



Miller Environmental Company, Inc.

Engineering • Geology • Construction

April 17, 1992

Department of Environmental Health
Hazardous Materials Division
80 Swan Way, Room 200
Oakland, CA 94621

Attn: Ms. Susan Hugo

Re: California Linen Rental Co., 989 41st Street,
Oakland, CA

Dear Ms. Hugo,

Enclosed are the laboratory results for the quarterly sampling interval for the above-mentioned site. This latest sampling episode is a continuation of the quarterly monitoring requirements recommended by Alameda County Health Care Services Agency (ACHCSA) in their letter dated 04/15/91.

Ground Water Monitoring Results

Prior to well sampling, a visual observation for floating product was performed using a clear teflon bailer. No free product was observed in any of the monitoring wells. A minimum of four well volumes were removed from each well prior to sampling. Water samples were collected in 40ml VOA bottles and 1-Liter amber jars. The samples were stored on ice during transport to the state-certified laboratory where they were analyzed for Total Petroleum Hydrocarbons (TPH) as gasoline, TPH as diesel, Total Oil and Grease (TOG) and benzene, toluene, ethylbenzene and total xylenes (BTEX). For ease of reference, a summary of laboratory results is presented in Table 1 on page 2.

Quarterly Report
California Linen, 989 41st Street, Oakland

TABLE 1
Summary of Laboratory Results

Well #	Date	TPH gas	TPH dsl	TOG	B ^{ppb}	T	E	X
MW1	10/02/89	70	0.61	ND	2800	2400	2300	4800
	02/20/90	73	2.2	3	7500	5900	680	5300
	07/25/90	34	ND	1	2000	670	120	1500
	10/23/90	50	1.1	ND	3300	4000	4200	4700
	01/28/91	99	1.7	3	4400	7400	1800	8600
	06/05/91	23	0.56	ND	2000	1200	640	2500
	08/15/91	59	3.5	3	3800	5500	1100	4800
	11/21/91	47	9.8	ND	6000	7200	2200	1000
	03/18/92	77	14	ND	17000	18000	2300	1300
MW2	10/02/89	ND	ND	ND	ND	ND	ND	ND
	02/20/90	ND	ND	ND	ND	ND	ND	ND
	07/25/90	ND	ND	ND	ND	ND	ND	ND
	10/23/90	ND	ND	ND	ND	ND	ND	ND
	01/28/91	ND	ND	ND	ND	ND	ND	ND
	06/05/91	ND	ND	ND	ND	ND	ND	ND
	08/15/91	ND	.05	ND	ND	ND	ND	ND
	11/21/91	ND	ND	ND	ND	ND	ND	ND
	03/18/92	ND	ND	ND	ND	1.1	ND	3.3

a) all TPH and TOG results are expressed in milligrams per liter (mg/L) which is equivalent to parts per million (ppm). BTEX results expressed in micrograms per Liter (ug/L) which is equivalent to parts per billion (ppb).

Water level readings were collected. Table 2 on page 3 is a summary of ground water elevations.

Quarterly Report
California Linen, 989 41st Street, Oakland

TABLE 2
Summary of Ground Water Elevations

DATE	MW1	MW2
10/11/89	46.19	44.81
11/13/89	45.85	44.91
12/14/89	45.86	44.97
02/20/90	46.53	45.35
03/22/90	46.55	45.17
04/23/90	45.81	44.99
07/25/90	45.68	44.88
08/22/90	46.34	44.51
09/25/90	46.20	44.53
10/23/90	45.68	44.64
01/28/91	45.34	44.46
06/05/91	45.54	44.21
08/15/91	45.19	44.52
11/21/91	45.43	44.44
03/18/92	47.34	44.51

a) elevations are given in feet above mean sea level (MSL).

Future Work

Levels of benzene and TPH as gasoline have not diminished in monitoring well MW1. Toluene and total xylenes were detected in well MW2 for the first time, although the levels detected were below their respective action levels of 100 and 1,750 ppb set by the Department of Health Services. Nevertheless, MEC recommends initiating a ground water remediation program in the vicinity of MW1. However, prior to initiation of such a program, a workplan should be submitted to ACHCSA outlining the proposed scope of work.

If you have any questions please do not hesitate to call me.

