POOR LEGIBILITY

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2047-00001

ROUTING AND TRANSMITTAL SLIP

Date 7/18/85

TO: (Name, office symbol, room number, building, Agency/Post)	Initials	Date
1.		
2.		
3.		
4.		
5.		

	Action		File		Note and Return
	Approval		For Clearance		Per Conversation
	As Requested		For Correction		Prepare Reply
	Circulate		For Your Information		See Me
	Comment		Investigate		Signature
	Coordination		Justify		

REMARKS

CAD 980884357. Waste Disposal - check files
ok or Therese G.

DO NOT use this form as a RECORD of approvals, concurrences, disposals, clearances, and similar actions

FROM: (Name, org. symbol, Agency/Post)	Room No.—Bldg.
Jeff Rosenbloom EPA	Phone No.

5041-102

OPTIONAL FORM 41 (Rev. 7-76)
Prescribed by GSA
FPMR (41 CFR) 101-11.206

☆ GPO : 1981 O - 361-529 (148)

REGION: 09
STATE : CA

U.S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF EMERGENCY AND REMEDIAL RESPONSE
C E R C L I S V 1.2

M.2 - SITE MAINTENANCE FORM

* ACTION: _ *

EPA ID : CAD980884357

SITE NAME: WASTE DISPOSAL INC SOURCE: 1 * _____ _ *

STREET : 12731 E LOS NIETOS RD CONG DIST: 33 * _____ __ *

CITY : SANTA FE SPRINGS ZIP: 90670 * _____ _____-____ *

CNTY NAME: LOS ANGELES CNTY CODE : 037 * _____ ___ *

LATITUDE : 33/56/30.0 LONGITUDE : 118/04/18.0 * __/__/__._ ___/__/__._ *

LL-SOURCE: G LL-ACCURACY: * _ _ *

SMSA : 4480 HYDRO UNIT: 18070105 * ____ _____ *

INVENTORY IND: Y REMEDIAL IND: Y REMOVAL IND: N FED FAC IND: N * _ _ _ _ *

NPL IND: P NPL LISTING DATE: 05/86 NPL DELISTING DATE: * _ __/__ __/__ *

SITE/SPILL IDS: * __ __ __ __ __ *

RPM NAME: MITANI, LEWIS RPM PHONE: FTS-454-7836 * _____ ___-___-____ *

SITE CLASSIFICATION: SITE APPROACH: * __ ___ *

DIOXIN TIER: REG FLD1: REG FLD2: * ___ _____ _ *

RESP TERM: PENDING ( ) NO FURTHER ACTION ( ) * PENDING (_) NO FURTHER ACTION (_) *

ENF DISP: NO VIABLE RESP PARTY ( ) VOLUNTARY RESPONSE ( ) * _ _ *
ENFORCED RESPONSE ( ) COST RECOVERY ( ) * _ _ *

SITE DESCRIPTION:

* _____ *
* _____ *
* _____ *
* _____ *

REGION: 09
STATE : CA

U.S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF EMERGENCY AND REMEDIAL RESPONSE
C E R C L I S V 1.2

RUN DATE: 10/27/86
RUN TIME: 15:19:13

M.2 - PROGRAM MAINTENANCE FORM

ACTION: _

SITE: WASTE DISPOSAL INC

EPA ID: CAD980884357 PROGRAM CODE: H01 PROGRAM TYPE:

PROGRAM QUALIFIER: ALIAS LINK :

PROGRAM NAME: SITE EVALUATION

DESCRIPTION:

This is an NPL site.
look in Administrative
Record in Superfund
Records Center for
this site file
Lisa Nelson
2-1-91

M.2 - EVENT MAINTENANCE FORM

* ACTION: _ *

SITE: WASTE DISPOSAL INC
PROGRAM: SITE EVALUATION

EPA ID: CAD980884357 PROGRAM CODE: H01 EVENT TYPE: DS1

FMS CODE: EVENT QUALIFIER : EVENT LEAD: E * _ ___ _ *

EVENT NAME: DISCOVERY STATUS: * _____ _ *

DESCRIPTION:

* _____ *
* _____ *
* _____ *
* _____ *

ORIGINAL	CURRENT	ACTUAL			
START:	START:	START:	__/__/__	__/__/__	__/__/__
COMP :	COMP :	COMP : 01/01/85	__/__/__	__/__/__	__/__/__

HQ COMMENT:

* _____ *

RG COMMENT:

* _____ *

COOP AGR #	AMENDMENT #	STATUS	STATE %
			0

* _____ _____ __ ___ *

M.2 - EVENT MAINTENANCE FORM

* ACTION: _ *

SITE: WASTE DISPOSAL INC
PROGRAM: SITE EVALUATION

EPA ID: CAD980884357 PROGRAM CODE: H01 EVENT TYPE: HR1

FMS CODE: EVENT QUALIFIER : EVENT LEAD: E * _ ___ _ *

EVENT NAME: HAZARD RANKING STATUS: * _____ _ *

DESCRIPTION:

* _____ *
* _____ *
* _____ *
* _____ *

ORIGINAL	CURRENT	ACTUAL			
START:	START:	START:	__/__/__	__/__/__	__/__/__
COMP :	COMP :	COMP : 07/01/85	__/__/__	__/__/__	__/__/__

HQ COMMENT:

* _____ *

RG COMMENT:

* _____ *

COOP AGR #	AMENDMENT #	STATUS	STATE %				
			0	_____	_____	__	___

M.2 - EVENT MAINTENANCE FORM

* ACTION: _ *

SITE: WASTE DISPOSAL INC
PROGRAM: SITE EVALUATION

EPA ID: CAD980884357 PROGRAM CODE: H01 EVENT TYPE: PA1

FMS CODE: EVENT QUALIFIER : EVENT LEAD: S * _ ___ _ *

EVENT NAME: PRELIMINARY ASSESSMENT STATUS: * _____ _ *

DESCRIPTION:

* _____ *
* _____ *
* _____ *
* _____ *

ORIGINAL	CURRENT	ACTUAL			
START:	START:	START: 01/01/85	__/__/__	__/__/__	__/__/__
COMP :	COMP :	COMP : 02/01/85	__/__/__	__/__/__	__/__/__

HQ COMMENT:

* _____ *

RG COMMENT:

* _____ *

COOP AGR #	AMENDMENT #	STATUS	STATE %				
			0	_____	_____	__	___

M.2 - EVENT MAINTENANCE FORM

* ACTION: _ *

SITE: WASTE DISPOSAL INC
PROGRAM: SITE EVALUATION

EPA ID: CAD980884357 PROGRAM CODE: H01 EVENT TYPE: SI1

FMS CODE: EVENT QUALIFIER : EVENT LEAD: T * _ __ _ *

EVENT NAME: SITE INSPECTION STATUS: * _____ _ *

DESCRIPTION:

* _____ *
* _____ *
* _____ *
* _____ *

ORIGINAL	CURRENT	ACTUAL			
START:	START:	START:	__/__/__	__/__/__	__/__/__
COMP :	COMP :	COMP : 07/01/85	__/__/__	__/__/__	__/__/__

HQ COMMENT:

* _____ *

RG COMMENT:

* _____ *

COOP AGR #	AMENDMENT #	STATUS	STATE %				
			0	_____	_____	__	__

M.2 - PROGRAM MAINTENANCE FORM

* ACTION: *

SITE: WASTE DISPOSAL INC

EPA ID: CAD980884357 PROGRAM CODE: P01 PROGRAM TYPE: *

PROGRAM QUALIFIER: ALIAS LINK : *

PROGRAM NAME: RESPONSE PLANNING *

DESCRIPTION:

*

*

*

*

M.2 - EVENT MAINTENANCE FORM

* ACTION: _ *

SITE: WASTE DISPOSAL INC
PROGRAM: RESPONSE PLANNING

EPA ID: CAD980884357 PROGRAM CODE: P01 EVENT TYPE: RP1

FMS CODE: EVENT QUALIFIER : EVENT LEAD: E * _ __ _ *

EVENT NAME: FP STATUS: * _____ _ *

DESCRIPTION:

* _____ *
* _____ *
* _____ *
* _____ *

ORIGINAL	CURRENT	ACTUAL			
START:	START:	START:	__/__/__	__/__/__	__/__/__
COMP :	COMP :	COMP :	__/__/__	__/__/__	__/__/__

HQ COMMENT:

* _____ *

RG COMMENT:

PENDING REAUTHORIZATION * _____ *

COOP AGR #	AMENDMENT #	STATUS	STATE %				
			0	_____	_____	__	___

M.2 - PROGRAM MAINTENANCE FORM

* ACTION: _ *

SITE: WASTE DISPOSAL INC

EPA ID: CAD980884357 PROGRAM CODE: R01 PROGRAM TYPE: * _ *

PROGRAM QUALIFIER: ALIAS LINK : * *

PROGRAM NAME: REMEDIAL RESPONSE * *

DESCRIPTION:

* *

* *

* *

* *

REGION: 09
STATE : CA

U.S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF EMERGENCY AND REMEDIAL RESPONSE
C E R C L I S V 1.2

M.2 - EVENT MAINTENANCE FORM

* ACTION: _ *

SITE: WASTE DISPOSAL INC
PROGRAM: REMEDIAL RESPONSE

EPA ID: CAD980884357 PROGRAM CODE: R01 EVENT TYPE: C01

FMS CODE: EVENT QUALIFIER : EVENT LEAD: E * _ __ _ *

EVENT NAME: RI/FS STATUS: * _____ _ *

DESCRIPTION:

* _____ *
* _____ *
* _____ *
* _____ *

ORIGINAL	CURRENT	ACTUAL			
START:	START:	START:	__/__/__	__/__/__	__/__/__
COMP :	COMP :	COMP :	__/__/__	__/__/__	__/__/__

HQ COMMENT:

* _____ *

RG COMMENT:

