locations of former fuel dispensers were backfilled by ICONCO with sands and the surface was paved with concrete.

4. SUMMARY AND CONCLUSIONS

During the excavation of soils above the USTs, a gray fibrous material was encountered by ICONCO. Results of subsequent soil sampling performed in this area indicated that asbestos was present in the soils. BAAQMD approved the excavation and offsite disposal of soils by an asbestos abatement contractor. Between July 7 and 9, 1998, ICONCO excavated overburden soils above the USTs and stockpiled the soils on site. Results of background air sampling performed by Golder during the soil excavation indicated that asbestos fiber concentrations were within EPA guidelines. Results of personnel air monitoring performed by ICONCO during the USTs removal indicated that the personal protective equipment used was effective, and that there was no significant release to the environment.

On July 8 and 9, 1998, fuel dispensers, fuel piping, vent lines and other equipment associated with USTs were removed by ICONCO. Fuel pipelines inside the garage were rinsed and abandoned inplace by capping the ends. The location of former fuel dispensers was backfilled and sealed with concrete. On July 10, 1998, two 10,000 gallon capacity USTs were removed from the site by ICONCO and transported to Erickson, Inc. The USTs excavation was backfilled with sands.

On July 10, 1998, conformation soil and ground water samples were collected from the former location of fuel dispensers and the USTs excavation and depth to ground water was measured. TPH-G and BTEX were reported below laboratory method detection limit in soil sample collected from location of fuel dispenser FD#1. TPH-G and BTEX (27,000 mg/kg, >25 mg/kg, 160 mg/kg, 130 mg/kg, and 1910 mg/kg and 31 mg/kg respectively) were reported in soil sample collected from location of fuel dispenser FD#2 area seal. Lead was reported at 7.4 mg/kg and 31 mg/kg in soil samples collected from FD#1 and FD#2, respectively.

Results of soil samples collected from the south wall and west wall of former location of USTs reported TPH-G and BTEX below laboratory method detection limits. Results of soil sample collected from east wall reported TPH-G, BTEX at 5.5 mg/kg, 0.057 mg/kg, 0.47 mg/kg, 0.150 mg/kg, 1.96 mg/kg respectively. Lead was reported at 67 mg/kg, 68 mg/kg and 42 mg/kg in soil samples collected from east, south and west walls, respectively.

Depth to ground water measured in the USTs excavation was approximately 10-feet bgs along the east wall, 11-feet bgs along the south wall, 12-feet bgs along the west wall. Results of one ground water sample collected from the northeast corner of the USTs excavation reported TPH-G and BTEX at concentrations of 30 mg/l, 1 mg/l, 6.9 mg/kg, 0.380 mg/l, and 1.5 mg/l, respectively.

As the USTs appeared to be in good condition on removal, and had recently tested tight, it is believed that petroleum hydrocarbons detected in soil and ground water are derived from site fill materials and represent background conditions. Data on the ambient chemical quality of soils and ground water were previously submitted to the ACHCSA and the RWQCB. Consequently, no further action with respect to the former USTs is recommended.

Table 1
Confirmation Sampling Results
Underground Storage Tanks Removal
2200 Powell Street, Emeryville, California

Sample	Sample Depth	Date	Sampling Results										
Location	(feet-bgs)	Sampled	TPH-G	Benzene	Toluene	Ethylbenzene	Xylenes	Lead					
	·		Soil S	amples Results (1	mg/kg)								
D-1	0.5	7/10/98	< 1	< .005	< .005	< .005	< .005	7.4					
D-2	2	7/10/98	27,000	<25	160	130	1,910	31					
EW-1	10	7/10/98	5.5	0.057	0.47	0.15	1.96	67					
SW-1	11	7/10/98	< 1	< .005	< .005	< .005	< .005	68_					
WW-1	12	7/10/98	< 1	< .005	< .005	< .005	< .005	42					
,			Ground W	ater Sampling R	esults (mg/l)								
W-1	10	7/10/98	30	1	6.9	0.380	4.5	N/A					

NOTES:

D-1 and D-2: Soil samples collected in former location of fuel dispensers.

EW-1, SW-1, WW-1: Soil samples collected from sidewalls of USTs excavation.

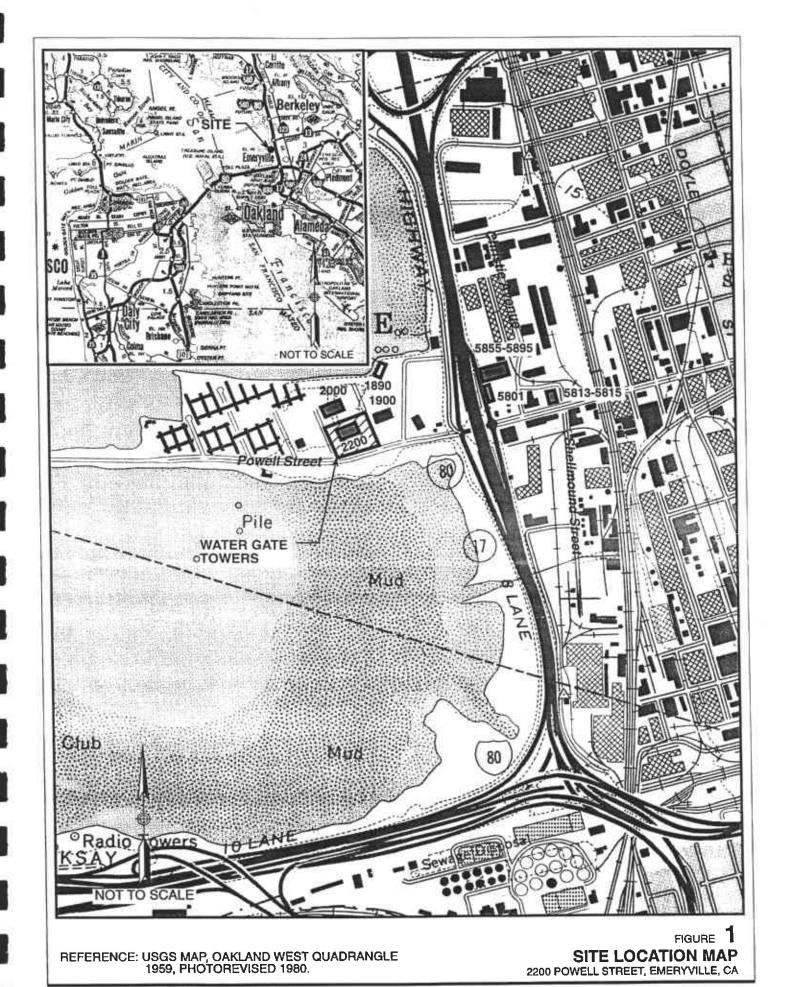
W-1: ground water sample collected from USTs excavation.

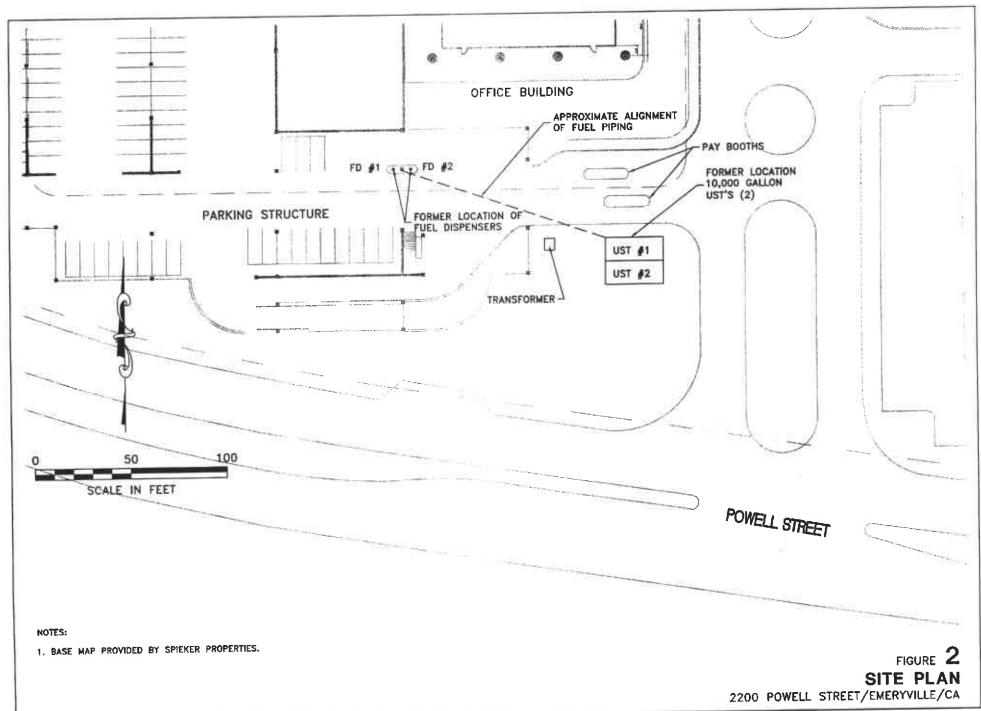
feet-bgs: feet below ground surface.