Sincerely,
MILLER ENVIRONMENTAL COMPANY

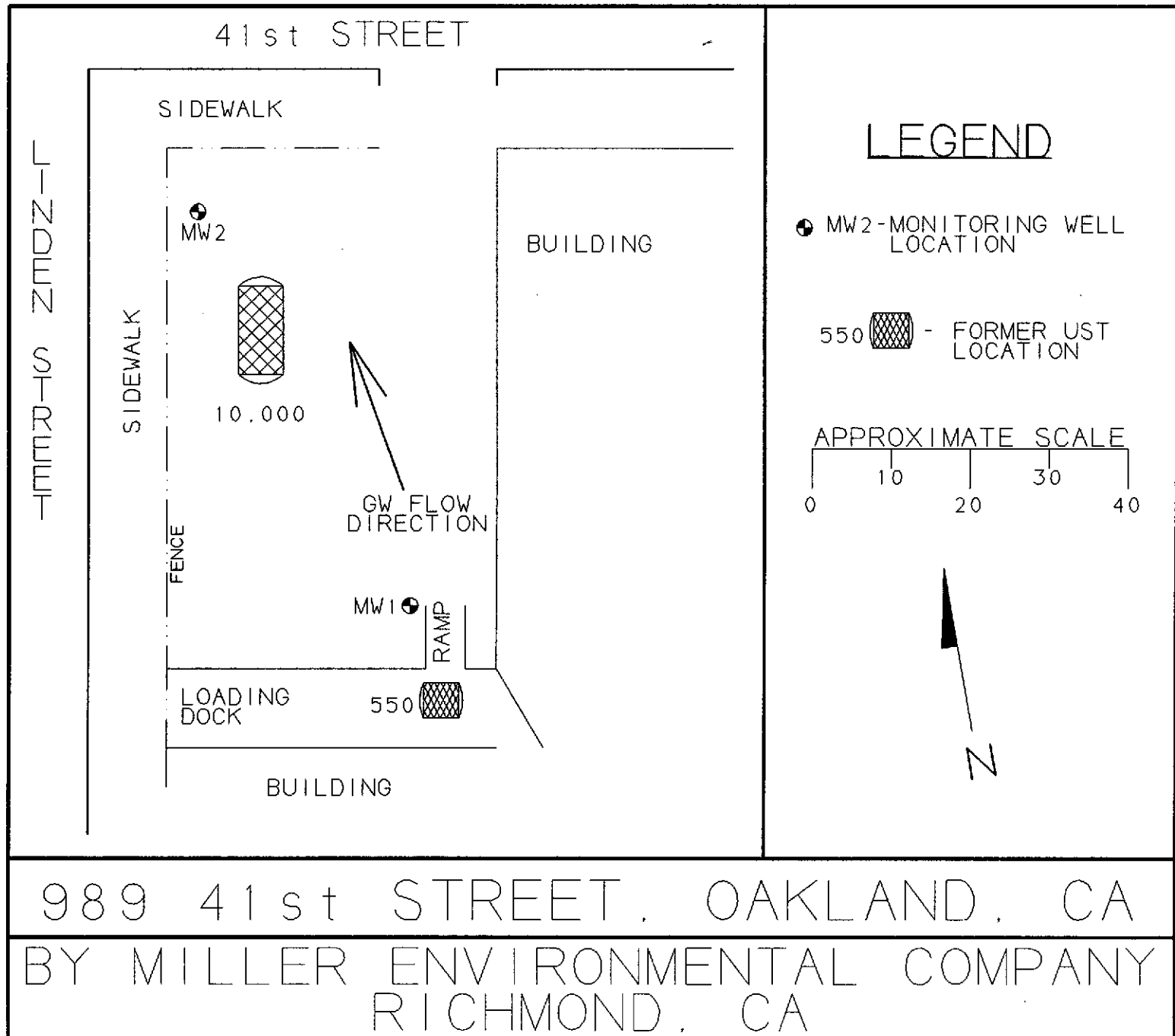


Reinhard Ruhmke
Project Geologist

Enc: Laboratory results, site plan

cc: RWQCB
Mr. Joel Pitney - California Linen
file

FIGURE 1 SITE PLAN - CALIFORNIA LINEN





NATIONAL
ENVIRONMENTAL RECEIVED
TESTING, INC.

