



Miller Environmental Company, Inc.

Engineering • Geology • Construction

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

Attn: Mr. Gil Wistar

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

Dear Mr. Wistar:

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. For ease of reference, a summary of laboratory results is presented in Table 1:

TABLE 1
Summary of Laboratory Results

Well #	Date	TPH gas	TPH dsl	TPH w.o.	B	T	E	X
MW1	10/02/89	70	0.61	ND	2.8	2.4	2.3	4.8
	02/20/90	73	2.2	3	7.5	5.9	0.68	5.3
	07/25/90	34	ND	1	2.0	0.67	0.12	1.5
	10/23/90	50	1.1	ND	3.3	4.0	4.2	4.7
	01/28/91	99	1.7	3	4.4	7.4	1.8	8.6
	06/05/91	23	0.56	ND	2.0	1.2	0.64	2.5
	08/15/91	59	3.5	3	3.8	5.5	1.1	4.8
	11/21/91	47	9.8	ND	6.0	7.2	2.2	10.0
	MW2	10/02/89	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

California Linen - Quarter Sampling Results - 11/21/91

Table 1 cont'd

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

- a) all results are expressed in milligrams per liter (mg/L) which is equivalent to parts per million (ppm).
- b) Laboratory note - Method blank contained 0.11 mg/L diesel. Blank was not subtracted from sample value. Due to limited sample volume, re-extraction was not possible, and blank must be extracted with sample. The Method Blank (MB) monitors the level of contamination introduced by reagents or glassware. Since the MB was greater than the level of contamination detected, the analysis for TPH/diesel was probably ND.

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

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

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

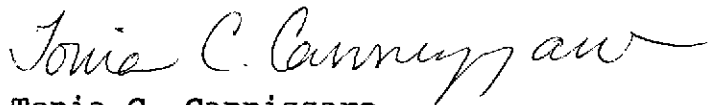
Future Work

~~Levels of benzene and TPH as gasoline have not diminished in monitoring well MW1 during the one and a half years of quarterly monitoring. Therefore, MEC recommends initiating a ground water remediation program in the vicinity of MW1. However, prior to initiation of such a program, a workplan will be submitted to ACHCSA outlining the scope of work.~~

California Linen - Quarter Sampling Results - 11/21/91

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

Sincerely,
MILLER ENVIRONMENTAL COMPANY



Tonia C. Cannizzaro
Project Engineer

Enc: Laboratory results, chain of custody form

cc: RWQCB
Joel Pitney - California Linen
file



NATIONAL
ENVIRONMENTAL
TESTING, INC.

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

RECEIVED

DEC 18 1991

MILLER ENVIRONMENTAL CO.

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

Date: 12/16/1991
NET Client Acct. No: 78800
NET Pacific Log No: 91.0842
Received: 11/22/1991

Client Reference Information

California Linen, Job: 10191

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: 91.0842

Date: 12/16/1991
 Page: 2

NET Pacific, Inc

Ref: California Linen, Job: 10191

SAMPLE DESCRIPTION: MW-1
 Date Taken: 11/21/1991
 Time Taken:
 LAB Job No: (-106017)

Parameter	Method	Reporting Limit	Results	Units
pH	150.1		6.7	pH units
Oil & Grease (Total)	55200	5	ND	mg/L
Oil & Grease (Non-Polar)	55200	5	ND	mg/L
TPH (Gas/BTXE,Liquid)				
METHOD 5030 (GC,FID)				
DATE ANALYZED			12-04-91	
DILUTION FACTOR*			50	
as Gasoline			0.05	47
				mg/L
METHOD 8020 (GC,Liquid)				
DATE ANALYZED			12-05-91	
DILUTION FACTOR*			500	
Benzene			0.5	6,000
				ug/L
Ethylbenzene			0.5	2,200
				ug/L
Toluene			0.5	7,200
				ug/L
Xylenes (Total)			0.5	10,000
				ug/L
METHOD 3510 (GC,FID)				
DILUTION FACTOR*			5	
DATE EXTRACTED			11-25-91	
DATE ANALYZED			11-26-91	
as Diesel			0.05	9.8
				mg/L
as Motor Oil			0.5	ND
				mg/L



Client Acct: 78800
 Client Name: Miller Environmental
 NET Log No: 91.0842

Date: 12/16/1991
 Page: 3

NET Pacific, Inc

Ref: California Linen, Job: 10191

SAMPLE DESCRIPTION: MW-2
 Date Taken: 11/21/1991
 Time Taken:
 LAB Job No: (-106018)