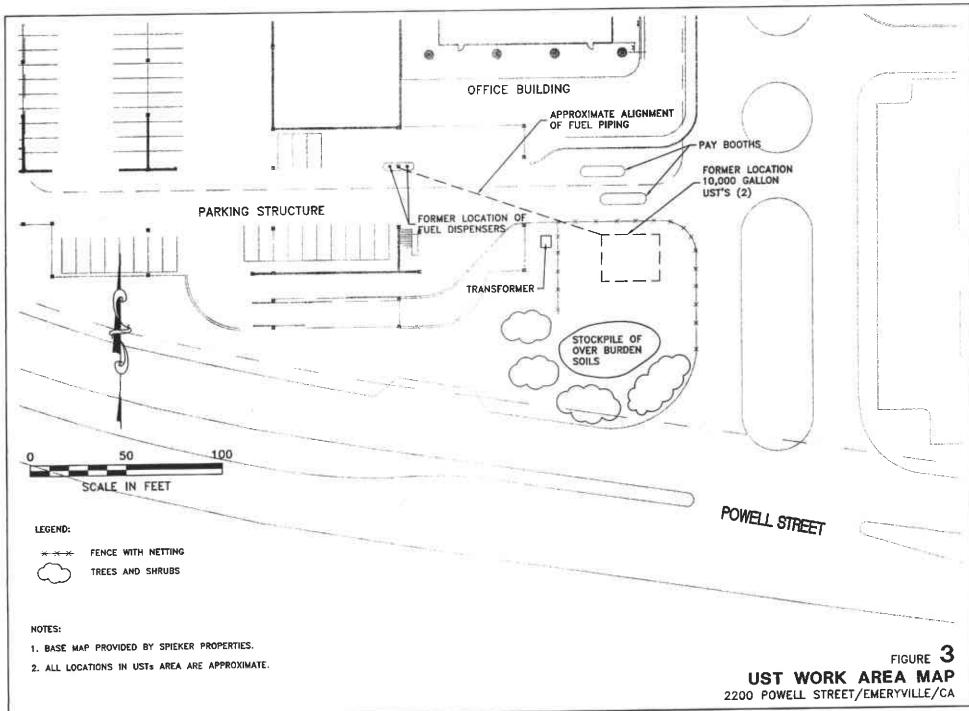
TPH-G: Total petroleum hydrocarbons quantified as gasoline.

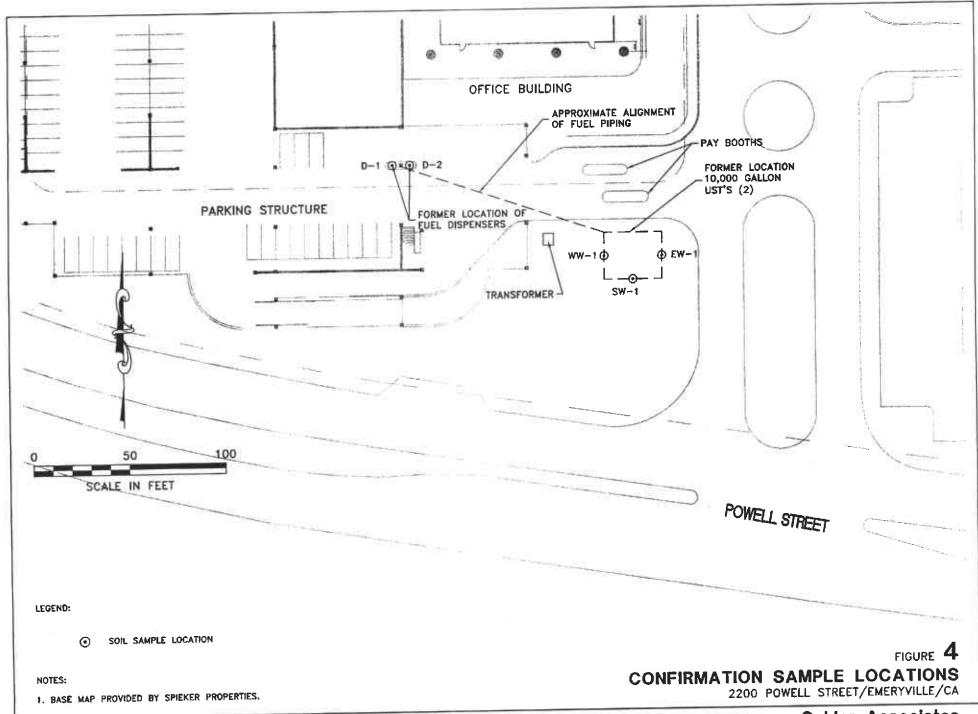
NA = Not Analyzed

Laboratory analysis performed by Curtis and Tompkins Ltd., Berkeley, California.









DAMATES 1 CA 1997 Fling 9737187 Took 100 5854.dwg | 9-4-98 14:47 | xrf; NONE

Golder Associates

APPENDIX A

Asbestos Soil Sampling Laboratory Report

RJ Lee Group, Inc.

350 Hochberg Road Monroeville, PA 15146 Tel: (724) 325-1776

Fax: (724) 733-1799

The Materials Characterization Specialists

July 8, 1998

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

RE:

PLM Standard Analysis for Samples as Shown on the Test Report

Job Number: AOC807048

Customer Purchase Order Number: 973-7187-100

Dear Mr. Cherwoo:

Enclosed are the results obtained from the asbestos identification for the above referenced samples. Analysis of the samples were made using the polarizing light microscope (PLM) and dispersion staining objective 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).

RJ Lee Group, Inc. is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) for selected test methods for airborne asbestos fiber analysis (TEM) and asbestos fiber analysis (PLM). RJ Lee Group's Monroeville laboratory is accredited by the American Industrial Hygiene Association for asbestos, silica and metals. The results contained herein apply only to analyzed samples.

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 samples covered by this report, RJ Lee Group will store the samples for a period of ninety (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples.

If you have any questions on this report or if we can be of further assistance, please feel free to call me.

Sincerely yours,

William H. Powers

Manager, Bulk Materials Analysis

William H. Howen /HS

WHP/hg

Enclosure

Test Report - Golder Associates

Attn: Rajeev Cherwoo

Project #: 973-7187-100

Project AOC807048

				Asbesto:	S	-								
Sample Number / Sample Appearance Client Sample Number	Chrysotile	e Amosite (Crocidolite A	nthophyl	lite Tremol	ite Act	inolite	Cellulose	Mineral Wool	Fibrous Glass			Material	s Run Date Analyst
2504150BHPL SP-1A	-	10 %	_	-	· NFM: Qtz,		-	-	-	-	-	-	90 %	7/6/98 WHP
Brown And White Soil													Non Homo	geneous
2504151BHPL SP-2A	-	15 %	-	- .	- N FM : Qtz,	Carh	- Onad	2 % Mag. F-S	- nar. Clav	-	-		83 %	7/6/98 WHP
Brown And White Soil				1	41 141 · Q(Z,	Caro,	Opaq,	111116, 1 ~	F , ,				Non Homo	geneous
2504152BHPL SP-3A	-	5 %	-	-	- NFM: Qtz,	Corb	- Onag	3 %	- nar Clav	-	-	-	92 %	7/6/98 WHP
Brown And White Soil				1	N F IVI : QIZ,	Caib,	Орац,	Mag, 1-5	par, Cruj				Non Homo	geneous
2504153BHPL SP-4A	-	5 %	-	-	- NFM: Qtz,	Carb	- Onag	5 % Mag F-S	- nar. Clav	-	-	-	90 %	7/6/98 WHP
Brown And White Soil				1	NE MI: Que,	Carb,	Орац,	mag, 1 o	pai, can				Non Homo	geneous
2504154BHPL SP-5A	-	1 %	-	-	- NFM: Qtz,	Coalo	- Onca	4 %	- nar Clav	-	-	-	95 %	7/6/98 WHP
Brown And White Soil				1	N F IVI : QtZ,	, Caro,	Opaq,	wag, 1-0	par, Ciuj				Non Homo	geneous
2504155BHPL SP-6A	_	1 %	-	^	- NFM: Qtz	Comb	- Onco	1 %	- nar Clav	-	-	-	98 %	7/6/98 WHP
Brown And White Soil				I	NEWI: QU	, Caro,	Орац,	iviag, 1-5	par, Cray				Non Homo	geneous
2504156BHPL SP-7A	-	1 %	-	-	- NEM: 0:-	CL	-	1 %	- nar Clav	-	-	-	98 %	7/6/98 WHP
Brown And White Soil				1	NFM: Qtz	, саго,	Opaq,	, 141ag, 1°-3	pm, Cany				Non Homo	geneous
2504157BHPL SP-8A	-	1 %	-	-	- NFM: Qtz	Corb	- Onad	5 % Per Mag	- F-Snar.	- Clav	-	-	94 %	7/6/98 WHP
Brown And White Soil]	IAT MIT GIZ	, сав,	Opaq,	, , 01, 1-1112	, - op	- · - ,			Non Homo	geneous