* _____ *

COOP AGR #	AMENDMENT #	STATUS	STATE %				
			0	_____	_____	__	__

M.2 - EVENT MAINTENANCE FORM

* ACTION: _ *

SITE: WASTE DISPOSAL INC
PROGRAM: REMEDIAL RESPONSE

EPA ID: CAD980884357 PROGRAM CODE: R01 EVENT TYPE: RA1

FMS CODE: EVENT QUALIFIER : EVENT LEAD: E * _ __ _ *

EVENT NAME: RA STATUS: * _____ _ *

DESCRIPTION:

* _____ *
* _____ *
* _____ *
* _____ *

ORIGINAL	CURRENT	ACTUAL			
START:	START:	START:	* __/__/__	__/__/__	__/__/__ *
COMP :	COMP :	COMP :	* __/__/__	__/__/__	__/__/__ *

HQ COMMENT:

* _____ *

RG COMMENT:

* _____ *

COOP AGR #	AMENDMENT #	STATUS	STATE %				
			0	* _____	_____	__	__ *

REGION: 09
STATE : CA

U.S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF EMERGENCY AND REMEDIAL RESPONSE
C E R C L I S V 1.2

M.2 - EVENT MAINTENANCE FORM

* ACTION: _ *

SITE: WASTE DISPOSAL INC
PROGRAM: REMEDIAL RESPONSE

EPA ID: CAD980884357 PROGRAM CODE: R01 EVENT TYPE: RD1

FMS CODE: EVENT QUALIFIER : EVENT LEAD: E * _ ___ _ *

EVENT NAME: RD STATUS: * _____ _ *

DESCRIPTION:

* _____ *
* _____ *
* _____ *
* _____ *

ORIGINAL	CURRENT	ACTUAL			
START:	START:	START:	__/__/__	__/__/__	__/__/__
COMP :	COMP :	COMP :	__/__/__	__/__/__	__/__/__

HQ COMMENT:

* _____ *

RG COMMENT:

* _____ *

COOP AGR #	AMENDMENT #	STATUS	STATE %				
			0	_____	_____	__	___

M 2 - EVENT MAINTENANCE FORM

* ACTION: _ *

SITE: WASTE DISPOSAL INC
PROGRAM: REMEDIAL RESPONSE

EPA ID: CAD980884357 PROGRAM CODE: R01 EVENT TYPE: R01

FMS CODE: EVENT QUALIFIER : EVENT LEAD: E * _ ___ _ *

EVENT NAME: ROD STATUS: * _____ _ *

DESCRIPTION:

* _____ *
* _____ *
* _____ *
* _____ *

ORIGINAL	CURRENT	ACTUAL			
START:	START:	START:	__/__/__	__/__/__	__/__/__
COMP :	COMP :	COMP :	__/__/__	__/__/__	__/__/__

HQ COMMENT:

* _____ *

RG COMMENT:

* _____ *

COOP AGR #	AMENDMENT #	STATUS	STATE %
			0

* _____ _____ __ ___ *

M.2 - REGIONAL UTILITY MAINTENANCE FORM

SITE: WASTE DISPOSAL INC

EPA ID: CAD980884357

REG CODE: HSCO-01 * ACTION: _ *

DESCRIPTION: OILY WASTE: OIL, OIL WELL MUD * _____ *

* _____ *

DATE1: * __/__/__ *

DATE2: * __/__/__ *

DATE3: * __/__/__ *

FREE FIELD: * _____ *

REG CODE: HSC3-01 * ACTION: _ *

DESCRIPTION: OTHER: SOLID FILL MATERIALS * _____ *

* _____ *

DATE1: * __/__/__ *

DATE2: * __/__/__ *

DATE3: * __/__/__ *

FREE FIELD: * _____ *

REG CODE: OPDL-01 * ACTION: _ *

DESCRIPTION: LANDFILL (SOLID WASTE LANDFILL) * _____ *

* _____ *

DATE1: * __/__/__ *

DATE2: * __/__/__ *

DATE3: * __/__/__ *

FREE FIELD: * _____ *

REGION: 09
STATE : CA

U.S. ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF EMERGENCY AND REMEDIAL RESPONSE
C E R C L I S V 1.2

M.2 - REGIONAL UTILITY MAINTENANCE FORM

SITE: WASTE DISPOSAL INC

EPA ID: CAD980884357

REG CODE: 9CAL-01 * ACTION: _ *

DESCRIPTION: CALIFORNIA 3012 SITE * _____ *

* _____ *

DATE1: 01/04/85 * __/__/__ *

DATE2: * __/__/__ *

DATE3: * __/__/__ *

FREE FIELD: * _____ *

REG CODE: 9ERR-01 * ACTION: _ *

DESCRIPTION: NEW ERRIS SITE * _____ *

* _____ *

DATE1: * __/__/__ *

DATE2: * __/__/__ *

DATE3: * __/__/__ *

FREE FIELD: * _____ *

ORIGINAL

DO NOT

Facility name: WASTE DISPOSAL, INC.

Location: 12817 Los Nietos Rd., Santa Fe Springs, California 90670

EPA Region: IX

Person(s) in charge of the facility: Adeline R. Bennett (owner) c/o M. Pitts
13978 Summit Drive
Whittier, CA 90602

Name of Reviewer: _____ Date: _____

General description of the facility:
(For example: landfill, surface impoundment, pile, container; types of hazardous substances; location of the facility; contamination route of major concern; types of information needed for rating; agency action, etc.)

Facility consists of a concrete-lined 1,000,000-barrel capacity pond/sump, oil sumps, and a solid waste landfill. Types of waste include petroleum wastes, steel mill slag, brewery wastes, sewage, drilling muds, acetylene sludge, refinery tank bottoms, dicyclo-distillate, and unidentified substances reportedly dumped at the facility at night. Years of operation are 1928 to 1965. This site presents a potential groundwater problem.

Scores: S_M = 34.60 S_{gw} = 59.88 S_{sw} = 0 S_a = 0)
S_{FE} =
S_{DC} =

SM = 34.60

FIGURE 1
HRS COVER SHEET

QA Kathleen Galloway
11/14/85

June 28, 1982

DOCUMENTATION RECORDS
FOR
HAZARD RANKING SYSTEM

INSTRUCTIONS: The purpose of these records is to provide a convenient way to prepare an auditable record of the data and documentation used to apply the Hazard Ranking System to a given facility. As briefly as possible summarize the information you used to assign the score for each factor (e.g., "Waste quantity = 4,230 drums plus 800 cubic yards of sludges"). The source of information should be provided for each entry and should be a bibliographic-type reference that will make the document used for a given data point easier to find. Include the location of the document and consider appending a copy of the relevant page(s) for ease in review.

FACILITY NAME: WASTE DISPOSAL, INC.

LOCATION: 12817 Los Nietos Rd., Santa Fe Springs, CA 90670

KCR
11/14/85

Ground Water Route Work Sheet					
Rating Factor	Assigned Value (Circle One)	Multi-plier	Score	Max. Score	Ref. (Section)
1 Observed Release	(0) 45	1	0	45	3.1
If observed release is given a score of 45, proceed to line 4. If observed release is given a score of 0, proceed to line 2.					
2 Route Characteristics					3.2
Depth to Aquifer of Concern	0 1 2 (3)	2	6	6	
Net Precipitation	(0) 1 2 3	1	0	3	
Permeability of the Unsaturated Zone	0 (1) 2 3	1	1	3	
Physical State	0 1 2 (3)	1	3	3	
	Total Route Characteristics Score		10	15	
3 Containment	0 1 2 (3)	1	3	3	3.3
4 Waste Characteristics					3.4
Toxicity/Persistence	0 3 6 9 12 15 (18)	1	18	18	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 (8)	1	8	8	
	Total Waste Characteristics Score		26	26	
5 Targets					3.5
Ground Water Use	0 1 2 (3)	3	9	9	
Distance to Nearest Well/Population Served	0 4 6 8 10 / 12 16 18 20 / 24 30 32 (35) 40	1	35	40	
	Total Targets Score		44	49	
6 If line 1 is 45, multiply 1 x 4 x 5; If line 1 is 0, multiply 2 x 3 x 4 x 5			34,320	57,330	
7 Divide line 6 by 57,330 and multiply by 100		S_{gw} = 59.86			

FIGURE 2
GROUND WATER ROUTE WORK SHEET

KBD
11/14/85

Surface Water Route Work Sheet					
Rating Factor	Assigned Value (Circle One)	Multi-plier	Score	Max. Score	Ref. (Section)
1 Observed Release	0 45	1	0	45	4.1
If observed release is given a value of 45, proceed to line 4. If observed release is given a value of 0, proceed to line 2.					
2 Route Characteristics					4.2
Facility Slope and Intervening Terrain	0 1 2 3	1	0	3	
1-yr. 24-hr. Rainfall	0 1 2 3	1	3	3	
Distance to Nearest Surface Water	0 1 2 3	2	4	6	
Physical State	0 1 2 3	1	3	3	
Total Route Characteristics Score			10	15	
3 Containment	0 1 2 3	1	3	3	4.3
4 Waste Characteristics					4.4
Toxicity/Persistence	0 3 6 9 12 15 18	1	18	18	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1	8	8	
Total Waste Characteristics Score			26	26	
5 Targets					4.5
Surface Water Use	0 1 2 3	3	0	9	
Distance to a Sensitive Environment	0 1 2 3	2	0	6	
Population Served/Distance to Water Intake Downstream	0 4 6 8 10 12 16 18 20 24 30 32 35 40	1	0	40	
Total Targets Score			0	55	
6 If line 1 is 45, multiply 1 x 4 x 5 If line 1 is 0, multiply 2 x 3 x 4 x 5			0	64,350	
7 Divide line 6 by 64,350 and multiply by 100		S_{SW} =	0		

FIGURE 7
SURFACE WATER ROUTE WORK SHEET

KPD
11/14/85

	S	S^2
Groundwater Route Score (S_{gw})	59.86	3583.22
Surface Water Route Score (S_{sw})	0	0
Air Route Score (S_a)	0	0
$S_{gw}^2 + S_{sw}^2 + S_a^2$		3583.22
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2}$		59.86
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2} / 1.73 = S_M =$		34.60

FIGURE 10
WORKSHEET FOR COMPUTING S_M

KCP
11/14/85

WASTE DISPOSAL, INC

Air Route Work Sheet					
Rating Factor	Assigned Value (Circle One)	Multi-plier	Score	Max. Score	Ref. (Section)
1 Observed Release	(0) 45	1	0	45	5.1
Date and Location:					
Sampling Protocol:					
If line 1 is 0, the S_a = 0. Enter on line 5. If line 1 is 45, then proceed to line 2.					
2 Waste Characteristics					5.2
Reactivity and Incompatibility	1 2 3	1		3	
Toxicity	0 1 2	3		9	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7	1		8	
	Total Waste Characteristics Score			20	
3 Targets					5.3
Population Within 4-Mile Radius	0 9 12 15 18 21 24 27 30	1		30	
Distance to Sensitive Environment	0 1 2 3	2		6	
Land Use	0 1 2 3	1		3	
	Total Targets Score			39	
4 Multiply 1 x 2 x 3				35,100	
5 Divide line 4 by 35,100 and multiply by 100		S_a = 0			

FIGURE 9
AIR ROUTE WORK SHEET

KED
11/14/85

NARRATIVE SUMMARY - WASTE DISPOSAL, INC.

