2047 -01-00

EPA REGION-9 SUPERFUND RECORDS CENTER

2047-00100

WASTE DISPOSAL INC

PROPERTY OF EPA REGION 9

HAZARDOUS WASTE MANAGEMENT DIVISION

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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215 FREMONT STREET

SAN FRANCISCO, CALIFORNIA 94105

August 31, 1984

SFUND RECORDS CTR
2047-00100

ReDevelopment Agency
City of Santa Fe Springs
11710 Telegraph Road
Santa Fe Springs, California 90670

Attention: Mr. Richard H. Weaver
Director

Proposal
Initial Subsurface Investigation
Waste Disposal Inc. Site
Santa Fe Springs, California
For the ReDevelopment Agency
City of Santa Fe Springs

INTRODUCTION

Dames & Moore is pleased to submit this proposal to conduct an initial investigation of subsurface conditions at the former Waste Disposal Inc. site located at, Los Nietos Road and Greenleaf Avenue in Santa Fe Springs, California. In developing this proposal we have considered information gained from: (1) files of the Toxic Substances Control Division of the Department of Health Services (DHS); (2) historic aerial photographs; (3) discussions with the Fire Chief of Santa Fe Springs and current owners of the subject site; and, (4) discussions with Messrs. Weaver and Beaty of the ReDevelopment Agency.

BACKGROUND

Available historical information assembled by the DHS indicates that the subject site is a subsurface, concrete-lined reservoir and likely began receiving wastes in the 1930s the reservoir was probably used as a crude oil storage reservoir similar to the companion reservoir located to the northwest. From the 1930s to the late 1950s the decommissioned reservoir served as a disposal site for a variety of wastes including:

Nov/84
DHS
LA Reg. office
Sent by
Steve Lavinger

1. petroleum refinery tank bottoms;
2. steel mill slag;
3. brewery wastes;
4. cesspool sewage; and
5. miscellaneous solid and liquid wastes.

Subsequent to the late 1950s, the disposal site received principally waste drilling muds from oil field drilling operations. Minor amounts of construction debris (wood debris, concrete rubble) were also disposed at the site during this time.

Historical aerial photographs show several sumps between the reservoir and Los Nietos Road and Greenleaf Avenue. The sumps are considerably smaller in volume than the main disposal site and probably received fluids (largely water) intermittently from the main disposal reservoir. In addition, aerial photographs show small outwash features originating at the northwest and southeast margin of the reservoir.

In the 1960s, disposal activities waned and by 1965 a soil mantle (cover) was placed over the reservoir. The site is presently undeveloped.

PURPOSE

Available data indicate that some of the wastes disposed in the reservoir and peripheral sumps are likely to contain hazardous compounds. In order to definitively establish whether hazardous wastes are present, and if so, their chemical composition, a program of waste sampling and waste sample analysis must be performed. Accordingly we proposed to conduct a limited investigation aimed at assessing the chemical character of wastes or waste constituents within and peripheral to the reservoir. We point out that the proposed

investigation is not intended to be an exhaustive evaluation of the chemical composition and distribution of all wastes or waste constituents presently at the site. Rather, the proposed investigation is intended to:

1. provide a vertical profile of the chemical character of waste encountered in a single boring in the main reservoir; and

2. provide an indication of the presence and chemical waste characteristics of waste and/or waste constituents at three locations immediately outside the reservoir.

The scope of the proposed investigation is outlined below. An elapsed time schedule and cost estimate for the proposed services are summarized in the subsequent section.

TECHNICAL WORK PLAN

Waste and Soil Sampling

Borings will be advanced at four locations as shown in Figure 1. One boring (DMEB-1) will be positioned near the center of the reservoir and three borings (DMEB-2 through 4) will be located roughly northwest, northeast, southeast of the reservoir. Boring DMEB-1 will be advanced to the concrete base of the reservoir which is anticipated to be approximately 25 to 30 feet below the ground surface. The peripheral borings will be advanced to a depth of 30 to 35 feet. Available data indicate that ground water may be as shallow as 50 feet below the ground surface. Due to the uncertainty of the exact depth to ground water, the peripheral borings will be terminated at 30 to 35 feet to minimize the potential of transporting waste or waste constituents to ground water via the boring.

All borings will be drilled under the technical supervision of a Dames & Moore geologist using hollow stem auger drilling equipment. This drilling method allows the collection of undisturbed samples without having to remove the auger from the borehole. Following completion of boring and sampling, each bore hole will be backfilled with cement. Drill cuttings removed from each boring will be placed in drums which will be appropriately sealed and labeled. Disposal of the drums, either as a refuse or hazardous waste (depending on the results of the chemical testing), will be the responsibility of the ReDevelopment Agency.

Waste and soil samples will be collected at 2 1/2 foot intervals in each boring. Samples will be collected utilizing a Dames & Moore U-type or equivalent sampler fitted with stainless steel inserts. Samples will be retained in the inserts or transferred to wide-mouth glass jars with teflon-lined screw caps, depending on the physical character of the sampled material. Appropriately packaged and labeled samples will be stored in the field in ice-chests cooled with blue ice. Chain of custody records for collected samples will be completed and stored in the ice chest with the samples. Samples and chain of custody records will be shipped to the analytical laboratory at the end of each day.

A Dames & Moore geologist will prepare a detailed log. In addition, a portable organic vapor analyzer (HNu) will be used to measure the concentration of organic vapors emitted from each sample. All field activities will be conducted in accordance with a Health and Safety Plan developed specifically for the proposed investigation.

Analytical Program

Chemical testing of selected samples or composites of samples will be performed by California Analytical Laboratories of Sacramento, California. On

the basis of available information regarding potential waste materials disposed at the subject site, we propose to analyze samples for Priority Pollutant Organics (U.S. EPA) and total CAM Inorganics*.

For the purposes of estimating program schedule and cost, we propose to analyze a maximum of 7 samples, 4 from DMEB-1 and one each from DMEB-2 through 4. Because the main disposal reservoir received a large quantity and variety of wastes over its history, we believe it would be desirable to composite all of samples and borings from each 7 to 8 foot interval of Boring DMEB-01. Accordingly, the 25 to 30 foot vertical profile of wastes would be chemically characterized on the basis of four composite samples. A single sample or composite of several samples from each of the peripheral borings will be tested for the same organic and inorganic compounds. We point out that schedules of samples and sample composites to be analyzed should be based on final observations and organic vapor emission measurements from all borings.

Report Preparation

Following receipt of all chemical test results, a draft summary of findings will be prepared for your review and comment. This report will contain a summary or descriptions of:

1. field drilling and sample collection procedures;
2. sample composition procedures and rational;
3. analytical procedures;
4. waste and/or geologic materials encountered; and
5. analytical results.

If desired, we will provide recommendations regarding further investigations.

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* CAM Inorganics - California Assessment Manual list of persistent and bioaccumulative inorganic compounds.

California Analytical Laboratories, Inc.
2544 Industrial Boulevard • West Sacramento, CA 95691 • (916) 372-1393

October 31, 1984
Lab No. 19403
Received: 9/28/84
Job No. 13262-005-01

Robert E. Troutman
812 Anacapa St. Suite A
Santa Barbara, CA 93101

Twenty-eight soil samples received in six inch plastic core tubes to be analyzed for CAM metals, EPA Method 624 and 625.