Samples received on: Monday, July 6, 1998

RJ Lee Group, Inc. Headquarters

350 Hochberg Road Monroeville, PA 15146 Date

Authorized Signature

Tuesday, July 7, 1998

William H. Powers, Manager-Optical

Phone (724) 325-1776 Fax (724) 733-1799

Page: 1

GOLDER ASSOCIATES

FRENYUSLIE CHAIN OF CUSTODY RECORD 973-7187- VOO) NATER GATE TOWERS / SPIEKER OF REMARKS (with initials) MARCYS LONG. Markes Jones CON-TAINERS MEDIA SAMPLE IDENTIFICATION STA. NO. | DATE | TIME 7-1-98 12 00 LITTE SILCK PILE 11220 F 1 6 7 STOKKPILE 1/235 Received by: (Signature / Firm) Date / Time Relinguished by: (Signature/Firm) Received by: (Signature/Firm) Date / Time Relinquished by: (Signature / Firm) GOIDER · Date / Time Received by - (Signature/Firm) Relinquished by: (Signoture/Firm) Relinquished by: (Signature (firm) Date / Time Received by : (Signature / Firm) MI ice Remarks (attachments if necessary) ATTN: RADELV CHERWOO Date / Time Received by: (Signature/Firm) Date / Time Relinquished by: (Signature / Firm) GOLDER ASSOCIATES 180 GRAND AVE. SIG. 150 OAKLAND, CA 94612

APPENDIX B

Air Sampling Laboratory Report

ASBESTOS AIR SPAMPLE ANALYSIS DATA

CLIENT:

GOLDER ASSOCIATES 10 CHRYSTLER SUITE B IRVINE CA, 92618

CLIENT PROJECT REFERENCE:

SPIEKER - EMERYVILLE

973-7187-100

KB PROJECT #;

9806

DATE RECEIVED:

7-9-98

DATE ANALYZED:

7-9-98

SITE ACTIVITY: OSHA MONITORING UST REMOVAL

800000000000000000000000000000000000000	CLENT SAMPLE #	#2 8###PLE # 9801174	54 HPLE 54TE 7-7-98	FIME (ABI) VCC (BB) 120/1200	DESCRIPTION LEXATION INSIDE WORK AREA	9/100	0.004
	2	9801175	7-7 - 98	120/1200	OUTSIDE WORK AREA	6/100	0.002
li	3	9801176	7-7-98		FIELD BLANK	0/100	
	4	9801177	7-7-98		FIELD BLANK	0/100	

Analyzed By:

Kirk Bakalis CSST# 92-0245 California

Kirk Bakalis

Note: The above results represent analytical work performed on samples collected by the client submitted to KB for analysis. All supplementary information regarding sample volume, location, etc. was provided by the client.

The US EPA recommended "Clean Air" criteria is based on a fiber concentration of 0.01 F/cc or less. The OSHA 8hr TWA permissible exposure limit for airborne asbestos is 0.1 f/cc per 29 CFR 1910.1001 and 1926.1101

Sample analysis was performed in accordance with the NIOSH 7400 method utilizing the "A" counting rules. This method identifies total fibers by Phase Contrast Microscopy using 400X magnification. This method does not distinguish between asbestos and non-asbestos fibers. All fibers with a length to diameter ratio of 3:1 or greater and a length of greater than 5 microns are counted. The NIOSH method of analysis requires a minimum of 5.5 fibers per 100 fields to be considered "detectable."

ASBESTOS AIR SAMPLE DATA SHEET

		
CLIENT Spicker	Properties	(Average value of all blanks per shift)
POJECT NAME SAIRKET		Record all bignes on data sheets and in
PROJECT NUMBER 973	-7187-100	
CONTRACTOR _ Goldet	/ Iconoco	Analytical Method: NIOSH 7400
Collection Medium: C PKSSFW. Pump C	alibration Flawmeter calibration:	Flowmeter #
Mixed caliniose ester filter Flow	Dollar Bubble burerte	Calibration Date
	(1000) (FR) (T)	MFA ECA
SAMPLE #	Oate collected 7-7-98 Collected	by K. Hoberts
1 4	Oate analyzedAnalyzed	•
Sample type RIR	(FB/FL	10% bilind recount results)
Sample location JNSIDE	WORK AREA	
Start Flow 10 C/m	Slop flow 10 tom Flow Rate	10 Rm Volume 1200 C
Start Time 6:00	Stop Time 6700 Total Time	120 (minutes)
FibersFields	LOWER LIMIT OF QUANT.	FIBERS/CC
SAMPLE 1 2	Date collected 7-7-98 Collected	by K. Roberts
\$	Date analyzedAnalyzed	,
Sample type MIR	(FB/FL	10% blind recount results)
Sample location DUTSIDE	WORK KACH	1 - 2 - 0
Start Flow 10 Rlm	Slop flow 10 R m Flow Rate 1	OCIM Volume 1200K
Start Time 6:05	Slop Time 8 05 Total Time_	(20 (minutes) =
FibersFields	LOWER LIMIT OF QUANT.	FIBERS/CC
SAMPLE #	Date callected Collected	i by
	Date analyzedAnalyzed	
Sample lype	(F8/FL	10% blind recount results)
}		
Start Flow	Stop flow Flow Rate	Volume
Start Time	Slop TimeTotal Time_	(minutes)
FibersFields	LOWER LIMIT OF QUANT.	FIBERS/CC
SAMPLE #	_ Date_collectedCollecte	d by
Samb 🛊	Date analyzed Analyze	d by
Sample type	(F9/FL	10% blind recount results)
Sample location		1
Start Flow	Stop flow Flow Rate _	Volume
Start Time		(minutes)
		FIBERS/CC

ASBESTOS AIR SPAMPLE ANALYSIS DATA

CLIENT:

GOLDER ASSOCIATES 10 CHRYSTLER SUITE B IRVINE CA. 92618

CLIENT PROJECT REFERENCE:

SPIEKER PROPERTIES - EMERYVILLE

973-718-100

KB PROJECT#:

9806

DATE RECEIVED: DATE ANALYZED: 7**-9-98** 7-9-98

SITE ACTIVITY: OSHA MONITORING

UST REMOVAL

14.65 14.65 1	LAH SAMPLH B	SAUGE LE CATE	PASTAGAG VOLUBAS	CHECKPTICS LOCATION	FREIPS: FELLIS	9 <u>85</u> 1.7 443.1
5	9801178	7-8-98	240/1200	INSIDE WORK AREA	16/100	0.006
6	9801179	7-8-98	240/1200	OUTSIDE WORK AREA	12/100	0.005
7	9801180	7-8-98	120/1200	OUTSIDE WORK AREA	13/100	0.005
8	9801181	7-8-98	120/1200	INSIDE WORK AREA	10/100	0.004
9	9801182	7-8-98		FIELD BLANK	0/100	
10	9801183	7-8-98		FIELD BLANK	1/100	

Analyzed By:

Kirk Bakalis CSST# 92-0245 California

Kirk Bakalis

Note: The above results represent analytical work performed on samples collected by the client submitted to KB for analysis. All supplementary information regarding sample volume, location, etc. was provided by the client.

The US EPA recommended "Clean Air" criteria is based on a fiper concentration of 0.01 F/cc or less. The OSHA 8hr TWA permissible exposure limit for airborne asbestos is 0.1 f/cc per 29 CFR 1910.1001 and 1926.1101

Sample analysis was performed in accordance with the NIOSH 7400 method utilizing the "A" counting rules. This method identifies total fibers by Phase Contrast Microscopy using 400X magnification. This method does not distinguish between asbestos and non-asbestos fibers. All fibers with a length to diameter ratio of 3:1 or greater and a length of greater than 5 microns are counted. The NIOSH method of analysis requires a minimum of 5.5 fibers per 100 fields to be considered "detectable."