Facility consists of a concrete-lined 1,000,000 barrel capacity pond/sump, oil sumps, and a solid waste landfill. Types of waste include petroleum wastes, steel mill slag, brewery wastes, sewage, drilling muds, acetylene sludge, refinery tank bottoms, dicyclodistillate, and unidentified substances reportedly dumped at the facility at night. There have been numerous citizen complaints concerning conditions at the facility throughout its operation.

Results of a recent soil investigation show the presence of numerous hazardous substances at the facility. The groundwater aquifers below the site are connected through natural conditions and wells screened at multiple depths. The site presents a potential groundwater problem.

RCP 11/14/85

GROUND WATER ROUTE

1 OBSERVED RELEASE None

Contaminants detected (5 maximum):

Rationale for attributing the contaminants to the facility:

* * *

2 ROUTE CHARACTERISTICS

Depth to Aquifer of Concern

Name/description of aquifers(s) of concern:

REF 1

Name of aquifer	Depth from surface at 25/11W-32
Gardena	50'
Hollydale	100'
Jefferson	150'
Lynwood	300-500'
Silverado	600-750'

Depth(s) from the ground surface to the highest seasonal level of the saturated zone [water table(s)] of the aquifer of concern:

Two nearby wells were measured by LACFCD in 1984:

REF 2

1. LACFCD 1641G = 25/11W-32K5 , 32.6' to water on 4-13-84
2. LACFCD 1645H = 25/11W-32Q3 , 43.6' to water on 6-11-84

Depth from the ground surface to the lowest point of waste disposal/ storage:

REF 3 Analytical results indicate waste at a depth of 20 feet.

Depth to aquifer of concern : 32.6' - 22' = 10.60'

Value of 3. SCORE = 6

11/14/85

Net Precipitation

Mean annual or seasonal precipitation (list months for seasonal):

REF 4 16 inches of mean annual precipitation.

Mean annual lake or seasonal evaporation (list months for seasonal):

REF 4 54 inches of mean annual lake evaporation.

Net precipitation (subtract the above figures):

16 - 54 inches = -38 inches. Value of 0.

SCORE = 0

Permeability of Unsaturated Zone

Soil type in unsaturated zone:

Soil samples were taken for Dames & Moore and analyzed by California Analytical Laboratories.

REF 3
1. West of reservoir : 14-18' clay with silt, sand
2. North-northeast of reservoir: 8-21' clay with silt, 22-24' sand
3. East-southeast of reservoir: 4-9' clay with silt, 9-18' silty clay, 18-20' clayey sand

Permeability associated with soil type:

REF 4 Based on Table 2 of Uncontrolled Hazardous Waste Site Ranking System: A Users Manual.

Value of 1. SCORE = 1

Physical State

Physical state of substances at time of disposal (or at present time for generated gases):

REF 3
REF A Site investigation identified liquid waste at ≈ 22 feet.

11/14/85

3 CONTAINMENT

Containment

Method(s) of waste or leachate containment evaluated:

REF 3 Integrity of cement lining of large surface impoundment has not been evaluated. Disposal in areas outside surface impoundment or possible leakage of impoundment is evident from sampling results of boring in area outside impoundment.

Method with highest score:

There is no containment in the contaminated areas outside the surface impoundment.

Value of 3 Score = 3

4 WASTE CHARACTERISTICS

Toxicity and Persistence

REF 3
REF 4
REF 5

Compound(s) evaluated:

Benzo(a)pyrene: 3 Toxicity 3 Persistence Phenanthrene: 3 Toxicity 2 Persistence

Phenol : 3 Toxicity, 1 Persistence

Benzene : 3 Toxicity, 1 Persistence

Toluene : 2 Toxicity, 1 Persistence

Compound with highest score:

Benzo (a) pyrene

Value of 18 SCORE = 18

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility, excluding those with a containment score of 0 (Give a reasonable estimate even if quantity is above maximum):

REF A and REF 3

270,599 yd^3 = volume of surface impoundment

Basis of estimating and/or computing waste quantity:

REF A and REF 3

Method: Cement-lined reservoir 25 ft deep and 610 feet diameter (diameter determined from scaled map)

Area = A = πr^2

Area x depth = Volume * * *

292,217 ft^2 x 25 ft = 7,306,166 ft^3 / 4 = 270,599 yd^3

(27 ft^3 = yd^3)

Value of 8

RED 11/14/85

5 TARGETS

Ground Water Use

Use(s) of aquifer(s) of concern within a 3-mile radius of the facility:

REF 6
REF 12

The aquifers of concern are used to supply 60% of the city of Santa Fe Springs drinking water and for irrigation. The city does not have an alternate source available to meet the present demand for which groundwater is now used. Value = 3 Score = 9

Distance to Nearest Well

Location of nearest well drawing from aquifer of concern or occupied building not served by a public water supply:

REF 7 and REF 8
REF 13

Location on nearest active well is approximately 3000 ft from site Well # 2S 11W 32J04S owned by Whittier Union High School District. This well is a domestic and irrigation well per Chris Nagler of DWR.

Population Served by Ground Water Wells Within a 3-Mile Radius

Identified water-supply well(s) drawing from aquifer(s) of concern within a 3-mile radius and populations served by each:

City of Santa Fe Springs Wells:

	State Well #	Owner #
REF 6	2S/11W-30R035	1
REF 7	2S/12W-25Q055	304W1
	3S/11W-06D039	4

Whittier Union High School Dist.

2S/11W-32J04S SH550

As well as others which may be located in 3 mile radius and are owned by Suburban Water Systems & San Gabriel Valley Water Co.

Total population served by ground water within a 3-mile radius:

REF 6 4200 connections X 3.8 persons per connection = 15,960

Value of 5

SCORE = 35

KRD 11/14/85

SURFACE WATER ROUTE

1 OBSERVED RELEASE None

Contaminants detected in surface water at the facility or downhill from it (5 maximum):

Rationale for attributing the contaminants to the facility:

* * *

2 ROUTE CHARACTERISTICS

Facility Slope and Intervening Terrain

Average slope of facility in percent:

REF 7 Using the USGS Whittier, Calif. quad, a 10-foot rise a 2500-foot run was measured.

$\frac{10}{2500} \times 100\% = 0.4\%$ slope

Name/description of nearest downslope surface water:

San Gabriel River

REF 7

Average slope of terrain between facility and above-cited surface water body in percent:

160 - 120 = 40 ft. rise

REF 7 13000 ft. run

0.3 % slope Value of 0. SCORE = 0

Is the facility located either totally or partially in surface water? No

REF 7

RCA 11/14/85

Is the facility completely surrounded by areas of higher elevation? No

REF 7

1-Year 24-Hour Rainfall in Inches

4 inches per HRS manual

REF 4

Value of 3. SCORE = 3

Distance to Nearest Downslope Surface Water

13000 ft. to San Gabriel River

REF 7 2000 ft to Sorenson Ave Drain

Value of 2. SCORE = 4

Physical State of Waste

See groundwater. SCORE = 3

* * *

3 CONTAINMENT

Containment

Method(s) of waste or leachate containment evaluated:

REF A Surface impoundment had breaks in the berm, historical evidence of surface outwash, and poor and inadequate run-on diversion structures SCORE = 3

Method with highest score:

XPD 11/14/85

4 WASTE CHARACTERISTICS

Toxicity and Persistence

Compound(s) evaluated

See groundwater. SCORE= 18

Compound with highest score:

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility, excluding those with a containment score of 0 (Give a reasonable estimate even if quantity is above maximum):

See groundwater. SCORE= 8

Basis of estimating and/or computing waste quantity:

* * *

5 TARGETS

Surface Water Use

Use(s) of surface water within 3 miles downstream of the hazardous substance:

REF 10
REF 11

Although the San Gabriel River is within 3 miles, no fishing is done in this particular part of the river. (The river area is primarily used for groundwater recharge.)

Value of 0 SCORE= 0

RCD
11/14/85

Is there tidal influence? No, not this far north.

Distance to a Sensitive Environment

Distance to 5-acre (minimum) coastal wetland, if 2 miles or less:

REF 7 Using the USGS quad and USFWS Pacific Coast Ecological Inventory map, site is not within 2 miles of any sensitive environment.

Value of 0. SCORE = 0

Distance to 5-acre (minimum) fresh-water wetland, if 1 mile or less:

Distance to critical habitat of an endangered species or national wildlife refuge, if 1 mile or less:

Population Served by Surface Water

Location(s) of water-supply intake(s) within 3 miles (free-flowing bodies) or 1 mile (static water bodies) downstream of the hazardous substance and population served by each intake:

There are no water-supply intakes of surface water in area.