S: SINGLE SAMPLE
C: COMPOSITE SAMPLE

CAL I.D.		Sample I.D.					
19403-1		DMEB-1-1	3.5	soil	9/24/84	14:50	HOLD
-2		DMEB-1-2	7.5	soil	9/24/84	15:05	HOLD
-3	S →	DMEB-1-3	10.0	soil	9/24/84	15:15	
-4	C	DMEB-1-4	12.5	soil	9/24/84	15:40	COMPOSITED
-5	C	DMEB-1-5	15	soil	9/24/84	16:00	COMPOSITED
-6	C	DMEB-1-6	17.5	soil	9/24/84	16:15	COMPOSITED
-7	C	DMEB-1-7	20	soil	9/24/84	16:40	COMPOSITED
-8	C	DMEB-2-1	5	soil	9/25/84	10:30	COMPOSITED
-9	C	DMEB-2-2	7.5	soil	9/25/84	10:45	COMPOSITED
-10	C	DMEB-2-3	10	soil	9/25/84	11:00	COMPOSITED
-11	C	DMEB-2-4	12.5	soil	9/25/84	11:10	COMPOSITED
-12		DMEB-2-5	15	soil	9/25/84	11:15	HOLD
-13	S →	DMEB-2-6	17.5	soil	9/25/84	11:25	
-14		DMEB-3-1	2.5	soil	9/26/84	08:15	HOLD
-15		DMEB-3-5	12.5	soil	9/26/84	10:25	HOLD
-16		DMEB-3-6	15	soil	9/26/84	10:35	HOLD
-17		DMEB-3-7	17.5	soil	9/26/84	10:45	HOLD
-18		DMEB-3-8	20	soil	9/26/84	11:35	HOLD
-19	S →	DMEB-3-9	22.5	soil	9/26/84	11:45	
-20	S →	DMEB-3-10	11	soil	9/26/84	14:50	
-21		DMEB-4-1	2.5	soil	9/26/84	12:35	HOLD
-22	S →	DMEB-4-2	5	soil	9/26/84	12:45	
-23		DMEB-4-3	7.5	soil	9/26/84	12:55	HOLD
-24		DMEB-4-4	10	soil	9/26/84	13:10	HOLD
-25		DMEB-4-5	12.5	soil	9/26/84	13:30	HOLD
-26		DMEB-4-6	15	soil	9/26/84	13:40	HOLD
-27		DMEB-4-7	17.5	soil	9/26/84	13:50	HOLD
-28		DMEB-4-8	20	soil	9/26/84	14:05	HOLD

Charles J. Soderquist, PhD
Vice President

Mark Masino
Director of Inorganic Services

jb

This report is for the sole and exclusive use of the client to whom it is addressed.
Samples not destroyed in testing are retained a maximum of thirty (30) days unless otherwise requested.

BORING DMEB 1
LOCATION CENTER OF CONCRETE LINED RESERVOIR

SUMMARY LOG

DEPTH	DESCRIPTION	SAMPLE #	SAMPLE DEPTH
0-3'	FILL SOIL		
3'	CONCRETE LAYER		
3-5'	CLAY/TARRY SLUDGE		
5	CONCRETE LAYER		
5-~9'	BLACK CLAY		
9-23	OILY/TARRY SLUDGE	3	10'
	(65ppm HNU AT 10')	COMPOSITE	12.5-20'
23'	CONCRETE		

PRIORITY POLLUTANTS DETECTED

NAPTHALENE
PHENANTHRENE
ETHYLBENZENE
TOLUENE
BENZENE
TRANS 1,2 DICHLOROETHENE
METHYLENE CHLORIDE
TETRACHLOROETHENE
TRICHLOROETHENE

DMEB 1
SAMPLE 3

C.A.M. METALS
Data Sheet

SAMPLE ID: DMEB-1-3 CAL ID: 19403-3

Element	Total (TTLC) Regulatory Values (mg/Kg wet wt.)	Total Found (mg/Kg)	Leachable (STLC) Regulatory Values (mg/L in leachate)	Leachable Found (mg/L)
Arsenic	500	<5	5	xxx
Antimony	500	<5	15	xxx
Barium	10000	80	100	xxx
Beryllium	75	<0.5	0.75	xxx
Cadmium	100	2.5 →	1	xxx
*Chromium III/VI	2500/500	21	560/5	xxx
Cobalt	8000	4.6	80	xxx
Copper	2500	44 →	25	xxx
Lead	1000	130 →	5	xxx
Mercury	20	0.25 →	0.2	xxx
Molybdenum	3500	<10	350	xxx
Nickel	2000	17	20	xxx
Selenium	100	<1	1	xxx
Silver	500	500 →	5	xxx
Thallium	700	<5	7	xxx
Vanadium	2400	22	24	xxx
Zinc	5000	150	250	xxx

Regulatory values from January 1984 CAM (California Department of Health Services).

*Reported as Cr III plus Cr VI.

PREPARED BY MN
APPROVED BY [illegible] DATE 11/2/84

California Analytical Laboratories, Inc.

DMEB 1
SAMPLE 3

EPA METHOD 625 PRIORITY POLLUTANTS
Data Sheet

CLIENT ID: DMEB-3 CAL LAB No: 19403-3

PP#	ACID COMPOUNDS	ug/Kg	PP#	BASE/NEUTRAL COMPOUNDS	ug/Kg
21A	2,4,6-trichlorophenol	<20000	40B	4-chlorophenyl phenyl ether	<20000
22A	p-chloro-m-cresol	<20000	41B	4-bromophenyl phenyl ether	<20000
24A	2-chlorophenol	<20000	42B	bis(2-chloroisopropyl) ether	<40000
31A	2,4-dichlorophenol	<20000	43B	bis(2-chloroethoxy) methane	<40000
34A	2,4-dimethylphenol	<20000	52B	hexachlorobutadiene	<20000
57A	2-nitrophenol	<40000	53B	hexachlorocyclopentadiene	<20000
58A	4-nitrophenol	<100000	54B	isophorone	<20000
59A	2,4-dinitrophenol	<100000	55B	naphthalene	29000 ←
60A	4,6-dinitro-o-cresol	<40000	56B	nitrobenzene	<20000
64A	pentachlorophenol	<20000	62B	N-nitrosodiphenylamine	<20000
65A	phenol	<20000	63B	N-nitrosodipropylamine	<20000
			66B	bis(2-ethylhexyl)phthalate	<20000
	BASE/NEUTRAL COMPOUNDS		67B	benzyl butyl phthalate	<20000
			68B	di-n-butyl phthalate	<20000
1B	acenaphthene	<20000	69B	di-n-octyl phthalate	<20000
5B	benzidine	<80000	70B	diethyl phthalate	<20000
8B	1,2,4-trichlorobenzene	<20000	71B	dimethyl phthalate	<20000
9B	hexachlorobenzene	<20000	72B	benzo(a)anthracene	<20000
12B	hexachloroethane	<20000	73B	benzo(a)pyrene	<40000
18B	bis(2-chloroethyl)ether	<20000	74B	benzo(b)fluoranthene	<40000*
20B	2-chloronaphthalene	<20000	75B	benzo(k)fluoranthene	<40000*
25B	1,2-dichlorobenzene	<20000	76B	chrysene	<40000
26B	1,3-dichlorobenzene	<20000	77B	acenaphthylene	<20000
27B	1,4-dichlorobenzene	<20000	78B	anthracene	<20000
28B	3,3'-dichlorobenzidine	<40000	79B	benzo(ghi)perylene	<40000
35B	2,4-dinitrotoluene	<40000	80B	fluorene	<20000
36B	2,6-dinitrotoluene	<40000	81B	phenanthrene	24000 ←
37B	1,2-diphenylhydrazine		82B	dibenzo(a,h)anthracene	<40000
	(as azobenzene)	<40000	83B	indeno(1,2,3-cd)pyrene	<40000
39B	fluoranthene	<20000	84B	pyrene	<20000