ASBESTOS AIR SAMPLE DATA SHEET

CLIENT Sale	Cen Properties		BFB
			sequence with other sample numbers
			Analytical Nethod: NIOSH 7400
Callection Medium:	Pump Calibration	Flowmeter calibrations	Flowmeter #
Mixed callulose ester (liter	Flowmeter	<u>Juhble</u> burerte	Calibration Data
		(100 f/mm) (ECL) (1000) (FR) (T)	MFA ECA
SAMPLE # 3	Oate callect	ed 78-98 Collecte	ed by K. Roberts
· ·	•		
			
		·· · ·	
			5 R/m volume 1200
Start Time 1011	Stop Time	/4:15Total Time	그년0 (minutes)
I			
COLET NAME SPEKAN EMPLY VILLE Record at later of acting these and in the sample continues and acting these acting the acting acting the ac			
ROJECT NAME Spie Kal Emery VIII PROJECT NUMBER 973-184-100 CONTRACTOR Grolder CONCO CONTRACTOR Grolder CONCO CONTRACTOR Grolder CONCO CONTRACTOR Grolder CONCO CONTRACTOR Contractor Flowmeter Subbit burerie Collibertian Orde Colliberti			
	ROJECT NAME SPOLECT NUMBER 973-7881-100 Analytical Method: MOSH 7400 ACC (1000XFXXXWA) LLOC (1000XFXXXWA) LLOC (1000XFXXXWA) ACC (10		
ROJECT NAME Specificate Concept ville Record of blacks on date sheere and in sequence with other sample numbers and sequence of the sequ			
Start Flow 5 21	ROJECT NAME Spie ket Emery ville ROJECT NUMBER 973-7881-100 Another company numbers ROJECT NUMBER 973-7881-100 Another company numbers ROJECT NUMBER 973-7881-100 Another company numbers Roman and the compan		
Start Time 9 39	Slop Time	/3 30 Total Time	140 (minutes) =
1			
SAMPLE ; 5	Ogte callec	tea 77-98 Collect	ed by K-Robents
Sample location O	UTSIDE WORK A	eca	
RECEIVED NAME Spekar Empty of the provided Received at binaria on date abserts one in sequence with other tample number and in sequence with other tample numbers and interest in sequence with other tample numbers and in sequence with other tample numbers and in sequence with other tample numbers and interest in sequence with other numbers and interest in sequence with other numbers. Figers Figers			
ROJECT NAME SPERCY EMPLY VILLE RECOVER OF STATE 100 CONTRACTOR GOODER ICONCO CONTRACTOR GOODER CONTRACT			
ripers	FieldsL0	OWER LIMIT OF QUANT.	FIBERS/CC
SAMPLE # 6	Date called	:ad 7-3-98 Collec	ted by K.R.Gerls
Pump # 0038	oate analy	zedAnalyz	ted by
Sample type	HCR	(F9/FL	10% blind recount results)
Sample location	INSIAGE GUDAR	ABEA	
Start Flow 12	2/m slop flow	10 R(m Flow Rate	10 K/m Valums 1200
Start Time	00 Slop Time	16,00 Total Tim	120 (minutes)
	•	- A444.1.	FIBERS/CC

ASBESTOS AIR SPAMPLE ANALYSIS DATA

CLIENT:

GOLDER ASSOCIATES 10 CHRYSTLER SUITE B

IRVINE CA, 92618

CLIENT PROJECT REFERENCE:

KB PROJECT #: SPIEKER - EMERYVILLE

973-7187-100

9806 7-15-98 DATE RECEIVED: 7-15-98 DATE ANALYZED:

SITE ACTIVITY: OSHA MONITORING **UST REMOVAL**

CLENT EAGPLE	SASSPIE SASSPIE	CARE	DMEGARIA Value	DESCRIPTION COUNTY ON	FIREFIE FREETS	FEE
1	9801184	7-9-98	240/1200	OUTSIDE WORK AREA	10/100	0.004
2	9801185	7-9-98	240/1200	INSIDE WORK AREA	15/100	0.006
3	9801186	7 -9-98		FIELD BLANK	0/100	
4	9801187	7-9-98		FIELD BLANK	0/100	

Analyzed By:

Kirk Bakalis CSST# 92-0245 California

Kirk Bakalis

Note: The above results represent analytical work performed on samples collected by the client submitted to KB for analysis. All supplementary information regarding sample volume, location, etc. was provided by the client.

The US EPA recommended "Clean Air" criteria is based on a fiber concentration of 0.01 F/cc or less. The OSHA 8hr TWA permissible exposure limit for airborne asbestos is 0.1 f/cc per 29 CFR 1910.1001 and 1926.1101

Sample analysis was performed in accordance with the NIOSH 7400 method utilizing the "A" counting rules. This method identifies total fibers by Phase Contrast Microscopy using 400X magnification. This method does not distinguish between asbestos and non-asbestos fibers. All fibers with a length to diameter ratio of 3:1 or greater and a length of greater than 5 microns are counted. The NIOSH method of analysis requires a minimum of 5.5 fibers per 100 fields to be considered "detectable."

ASBESTOS AIR SAMPLE DATA SHEET

CLIENT Spielsey Pre	perties	8FB
ROJECT NAME Spieles		(Average value of all bigniss per snift) Record all bigniss on data sheets and in
PROJECT NUMBER 973-	<i>/</i> ——"	sedneuca with other samble unmoets
CONTRACTOR Golden		Analytical Method: HIOSH 7400
Callague	Calibration Flowmeter calibration:	Flawmeter #
Mixed callulage exter (liter Flow	meter Bubble burerte	Calibration Oate
$AC = \frac{\left(\frac{fB}{FL} - \frac{3fB}{1000}\right)\left(\frac{ECL}{ECL}\right)}{\left(1000000000000000000000000000000000000$	LLOQ= (100 f/mm) (ECL) (1000) (FR) (T)	MFA ECA
	Date collected 7-9-98 Collected	by K. Aber D
1	Ogia analyzad Analyzad	•
	WORK WRELL (FB/FL	
Sample location AIR		•
Start Flow \$5 R/m	Stop flow \$5 C m Flow Rate_	羽まん / Yolume 1200
	Slop Time (2:00 Total Time	· · · · · · · · · · · · · · · · · · ·
	LOWER LIMIT OF QUANT.	
SAMPLE # 8	Oate callected 7-9-98 Callected	i by K. Abberts
Pump # 0038	Date analyzedAnalyzed	ьу
Sample type AIR		10% blind recount results)
Sample location INSING		
Start Flow Selling	Slop flow 5 & M Flow Rate =	5 C/m volume 1200
Start Time 8:00	Slop Time 12:00 Total Time	ス <u>(の (minutes)</u> =
_	LOWER LIMIT OF QUANT.	FIBERS/CC
	Date collected Collected	
! }	Date analyzed Analyzed	
· ·	(FB/FL	
11		
	Slop flowFlow Rate	Yolume
	Stop TimeTotal Time_	
•	LOWER LIMIT OF QUANT.	
	Date collectedCallected	
	Oate analyzedAnalyzed	
	(FB/FL	
<u>.</u>	Stop (towFlow Rate	Yolume
	Slop TimeTotal Time_	
Ethern Could	LOWER LIMIT OF OUANT.	FIBERS/CC

RJ LEE GROUP INC. PCM FINAL REPORT - A00807262

ICONCO, INC.

PROJECT: 630, HHC POWELL ST. EMERYVILLE, CA.

ALIN: LISA

TO: LISA

fROM:

DATE:

B. THOMAS

July 15, 1998 REGARDING: PCM RESULTS

Job Kumber: 630

Job Location: HMC PUMBL SI. EMERYVILLE

Received Dator July 15, 1998

Sample Number	Client Sample Humber	Total Fibers	Total fields	Concentration (fibers/cc)	95% Upper Confidence Limit	Sample Volume ([iters)
789801	7-8-98-01	45.5	100	0.0516	0.0728	432.0
789802	7-8-98-02.	19.0	100	0.0296	0.0444	315.0
789803	7-9-98-83	17.0	100	0.0257	0.0390	324.0
789804	7-10-98-04	£8.0	100	0.0253	0.0361	735.0
789805	7-13-98-05	13.5	100	0.0075	0.0117	882.0
789806	07-14-98-06	20.0	100	0.0182	0.0271	540.0

Volumes are verified by RJ Lee Group, Inc., based on the flow rate/start stop times provided by the client.

Authorized Signature

Concentration reflects subtraction of blank counts if blanks are submitted. Bay Area Lab RJ Lee Group, Inc. 530 McCormick Street San Leandre, CA 94577 (510) 567-0480 *** FAX (510) 567-0488 ANALYSIS per WIOSH 7400 Issue 2 SAMPLES WILL BE HELD FOR 90 DAYS THEM DISPOSED OF PER FEDERAL REGULATIONS. PLEASE CONTACT RJ LEE GROUP IF SAMPLES ARE TO BE RETURNED.

Date: July 15, 1998

FAX NO. 5105070488

Aoc 407267

PERSONNEL AIR SAMPLING LOG

Sample Taken By: BobWaldhauS Contractor Employer: HMC

strent Powell St. CHY. Emery Ville, Ca.

Sample Type: AREA
PERSONNEL
ASBESTOS
LEAD

100NCO, Inc. 303 Derby Avenue, Cakland, CA 94891 Phone: (510) 261-1900 Fax: (510) 261-2459

	<u> </u>			Calib.		Callb.		Total	Total Sample	Type		1
Date Taken	Sample #	Pump#	Location Of Sample Or Worker's Name And Social Security Number	Flow Start (l/m)	Time . On	Flow Finish	Time Off	Time Min	Valum s L	Of Respirator	Task Performed	_
7-8- 9 8	17.	#/		1.8	7214	1.8	11:004	240	432	2 face	Work on Tan	1.
	4/_	# 1	Alex Villal baza	1.8	11:00/	1.2	4:30P		315	2 hore	Work on Tan	卜
7-4-18		#/	Alex Villalbazo	1.8	700	1.8	10:00	180	324	2 face	Work on tax	ts
71098	44.	#1	AlexVillalbezo	1.75	8:304	1.75	JJOP	420	735	Zface	Work on ter	4/5
7-13-98	 ' _	#/	Bob Waldheus	1.8	7.30	1.8	3:40 P	490	882	12 face	Buckfill in Exc	100
7-14-9	147	2/	13.6 Waldhoos 577	1.8	7:00	1.6	12:00	300	540	Stace	Excamber (eas
/ 3 / _ F		 	3,7,0,0,0								3 ***	<u>}</u>
,			-									_
	-	 										1.
-		+							T .			