NET Pacific, Inc.
435 Tesconi Circle
Santa Rosa, CA 95401
Tel: (707) 526-7200
Fax: (707) 526-9623

APR 9 1992

MILLER ENVIRONMENTAL CO.

Reinhard Ruhmke
Miller Environmental
385 Pittsburg Ave.
Richmond, CA 94801

Date: 04/07/1992
NET Client Acct. No: 78800
NET Pacific Log No: 92.1444
Received: 03/19/1992

Client Reference Information

Cal Linen, Job No. 10810

Sample analysis in support of the project referenced above has been completed and results are presented on following pages. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Approved by:


Jules Skamarack
Laboratory Manager

Enclosure(s)



Client Acct: 78800
 Client Name: Miller Environmental
 NET Log No: 92.1444

Date: 04/07/1992
 Page: 2

NET Pacific, Inc

Ref: Cal Linen, Job No. 10810

SAMPLE DESCRIPTION: 1
 Date Taken: 03/18/1992
 Time Taken: 10:52
 LAB Job No: (-116846)

Parameter	Method	Reporting Limit	Results	Units
TPH (Gas/BTXE,Liquid)			--	
METHOD 5030 (GC,FID)			--	
DATE ANALYZED			03-29-92	
DILUTION FACTOR*			100	
as Gasoline	5030	0.05	77	mg/L
METHOD 8020 (GC,Liquid)			--	
DATE ANALYZED			03-30-92	
DILUTION FACTOR*			1,000	
Benzene	8020	0.5	17,000	ug/L
Ethylbenzene	8020	0.5	2,300	ug/L
Toluene	8020	0.5	18,000	ug/L
Xylenes (Total)	8020	0.5	13,000	ug/L
SURROGATE RESULTS			--	
Bromofluorobenzene	5030		108	% Rec.
METHOD 3510 (GC,FID)				
DILUTION FACTOR*			10	
DATE EXTRACTED			03-23-92	
DATE ANALYZED			03-31-92	
as Diesel	3510	0.05	14 **	mg/L

** NOTE: Petroleum hydrocarbon as diesel result is due to a petroleum hydrocarbon that appears to be lighter than diesel.



NET Pacific, Inc

Client Acct: 78800
Client Name: Miller Environmental
NET Log No: 92.1444

Date: 04/07/1992
Page: 3

Ref: Cal Linen, Job No. 10810

SAMPLE DESCRIPTION: 2
Date Taken: 03/18/1992
Time Taken: 10:58
LAB Job No: (-116847)

Parameter	Method	Reporting Limit	Results	Units
Oil & Grease (Total)	5520B	5	ND	mg/L
TPH (Gas/BTEXE,Liquid)			--	
METHOD 5030 (GC,FID)				
DATE ANALYZED			03-29-92	
DILUTION FACTOR*			1	
as Gasoline	5030	0.05	ND	mg/L
METHOD 8020 (GC,Liquid)			--	
DATE ANALYZED			03-29-92	
DILUTION FACTOR*			1	
Benzene	8020	0.5	ND	ug/L
Ethylbenzene	8020	0.5	ND	ug/L
Toluene	8020	0.5	1.1	ug/L
Xylenes (Total)	8020	0.5	3.3	ug/L
SURROGATE RESULTS			--	
Bromofluorobenzene	5030		84	% Rec.
METHOD 3510 (GC,FID)				
DILUTION FACTOR*			1	
DATE EXTRACTED			03-23-92	
DATE ANALYZED			03-31-92	
as Diesel	3510	0.05	ND	mg/L



Client Acct: 78800
Client Name: Miller Environmental
NET Log No: 92.1444

Date: 04/07/1992
Page: 4

NET Pacific, Inc

Ref: Cal Linen, Job No. 10810

QUALITY CONTROL DATA

Parameter	Reporting Limits	Units	Cal Verf Stand % Recovery	Blank Data	Spike % Recovery	Duplicate Spike % Recovery	RPD
Gasoline	0.05	mg/L	88	ND	91	92	1.0
Benzene	0.5	ug/L	91	ND	104	100	3.8
Toluene	0.5	ug/L	90	ND	104	101	3.2
Gasoline	0.05	mg/L	96	ND	97	93	4.2
Benzene	0.5	ug/L	82	ND	103	96	7.4
Toluene	0.5	ug/L	90	ND	100	95	5.2
Diesel	0.05	mg/L	67	ND	N/A	N/A	1.3
O&G, total	5.0	mg/L	100	ND	100	96	4.1

COMMENT: Blank Results were ND on other analytes tested.