REF 10

Value of 0.

SCORE = 0

KCP 11/14/85

Computation of land area irrigated by above-cited intake(s) and conversion to population (1.5 people per acre):

Total population served:

Name/description of nearest of above water bodies:

Distance to above-cited intakes, measured in stream miles.

LEP
11/14/85

AIR ROUTE

REF A 1 OBSERVED RELEASE No observed air release Known, according to abandoned site project file.

Contaminants detected:

Date and location of detection of contaminants

Methods used to detect the contaminants:

Rationale for attributing the contaminants to the site:

* * *

2 WASTE CHARACTERISTICS

Reactivity and Incompatibility

Most reactive compound:

Most incompatible pair of compounds:

KCP 11/14/85

Toxicity

Most toxic compound:

Hazardous Waste Quantity

Total quantity of hazardous waste:

Basis of estimating and/or computing waste quantity:

* * *

3 TARGETS

Population Within 4-Mile Radius

Circle radius used, give population, and indicate how determined:

0 to 4 mi 0 to 1 mi 0 to 1/2 mi 0 to 1/4 mi

Distance to a Sensitive Environment

Distance to 5-acre (minimum) coastal wetland, if 2 miles or less:

Distance to 5-acre (minimum) fresh-water wetland, if 1 mile or less:

KEP
11/14/85

Distance to critical habitat of an endangered species, if 1 mile or less:

Land Use

Distance to commercial/industrial area, if 1 mile or less:

Distance to national or state park, forest, or wildlife reserve, if 2 miles or less:

Distance to residential area, if 2 miles or less:

Distance to agricultural land in production within past 5 years, if 1 mile or less:

Distance to prime agricultural land in production within past 5 years, if 2 miles or less:

Is a historic or landmark site (National Register or Historic Places and National Natural Landmarks) within the view of the site?

KCD
11/14/85

REFERENCES - WASTE DISPOSAL, INC. RANKING PACKAGE

Reference	Source
A	Abandoned Site Project File from California Toxic Substances Control Division, Southern California Section
1	Planned Utilization for the Groundwater Basins of the Coastal Plain of Los Angeles County, Appendix A: Groundwater Geology, Department of Water Resources, Southern District Bulletin No. 104, June 1961.
2	Telephone conversation with George Farag, Los Angeles County Flood Control District, 11-14-84.
3	Dames & Moore: Summary of Findings of Preliminary Site Investigation of Waste Disposal, Inc. Site, 12-7-84.
4	Uncontrolled Hazardous Waste Site Ranking System - A Users Manual, Mitre Corp., 1982.
5	Sax, N.I., Dangerous Properties of Hazardous Materials, Fifth Edition, 1979.
6	Record of Communication with John Price, Chief Engineer of City of Santa Fe Springs, 8-5-85.
7	USGS Quadrangle: Whittier, California.
8	Telephone conversation with Chris Nagler, Department of Water Resources, 11-14-84,
8A	Central and West Basin Water Replenishment District, Annual Survey Report on Ground Water Replenishment, 1985.
9	Watermaster Service Central Basin Report, October 1984.
10	Telephone and personal conservations with George Beaty, City of Santa Fe Springs Planning and Development, 11-9-84.
11	Telephone conversation with Pat Moore, Department of Fish and Game, 11-9-84.

KCP
11/14/85

References - Waste Disposal, Inc., contd.

Reference

12 Telephone conversation between Therese Gioia, USEPA Region IX and John Price, Santa Fe Springs, chief engineer. 10-15-85.

13 Telephone conversation between Kathleen Galloway, MITRE, and Chris Nagler, Dept. of Water Resources. 11-13-85.

KCP
11/14/85

Reference 12

RECORD OF COMMUNICATION

☑ PHONE CALL ☐ DISCUSSION ☐ FIELD TRIP ☐ CONFERENCE
☐ OTHER (SPECIFY)

(Record of item checked above)

TO:	FROM:	DATE
John Price Santa Fe Springs Chief Eng.	Therese Gioia	10-15-85
		TIME 9:00 AM

SUBJECT
Aquifers from which city's groundwater is drawn

SUMMARY OF COMMUNICATION

Mr. Price researched his records and found the following information regarding which aquifers are used for the city's water supply:

Well #1 ⇒ Silverado + Sunnyside
Well #2 ⇒ Hollydale, Jefferson, Lynwood, Silverado, and Sunnyside
Well #4 ⇒ Lynwood, Silverado, & Sunnyside
Well #304 ⇒ Silverado
Well #308 ⇒ Jefferson + Lynwood
Well #309 ⇒ Sunnyside

Mr. Price said Well #305 listed in the Watermaster Report is not used and that Well #308 is also unused. Well #309 is the only well to use the Sunnyside Aquifer alone.

CONCLUSIONS, ACTION TAKEN OR REQUIRED

Of the wells in the 3-mile radius, Well #309 represents less than 25% of the groundwater used by the city.

INFORMATION COPIES
TO:

EPA Form 1300-6 (7-72) REPLACES EPA HQ FORM 5300-3 WHICH MAY BE USED UNTIL SUPPLY IS EXHAUSTED.

Reference 13

Telecon

From: Kathleen Galloway, MITRE KED

To: Chris Nagler, DWR 213-620-4119

Date: 13 November, 1985

Time: 11:00 AM

Subject: Whittier Union District School Well No. 2S11W 32J Ø4S located at the Sierra High School Campus.

The well is screened at 228 ft. which corresponds to the Lynnwood aquifer. It is 804 ft. deep and is also screened in the Sunnyside aquifer.

REF A

FINAL DISPOSITION

Name Santa Ana ASP

Date January 31, 1983

Site Name Waste Disposal, Inc.

Site Address 12700 E. Los Nietos Road

City Santa Fe Springs Zip Code 90670 County Los Angeles

RCRA # _____ Superfund # _____ SWIS # 19-49-0142

REFERRAL: Date(s) referred: June 30, 1982

Referral Agency Name(s): DOHS-LA-HWMB-Enforcement

Reason referred: The Site was essentially an unregulated dump between 1928 to about 1965 and is used as a dumping ground for oil field contractors and operators. The site accepted rotary drilling mud, steel mill slag, dry mud from oil field sumps, and acetylene sludge. The operators on the site accepted liquid wastes without identification, and wastes were received at night. *(Continued below)

INCLUDE IN ASP SITE SUMMARIES: (date and initial)

	Yes	No (explain below)
Lead Person	Ozden Mindevalli OOM.	
Regional Administrator	John Hinton 6/13/83	
Project Manager	Thomas Bailey 6/29/83	
Other (Coordinator)	Ned Therien 5/9/83	

Reason for not including in the site summaries: In the early 60's, the site also received Pazone, which is refinery tank bottom sediment. The site is surrounded by residential areas and is adjacent to high school playing field. The site could be a source of groundwater contamination in this area. It is recommended that DOHS-HWMB-Enforcement do a detailed investigation of this site.

ABANDONED SITE PROJECT

MAP SITE #9:

FIRM: Waste Disposal Inc.
12700 E. Los Nietos Road
Santa Fe Springs

STATUS: Inactive

aka Pitts-Hudson-Caneer-Carter Dump
aka Los Nietos Dump
aka Whittier Area Disposal Dump
Aka Chicksan Co.
aka Security Engineering

CURRENT OWNERS: Santa Fe Springs Recycling
P.O. Box 5115
Fullerton, CA 92635

FINDINGS: Site was a licensed Class III disposal Site. Received rotary drilling mud, steel mill slag, dry mud from oil field sumps, acetylene sludge, dicyclodistilate, cesspool operations fluids and numerous reports of operator receiving materials without identification and wastes were received at night without supervision. Site had odor problems and owner was fined many times during the period 2-49 to 7-58 when it was in operation.

Neighbors of Waste Disposal, Inc. complained to all government agencies about the problem at the dump and their adversed health and economic effects to no avail. In 8-58 the neighbors took Waste Disposal to Court (Whittier Court Case #M11447,M11449, M11519 and M15183) claiming the activities at Waste Disposal were causing adverse health effects (vomiting, loss of appetite, headaces), loss of property value, noise during night hours and wastes dropped in the streets. The relief requested from the court was 1) suspend operations immediately and make steps toward permenent closing of the site and 2) revoke permit because operator received wastes he was unlicensed for.

Tips from area businessmen revealed that Waste Disposal stopped receiving liquid wastes around 1958 and took concrete from highway construction until about 1964 or 65.

The size of the dump was considerably larger during the 1950's when the entrance was right on the road edge.

The LACFCD memo indicates that Waste Disposal overlies fine sands, sandy clays and gravels. Shallow wells within 500 ft & 4200 ft water table depth in 1955 about 85 feet.
**

CURRENT CONDITION: Open field littered with demolition debris in the center portion and site has businesses over the roadside border.

RECOMMENDATION: Field Survey teams recommends to check air photo for exact size of site through the years of operation, and to schedule interviews with Santation District Inspectors. Agency Search Team recommends that the Whittier Court Case files be investigated, and all other possible sources such as Santa Fe Springs City Hall and The County Health Dept., etc. The type of industries that border the dump during the 1950's and the high school should be taken into consideration.

** Historical research shows an open oil storage tank on property.

Waste Disposal Inc.
12817 Los Nietos Rd.
Santa Fe Springs, Ca 90670

History

The Abandoned Site Project files date this dump to 1928. It was first permitted after citizen complaints, in 1949 and had developed from borrow pits. In 1949 the facility consisted of a large concrete lined basin (25 ft deep and extending 10 ft above ground level) capable of holding 1,000,000 bbl (barrels, not gallons). The central area consisted of about 11 acres altho at one time the site was estimated at more than 30 acres. Around the large pond were oil sumps and landfill for solid waste. Much documentation about the site has been lost as agencies threw away old files. Several aerial photos document its use into the early 1960s. Some correspondence files exist from the period 1949 to 1958. The history is one of problems and neglect.