Laboratory Name: R3Cee

APPENDIX C

Uniform Hazardous Waste Manifest

19. Discrepancy Indication Space

20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Ipen 19 Printed Typed Name

Month

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator's US EPA ID No.	Manifest Docume		2. Page 1	Information in the shaded is not required by Federal
	FIGURE OF STATE OF THE	<u> </u>		Vanifest Document	lumber
3. Generator's Name and Mailing Address SPIEKER PROPERITE				as war and a	95593
2200 POWEL SUITE 3	25 EMERXVILLE CA	94608	B. State	enerator's ID	
1. Generator's Phone (\$10) 594			Piv	ומושומוסו	4 4 00005
	- 3 (→0)() 6. US EPA ID Num	her	C. Sigte	ransporter's ID	7 - 2 O TO 10 GO 10 CO
Transporter 1 Company Name F (2) (6) / (name) Louis (6)		5030173			Section 14 March
Erickson, Inc.	CADO	5-1-6-6-3-9-2	- D. Transp	arter's Phone :	3101 235-1393
	8. US EPA ID Num	her	E Stote 2	representative	
7. Transporter 2 Company Name	0. 00 E/A ID 110		and the same of		
				in the second of the	
9. Designated Facility Name and Site Address	ss 10. US EPA ID Num	iber	0 (7)	RATING TO STATE	
Romic Chemical Corp.				相對對對	
2081 Bay Road			H. Facili		a markatan
East Palo Alto, CA 9	94303 C A D 0 0	9 4 5 2 6 5 7	7		
11. US DOT Description (including Proper Shi		12. C	ontainers	13. Total	14. Unit Wt/Vol
11. US DOT Description (including Proper Site	ipping ridine, ridzara Class, and to ridine	No.	Туре	Quantity	Wt/Vol
R.O. Waste Gasoline	Mixture, 3 UN 1203	·	-	l · .	
PG II ERG #27 (D001	D0181	001	TT	011121510	G
b	1016)		77.5		200
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		1 1 1	1	1111	7 TY A STEEL S
			 	 	
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			4	 	2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
d.					
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facts with a filter of the	·				
3. Additional Descriptions for Materials Lister	d Above		K. Hank	ling Codes for Wo	tes Listed Above
is vereileuns; vansent					
建设在企业的基础的	A STATE OF THE STA		in the last		
				Birgasea arab.	
15. Special Handling Instructions and Addition	onal Information			la anno a manda das	
Keep away from sour	ces of ignition. Alw	ays wear hard	CLAY	THORE WOLKER	y arvur.
(1 // // m /= 4x 1f //	Contact Name. Jelf Wk	ITC & Phone	(3101°7	17-2600	
U.G.S.T. S 24 Mr. C				<u> </u>	
•			طائده ماه ماهد		
OFFICE ATOMIC CERTIFICATION, ILL.	eby declare that the contents of this consign	nment are fully and accure	RIGIA DESCUIDA	ed above by proper	stribbing name and are co
OFFICE ATOMIC CERTIFICATION, ILL.	reby declare that the contents of this consign in all respects in proper condition for trans	nment are fully and accure port by highway according	g to applicat	ed above by proper ble international and	shipping name and are a national government regu
16. GENERATOR'S CERTIFICATION: I her packed, marked, and labeled, and are	in all respects in proper condition for frons	port by highway according	oxicity of w	iste generated to the	ie degree I have determin
16. GENERATOR'S CERTIFICATION: I her packed, marked, and labeled, and are lift I am a large quantity generator, I c	in all respects in proper condition for trans-	reduce the volume and to	oxicity of wo	iste generated to the	ie degree I have determin in minimizes the present a
16. GENERATOR'S CERTIFICATION: I her packed, marked, and labeled, and are If I am a large quantity generator, I c economically practicable and that I have threat to human health and the environ	in all respects in proper condition for trans- certify that I have a program in place to we selected the practicable method of trea- nment; OR, if I am a small quantity gener	reduce the volume and to	oxicity of wo	iste generated to the	ie degree I have determin in minimizes the present a
16. GENERATOR'S CERTIFICATION: I her packed, marked, and labeled, and are If I am a large quantity generator, I c economically practicable and that I have threat to human health and the environ waste management method that is avail	in all respects in proper condition for trans- certify that I have a program in place to ve selected the practicable method of trea nment; OR, if I am a small quantity gener lable to me and that I can afford.	reduce the volume and to	oxicity of wo	iste generated to the	ie degree I have determin in minimizes the present a
16. GENERATOR'S CERTIFICATION: I her pocked, marked, and labeled, and are if I am a large quantity generator, I c economically practicable and that I have threat to human health and the environ waste management method that is avail Printed/Typed Name	in all respects in proper condition for trans- certify that I have a program in place to we selected the practicable method of trea- nment; OR, if I am a small quantity gener lable to me and that I can afford. Signature	reduce the volume and to	oxicity of wo	iste generated to the	ie degree I have determin th minimizes the present a aste generation and select
16. GENERATOR'S CERTIFICATION: I her packed, marked, and labeled, and are if I am a large quantity generator, I c economically practicable and that I have threat to human health and the environ waste management method that is avail Printed/Typed Name Spieker Properties. Jefful	certify that I have a program in place to ve selected the practicable method of treatment; OR, if I am a small quantity generlable to me and that I can afford. Signature	reduce the volume and to	oxicity of wo	iste generated to the	ie degree I have determin th minimizes the present a aste generation and select Month Day
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	proved OMB Not 2050–0039 (Expires 9-30-96) Int ar type. Form designed for use on elite (1	ı) typewriter.	200		F-9-			Sacramento, California
	UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator's US EPA	144905	Manifest Document	1 No.	2. Page 1		n in the shaded areas nired by Federal law.
	3. Generator's Name and Mailing Address SPIEZER FROPERTIES AT 1000 FOR ELL CUITE 605	TN JEFF WHIT	E .	<u>1</u>		Manifest Document	Number	86835891
	4. Generator's Phone (510) 594 - 4					Sementarior's 10 RIKINIQAA	0	OPSPA
	5. Transporter 1 Campany Name	6 . U	5 EPA ID Number			Transporter's ID		Anti-Sar Anti-Sar
	Ecology Control Industries	ÇA	D 9 8 2 0	30173	"学业"的意思	Consporter's ID	75	10)235-1393
	7. Transporter 2 Company Name	8. U	IS EPA ID Number	į		AND PARK	# 8 h	P. S.
					12.7	porter's Phone Facility's ID		
	Designated Facility Name and Site Address ERICKSON INC.	i 10. t	IS EPA ID Number		C_{i}^{ℓ}	FDJOJOJAJA	466	3921
	255 PARR BLYD RICHMOND: CA 94801	C IA	IDI0[0]9[4]	1616131912	9145/191		51	0-235-1393
	11. US DOT Description (including Proper Ship			12. Con	·-	13. Total	14. Unit	L. Waste Number
			, and 15 (15)	No.	Type _	Quantity	Wt/Vol	Side
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	с.		• #**					Sicie
ĺ								EPA/Other
	d.							State
								EPA/Other
	J. Additional Descriptions for Materials Listed	and the second of the second o			K. Hand	lling Codes for Wast	les Listed A b.	bove
	QTYEMPTY STORAG	ETANK(S) # <u>23</u>	203		Con C	19	ing.	
	15 LBS DRY ICE PER 1000 GALLO	, TANK(S) HAVE	BEEN INERTEI	WITH	5		d.	
	15. Special Handling Instructions and Addition Wear appropriate protec	al Information	when handli		1 3 3 11 1 2 3 1 4 1 1 1	SHALL COLL	125. 2 No	
	24 Hour Emergency Tele							
	24 Hour Emergency Con	tact:		rent en	<i>‡</i> ' , ;	Cart R. T.	<i>r</i> .	
	A CENERATORIC CERTIFICATION, I beselve	hii declare that the content	of this consignment a	re fully and accurate	lv describe	ed above by proper	shipping no	ame and are classified,
i	packed, marked, and labeled, and are in	all respects in proper cond	dition for transport by	highway according t	oʻapplicab	le international and	national go	overnment regulations.
	If t am a large quantity generator, I cer economically practicable and that I have threat to human health and the environm	Alactad the prosticable o	nemon of treatment s	torace or disposal (currently a	ADMIDIE IO ING MINE		, mro b. 444
	waste management method that is availab	ble to me and that I can a	fford.	- 1	111	70 -		onth Day Year
Ļ	Printed/Typed Name John R. Wintrier St		Signature	2. W	ll		0	7/10/9/3
*	17. Transporter 1 Acknowledgement of Receiption Printed/Typed Name	pt of Materials	Signatore	<u> </u>		_	M	onth Day Year
Ñ Ş	Thinks, types tells				<u> </u>	\bigcirc		
Ç	18. Transporter 2 Acknowledgement of Receip	pt of Materials	Signature /	<i>^</i>		-\/	M	onth Day Year
SPORTER	Printed/Typed Name) ! 	1		7		<u>/ ^</u>	onth Day Year
F A	19. Discrepancy Indication Space 17. DELVER SIENEOIN SE	ZRON 18.	00			B		
ç								
į	20. Facility Owner or Operator Certification	of receipt of hazardous m		s manifest except as	noted in It	em 19.	1 44	and Day Yar-
Ť	Printed/Typed Name TAVIO SATO		Signature -	= Stro			6	ionith Day Year
			1	- 11				