Parameter	Method	Reporting Limit	Results	Units
Oil & Grease (Total)	5520B	5	ND	mg/L
Oil & Grease (Non-Polar)	5520F	5	ND	mg/L
TPH (Gas/BTXE,Liquid)				
METHOD 5030 (GC,FID)			--	
DATE ANALYZED			12-04-91	
DILUTION FACTOR*			1	
as Gasoline		0.05	ND	mg/L
METHOD 8020 (GC,Liquid)			--	
DATE ANALYZED			12-04-91	
DILUTION FACTOR*			1	
Benzene		0.5	ND	ug/L
Ethylbenzene		0.5	ND	ug/L
Toluene		0.5	ND	ug/L
Xylenes (Total)		0.5	ND	ug/L
METHOD 3510 (GC,FID)				
DILUTION FACTOR*			1	
DATE EXTRACTED			11-25-91	
DATE ANALYZED			11-26-91	
as Diesel		0.05	ND	mg/L
as Motor Oil		0.5	ND	mg/L



Client Acct: 78800
Client Name: Miller Environmental
NET Log No: 91.0842

Date: 12/16/1991
Page: 4

NET Pacific, Inc

Ref: California Linen, Job: 10191

QUALITY CONTROL DATA

Parameter	Reporting Limits	Units	Cal Verf Stand % Recovery	Blank Data	Spike % Recovery	Duplicate Spike % Recovery	RPD
Gasoline	0.05	mg/L	102	ND	98	100	2.0
Benzene	0.5	ug/L	104	ND	99	105	2.6
Toluene	0.5	ug/L	109	ND	101	101	<1
Diesel	0.05	mg/L	99	ND	103	105	1.9
Motor Oil	0.5	mg/L	105	ND	N/A	N/A	N/A
O&G, total	5.0	mg/L	94	ND	95	97	1.0
O&G, non-polar	5.0	mg/L	81	ND	N/A	N/A	N/A
pH	--	units	100	N/A	N/A	N/A	<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, $100 \frac{|\text{Value 1} - \text{Value 2}|}{\text{mean value}}$.
- SNA : Standard not available.
- ug/Kg (ppb) : Concentration in units of micrograms of analyte per kilogram of sample, wet-weight basis (parts per billion).
- ug/L : Concentration in units of micrograms of analyte per liter of sample.
- umhos/cm : Micromhos per centimeter.

Method References

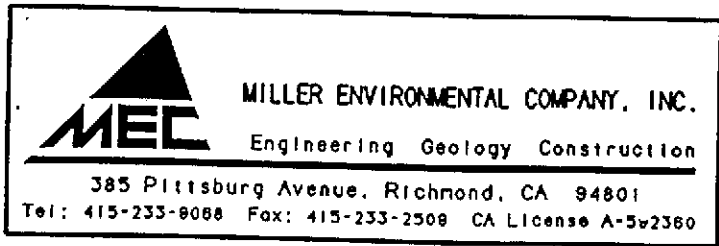
Methods 100 through 493: see "Methods for Chemical Analysis of Water & Wastes", U.S. EPA, 600/4-79-020, rev. 1983.

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, 16th Edition, APHA, 1985.

Sample Analysis Request / Chain of Custody (2309)



JOB NAME: California Lines

JOB NUMBER: 10191 P.O. Number: 10191

Samplers: Reinhard Nubmink

Sample I.D.	Date	Time	Comp.	Grab	Location	No. of Containers	Matrix	ANALYSES					Turn Around Time
								TPH as Gasoline	BTXE	TPH as Diesel	TOG	PH	
MU1	11/21			Y	Monitoring well MU1	5	Water	X	X	X	X	X	10-day
MU2	"			Y	" " MU2	5	"	X	X	X	X		

CUSTODY SEALED 11/21/91
1900 MU1 seal intact

Relinquished By (Signature): 1 <u>Reinhard Nubmink</u>	Date: 11/21/91	Time: 1200	Accepted By (Signature): 1 <u>Mary Lorenzi</u>	Laboratory Name & Address: <u>NET</u> <u>Santa Rosa</u>	REMARKS:
2 <u>Mary Lorenzi</u>	11/21/91	1900	2		
3 (VIA NCS)	11/24/91	0800	3 <u>Lyngel</u>		