1.	aldrin	<500	8.	dieldrin	<500
2.	B-BHC	<500	9.	endosulfan sulfate	<1000
3.	D-BHC	<500	10.	endrin aldehyde	<1000
4.	chlordane	<5000	11.	heptachlor	<500
5.	4,4'-DDD	<500	12.	heptachlor epoxide	<500
6.	4,4'-DDE	<500	13.	PCB	<5000
7.	4,4'-DDT	<500	14.	toxaphene	<10000

* - compounds co-elute - analysed as a single compound
The less-than (<) symbol means "not present at or above the indicated value (detection limit)".

Prepared by: JB

Approved by: MM Date: 10/25/84

DMEB 1
SAMPLE 3

EPA METHOD 624 (EXPANDED)
Data sheet

CLIENT ID: DMEB-1-3 CAL LAB NO:19403-3

PP#	VOLATILES	UG/KG
2V	acrolein	<10000
3V	acrylonitrile	<10000
4V	benzene	<2000
6V	carbon tetrachloride	<2000
7V	chlorobenzene	<2000
10V	1,2-dichloroethane	<2000
11V	1,1,1-trichloroethane	<2000
13V	1,1-dichloroethane	<2000
14V	1,1,2-trichloroethane	<2000
15V	1,1,2,2-tetrachloroethane	<2000
16V	chloroethane	<2000
19V	2-chloroethylvinyl ether	<10000
23V	chloroform	<2000
29V	1,1-dichloroethene	<2000
30V	trans-1,2-dichloroethene	<2000
32V	1,2-dichloropropene	<2000
33V	1,3-dichloropropene	<2000
38V	ethylbenzene	1800 ←
44V	methylene chloride	<5000
45V	chloromethane	<2000
46V	bromomethane	<2000
47V	bromoform	<2000
48V	bromodichloromethane	<2000
49V	fluorotrichloromethane	<2000
50V	dichlorodifluoromethane	<2000
51V	chlorodibromomethane	<2000
85V	tetrachloroethene	<2000
86V	toluene	3100 ←
87V	trichloroethene	<2000
88V	vinyl chloride	<2000

NON-PRIORITY POLLUTANT HAZARDOUS SUBSTANCES LIST COMPOUNDS

CL13	acetone	<50000
CL14	2-butanone	<50000
CL15	carbondisulfide	<20000
CL16	2-hexanone	<50000
CL17	4-methyl-2-pentanone	<50000
CL18	styrene	<20000
CL19	vinyl acetate	<10000
CL20	total xylenes	15000 ←

The less-than (<) symbol means "not present at or above the indicated value (detection limit)".

Prepared by: DB

Approved by: MM

Date: 10/25/84

California Analytical Laboratories, Inc.

DMEB-1
SAMPLE
COMPOSITE

C.A.M. METALS
Data Sheet

SAMPLE ID: DMEB-1-4, 5, 6 & 7 CAL ID: 19403-4,5,6,7

Element	Total (TTLC) Regulatory Values (mg/Kg wet wt.)	Total Found (mg/Kg)	Leachable (STLC) Regulatory Values (mg/L in leachate)	Leachable Found (mg/L)
Arsenic	500	<5	5	xxx
Antimony	500	<5	15	xxx
Barium	10000	310 →	100	xxx
Beryllium	75	<0.5	0.75	xxx
Cadmium	100	2.6 →	1	xxx
*Chromium III/VI	2500/500	310 →	560/5	xxx
Cobalt	8000	5.0	80	xxx
Copper	2500	57 →	25	xxx
Lead	1000	250 →	5	xxx
Mercury	20	0.19	0.2	xxx
Molybdenum	3500	<10	350	xxx
Nickel	2000	38 →	20	xxx
Selenium	100	<1	1	xxx
Silver	500	<2	5	xxx
Thallium	700	<5	7	xxx
Vanadium	2400	45 →	24	xxx
Zinc	5000	2300 →	250	xxx

Regulatory values from January 1984 CAM (California Department of Health Services).

*Reported as Cr III plus Cr VI.

PREPARED BY _____
APPROVED BY _____ DATE 11/2/89

California Analytical Laboratories, Inc.

DMEB 1
COMPOSITE
SAMPLE

EPA METHOD 625 PRIORITY POLLUTANTS
Data Sheet

CLIENT ID:COMBINATION CAL LAB No: 19403-C1

PP#	ACID COMPOUNDS	ug/Kg	PP#	BASE/NEUTRAL COMPOUNDS	ug/Kg
21A	2,4,6-trichlorophenol	<40000	40B	4-chlorophenyl phenyl ether	<40000
22A	p-chloro-m-cresol	<40000	41B	4-bromophenyl phenyl ether	<40000
24A	2-chlorophenol	<40000	42B	bis(2-chloroisopropyl) ether	<80000
31A	2,4-dichlorophenol	<40000	43B	bis(2-chloroethoxy) methane	<80000
34A	2,4-dimethylphenol	<40000	52B	hexachlorobutadiene	<40000
57A	2-nitrophenol	<80000	53B	hexachlorocyclopentadiene	<40000
58A	4-nitrophenol	<200000	54B	isophorone	<40000
59A	2,4-dinitrophenol	<200000	55B	naphthalene	66000 ←
60A	4,6-dinitro-o-cresol	<80000	56B	nitrobenzene	<40000
64A	pentachlorophenol	<40000	62B	N-nitrosodiphenylamine	<40000
65A	phenol	<40000	63B	N-nitrosodipropylamine	<40000
			66B	bis(2-ethylhexyl)phthalate	<40000
	BASE/NEUTRAL COMPOUNDS		67B	benzyl butyl phthalate	<40000
			68B	di-n-butyl phthalate	<40000
1B	acenaphthene	<40000	69B	di-n-octyl phthalate	<40000
5B	benzidine	<160000	70B	diethyl phthalate	<40000
8B	1,2,4-trichlorobenzene	<40000	71B	dimethyl phthalate	<40000
9B	hexachlorobenzene	<40000	72B	benzo(a)anthracene	<40000
12B	hexachloroethane	<40000	73B	benzo(a)pyrene	<80000
18B	bis(2-chloroethyl)ether	<40000	74B	benzo(b)fluoranthene	<80000*
20B	2-chloronaphthalene	<40000	75B	benzo(k)fluoranthene	<80000*
25B	1,2-dichlorobenzene	<40000	76B	chrysene	<80000
26B	1,3-dichlorobenzene	<40000	77B	acenaphthylene	<40000
27B	1,4-dichlorobenzene	<40000	78B	anthracene	<40000
28B	3,3'-dichlorobenzidine	<80000	79B	benzo(ghi)perylene	<80000
35B	2,4-dinitrotoluene	<80000	80B	fluorene	<40000
36B	2,6-dinitrotoluene	<80000	81B	phenanthrene	30000 ←
37B	1,2-diphenylhydrazine (as azobenzene)	<80000	82B	dibenzo(a,h)anthracene	<80000
			83B	indeno(1,2,3-cd)pyrene	<80000
39B	fluoranthene	<40000	84B	pyrene	<40000
1.	aldrin	<500	8.	dieldrin	<500
2.	B-BHC	<500	9.	endosulfan sulfate	<1000
3.	D-BHC	<500	10.	endrin aldehyde	<1000
4.	chlordane	<5000	11.	heptachlor	<500
5.	4,4'-DDD	<500	12.	heptachlor epoxide	<500
6.	4,4'-DDE	<500	13.	PCB	<5000
7.	4,4'-DDT	<500	14.	toxaphene	<10000

* - compounds co-elute - analysed as a single compound
The less-than (<) symbol means "not present at or above the indicated value (detection limit)".