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA, CALL 1-800-852-7550

	California—Environmental Protection Agency proved OMB No. 2050–0039 (Expires 9-30-96) int or type. Form designed for use on elite (1) typewriter.	See Instructions of	on Du'	hage	···		nt of Toxic Substances acramento, California
•	UNIFORM HAZARDOUS	1	est Document	No.	2. Page 1		in the shaded areas red by Federal law.
1		DHAIAITRIS 2		A. State /	Monifest Document	Number	
	3. Generator's Name and Mailing Address SPIEZEC PROPERTY AND JEFF 61 1 2200 pouriet Court 225 Emeryo	HITE CA 14608	ļ.				<u> </u>
	1 2200 posterior contre 225 emergo	ALLE EN 14000	Ţ	18 (77)	Generator's ID	And the	
	4. Generator's Phone CIG 15 74 5200					H4 E	000520
	5. Transporter 1 Company Name	6. US EPA ID Number			Fransporter's 10	X	
l	Ecology Control Industries	C A D 9 8 2 0 3 0	1173	D. Transp	orter's Phone	· · (5	10)235-13
1	7. Transporter 2 Company Name	8. US EPA ID Number		E. State 1	ransporter's ID		
	ļ		1 1 1	F Tremsp	orter's Phone		* }*
ĺ	9. Designated Facility Name and Site Address	10. US EPA ID Number			Foolity's ID		2017
l	ERICKSON INC.			H. Facilit	FID 010 P] K	FOD!	2712+1
	255 PARR BLVD	CIAID 0 0 9 4 6 6	131912			51	0-235-139
1	RICHMOND, CA 34801 11. US DOT Description (including Proper Shipping Name, Hazard		12. Conf		13. Total	14. Unit	L Woste Number
l			No	Туре	Quantity	Wt/Vol	Stote
ı	WASTE EMPTY STORAGE TAI			~ ~		Р	512
G	Non-RCRA hazardous waste soli	d sassocided figur	601	TP	02000	I -	EPA/Other NONE
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	d.						State
l							EPA/Other
				K Hand	ling Codes for Was	tes Listed A	bove
l	J. Additional Descriptions for Materials Listed Above	? ••••	が 144。	o	1/00	ь.	
	OTY	AVE BEEN INERTED WIT	erio. Augusta		177	d	
	15 LBS DRY ICE PER 1000 GALLONS CAPACIT	TO LEADER THE RESENTED THE REPORT OF THE COMMISSION OF THE PERSON OF THE		G. T.			
١	15 Secript Handling leater stient and Additional Information			1. Haft 2 40 -0 .		. <u> </u>	
ı	Wear appropriate protective clothi	ng when handling.					
١	24 Hour Emergency Telephone Nu	mber: 🎋 🔻 🤲					
İ	24 Hour Emergency Contact:	er wait / sil	1,6 12.	11/4	1 9 E 7 ES		1 1 70
ı	16. GENERATOR'S CERTIFICATION: I hereby declare that the c packed, marked, and labeled, and are in all respects in prope	ontents of this consignment are fully or condition for transport by highway	and accurate v according to	y describe applicab	d above by proper le international and	shipping no national go	ime and are classitie vernment regulation:
I							
١	If I am a large quantity generator, I certify that I have a perconomically practicable and that I have selected the practic						
ı	threat to human health and the environment; OR, if I am a waste management method that is available to me and that I	small quantity generator, i have mo	ade a good f	aith ettort	to minimize my wo	iste genero	mon una seleci ine c
İ	Printed/Typed Name	- Signature	41	1 44	/	Ma Ji	onth Day I177 IIII
<u> †</u>	JOHN R. WINTHER - SPIERRY PROPERTY	- Al-R	111	<u> </u>			
Ŕ	17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name BPINN L. HCLINLEY	Signature William	J 41	P.Kii	les	0	1000 B
N	THE MICHIGARD	The Nia	1		<u> </u>	10	7-10-7
ŗ	18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name	Signature					onth Day
R	Printed/ Typed Technic						<u> </u>
RTE	19. Discrepancy Indication Space						*
R T E		*					
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ORTER FACI							
A	2.12	ous materials covered by this manife	est except as	noted in H	em 19.		onth Day
AC	20. Facility Owner or Operator Certification of receipt of hazard Printed/Typed Name	ous materials covered by this manife	est except as	noted in th	em 19.	*	onth Day

APPENDIX D

Confirmation Sampling Laboratory Report



Curtis & Tompkins, Ltd., Analytical Laboratories, Since 1878

2323 Fifth Street, Berkeley, CA 9471O, Phone (51O) 486-0900

ANALYTICAL REPORT

Prepared for:

Golder Associates 180 Grand Ave Suite 250 Oakland, CA 94612

Date: 28-JUL-98 Lab Job Number: 134484

Project ID: 973-7187

Location: Spieker Properties



Reviewed by:

Reviewed by:

This package may be reproduced only in its entirety.



TVH-Total Volatile Hydrocarbons

Client: Golder Associates

Project#: 973-7187

Location: Spieker Properties

Analysis Method: EPA 8015M Prep Method: EPA 5030

Sample # Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
134484-001 D-2	42160	07/10/98	07/22/98	07/22/98	
134484-002 D-1	42160	07/10/98	07/22/98	07/22/98	,
134484-003 EW-1	42129	07/10/98	07/21/98	07/21/98	
134484-004 SW-1	42129	07/10/98	07/21/98	07/21/98	

Matrix: Soil

Analyte Diln Fac:	Units	134484-001 5000	134484-002 1	134484-003 1	134484-004
Gasoline C7-C12	mg/Kg	27000	<1	5.5	<1
Surrogate					
Trifluorotoluene Bromofluorobenzene	%REC %REC	117 141	108 98	104 131	96 117





BTXE

Client: Golder Associates

Project#: 973-7187

Location: Spieker Properties

Analysis Method: EPA 8020A

Prep Method: EPA 5030

Sample # Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
134484-001 D-2	42160	07/10/98	07/22/98	07/22/98	
134484-002 D-1	42160	07/10/98	07/22/98	07/22/98	
134484-003 EW-1	42129	07/10/98	07/21/98	07/21/98	
134484-004 SW-1	42129	07/10/98	07/21/98	07/21/98	

Matrix: Soil

Analyte Diln Fac:	Units	134484-001 5000	134484-002 1	134484-003	134484-004 1
Benzene	ug/Kg	<25000	<5	57	<5
Toluene	ug/Kg	160000	<5	470	<5
Ethylbenzene	ug/Kg	130000	<5	150	<5
m,p-Xylenes	ug/Kg	1300000	<5	1000	<5
o-Xylene	ug/Kg	610000	<5	960	<5
Surrogate	11111				
Trifluorotoluene	*REC	76	79	107	106
Bromofluorobenzene	%REC	89	78	138	122



TVH-Total Volatile Hydrocarbons

Client: Golder Associates

Project#: 973-7187

Location: Spieker Properties

Analysis Method: EPA 8015M

Prep Method: EPA 5030

Sample # Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
134484-005 WW-1	42129	07/10/98	07/21/98	07/21/98	

Matrix: Soil

Analyte Diln Fac:	Units	134484-005 1	
Gasoline C7-C12	mg/Kg	<1	
Surrogate			
Trifluorotoluene	%REC	98	
Bromofluorobenzene	%REC	123	



BTXE

Client: Golder Associates

Project#: 973-7187

Location: Spieker Properties

Analysis Method: EPA 8020A

Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
134484-00	5 WW-1	42129	07/10/98	07/21/98	07/21/98	

Matrix: Soil

Analyte Diln Fac:	Units	134484-005	
Benzene	ug/Kg	<5	
Toluene	ug/Kg	<5	
Ethylbenzene	ug/Kg	<5	
m,p-Xylenes	ug/Kg	<5	
o-Xylene	ug/Kg	<5	
Surrogate			
Trifluorotoluene	%REC	101	
Bromofluorobenzene	%REC	129	

BATCH QC REPORT



07/17/98

07/17/98

TVH-Total Volatile Hydrocarbons

Golder Associates Client:

Project#: 973-7187

Location: Spieker Properties

Analysis Method: EPA 8015M

EPA 5030 Prep Method:

METHOD BLANK

Prep Date: Soil

Matrix: Analysis Date: Batch#: 42084 mg/Kg

Units: Diln Fac: 1

Analyte	Result	
Gasoline C7-C12	<1.0	
Surrogate	%Rec	Recovery Limits
Trifluorotoluene Bromofluorobenzene	83 113	53-157 53-157

BATCH QC REPORT



BTXE

Client: Golder Associates

Project#: 973-7187

Location: Spieker Properties

Analysis Method: EPA 8020A

Prep Method: EPA 5030

METHOD BLANK

Matrix: Soil Prep Date: 07/17/98
Batch#: 42084 Analysis Date: 07/17/98

Units: ug/Kg Diln Fac: 1

....