Problem:

The Waste Disposal site was "completely unregulated site of dumps, several, oil dumps, solid waste landfill and a large reservoir. when finally permitted in 1949 after 20 years of operation. Although it was supposed to be limited to ~~24 hrs~~ a 6:00 AM to ~~6:00 PM~~ 6:00 PM operation, the dump was actually open 24 hours a day. In 1953, within days of receiving an order to comply (close at night) the operator secured a variance for 24 hour a day operation. Eight months later the firm was ordered to maintain a 24 hour caretaker. Correspondence contains repeated allegations that the pond received many undesignated liquids. In 1957 the owner was quoted by the Whittier News "... it soon became evident that there was no practical means of controlling the continuing and promiscuous dumping." In other words, no one knows what materials were dumped. Refinery tank bottoms probably contained phenols and a variety of metals. The materials from the pond were allowed to drain onto the ground. Aerial photos from 1956 and 1960 showed breaks in the berms and outwash patterns on the ground. In

Can old drawing of the facility show a not "drain" on the north side.

1952 the operator secured a permit to lay pipe on top of Greenleaf Ave for two weeks to drain fluids from the dump. In 1953, ten months later the pipe was still on top of the street. In 1957 the pipe was still in the ground. On February 3, 1957 an inspector noticed an aluminum pipe running from the dump down Greenleaf Ave. Leaks in the pipe showed there was oil in the water. Local ~~complainants~~ people contacted regulatory agencies because they felt allowing oil flow to the sewer was an offense. The giant sump apparently acted only as a settling basin. Regulatory response to most of the citizens' complaints during the 1950s was evasive and non-committal. Foul odors caused sickness of workmen at the site and many problems for local people. Those living near the dump claimed adverse effects including illness, discomfort, loss of appetite, headaches, nausea, vomiting and inability to eat the hungry. Some days children couldn't play outside and ~~a nearby school~~ windows had to be closed at a nearby school. Letters from the school principal and superintendent remain from the ~~[illegible]~~ 1950s. In 1957 the ~~operator~~ owners ~~was~~ were charged with 3 violations of section 24 24= of the Health and Safety Code. A year later

they pleaded guilty in [illegible] and paid a $100.00 fine. Two similar fines were suspended.

St Paul High School and athletic fields are very near the site (southeast and north perhaps a 1000 ft. away).

Photos from, Colored aerial from 11-27-53 (L.A. County Engineering Facility) show the reservoir almost brim full with oily material outside the retaining wall.

Soils below the site were described as alternating fine sands, sandy clays and gravels. Depth to ground water 45 ft (1949) and 30 ft (1943).

Recommendation

Core samples from the site are necessary to determine the presence and concentration of hazardous materials. This site may have contributed to groundwater contamination. Well testing is recommended. High Priority is recommended because of the long history of promiscuous dumping", the large volume of material, proximity to groundwater and the adjacent school and athletic field.

PRELIMINARY ASSESSMENT
Region 9

Preparer's Name Linse Erica Date July 19 1984

		SOURCE	INFORMATION
1.	Site ID Number		
2.	Site Name	Abandoned site file	Waste Disposal Inc.
3.	Site Location	Santa Fe Springs, George Beaty, Planning Dept City Hall, Santa Fe Springs	12617 Los Nietos Rd Santa Fe Springs, Ca
4.	County	" "	Los Angeles
5.	Owner (Address & telephone no.)	"	Adeline R. Bennett In care of M. Pitts 13978 Summit Drive Whittier, Ca 90602
6.	Operator (Address & telephone no.)	" "	Operator was Waste Disposal Inc. 12731 E. Los Nietos Rd. Whittier, Ca
7.	Type of Ownership	" "	Private
8.	Status	" "	Inactive
9.	Source Activity	Regional Planning Commission - County of Los Angeles letter 30 Aug 1949 To A.H. Adams, Director of Planning	Petroleum wastes, steel mill slag, Brewery wastes, Cesspool sewage, and midnight dumping.
10.	Years of Operation	Abandoned site file	1928 to about 1965
11.	Facility Type	↓ ↓	OIL SUMPS AND A concrete lined 1,000,000 Bbl pond. Also a solid waste landfill (Class II)
12.	Waste Type and Description		drilling muds, slag, dry mud from oil field sumps, acetylene sludge, liquid wastes without identification, brewery wastes, sewage, refinery tank bottoms, and a dicyclo distillate. In 1957 owner stated "no practical means of controlling the continuing and promiscuous dumping".

EPA-IX-FORM 890 1/18/83

15. Contacts Mr. George Beaty, Planning Dept. Santa Fe Springs City Hall 213-868-0511 X211

16. Incidents 1953 Workman at site became ill and had to leave the premises - unable to continue working because of the smell.

Fire and Explosion ___ Direct Contact ___

17. Inspections (date, type, by whom, recommendations)

July 1949 Zoning Investigation, L.D. Tweedy, Borrow pit and solid fill dumping

May 1950 Field Investigation. Solid materials are being dumped to east of the cement reservoir and oil well mud is being dumped to the west

2-57 order investigation, management cited on legal complaint.

2-13-57 same after 2-18-57 same.

18. Enforcement History (list date, type of action, requirements, outcome)

Before 1949, operated without permit. 6AM-6PM OPERATION - NOT 24 HRS/DAY.
4 MARCH 1953 ORDER TO COMPLY WITH
March 6-27, 1958 Whittier Municipal Court, Cases number M 11447, M 11449, M 11519. Owners plead guilty to section 24243 Health & Safety Code. One $100 fine paid; 2 suspended.

19. Initial recommendation for further action:

Soil sampling to determine presence and concentration of hazardous materials testing is recommended. High Priority is recommended because of the very sensitive surrounding community; the large volume of material, proximity to groundwater and the nearby elementary school.

20. EPA recommendation for further action:

18. Response Termination: __ No Further Action __ Pending __ Active

Justification:

TYPE OF ACTION	NAME OF AGENCY OR CONTACT	TELEPHONE # OR ADDRESS	INFORMATION RECEIVED
RWQCB File Search	RWQCB casefile 53-131		AKA Whittier Disposal Area, Los Nietos Dump, Pitts-Hudson-Caneer-Carter Dump. 7-29-53 LACE: Ind waste Permit 6130 acceptance of acetylene sludge into Rotary mud sump. 5-27-55 Request to exten boundaries 200,000 sq.ft. 8-22-55 LACFCD: Site overlies fine sands, sandy clays, gravels, OK to extend of stipulate material to be dumped. Shallow wells within 500 ft. depth of H_2O table = 85ft. 7-11-58 Letter from "Spokesman" of Whittier History of dump 4-49 to 7-58 many complaints about odor (many health side-effects: vomit, loss of appetite, headaches loss of tenants, loss of prospective purchases, truck drippings on street Noise during sleeping hours (continued)

TYPE OF ACTION	NAME AGENCY OR CONTACT	TELEPHONE # OR ADDRESS	INFORMATION RECEIVED
File Search	RWQCB		(cont.) 4-19-72 Telecon memo. Dump closed ≈10 yrs. Class III Disposal Site acetylene sludge, brewer residue, cesspool operatio fluids.
File Search	LACE I 629 P 9057		Aug 5, 1953 permit LACE Division of Sanitation Industrial Wa Section. Rotary drilling mud, clec earth rock, sand + gravel, paving fragments, concrete brick, plaster, steel mill slag, dry mud cake from oil field sumps (production tank sludge), acetylene sludge. 4-22-59 Arthur Pickett to Menlo L. Wilhalms people associated with waste disposal Inc. N.B. Hudson 206 E. Penn, Wh D.L. Carter 8306 S. Oceanview whit. [redacted]. Marvin Pitts 8520 S. Catalina, Whit. F. Caneer 401 Hill, whit (← cont. above)
	(cont.) dumped mud from oil wells, stopped in 1955, then took concrete from Hwy. construction, stopped in 64-65.		

SITE INFORMATION SUMMARY

Waste Disposal, Inc.
12700 E. Los Nietos Road
Santa Fe Springs, CA 90670

HISTORY

Waste Disposal Inc. was in operation from 1928 to 1965 and was classified as a Class III disposal site. This site was also known as Pitts-Hudson-Caneer-Carter Dump, Los Nietos Dump. Whittier Area Disposal Dump, Chicksan Company, and Security Engineering. The site is currently owned by Santa Few Springs Recycling, P.O. Box 5115, Fullerton, CA 92635.

DESCRIPTION OF PROBLEM

The site was essentially an unregulated dump, between 1928 to about 1949, and was used as a dumping ground for oil field contractors and operators. Between 1949 to 1958, the site accepted rotary drilling mud, steel mill slag, dry mud from oil field sumps and acetylene sludge.

Interviews with Los Angeles County Sanitation District inspectors revealed that the operator of the dump accepted liquid waste without identification and wastes were received at night.

In 1958, a citizen's group took Waste Disposal to court alledging that activities caused adverse health effects, loss of property values and nightly activity as well as other problems. (Whittier Court Case # M11447, M11449, M11519, and M15183).

Files at the Los Angeles County Engineers were destroyed, however a color slide of the site survived. The pit was unlined and accepted payone, which is refinery tank bottom sediment. A questionnaire returned from Powerine Refinery stated that "unspecified refinery wastes" were accepted at the dump.

This site is considered to be extremely hazardous by the L.A. (A-D) Area ASP staff due to the fact that it is surrounded by residential areas and is adjacent to a high school playing field. The site could also be a source of grounwater contamination in this area.

SAMPLING AND RESULTS

The Abandoned Site Project staff have not sampled the site at this time. Core samples are required to determine the extent and composition of material present beneath the ground surface.

CLEANUP AND MITIGATION

Cleanup and mitigation measures are pending sampling of the site.

A.H.Adams, Director of Planning
The Regional Planning Commission
County of Los Angeles, California

KEF A

Case No. 634

We, the undersigned, all property owners and residents of property in adjoining areas to the land involved in this permit, respectfully request the Planning Commission to deny this permit wholly and completely.