NET Pacific, Inc

KEY TO ABBREVIATIONS and METHOD REFERENCES

- < : Less than; When appearing in results column indicates analyte not detected at the value following. This datum supercedes the listed Reporting Limit.
- * : Reporting Limits are a function of the dilution factor for any given sample. To obtain the actual reporting limits for this sample, multiply the stated Reporting Limits by the dilution factor (but do not multiply reported values).
- ICVS : Initial Calibration Verification Standard (External Standard).
- mean : Average; sum of measurements divided by number of measurements.
- mg/Kg (ppm) : Concentration in units of milligrams of analyte per kilogram of sample, wet-weight basis (parts per million).
- mg/L : Concentration in units of milligrams of analyte per liter of sample.
- mL/L/hr : Milliliters per liter per hour.
- MPN/100 mL : Most probable number of bacteria per one hundred milliliters of sample.
- N/A : Not applicable.
- NA : Not analyzed.
- ND : Not detected; the analyte concentration is less than applicable listed reporting limit.
- NTU : Nephelometric turbidity units.
- RPD : Relative percent difference, $100 \text{ [Value 1 - Value 2]}/\text{mean value}$.
- SNA : Standard not available.
- ug/Kg (ppb) : Concentration in units of micrograms of analyte per kilogram of sample, wet-weight basis (parts per billion).
- ug/L : Concentration in units of micrograms of analyte per liter of sample.
- umhos/cm : Micromhos per centimeter.

Method References

Methods 100 through 493: see "Methods for Chemical Analysis of Water & Wastes", U.S. EPA, 600/4-79-020, rev. 1983.

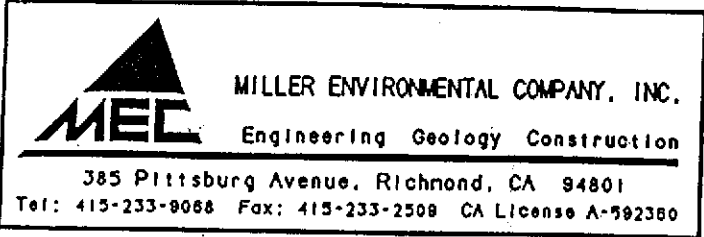
Methods 601 through 625: see "Guidelines Establishing Test Procedures for the Analysis of Pollutants" U.S. EPA, 40 CFR, Part 136, rev. 1988.

Methods 1000 through 9999: see "Test Methods for Evaluating Solid Waste", U.S. EPA SW-846, 3rd edition, 1986.

SM: see "Standard Methods for the Examination of Water & Wastewater, 17th Edition, APHA, 1989.

Sample Analysis Request / Chain of Custody

380



JOB NAME: **Cal Linen** 4592

JOB NUMBER: **10316** P.O. Number:

Samplers: **Darin Reinholdt**

Sample I.D.	Date	Time	Comp.	Grab	Location	No. of Containers	Matrix	ANALYSES				Turn Around Time	
								TPH as Gasoline	BTXE	TPH as Diesel	TOB		
1	3/18/92	10:52		1		4	H ₂ O	1	1	1	≡	*limited sample	10 Day
2	"	10:58		1		4	"	1	1	1	≡	5 Det. Limit	1

(CUSTODY SEALED 3-18)
 @ 7:00 am *[Signature]*
 seal intact

Relinquished By (Signature)	Date	Time	Accepted By (Signature)
1 <i>Darin Reinholdt</i>	3/18/92		1 <i>[Signature]</i> 3-18 2:30
2 <i>[Signature]</i>	3/18	7:00 pm	
3 (VIA NCS)	3/19/92 0800		3 <i>[Signature]</i>

Laboratory Name & Address: **NET**

REMARKS:



NATIONAL
ENVIRONMENTAL
TESTING, INC.