Analyte	Result	
Benzene	<5.0	
Toluene	<5.0	
Ethylbenzene	<5.0	
m,p-Xylenes	<5.0	
o-Xylene	<5.0	
Surrogate	%Rec	Recovery Limits
Trifluorotoluene	83	53-126
Bromofluorobenzene	120	35-144

BATCH QC REPORT



TVH-Total Volatile Hydrocarbons

Client: Golder Associates

Project#: 973-7187

Location: Spieker Properties

Analysis Method: EPA 8015M

Prep Method: **EPA** 5030

METHOD BLANK

07/20/98 Prep Date: Soil Matrix: 07/20/98 Analysis Date: Batch#: 42129

Units: mg/Kg Diln Fac: 1

Analyte	Result	
Gasoline C7-C12	<1.0	
Surrogate	%Rec	Recovery Limits
Trifluorotoluene	96	53-157
Bromofluorobenzene	107	53-157

BATCH QC REPORT



BTXE

Client: Golder Associates

Project#: 973-7187

Location: Spieker Properties

Analysis Method: EPA 8020A

Prep Method: EPA 5030

METHOD BLANK

07/20/98 Prep Date:

Soil Matrix: Analysis Date: 07/20/98 Batch#: 42129 Units: ug/Kg

Diln Fac: 1

Analyte	Result	
Benzene	<5.0	ļ
Toluene	<5.0	
Ethylbenzene	<5.0	•
m,p-Xylenes	<5.0	
o-Xylene	<5.0	
Surrogate	%Rec	Recovery Limits
Trifluorotoluene	108	53-126
Bromofluorobenzene	111	35-144

BATCH QC REPORT



TVH-Total Volatile Hydrocarbons

Client: Golder Associates

Project#: 973-7187

Location: Spieker Properties

Analysis Method: EPA 8015M

Prep Method:

EPA 5030

METHOD BLANK

Soil Matrix: 42160 Batch#: Units: mg/Kg

Prep Date: Analysis Date: 07/21/98

07/21/98

Diln Fac: 1

Analyte	Result	
Gasoline C7-C12	<1.0	
Surrogate	%Rec	Recovery Limits
Trifluorotoluene Bromofluorobenzene	104 94	53-157 53-157

BATCH QC REPORT



BTXE

Client: Golder Associates

Project#: 973-7187

Location: Spieker Properties

Analysis Method: EPA 8020A

Prep Method: EPA 5030

METHOD BLANK

Matrix: Soil Prep Date: 07/21/98
Batch#: 42160 Analysis Date: 07/21/98

Units: ug/Kg Diln Fac: 1

Analyte	Result	
Benzene	<5.0	
Toluene	<5.0	
Ethylbenzene	<5.0	
m,p-Xylenes	<5.0	
o-Xylene	<5.0	
Surrogate	%Rec	Recovery Limits
Trifluorotoluene	76	53-126
Bromofluorobenzene	75	35-144

Matrix:

BATCH QC REPORT



TVH-Total Volatile Hydrocarbons

Client: Golder Associates

Project#: 973-7187

Location: Spieker Properties

Analysis Method: EPA 8015M

Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Soil Prep Date: 07/17/98
42084 Analysis Date: 07/17/98

Batch#: 42084 Units: mg/Kg Diln Fac: 1

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline C7-C12	9.26	10	93	78-120
Surrogate	%Rec	Limits		
Trifluorotoluene	90	53-157		
Bromofluorobenzene	139	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

BATCH QC REPORT



TVH-Total Volatile Hydrocarbons

Client: Golder Associates

Project#: 973-7187

Location: Spieker Properties

Analysis Method: EPA 8015M

Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Matrix: Soil
Batch#: 42129
Units: mg/Kg

Diln Fac: 1

Prep Date:
Analysis Date:

07/20/98 07/20/98

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline C7-C12	10.23	10	102	78-120
Surrogate	%Rec	Limits		
Trifluorotoluene	107	53-157		
Bromofluorobenzene	148	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

BATCH QC REPORT



TVH-Total Volatile Hydrocarbons

Client: Golder Associates

Project#: 973-7187

Location: Spieker Properties

Analysis Method: EPA 8015M

Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Prep Date: 07/21/98

Matrix: Soil Prep Date: 07/21/98
Batch#: 42160 Analysis Date: 07/21/98

Units: mg/Kg Diln Fac: 1

Analyte	Result	Spike Added	%Rec #	Limits
Gasoline C7-C12	10.49	10	105	78-120
Surrogate	%Rec	Limits		
Trifluorotoluene Bromofluorobenzene	135 102	53-157 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

BATCH QC REPORT



BTXE

Client: Golder Associates

Project#: 973-7187

Location: Spieker Properties

Soil

Analysis Method: EPA 8020A

Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Prep Date:

07/22/98

Analysis Date:

07/22/98

Batch#: 42160 Units: ug/Kg Diln Fac: 1

Matrix:

Analyte	Result	Spike Added	%Rec #	Limits
Benzene	84.23	100	84	69-118
Toluene	95.21	100	95	73-118
Ethylbenzene	93.39	100	93	68-124
m,p-Xylenes	194.8	100	97	67-124
o-Xylene	99.28	100	99	73-127
Surrogate	%Rec	Limits		
Trifluorotoluene	80	53-126		_
Bromofluorobenzene	80	35-144		

[#] Column to be used to flag recovery and RPD values with an asterisk

^{*} Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

BATCH QC REPORT



BTXE

Client: Golder Associates

Project#: 973-7187

Location: Spieker Properties

Analysis Method: EPA 8020A

Prep Method: EPA 5030

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Soil Prep Date: 07/17/98
Batch#: 42084 Analysis Date: 07/17/98

Units: ug/Kg Diln Fac: 1

BS Lab ID: QC75155

Analyte	Spike Added	BS	%Rec #	Limits
Benzene	100	88.33	88	69-118
Toluene	100	95.52	96	73-118
Ethylbenzene	100	92.75	93	68-124
m,p-Xylenes	200	197.2	99	67-124
o-Xylene	100	92.35	92	73-127
Surrogate	%Rec	Limits		
Trifluorotoluene	83	53-126		
Bromofluorobenzene	122	35-144		

BSD Lab ID: QC75156

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Benzene	100	90.35	90	69-118	2	14
Toluene	100	98.07	98	73-118	3	21
Ethylbenzene	100	95.14	95	68-124	3	22
m,p-Xylenes	200	201.4	101	67-124	2	22
o-Xylene	100	94.6	95	73-127	2	26
Surrogate	%Rec	Limit	s			
Trifluorotoluene	86	53-12	26			
Bromofluorobenzene	128	35-14	14			

[#] Column to be used to flag recovery and RPD values with an asterisk

Spike Recovery: 0 out of 10 outside limits

^{*} Values outside of QC limits

RPD: 0 out of 5 outside limits

BATCH QC REPORT



BTXE

Client: Golder Associates

Project#: 973-7187

Location: Spieker Properties

Analysis Method: EPA 8020A

Prep Method: EPA 5030

BLANK SPIKE/BLANK SPIKE DUPLICATE

Matrix: Soil Prep Date: 07/20/98 Batch#: 42129 Analysis Date: 07/20/98

Units: ug/Kg Diln Fac: 1

BS Lab ID: QC75316

Analyte	Spike Added	BS	%Rec #	Limits
Benzene	100	89.62	90	69-118
Toluene	100	104.2	104	73-118
Ethylbenzene	100	92.9	93	68-124
m,p-Xylenes	200	214.2	107	67-124
o-Xylene	100	103.7	104	73-127
Surrogate	%Rec	Limits		
Trifluorotoluene	110	53-126		
Bromofluorobenzene	120	35-144		

BSD Lab ID: QC75317

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit
Benzene	100	87.37	87	69-118	3	14
Toluene	100	100.2	100	73-118	4	21
Ethylbenzene	100	91.77	92	68-124	1	22
m,p-Xylenes	200	212	106	67-124	1	22
o-Xylene	100	103.9	104	73-127	0	26
Surrogate	%Rec	Limits				
Trifluorotoluene	109	53-12	26			
Bromofluorobenzene	127	35-14	14			

[#] Column to be used to flag recovery and RPD values with an asterisk

^{*} Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

BATCH QC REPORT



TVH-Total Volatile Hydrocarbons

Client: Golder Associates

Project#: 973-7187

Location: Spieker Properties

Analysis Method: EPA 8015M

Prep Method:

EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ

Lab ID: 134513-001

Matrix: Soil 42129 Batch#:

Sample Date: Received Date: 07/14/98 07/14/98

Prep Date:

07/20/98

Analysis Date:

07/20/98

Units: mg/Kg Diln Fac: 1

MS Lab ID: QC75319

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Gasoline C7-C12	10	<1	6.84	68	38-132
Surrogate	%Rec	Limits			
Trifluorotoluene Bromofluorobenzene	107 139	53-157 53-157			

MSD Lab ID: QC75320

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Gasoline C7-C12	10	8.35	84	38-132	20	26
Surrogate	%Rec	Limit	s			
Trifluorotoluene Bromofluorobenzene	109 1 4 5	53-15 53-15		-		

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

BATCH QC REPORT



TVH-Total Volatile Hydrocarbons

Analysis Method: EPA 8015M Client: Golder Associates EPA 5030

Prep Method: Project#: 973-7187

Location: Spieker Properties

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

07/13/98 Sample Date: Field ID: ZZZZZZ Received Date: 07/17/98 134597-002 Lab ID: 07/21/98 Prep Date: Soil Matrix: Analysis Date: 07/21/98 Batch#: 42160

Moisture: 4% mg/Kg dry weight Units:

Diln Fac: 1

MS Lab ID: QC75437

Analyte	Spike Added	Sample	MS	%Rec #	Limits
Gasoline C7-C12	10.42	<1.042	9.573	92	38-132
Surrogate	%Rec	Limits			
Trifluorotoluene	132	53-157	- -		
Bromofluorobenzene	105	53-157			

MSD Lab ID: QC75438

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Gasoline C7-C12	10.42	9.406	90	38-132	2	26
Surrogate	%Rec	Limits	3			
Trifluorotoluene Bromofluorobenzene	137 108	53-15' 53 - 15'				

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



Page 1 of 1

TVH-Total Volatile Hydrocarbons

Golder Associates Client:

Project#: 973-7187

Location: Spieker Properties

Analysis Method: EPA 8015M

EPA 5030 Prep Method:

Sample # Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
134484-006 W-1	42043	07/10/98	07/16/98	07/16/98	

Matrix: Water

Analyte Diln Fac:	Units	134484-006 50	
Gasoline C7-C12	ug/L	30000	
Surrogate			
Trifluorotoluene	%REC	114	
Bromofluorobenzene	%REC	113	



Page 1 of 1

BTXE

Client: Golder Associates

Project#: 973-7187

Location: Spieker Properties

Analysis Method: EPA 8020A

Prep Method: EPA 5030

Sample #	Client ID	Batch #	Sampled	Extracted	Analyzed	Moisture
134484-00	6 W-1	42043	07/10/98	07/16/98	07/16/98	

Matrix: Water

Analyte Diln Fac:	Units	134484-006 50	
Benzene	ug/L	1000	
Toluene	ug/L	6900	
Ethylbenzene	ug/L	380	
m,p-Xylenes	ug/L	3000	
o-Xylene	ug/L	1500	
Surrogate			
Trifluorotoluene	%REC	85	
Bromofluorobenzene	%REC	90	•

BATCH QC REPORT



TVH-Total Volatile Hydrocarbons

Golder Associates Client:

Location: Spieker Properties

Water

Project#: 973-7187

Analysis Method: EPA 8015M Prep Method: EPA 5030

Analysis Date:

METHOD BLANK

07/16/98 Prep Date: 07/16/98

42043 Batch#: ug/L Units: Diln Fac: 1

Matrix:

Analyte	Result	
Gasoline C7-C12	<50	
Surrogate	%Rec	Recovery Limits
Trifluorotoluene Bromofluorobenzene	109 100	59-162 59-162

BATCH QC REPORT



BTXE

Client: Golder Associates

Project#: 973-7187

Location: Spieker Properties

Water

42043

Analysis Method: EPA 8020A

Prep Method: EPA 5030

METHOD BLANK

Prep Date: 07/16/98

Analysis Date: 07/16/98

Diln Fac: 1

Units: ug/L

Matrix:

Batch#:

Analyte	Result	
Benzene	<0.5	
Toluene	<0.5	
Ethylbenzene	<0.5	
m,p-Xylenes	<0.5	
o-Xylene	<0.5	
Surrogate	%Rec	Recovery Limits
Trifluorotoluene	80	53-124
Bromofluorobenzene	82	41-142

BATCH QC REPORT



TVH-Total Volatile Hydrocarbons

Client: Golder Associates

Project#: 973-7187

Location: Spieker Properties

Water

Analysis Method: EPA 8015M

Prep Method: EPA 5030

LABORATORY CONTROL SAMPLE

Prep Date: 07/16/98 Analysis Date: 07/16/98

Batch#: 42043 Units: ug/L Diln Fac: 1

Matrix:

Analyte	Result	Spike Added	%Rec #	Limits		
Gasoline C7-C12	2008	2000	100	80-119		
Surrogate	%Rec	Limits				
Trifluorotoluene Bromofluorobenzene	139 105	59-162 59-162				

[#] 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

BATCH QC REPORT



BTXE

Client: Golder Associates

Water

42043

Project#: 973-7187

Location: Spieker Properties

Analysis Method: EPA 8020A

Prep Method: EPA 5030

BLANK SPIKE/BLANK SPIKE DUPLICATE

Prep Date:

Prep Date: 07/16/98 Analysis Date: 07/16/98

Units: ug/L Diln Fac: 1

Matrix:

Batch#:

BS Lab ID: QC75002

Analyte	Spike Added	BS	%Rec #	Limits
Benzene	20	16.83	84	69-109
Toluene	20	19.45	97	72-116
Ethylbenzene	20	18.64	93	67-120
m,p-Xylenes	40	39.37	98	69-117
o-Xylene	20	19.74	99	75-122
Surrogate	%Rec	Limits		
Trifluorotoluene	83	53-124		
Bromofluorobenzene	83	41-142		

BSD Lab ID: QC75003

Analyte	Spike Added	BSD	%Rec #	Limits	RPD #	Limit		
Benzene	20	17.34	87	69-109	3	11		
Toluene	20	19.45	97	72-116	0	11		
Ethylbenzene	20	18.97	95	67-120	2	12		
m,p-Xylenes	40	39.99	100	69-117	2	11		
o-Xylene	20	20.12	101	75-122	2	12		
Surrogate	%Rec	Limit	s					
Trifluorotoluene	82	53-124						
Bromofluorobenzene	83	41-14	12					

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

BATCH QC REPORT



TVH-Total Volatile Hydrocarbons

Client: Golder Associates

Project#: 973-7187

Location: Spieker Properties

Analysis Method: EPA 8015M

Prep Method: EPA 5030

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Field ID: ZZZZZZ Lab ID: 134504-008 Matrix: Water

Batch#: 42043 Units: ug/L Diln Fac: 1

 Sample Date:
 07/09/98

 Received Date:
 07/10/98

 Prep Date:
 07/16/98

 Analysis Date:
 07/16/98

MS Lab ID: QC75004

Analyte	Spike Added	Sample	MS	%Rec #	Limits		
Gasoline C7-C12	2000	<50	2114	106	71-131		
Surrogate	%Rec	Limits					
Trifluorotoluene Bromofluorobenzene	154 121	59-162 59-162					

MSD Lab ID: QC75005

Analyte	Spike Added	MSD	%Rec #	Limits	RPD #	Limit
Gasoline C7-C12	2000	2096	105	71-131	1	26
Surrogate	₹Rec	Limi	ts	· · · · · · · · · · · · · · · · · · ·		
Trifluorotoluene Bromofluorobenzene	153 121	59-1 59-1				

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

DATE REPORTED: 07/27/98

CLIENT: Golder Associates

PROJECT ID: 973-7187
LOCATION: Spieker Properties
MATRIX: Soil

Metals Analytical Report

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Sample ID	Lab ID	Sample Date	Receive Date	Result (mg/Kg)	Reporting Limit (mg/Kg)	IDF	QC Batch	Method	Analysis Date
D-2 D-1 EW-1 SW-1 WW-1	134484-001 134484-002 134484-003 134484-004 134484-005	07/10/98 07/10/98 07/10/98	07/10/98 07/10/98 07/10/98	31 7.4 67 68 42	0.15 0.14 0.14 0.15 0.15	1 1	42106 42106 42106	EPA 6010A EPA 6010A EPA 6010A EPA 6010A	07/22/98 07/22/98 07/22/98



Curtis & Tompkins, Ltd.

DATE REPORTED: 07/27/98

CLIENT: Golder Associates

JOB NUMBER: 134484

BATCH QC REPORT PREP BLANK

Compound	Result	Reporting Limit	Units	IDF	QC Batch	Method	Analysis Date
Lead	ND	0.15	mg/Kg	1	42106	EPA 6010A	07/22/98
	ND = Not Detect	ted at or a	above :	repor	ting l	imit	

Curtis & Tompkins, Ltd.

DATE REPORTED: 07/27/98

CLIENT: Golder Associates

JOB NUMBER: 134484

BATCH QC REPORT LABORATORY CONTROL SAMPLE

Compound	Spike Amt	Result	Units	% Rec.	QC Batch	Method	Analysis Date
Lead	25	21.9	mg/Kg	88	42106	EPA 6010A	07/22/98

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