The dumping conducted on this property in the past has been so hazardous and annoying to us that numerous times we have discussed getting up a petition against this dump.....at the time of the Kathy Fiscus incident, we were all again aware of the danger to our children and children for miles around in this dump. The dumping and trucking conducted in the past has been very very objectionable to us....if a permit is granted we feel certain that all dumping and trucking operations would be increased considerably and would be more than most of us could stand.

The place in the dump now referred to as "solid dump" is in reality solid dump around the edges with a fluid fill in the center....you can see the logs and rafts the small boys have floated out to the middle...this is where one small boy already has fallen in but luckily saved by an older boy....this is where the so called solid dump has left crevices and cavities have formed many caves for the smallchildren to play in. This is a neighborhood of small children... and a scant five six blocks away is an elementary school of over 500 students. While this property is fenced, it is not adequate to keep children out and it is only a question of time until a serious accident or death occurs in this place if the children are not protected. A gate is provided on Los Nietos but it is locked only part of the time.....on the Greenleaf side, there is no gate...only a makeshift affair where part of the fence is put down to allow trucks to enter.....this section of fence is left down completelymany many times.

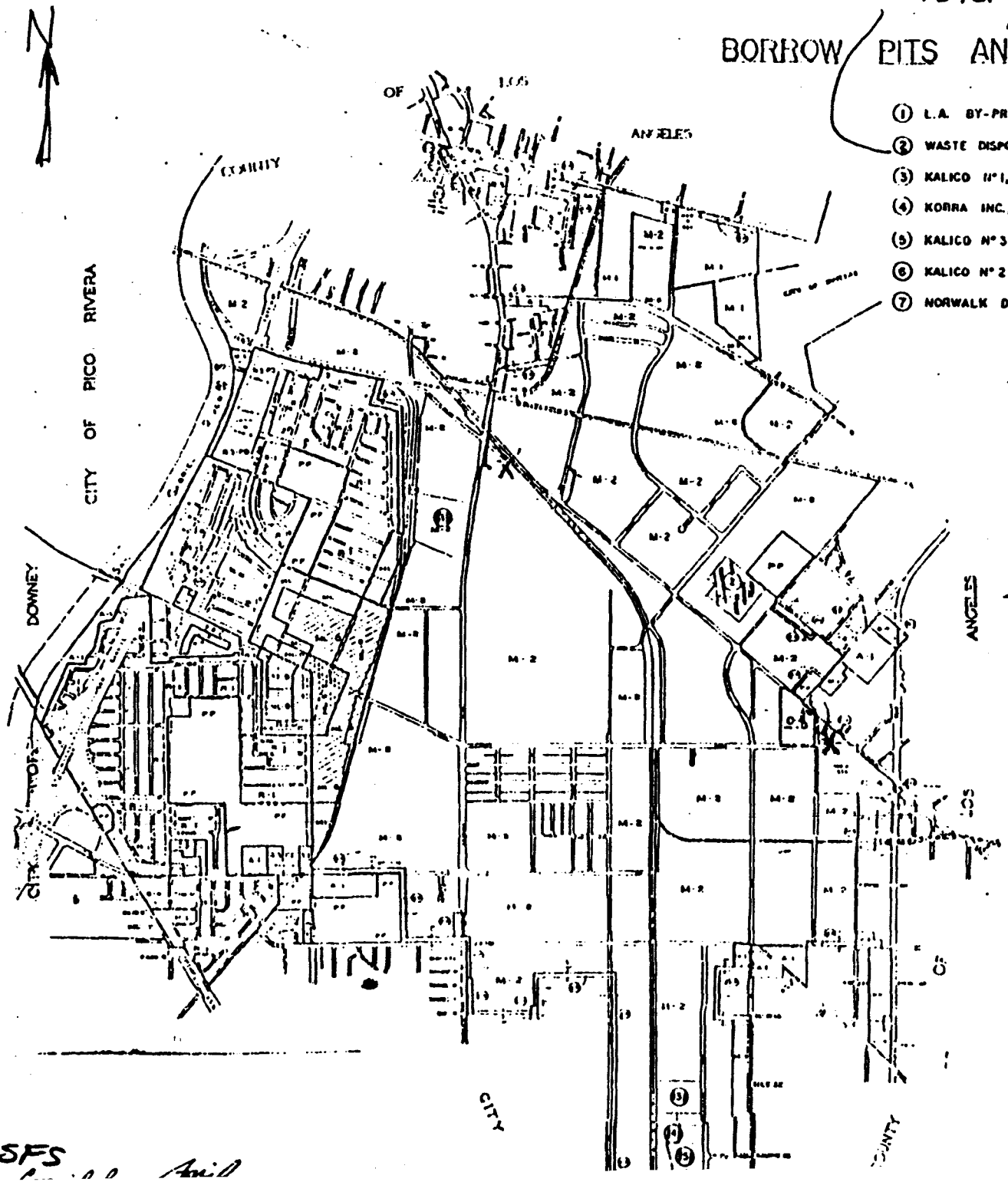
We have a condition here of constant floating clouds of dust that prevail for hours and hours.....not only the hours that actual dumping or trucking is carried on but hours after as much of the dust floats onto Greenleaf Ave and then is re-raised and re-floated everytime a car goes by. This dust is not only dust from the dirt but the more harmful silt of plaster, brick, etc. causing a definite health hazard, unending home and property cleaning problems and many hazards and annoyances.

These list only the outstanding objections; there are many more such as dumped paper floating over on our property; trucks working all hours of the night; trucks dragging mud, etc out onto the highway, and many others.

Stanley W. Cleveland Pauline R. Cleveland 12923 E. Barton Rd
Gerald Kubetsch Frances O Kubetsch 12910 E. Barton Rd
Jean H. Bennett. Jewel O. Bennett 12943 E. Los Nietos Rd
Ed A Wilhelm Maude D Wilhelm 12942 E Barton Rd
James R. Kirkland, Ruby M. Kirkland 12934 Barton Rd Whitt
David A. Albert 13003 E. Barton Rd. Whittier Cal
Bert Gilbertson 13023 East Barton Road, Whittier Calif
Ruby E. Gilbertson 13023 East Barton Road Whittier Calif

12731 E. Los Nietos Rd
Regional Planning Commiss

BORROW PITS AND/OR DUMP SITES



1. L.A. BY-PRODUCTS, 9615 NORWALK BLVD.
2. WASTE DISPOSAL INC. 12817 LOS NIETOS RD.
3. KALICO N°1, 11801 GREENSTONE AVE.
4. KORRA INC., 12027 GREENSTONE AVE.
5. KALICO N°3, 12201 GREENSTONE AVE.
6. KALICO N°2, 12924 IMPERIAL HWY.
7. NORWALK DUMP, 13780 IMPERIAL HWY.