NET Pacific, Inc.
435 Tesconi Circle
Santa Rosa, CA 95401
Tel: (707) 526-7200
Fax: (707) 526-9623

RECEIVED

APR 16 1992

MILLER ENVIRONMENTAL CO.

Reinhard Ruhmke
Miller Environmental
385 Pittsburg Ave.
Richmond, CA 94801

Date: 04/14/1992
NET Client Acct. No: 78800
NET Pacific Job No: 92.1787
Received: 04/03/1992

Client Reference Information

Cal Linen, Job: W/O 10310

Sample analysis in support of the project referenced above has been completed and results are presented on following pages. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Approved by:


Jules Skamarack
Laboratory Manager

Enclosure(s)



Client Acct: 78800
 Client Name: Miller Environmental
 NET Job No: 92.1787

Date: 04/14/1992
 Page: 2

NET Pacific, Inc

Ref: Cal Linen, Job: W/O 10310

SAMPLE DESCRIPTION: MW1
 Date Taken: 04/02/1992
 Time Taken: 11:08
 LAB Job No: (-118314)

Parameter	Method	Reporting Limit	Results	Units
Oil & Grease (Total)	5520B	5	ND	mg/L

QUALITY CONTROL DATA

Parameter	Reporting Limits	Units	Cal Verf Stand % Recovery	Blank Data	Spike % Recovery	Duplicate Spike % Recovery	RPD
O&G, total	5.0	mg/L	100	ND	99	100	<1
O&G, non-polar	5.0	mg/L	100	ND	N/A	N/A	N/A

COMMENT: Blank Results were ND on other analytes tested.



NET Pacific, Inc

KEY TO ABBREVIATIONS and METHOD REFERENCES

- < : Less than; When appearing in results column indicates analyte not detected at the value following. This datum supercedes the listed Reporting Limit.
- * : Reporting Limits are a function of the dilution factor for any given sample. To obtain the actual reporting limits for this sample, multiply the stated Reporting Limits by the dilution factor (but do not multiply reported values).
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- mg/Kg (ppm) : Concentration in units of milligrams of analyte per kilogram of sample, wet-weight basis (parts per million).
- mg/L : Concentration in units of milligrams of analyte per liter of sample.
- mL/L/hr : Milliliters per liter per hour.
- MPN/100 mL : Most probable number of bacteria per one hundred milliliters of sample.
- N/A : Not applicable.
- NA : Not analyzed.
- ND : Not detected; the analyte concentration is less than applicable listed reporting limit.
- NTU : Nephelometric turbidity units.
- RPD : Relative percent difference, $100 \frac{|\text{Value 1} - \text{Value 2}|}{\text{mean value}}$.
- SNA : Standard not available.
- ug/Kg (ppb) : Concentration in units of micrograms of analyte per kilogram of sample, wet-weight basis (parts per billion).
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- umhos/cm : Micromhos per centimeter.

Method References

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Methods 601 through 625: see "Guidelines Establishing Test Procedures for the Analysis of Pollutants" U.S. EPA, 40 CFR, Part 136, rev. 1988.

Methods 1000 through 9999: see "Test Methods for Evaluating Solid Waste", U.S. EPA SW-846, 3rd edition, 1986.

SM: see "Standard Methods for the Examination of Water & Wastewater, 17th Edition, APHA, 1989.

Sample Analysis Request / Chain of Custody



JOB NAME: **Cal Linen** 4929

JOB NUMBER: **w/o 10310** P.O. Number:

Samplers: **Darin Reinholdt**

Sample I.D.	Date	Time	Comp.	Grab	Location	No. of Containers	Matrix	ANALYSES						Turn Around Time		
								TPH as Gasoline	BTXE	TOL	TOB					
1	4/2	11:08		1	MW1	1	H ₂ O								.5 Det Lim	0000 *
2	1	11:05		1	MW2	1	H₂O								ASLD 1	*
															per PR to LCP 4/3/92	

CUSTODY SEALED 4/2/92
 1900 MWT seals intact A.C.

Relinquished By (Signature)	Date	Time	Accepted By (Signature)
1 Darin Reinholdt	4/2/92	2:50pm	1 Mike Turani
2 Mike Turani	4/2/92	1900	2 A Lopez 4/3/92 0800
3			3

Laboratory Name & Address: REMARKS:

* replacements of lab broken jars per PR to LCP 4/3/92