Prepared by: DB

Approved by: MM Date: 10/25/84

VMEB 1
COMPOSITE
SAMPLE

EPA METHOD 624 (EXPANDED)
Data sheet

CLIENT ID:DMEB-4,5,6,7 COMPOSITE CAL LAB NO:19403-C1

PP#	VOLATILES	UG/Kg
2V	acrolein	<1000
3V	acrylonitrile	<1000
4V	benzene	5100 ←
6V	carbon tetrachloride	<200
7V	chlorobenzene	<200
10V	1,2-dichloroethane	<200
11V	1,1,1-trichloroethane	<200
13V	1,1-dichloroethane	<200
14V	1,1,2-trichloroethane	<200
15V	1,1,2,2-tetrachloroethane	<200
16V	chloroethane	<200
19V	2-chloroethylvinyl ether	<1000
23V	chloroform	<200
29V	1,1-dichloroethene	<200
30V	trans-1,2-dichloroethene	1100 ←
32V	1,2-dichloropropane	<200
33V	1,3-dichloropropene	<200
38V	ethylbenzene	25000 ←
44V	methylene chloride	7400 ←
45V	chloromethane	<200
46V	bromomethane	<200
47V	bromoform	<200
48V	bromodichloromethane	<200
49V	fluorotrichloromethane	<200
50V	dichlorodifluoromethane	<200
51V	chlorodibromomethane	<200
85V	tetrachloroethene	22000 ←
86V	toluene	57000 ←
87V	trichloroethene	13000 ←
88V	vinyl chloride	<200

NON-PRIORITY POLLUTANT HAZARDOUS SUBSTANCES LIST COMPOUNDS

CL13	acetone	<500
CL14	2-butanone	5100 ←
CL15	carbondisulfide	<200
CL16	2-hexanone	<500
CL17	4-methyl-2-pentanone	<500
CL18	styrene	<200
CL19	vinyl acetate	<1000
CL20	total xylenes	120000 ←

The less-than (<) symbol means "not present at or above the indicated value (detection limit)".

Prepared by: DB

Approved by: MTM

Date: 10/25/84

BORING : DMEB-2
LOCATION ~ 150' WEST OF RESERVOIR EDGE

SUMMARY LOG

DEPTH	DESCRIPTION	SAMPLE #	SAMPLE DEPTH
0-3'	FILL SOIL		
3.5'	CONCRETE LAYER		
4-14'	BLACK OILY CLAY/ SLUDGE (6ppm HNU AT 12.5')	COMPOSITE	5-12.5'
14-18	CLAY W/ SILT, SAND (NATURAL SOIL?)	6	17.5'

PRIORITY POLLUTANTS DETECTED

NAPHTHALENE
ETHYLBENZENE

DMEB-2
COMPOSITE
SAMPLE

C.A.M. METALS
Data Sheet

SAMPLE ID: DMEB-2-1,2,3,4 CAL ID: 19403,8,9,10,11

Element	Total (TTLC) Regulatory Values (mg/Kg wet wt.)	Total Found (mg/Kg)	Leachable (STLC) Regulatory Values (mg/L in leachate)	Leachable Found (mg/L)
Arsenic	500	<5	5	xxx
Antimony	500	<5	15	xxx
Barium	10000	930 →	100	xxx
Beryllium	75	<0.5	0.75	xxx
Cadmium	100	1.9 →	1	xxx
*Chromium III/VI	2500/500	24	560/5	xxx
Cobalt	8000	3.9	80	xxx
Copper	2500	28 →	25	xxx
Lead	1000	280 →	5	xxx
Mercury	20	0.22 →	0.2	xxx
Molybdenum	3500	<10	350	xxx
Nickel	2000	27 →	20	xxx
Selenium	100	<1	1	xxx
Silver	500	<2	5	xxx
Thallium	700	30 →	7	xxx
Vanadium	2400	24 →	24	xxx
Zinc	5000	130	250	xxx

Regulatory values from January 1984 CAM (California Department of Health Services).

*Reported as Cr III plus Cr VI.

PREPARED BY MM
APPROVED BY [illegible] DATE 11/2/84

California Analytical Laboratories, Inc.

VMEB 2
COMPOSITE
SAMPLE

EPA METHOD 625 PRIORITY POLLUTANTS
Data Sheet

VMEB
CLIENT ID:COMPOSITE 2 CAL LAB No: 19403-C2

PP#	ACID COMPOUNDS	ug/Kg	PP#	BASE/NEUTRAL COMPOUNDS	ug/Kg
21A	2,4,6-trichlorophenol	<20000	40B	4-chlorophenyl phenyl ether	<20000
22A	p-chloro-m-cresol	<20000	41B	4-bromophenyl phenyl ether	<20000
24A	2-chlorophenol	<20000	42B	bis(2-chloroisopropyl) ether	<40000
31A	2,4-dichlorophenol	<20000	43B	bis(2-chloroethoxy) methane	<40000
34A	2,4-dimethylphenol	<20000	52B	hexachlorobutadiene	<20000
57A	2-nitrophenol	<40000	53B	hexachlorocyclopentadiene	<20000
58A	4-nitrophenol	<100000	54B	isophorone	<20000
59A	2,4-dinitrophenol	<100000	55B	naphthalene	13000 ←
60A	4,6-dinitro-o-cresol	<40000	56B	nitrobenzene	<20000
64A	pentachlorophenol	<20000	62B	N-nitrosodiphenylamine	<20000
65A	phenol	<20000	63B	N-nitrosodipropylamine	<20000
			66B	bis(2-ethylhexyl)phthalate	<20000
	BASE/NEUTRAL COMPOUNDS		67B	benzyl butyl phthalate	<20000
			68B	di-n-butyl phthalate	<20000
1B	acenaphthene	<20000	69B	di-n-octyl phthalate	<20000
5B	benzidine	<8000	70B	diethyl phthalate	<20000
8B	1,2,4-trichlorobenzene	<20000	71B	dimethyl phthalate	<20000
9B	hexachlorobenzene	<20000	72B	benzo(a)anthracene	<20000
12B	hexachloroethane	<20000	73B	benzo(a)pyrene	<40000
18B	bis(2-chloroethyl)ether	<20000	74B	benzo(b)fluoranthene	<40000*
20B	2-chloronaphthalene	<20000	75B	benzo(k)fluoranthene	<40000*
25B	1,2-dichlorobenzene	<20000	76B	chrysene	<40000
26B	1,3-dichlorobenzene	<20000	77B	acenaphthylene	<20000
27B	1,4-dichlorobenzene	<20000	78B	anthracene	<20000
28B	3,3'-dichlorobenzidine	<40000	79B	benzo(ghi)perylene	<40000
35B	2,4-dinitrotoluene	<40000	80B	fluorene	<20000
36B	2,6-dinitrotoluene	<40000	81B	phenanthrene	<20000
37B	1,2-diphenylhydrazine		82B	dibenzo(a,h)anthracene	<40000
	(as azobenzene)	<40000	83B	indeno(1,2,3-cd)pyrene	<40000
39B	fluoranthene	<20000	84B	pyrene	<20000