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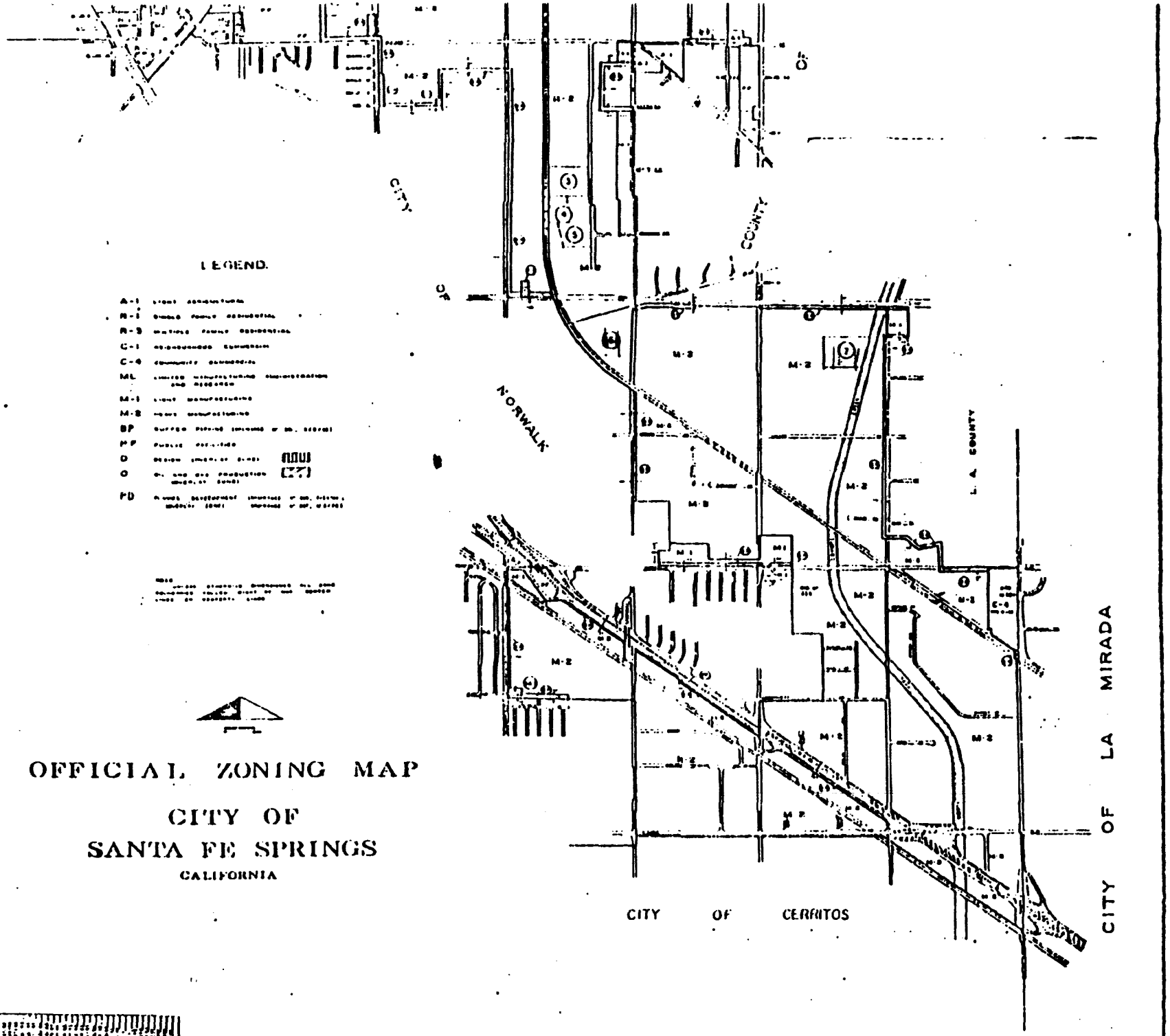
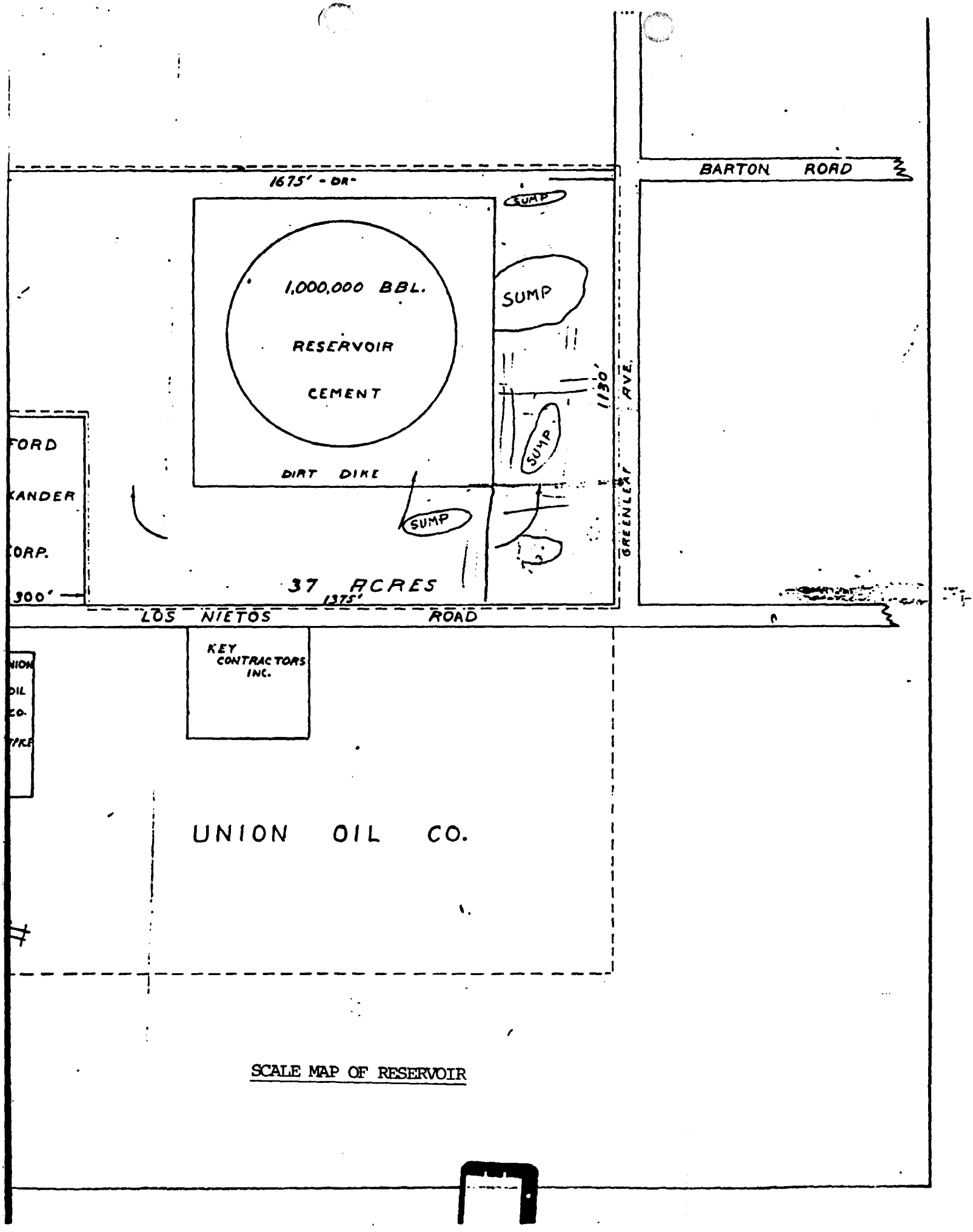


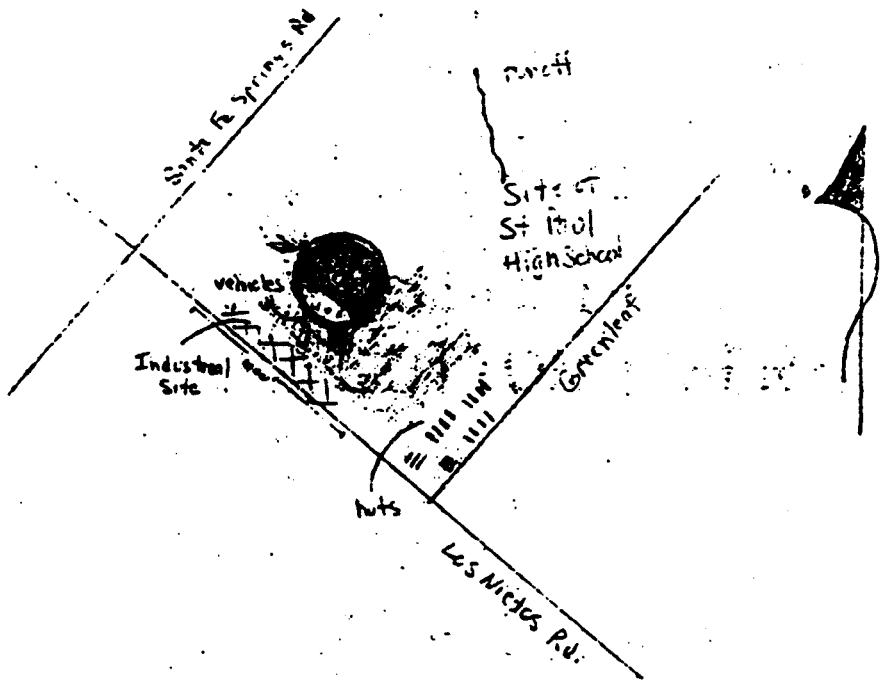
OFFICIAL ZONING MAP

CITY OF SANTA FE SPRINGS

CALIFORNIA

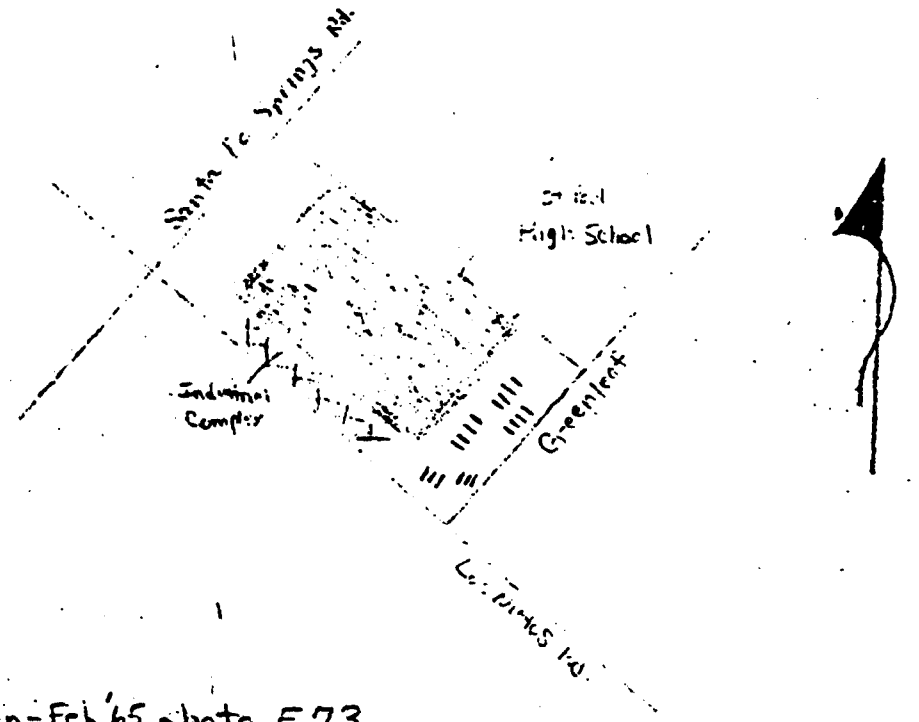


SCALE MAP OF RESERVOIR



Date 6-30-60 photo 2313 L25

Waste Disposal is still active. Vehicles present seem to be filling in pit with soil material. Breachs in the berm are still evident. St. Paul High School is now constructed to the northeast of the site.



Date Jan-Feb '65 photo E 73

Waste Disposal is no longer active. Circular pit is now covered over with soil.

NARRATIVE SUMMARY - WASTE DISPOSAL, INC.

Facility consists of a concrete-lined 1,000,000 barrel capacity pond/sump, oil sumps, and a solid waste landfill. Types of waste include petroleum wastes, steel mill slag, brewery wastes, sewage, drilling muds, acetylene sludge, refinery tank bottoms, dicyclodistillate, and unidentified substances reportedly dumped at the facility at night. There have been numerous citizen complaints concerning conditions at the facility throughout its operation.

Results of a recent soil investigation show the presence of numerous hazardous substances at the facility. The groundwater aquifers below the site are connected through natural conditions and wells screened at multiple depths. The site presents a potential groundwater problem.

11/14/85

ORIGINAL

DO NOT

Facility name: WASTE DISPOSAL, INC.