1.	aldrin	<500	8.	dieldrin	<500
2.	B-BHC	<500	9.	endosulfan sulfate	<1000
3.	D-BHC	<5000	10.	endrin aldehyde	<1000
4.	chlordane	<5000	11.	heptachlor	<500
5.	4,4'-DDD	<500	12.	heptachlor epoxide	<500
6.	4,4'-DDE	<500	13.	PCB	<5000
7.	4,4'-DDT	<500	14.	toxaphene	<10000

* - compounds co-elute - analysed as a single compound
The less-than (<) symbol means "not present at or above the indicated value (detection limit)".

Prepared by: DB

Approved by: NAM Date: 10/25/84

DMEB 2 COMPOSITE SAMPLE

EPA METHOD 624 (EXPANDED)
Data sheet

CLIENT ID:DMEB-2-1,2,3,4 CAL LAB NO: 19403-C2

PP#	VOLATILES	ug/Kg
2V	acrolein	<10000
3V	acrylonitrile	<10000
4V	benzene	<2000
6V	carbon tetrachloride	<2000
7V	chlorobenzene	<2000
10V	1,2-dichloroethane	<2000
11V	1,1,1-trichloroethane	<2000
13V	1,1-dichloroethane	<2000
14V	1,1,2-trichloroethane	<2000
15V	1,1,2,2-tetrachloroethane	<2000
16V	chloroethane	<2000
19V	2-chloroethylvinyl ether	<10000
23V	chloroform	<2000
29V	1,1-dichloroethene	<2000
30V	trans-1,2-dichloroethene	<2000
32V	1,2-dichloropropane	<2000
33V	1,3-dichloropropene	<2000
38V	ethylbenzene	1900
44V	methylene chloride	<5000
45V	chloromethane	<2000
46V	bromomethane	<2000
47V	bromoform	<2000
48V	bromodichloromethane	<2000
49V	fluorotrichloromethane	<2000
50V	dichlorodifluoromethane	<2000
51V	chlorodibromomethane	<2000
85V	tetrachloroethene	<2000
86V	toluene	<2000
87V	trichloroethene	<2000
88V	vinyl chloride	<2000

NON-PRIORITY POLLUTANT HAZARDOUS SUBSTANCES LIST COMPOUNDS

CL13	acetone	<50000
CL14	2-butanone	<50000
CL15	carbondisulfide	<20000
CL16	2-hexanone	<50000
CL17	4-methyl-2-pentanone	<50000
CL18	styrene	<20000
CL19	vinyl acetate	<10000
CL20	total xylenes	4800

The less-than (<) symbol means "not present at or above the indicated value (detection limit)".

Prepared by: DB

Approved by: MM

Date: 10/25/84

VMEB 2
SAMPLE 6

C.A.M. METALS
Data Sheet

SAMPLE ID: DMEB-2-6 CAL ID: 19403-13

Element	Total (TTLC) Regulatory Values (mg/Kg wet wt.)	Total Found (mg/Kg)	Leachable (STLC) Regulatory Values (mg/L in leachate)	Leachable Found (mg/L)
Arsenic	500	<5	5	xxx
Antimony	500	<5	15	xxx
Barium	10000	120 →	100	xxx
Beryllium	75	0.65	0.75	xxx
Cadmium	100	2.0 →	1	xxx
*Chromium III/VI	2500/500	30	560/5	xxx
Cobalt	8000	12	80	xxx
Copper	2500	28 →	25	xxx
Lead	1000	<5	5	xxx
Mercury	20	0.1	0.2	xxx
Molybdenum	3500	<10	350	xxx
Nickel	2000	22 →	20	xxx
Selenium	100	<1	1	xxx
Silver	500	<2	5	xxx
Thallium	700	<5	7	xxx
Vanadium	2400	49 →	24	xxx
Zinc	5000	57	250	xxx

Regulatory values from January 1984 CAM (California Department of Health Services).

*Reported as Cr III plus Cr VI.

PREPARED BY MM
APPROVED BY [signature] DATE 4/2/84

California Analytical Laboratories, Inc.

DMEB 2
SAMPLE 6

EPA METHOD 625 PRIORITY POLLUTANTS
Data Sheet

CLIENT ID:DMEB-2-6 CAL LAB No: 19403-13

PP#	ACID COMPOUNDS	ug/Kg
21A	2,4,6-trichlorophenol	<400
22A	p-chloro-m-cresol	<400
24A	2-chlorophenol	<400
31A	2,4-dichlorophenol	<400
34A	2,4-dimethylphenol	<400
57A	2-nitrophenol	<800
58A	4-nitrophenol	<2000
59A	2,4-dinitrophenol	<2000
60A	4,6-dinitro-o-cresol	<800
64A	pentachlorophenol	<400
65A	phenol	<400

PP#	BASE/NEUTRAL COMPOUNDS	ug/Kg
1B	acenaphthene	<400
5B	benzidine	<1600
8B	1,2,4-trichlorobenzene	<400
9B	hexachlorobenzene	<400
12B	hexachloroethane	<400
18B	bis(2-chloroethyl)ether	<400
20B	2-chloronaphthalene	<400
25B	1,2-dichlorobenzene	<400
26B	1,3-dichlorobenzene	<400
27B	1,4-dichlorobenzene	<400
28B	3,3'-dichlorobenzidine	<800
35B	2,4-dinitrotoluene	<800
36B	2,6-dinitrotoluene	<800
37B	1,2-diphenylhydrazine (as azobenzene)	<800
39B	fluoranthene	<400
40B	4-chlorophenyl phenyl ether	<400
41B	4-bromophenyl phenyl ether	<400
42B	bis(2-chloroisopropyl) ether	<800
43B	bis(2-chloroethoxy) methane	<800
52B	hexachlorobutadiene	<400
53B	hexachlorocyclopentadiene	<400
54B	isophorone	<400
55B	naphthalene	<400
56B	nitrobenzene	<400
62B	N-nitrosodiphenylamine	<400
63B	N-nitrosodipropylamine	<400
66B	bis(2-ethylhexyl)phthalate	<400
67B	benzyl butyl phthalate	<400
68B	di-n-butyl phthalate	<400
69B	di-n-octyl phthalate	<400
70B	diethyl phthalate	<400
71B	dimethyl phthalate	<400
72B	benzo(a)anthracene	<400
73B	benzo(a)pyrene	<800
74B	benzo(b)fluoranthene	<800*
75B	benzo(k)fluoranthene	<800*
76B	chrysene	<800
77B	acenaphthylene	<400
78B	anthracene	<400
79B	benzo(ghi)perylene	<800
80B	fluorene	<400
81B	phenanthrene	<400
82B	dibenzo(a,h)anthracene	<800
83B	indeno(1,2,3-cd)pyrene	<800
84B	pyrene	<400

1.	aldrin	<500
2.	B-BHC	<500
3.	D-BHC	<500
4.	chlordane	<5000
5.	4,4'-DDD	<500
6.	4,4'-DDE	<500
7.	4,4'-DDT	<500
8.	dieldrin	<500
9.	endosulfan sulfate	<1000
10.	endrin aldehyde	<1000
11.	heptachlor	<500
12.	heptachlor epoxide	<500
13.	PCB	<5000
14.	toxaphene	<10000

* - compounds co-elute - analysed as a single compound
The less-than (<) symbol means "not present at or above the indicated value (detection limit)".

Prepared by: JB

Approved by: MAM Date: 10/25/84

DMEB 2
SAMPLE 6

EPA METHOD 624 (EXPANDED)
Data sheet

CLIENT ID:DMED-2-6 CAL LAB NO:19403-13

PP#	VOLATILES	ug/Kg
2V	acrolein	<1000
3V	acrylonitrile	<1000
4V	benzene	<200
6V	carbon tetrachloride	<200
7V	chlorobenzene	<200
10V	1,2-dichloroethane	<200
11V	1,1,1-trichloroethane	<200
13V	1,1-dichloroethane	<200
14V	1,1,2-trichloroethane	<200
15V	1,1,2,2-tetrachloroethane	<200
16V	chloroethane	<200
19V	2-chloroethylvinyl ether	<1000
23V	chloroform	<200
29V	1,1-dichloroethene	<200
30V	trans-1,2-dichloroethene	<200
32V	1,2-dichloropropane	<200
33V	1,3-dichloropropene	<200
38V	ethylbenzene	<500
44V	methylene chloride	<500
45V	chloromethane	<200
46V	bromomethane	<200
47V	bromoform	<200
48V	bromodichloromethane	<200
49V	fluorotrichloromethane	<200
50V	dichlorodifluoromethane	<200
51V	chlorodibromomethane	<200
85V	tetrachloroethene	<200
86V	toluene	<200
87V	trichloroethene	<200
88V	vinyl chloride	<200

NON-PRIORITY POLLUTANT HAZARDOUS SUBSTANCES LIST COMPOUNDS

CL13	acetone	<500
CL14	2-butanone	<500
CL15	carbondisulfide	<200
CL16	2-hexanone	<500
CL17	4-methyl-2-pentanone	<500
CL18	styrene	<200
CL19	vinyl acetate	<1000
CL20	total xylenes	<200

The less-than (<) symbol means "not present at or above the indicated value (detection limit)".

Prepared by: DB

Approved by: [illegible]

Date: 10/25/94

BORING DMEB-3
LOCATION ~200' NORTH-NORTHEAST OF RESERVOIR EDGE

SUMMARY LOG

DEPTH	DESCRIPTION	SAMPLE #	SAMPLE DEPT
0-8	FILL SOIL, TRASH		
8-21.5	CLAY/SILT (SLIGHT ODOR AT 11')	10	11
21.5-23.5'	CLEAN SAND	9	22.5

NO PRIORITY POLLUTANTS IDENTIFIED

VIRED 3
SAMPLE 9

C.A.M. METALS
Data Sheet

SAMPLE ID: DMEB-3-9 CAL ID: 19403-19

Element	Total (TTLC) Regulatory Values (mg/Kg wet wt.)	Total Found (mg/Kg)	Leachable (STLC) Regulatory Values (mg/L in leachate)	Leachable Found (mg/L)
Arsenic	500	30 →	5	xxx
Antimony	500	<5	15	xxx
Barium	10000	53	100	xxx
Beryllium	75	<0.5	0.75	xxx
Cadmium	100	0.5	1	xxx
*Chromium III/VI	2500/500	7.1	560/5	xxx
Cobalt	8000	3.6	80	xxx
Copper	2500	9.4	25	xxx
Lead	1000	<5	5	xxx
Mercury	20	<0.1	0.2	xxx
Molybdenum	3500	<10	350	xxx
Nickel	2000	6.6	20	xxx
Selenium	100	<1	1	xxx
Silver	500	<2	5	xxx
Thallium	700	<5	7	xxx
Vanadium	2400	14	24	xxx
Zinc	5000	22	250	xxx

Regulatory values from January 1984 CAM (California Department of Health Services).

*Reported as Cr III plus Cr VI.

PREPARED BY MW
APPROVED BY [illegible] DATE 11/21/84

California Analytical Laboratories, Inc.

DMEB 3
SAMPLE 9

EPA METHOD 625 PRIORITY POLLUTANTS
Data Sheet

CLIENT ID:DMEB-3-9 CAL LAB No: 19403-19

PP#	ACID COMPOUNDS	ug/Kg
21A	2,4,6-trichlorophenol	<200
22A	p-chloro-m-cresol	<200
24A	2-chlorophenol	<200
31A	2,4-dichlorophenol	<200
34A	2,4-dimethylphenol	<200
57A	2-nitrophenol	<400
58A	4-nitrophenol	<1000
59A	2,4-dinitrophenol	<1000
60A	4,6-dinitro-o-cresol	<400
64A	pentachlorophenol	<200
65A	phenol	<200

PP#	BASE/NEUTRAL COMPOUNDS	ug/Kg
1B	acenaphthene	<200
5B	benzidine	<800
8B	1,2,4-trichlorobenzene	<200
9B	hexachlorobenzene	<200
12B	hexachloroethane	<200
18B	bis(2-chloroethyl)ether	<200
20B	2-chloronaphthalene	<200
25B	1,2-dichlorobenzene	<200
26B	1,3-dichlorobenzene	<200
27B	1,4-dichlorobenzene	<200
28B	3,3'-dichlorobenzidine	<400
35B	2,4-dinitrotoluene	<400
36B	2,6-dinitrotoluene	<400
37B	1,2-diphenylhydrazine (as azobenzene)	<400
39B	fluoranthene	<200
40B	4-chlorophenyl phenyl ether	<200
41B	4-bromophenyl phenyl ether	<200
42B	bis(2-chloroisopropyl) ether	<400
43B	bis(2-chloroethoxy) methane	<400
52B	hexachlorobutadiene	<200
53B	hexachlorocyclopentadiene	<200
54B	isophorone	<200
55B	naphthalene	<200
56B	nitrobenzene	<200
62B	N-nitrosodiphenylamine	<200
63B	N-nitrosodipropylamine	<200
66B	bis(2-ethylhexyl)phthalate	<200
67B	benzyl butyl phthalate	<200
68B	di-n-butyl phthalate	<200
69B	di-n-octyl phthalate	<200
70B	diethyl phthalate	<200
71B	dimethyl phthalate	<200
72B	benzo(a)anthracene	<200
73B	benzo(a)pyrene	<400
74B	benzo(b)fluoranthene	<400*
75B	benzo(k)fluoranthene	<400*
76B	chrysene	<400
77B	acenaphthylene	<200
78B	anthracene	<200
79B	benzo(ghi)perylene	<400
80B	fluorene	<200
81B	phenanthrene	<200
82B	dibenzo(a,h)anthracene	<400
83B	indeno(1,2,3-cd)pyrene	<400
84B	pyrene	<200

1.	aldrin	<500
2.	B-BHC	<500
3.	D-BHC	<500
4.	chlordane	<5000
5.	4,4'-DDD	<500
6.	4,4'-DDE	<500
7.	4,4'-DDT	<500
8.	dieldrin	<500
9.	endosulfan sulfate	<1000
10.	endrin aldehyde	<1000
11.	heptachlor	<500
12.	heptachlor epoxide	<500
13.	PCB	<5000
14.	toxaphene	<10000

* - compounds co-elute - analysed as a single compound
The less-than (<) symbol means "not present at or above the indicated value (detection limit)".

Prepared by: DB

Approved by: MM Date: 10/25/84

DMEB 3
SAMPLE 9

EPA METHOD 624 (EXPANDED)
Data sheet

CLIENT ID: DMEB-3-9 CAL LAB NO:19403-19

PPM	VOLATILES	UG/Kg
2V	acrolein	<1000
3V	acrylonitrile	<1000
4V	benzene	<200
6V	carbon tetrachloride	<200
7V	chlorobenzene	<200
10V	1,2-dichloroethane	<200
11V	1,1,1-trichloroethane	<200
13V	1,1-dichloroethane	<200
14V	1,1,2-trichloroethane	<200
15V	1,1,2,2-tetrachloroethane	<200
16V	chloroethane	<200
19V	2-chloroethylvinyl ether	<1000
23V	chloroform	<200
29V	1,1-dichloroethene	<200
30V	trans-1,2-dichloroethene	<200
32V	1,2-dichloropropane	<200
33V	1,3-dichloropropene	<200
38V	ethylbenzene	<500
44V	methylene chloride	<500
45V	chloromethane	<200
46V	bromomethane	<200
47V	bromoform	<200
48V	bromodichloromethane	<200
49V	fluorotrichloromethane	<200
50V	dichlorodifluoromethane	<200
51V	chlorodibromomethane	<200
85V	tetrachloroethene	<200
86V	toluene	<200
87V	trichloroethene	<200
88V	vinyl chloride	<200

NON-PRIORITY POLLUTANT HAZARDOUS SUBSTANCES LIST COMPOUNDS

CL13	acetone	<500
CL14	2-butanone	<500
CL15	carbondisulfide	<200
CL16	2-hexanone	<500
CL17	4-methyl-2-pentanone	<500
CL18	styrene	<200
CL19	vinyl acetate	<1000
CL20	total xylenes	<200

The less-than (<) symbol means "not present at or above the indicated value (detection limit)".

Prepared by: DB

Approved by: MDM Date: 10/25/84

DMEB 3
SAMPLE 10

C.A.M. METALS
Data Sheet

SAMPLE ID: 3- DMEB-10 CAL ID: 19403-20

Element	Total (TTLC) Regulatory Values (mg/Kg wet wt.)	Total Found (mg/Kg)	Leachable (STLC) Regulatory Values (mg/L in leachate)	Leachable Found (mg/L)
Arsenic	500	<5	5	xxx
Antimony	500	<5	15	xxx
Barium	10000	95	100	xxx
Beryllium	75	<0.5	0.75	xxx
Cadmium	100	1.6 →	1	xxx
*Chromium III/VI	2500/500	18	560/5	xxx
Cobalt	8000	7.6	80	xxx
Copper	2500	17	25	xxx
Lead	1000	<5	5	xxx
Mercury	20	<0.1	0.2	xxx
Molybdenum	3500	<10	350	xxx
Nickel	2000	14	20	xxx
Selenium	100	<1	1	xxx
Silver	500	<2	5	xxx
Thallium	700	<5	7	xxx
Vanadium	2400	32 →	24	xxx
Zinc	5000	42	250	xxx

Regulatory values from January 1984 CAM (California Department of Health Services).

*Reported as Cr III plus Cr VI.

PREPARED BY MM
APPROVED BY [illegible] DATE 11/2/84

California Analytical Laboratories, Inc.

DMEB 3
SAMPLE 10

EPA METHOD 625 PRIORITY POLLUTANTS
Data Sheet

CLIENT ID:MEB-3-10 CAL LAB No: 19403-20

PP#	ACID COMPOUNDS	ug/Kg	PP#	BASE/NEUTRAL COMPOUNDS	ug/Kg
21A	2,4,6-trichlorophenol	<200	40B	4-chlorophenyl phenyl ether	<200
22A	p-chloro-m-cresol	<200	41B	4-bromophenyl phenyl ether	<200
24A	2-chlorophenol	<200	42B	bis(2-chloroisopropyl) ether	<400
31A	2,4-dichlorophenol	<200	43B	bis(2-chloroethoxy) methane	<400
34A	2,4-dimethylphenol	<200	52B	hexachlorobutadiene	<200
57A	2-nitrophenol	<400	53B	hexachlorocyclopentadiene	<200
58A	4-nitrophenol	<1000	54B	isophorone	<200
59A	2,4-dinitrophenol	<1000	55B	naphthalene	<200
60A	4,6-dinitro-o-cresol	<400	56B	nitrobenzene	<200
64A	pentachlorophenol	<200	62B	N-nitrosodiphenylamine	<200
65A	phenol	<200	63B	N-nitrosodipropylamine	<200
			66B	bis(2-ethylhexyl)phthalate	<200
	BASE/NEUTRAL COMPOUNDS		67B	benzyl butyl phthalate	<200
			68B	di-n-butyl phthalate	<200
1B	acenaphthene	<200	69B	di-n-octyl phthalate	<200
5B	benzidine	<800	70B	diethyl phthalate	<200
8B	1,2,4-trichlorobenzene	<200	71B	dimethyl phthalate	<200
9B	hexachlorobenzene	<200	72B	benzo(a)anthracene	<200
12B	hexachloroethane	<200	73B	benzo(a)pyrene	<400
18B	bis(2-chloroethyl)ether	<200	74B	benzo(b)fluoranthene	<400*
20B	2-chloronaphthalene	<200	75B	benzo(k)fluoranthene	<400*
25B	1,2-dichlorobenzene	<200	76B	chrysene	<400
26B	1,3-dichlorobenzene	<200	77B	acenaphthylene	<200
27B	1,4-dichlorobenzene	<200	78B	anthracene	<200
28B	3,3'-dichlorobenzidine	<400	79B	benzo(ghi)perylene	<400
35B	2,4-dinitrotoluene	<400	80B	fluorene	<200
36B	2,6-dinitrotoluene	<400	81B	phenanthrene	<200
37B	1,2-diphenylhydrazine		82B	dibenzo(a,h)anthracene	<400
	(as azobenzene)	<400	83B	indeno(1,2,3-cd)pyrene	<400
39B	fluoranthene	<200	84B	pyrene	<200

1.	aldrin	<500	8.	dieldrin	<500
2.	B-BHC	<500	9.	endosulfan sulfate	<1000
3.	D-BHC	<500	10.	endrin aldehyde	<1000
4.	chlordane	<5000	11.	heptachlor	<500
5.	4,4'-DDD	<500	12.	heptachlor epoxide	<500
6.	4,4'-DDE	<500	13.	PCB	<5000
7.	4,4'-DDT	<500	14.	toxaphene	<10000

* - compounds co-elute - analysed as a single compound
The less-than (<) symbol means "not present at or above the indicated value (detection limit)".

Prepared by: DB

Approved by: MM Date: 10/25/84

VMED 3
SAMPLE 10

EPA METHOD 624 (EXPANDED)
Data sheet

CLIENT ID:DMEB-3-10 CAL LAB NO:19403-20

PP#	VOLATILES	ug/Kg
2V	acrolein	<1000
3V	acrylonitrile	<1000
4V	benzene	<200
6V	carbon tetrachloride	<200
7V	chlorobenzene	<200
10V	1,2-dichloroethane	<200
11V	1,1,1-trichloroethane	<200
13V	1,1-dichloroethane	<200
14V	1,1,2-trichloroethane	<200
15V	1,1,2,2-tetrachloroethane	<200
16V	chloroethane	<200
19V	2-chloroethylvinyl ether	<1000
23V	chloroform	<200
29V	1,1-dichloroethene	<200
30V	trans-1,2-dichloroethene	<200
32V	1,2-dichloropropane	<200
33V	1,3-dichloropropene	<200
38V	ethylbenzene	<500
44V	methylene chloride	<500
45V	chloromethane	<200
46V	bromomethane	<200
47V	bromoform	<200
48V	bromodichloromethane	<200
49V	fluorotrichloromethane	<200
50V	dichlorodifluoromethane	<200
51V	chlorodibromomethane	<200
85V	tetrachloroethene	<200
86V	toluene	<200
87V	trichloroethene	<200
88V	vinyl chloride	<200

NON-PRIORITY POLLUTANT HAZARDOUS SUBSTANCES LIST COMPOUNDS

CL13	acetone	<500
CL14	2-butanone	<500
CL15	carbondisulfide	<200
CL16	2-hexanone	<500
CL17	4-methyl-2-pentanone	<500
CL18	styrene	<200
CL19	vinyl acetate	<1000
CL20	total xylenes	<200

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BORING DMEB 4
LOCATION ~200' EAST-SOUTHEAST OF RESERVOIR EDGE

SUMMARY LOG

DEPTH	DESCRIPTION	SAMPLE #	SAMPLE DEPTH
0-4	FILL SOIL		
4-9	CLAY/SILT, OILY	2	5
9-18.5	SILTY CLAY		
18.5-20	CLAYEY SAND		

PRIORITY POLLUTANTS IDENTIFIED

BENZO ANTHRACENE
BENZO PYRENE
BENZO(K) FLOURANTHENE
CHRYSENE
BENZO (GHI) PERYLENE
INDENO (1,2,3 CD) PYRENE
PYRENE
FLOURANTHENE

SAMPLE 2

C.A.M. METALS
Data Sheet

SAMPLE ID: DMEB-4-2 CAL ID: 19403-22

Element	Total (TTLC) Regulatory Values (mg/Kg wet wt.)	Total Found (mg/Kg)	Leachable (STLC) Regulatory Values (mg/L in leachate)	Leachable Found (mg/L)
Arsenic	500	<5	5	xxx
Antimony	500	<5	15	xxx
Barium	10000	320 →	100	xxx
Beryllium	75	<0.5	0.75	xxx
Cadmium	100	1.9 →	1	xxx
*Chromium III/VI	2500/500	27	560/5	xxx
Cobalt	8000	9.2	80	xxx
Copper	2500	34 →	25	xxx
Lead	1000	17 →	5	xxx
Mercury	20	<0.1	0.2	xxx
Molybdenum	3500	<10	350	xxx
Nickel	2000	23 →	20	xxx
Selenium	100	<1	1	xxx
Silver	500	<2	5	xxx
Thallium	700	<5	7	xxx
Vanadium	2400	32 →	24	xxx
Zinc	5000	220	250	xxx

Regulatory values from January 1984 CAM (California Department of Health Services).

*Reported as Cr III plus Cr VI.

PREPARED BY _____

APPROVED BY _____ DATE 11/2/84

California Analytical Laboratories, Inc.

VMEB 4
SAMPLE 2

EPA METHOD 625 PRIORITY POLLUTANTS
Data Sheet

CLIENT ID:DMEB-4-2 CAL LAB No: 19403-22

PP#	ACID COMPOUNDS	ug/Kg
21A	2,4,6-trichlorophenol	<200
22A	p-chloro-m-cresol	<200
24A	2-chlorophenol	<200
31A	2,4-dichlorophenol	<200
34A	2,4-dimethylphenol	<200
57A	2-nitrophenol	<400
58A	4-nitrophenol	<1000
59A	2,4-dinitrophenol	<1000
60A	4,6-dinitro-o-cresol	<400
64A	pentachlorophenol	<200
65A	phenol	<200

PP#	BASE/NEUTRAL COMPOUNDS	ug/Kg
1B	acenaphthene	<200
5B	benzidine	<800
8B	1,2,4-trichlorobenzene	<200
9B	hexachlorobenzene	<200
12B	hexachloroethane	<200
18B	bis(2-chloroethyl)ether	<200
20B	2-chloronaphthalene	<200
25B	1,2-dichlorobenzene	<200
26B	1,3-dichlorobenzene	<200
27B	1,4-dichlorobenzene	<200
28B	3,3'-dichlorobenzidine	<400
35B	2,4-dinitrotoluene	<400
36B	2,6-dinitrotoluene	<400
37B	1,2-diphenylhydrazine (as azobenzene)	<400
39B	fluoranthene →	210

PP#	BASE/NEUTRAL COMPOUNDS	ug/Kg
40B	4-chlorophenyl phenyl ether	<200
41B	4-bromophenyl phenyl ether	<200
42B	bis(2-chloroisopropyl) ether	<400
43B	bis(2-chloroethoxy) methane	<400
52B	hexachlorobutadiene	<200
53B	hexachlorocyclopentadiene	<200
54B	isophorene	<200
55B	naphthalene	<200
56B	nitrobenzene	<200
62B	N-nitrosodiphenylamine	<200
63B	N-nitrosodipropylamine	<200
66B	bis(2-ethylhexyl)phthalate	<200
67B	benzyl butyl phthalate	<200
68B	di-n-butyl phthalate	<200
69B	di-n-octyl phthalate	<200
70B	diethyl phthalate	<200
71B	dimethyl phthalate	<200
72B	benzo(a)anthracene	380 ←
73B	benzo(a)pyrene	1100 ←
74B	benzo(b)fluoranthene	<400*
75B	benzo(k)fluoranthene	1500 ←
76B	chrysene	460 ←
77B	acenaphthylene	<200
78B	anthracene	<200
79B	benzo(ghi)perylene	200 ←
80B	fluorene	<200
81B	phenanthrene	<200
82B	dibenzo(a,h)anthracene	<400
83B	indeno(1,2,3-cd)pyrene	300 ←
84B	pyrene	160 ←

1.	aldrin	<500	8.	dieldrin	<500
2.	B-BHC	<500	9.	endosulfan sulfate	<1000
3.	D-BHC	<500	10.	endrin aldehyde	<1000
4.	chlordane	<5000	11.	heptachlor	<500
5.	4,4'-DDD	<500	12.	heptachlor epoxide	<500
6.	4,4'-DDE	<500	13.	PCB	<5000
7.	4,4'-DDT	<500	14.	toxaphene	<10000

* - compounds co-elute - analysed as a single compound
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VMEB 4
SAMPLE 2

EPA METHOD 624 (EXPANDED)
Data sheet

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