Location: 12817 Los Nietos Rd., Santa Fe Springs, California 90670

EPA Region: IX

Person(s) in charge of the facility: Adeline R. Bennett (owner) c/o M. Pitts
13978 Summit Drive
Whittier, CA 90602

Name of Reviewer: _____ Date: _____

General description of the facility:
(For example: landfill, surface impoundment, pile, container; types of hazardous substances; location of the facility; contamination route of major concern; types of information needed for rating; agency action, etc.)

Facility consists of a concrete-lined 1,000,000-barrel capacity pond/sump, oil sumps, and a solid waste landfill. Types of waste include petroleum wastes, steel mill slag, brewery wastes, sewage, drilling muds, acetylene sludge, refinery tank bottoms, dicyclo-distillate, and unidentified substances reportedly dumped at the facility at night. Years of operation are 1928 to 1965. This site presents a potential groundwater problem.

Score: S_M = 34.60 S_{gw} = 59.88 S_{sw} = 0 S_a = 0)
S_{FE} =
S_{DC} =

SM = 34.60

FIGURE 1
HRS COVER SHEET

QA
Kathleen Galloway
11/14/85

Ground Water Route Work Sheet					
Rating Factor	Assigned Value (Circle One)	Multi-plier	Score	Max. Score	Ref. (Section)
1 Observed Release	(0) 45	1	0	45	3.1
If observed release is given a score of 45, proceed to line 4. If observed release is given a score of 0, proceed to line 2.					
2 Route Characteristics					3.2
Depth to Aquifer of Concern	0 1 2 (3)	2	6	6	
Net Precipitation	(0) 1 2 3	1	0	3	
Permeability of the Unsaturated Zone	0 (1) 2 3	1	1	3	
Physical State	0 1 2 (3)	1	3	3	
	Total Route Characteristics Score		10	15	
3 Containment	0 1 2 (3)	1	3	3	3.3
4 Waste Characteristics					3.4
Toxicity/Persistence	0 3 6 9 12 15 (18)	1	18	18	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 (8)	1	8	8	
	Total Waste Characteristics Score		26	26	
5 Targets					3.5
Ground Water Use	0 1 2 (3)	3	9	9	
Distance to Nearest Well/Population Served	0 4 6 8 10 / 12 16 18 20 / 24 30 32 (35) 40	1	35	40	
	Total Targets Score		44	49	
6 If line 1 is 45, multiply 1 x 4 x 5; If line 1 is 0, multiply 2 x 3 x 4 x 5			34,320	57,330	
7 Divide line 6 by 57,330 and multiply by 100	S_{gw} = 59.86				

FIGURE 2
GROUND WATER ROUTE WORK SHEET

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Surface Water Route Work Sheet					
Rating Factor	Assigned Value (Circle One)	Multi-plier	Score	Max. Score	Ref. (Section)
1 Observed Release	0 45	1	0	45	4.1
If observed release is given a value of 45, proceed to line 4. If observed release is given a value of 0, proceed to line 2.					
2 Route Characteristics					4.2
Facility Slope and Intervening Terrain	0 1 2 3	1	0	3	
1-yr. 24-hr. Rainfall	0 1 2 3	1	3	3	
Distance to Nearest Surface Water	0 1 2 3	2	4	6	
Physical State	0 1 2 3	1	3	3	
	Total Route Characteristics Score		10	15	
3 Containment	0 1 2 3	1	3	3	4.3
4 Waste Characteristics					4.4
Toxicity/Persistence	0 3 6 9 12 15 18	1	18	18	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1	8	8	
	Total Waste Characteristics Score		26	26	
5 Targets					4.5
Surface Water Use	0 1 2 3	3	0	9	
Distance to a Sensitive Environment	0 1 2 3	2	0	6	
Population Served/Distance to Water Intake Downstream	0 4 6 8 10 12 16 18 20 24 30 32 35 40	1	0	40	
	Total Targets Score		0	55	
6 If line 1 is 45, multiply 1 x 4 x 5 If line 1 is 0, multiply 2 x 3 x 4 x 5			0	64,350	
7 Divide line 6 by 64,350 and multiply by 100		S_{sw} =	0		

FIGURE 7
SURFACE WATER ROUTE WORK SHEET

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	S	S^2
Groundwater Route Score (S_{gw})	59.86	3583.22
Surface Water Route Score (S_{sw})	0	0
Air Route Score (S_a)	0	0
$S_{gw}^2 + S_{sw}^2 + S_a^2$		3583.22
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2}$		59.86
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2} / 1.73 = S_M =$		34.60

FIGURE 10
WORKSHEET FOR COMPUTING S_M

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WASTE DISPOSAL, INC

Air Route Work Sheet					
Rating Factor	Assigned Value (Circle One)	Multi-plier	Score	Max. Score	Ref. (Section)
1 Observed Release	0 45	1	0	45	5.1
Date and Location:					
Sampling Protocol:					
If line 1 is 0, the S_a = 0. Enter on line 5. If line 1 is 45, then proceed to line 2.					
2 Waste Characteristics					5.2
Reactivity and Incompatibility	1 2 3	1		3	
Toxicity	0 1 2	3		9	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7	1		8	
	Total Waste Characteristics Score			20	
3 Targets					5.3
Population Within 4-Mile Radius	0 9 12 15 18 21 24 27 30	1		30	
Distance to Sensitive Environment	0 1 2 3	2		6	
Land Use	0 1 2 3	1		3	
	Total Targets Score			39	
4 Multiply 1 x 2 x 3				35,100	
5 Divide line 4 by 35,100 and multiply by 100		S_a = 0			

FIGURE 9
AIR ROUTE WORK SHEET

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11/14/85

June 28, 1982

DOCUMENTATION RECORDS
FOR
HAZARD RANKING SYSTEM

INSTRUCTIONS: The purpose of these records is to provide a convenient way to prepare an auditable record of the data and documentation used to apply the Hazard Ranking System to a given facility. As briefly as possible summarize the information you used to assign the score for each factor (e.g., "Waste quantity = 4,230 drums plus 800 cubic yards of sludges"). The source of information should be provided for each entry and should be a bibliographic-type reference that will make the document used for a given data point easier to find. Include the location of the document and consider appending a copy of the relevant page(s) for ease in review.

FACILITY NAME: WASTE DISPOSAL, INC.

LOCATION: 12817 Los Nietos Rd., Santa Fe Springs, CA 90670

ECA
11/14/85

GROUND WATER ROUTE

1 OBSERVED RELEASE None

Contaminants detected (5 maximum):

Rationale for attributing the contaminants to the facility:

* * *

2 ROUTE CHARACTERISTICS

Depth to Aquifer of Concern

Name/description of aquifers(s) of concern:

REF 1

Name of aquifer	Depth from surface at 2S/11W-32
Gardena	50'
Hollydale	100'
Jefferson	150'
Lynwood	300-500'
Silverado	600-750'

Depth(s) from the ground surface to the highest seasonal level of the saturated zone [water table(s)] of the aquifer of concern:

Two nearby wells were measured by LACFCD in 1984:

REF 2

1. LACFCD 1644G = 2S/11W-32K5 , 32.6' to water on 4-13-84
2. LACFCD WASH = 2S/11W-32Q3 , 43.6' to water on 6-11-84

Depth from the ground surface to the lowest point of waste disposal/storage:

REF 3 Analytical results indicate waste at a depth of 20 feet.

Depth to aquifer of concern : 32.6' - 22' = 10.60'

Value of 3. SCORE = 6

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Net Precipitation

Mean annual or seasonal precipitation (list months for seasonal):

REF 4 16 inches of mean annual precipitation.

Mean annual lake or seasonal evaporation (list months for seasonal):

REF 4 54 inches of mean annual lake evaporation.

Net precipitation (subtract the above figures):

16 - 54 inches = -38 inches. Value of 0.

SCORE = 0

Permeability of Unsaturated Zone

Soil type in unsaturated zone:

Soil samples were taken for Dames & Moore and analyzed by California Analytical Laboratories.

REF 3

1. West of reservoir : 14-18' clay with silt, sand
2. North-northwest of reservoir: 8-21' clay with silt, 22-24' sand
3. East-southeast of reservoir: 4-9' clay with silt, 9-18' silty clay, 18-20' clayey sand

Permeability associated with soil type:

REF 4 Based on Table 2 of Uncontrolled Hazardous Waste Site Ranking System: A Users Manual.

Value of 1. SCORE = 1

Physical State

Physical state of substances at time of disposal (or at present time for generated gases):

REF 3
REF A Site investigation identified liquid waste at ≈ 22 feet.

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3 CONTAINMENT

Containment

Method(s) of waste or leachate containment evaluated:

REF 3 Integrity of cement lining of large surface impoundment has not been evaluated. Disposal in areas outside surface impoundment or possible leakage of impoundment is evident from sampling results of boring in area outside impoundment.

Method with highest score:

There is no containment in the contaminated areas outside the surface impoundment.

Value of 3 Score = 3

4 WASTE CHARACTERISTICS

Toxicity and Persistence

REF 3
REF 4
REF 5

Compound(s) evaluated:

Benzo(a)pyrene: 3 Toxicity 3 Persistence Phenanthrene: 3 Toxicity 2 Persistence

Phenol : 3 Toxicity, 1 Persistence

Benzene : 3 Toxicity, 1 Persistence

Toluene : 2 Toxicity, 1 Persistence

Compound with highest score:

Benzo (a) pyrene

Value of 18 SCORE = 18

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility, excluding those with a containment score of 0 (Give a reasonable estimate even if quantity is above maximum):

REF A and REF 3

270,599 yd^3 = volume of surface impoundment

Basis of estimating and/or computing waste quantity:

REF A and REF 3

Method: Cement-lined reservoir 25 ft deep and 610 feet diameter (diameter determined from scaled map)

Area = A = πr^2

Area x depth = Volume * * *

292,247 ft^2 x 25 ft = 7,306,166 ft^3 = 270,599 yd^3

(27 ft^3 = yd^3)

Value of 8

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5 TARGETS

Ground Water Use

Use(s) of aquifer(s) of concern within a 3-mile radius of the facility:

REF 6
REF 12

The aquifers of concern are used to supply 60% of the city of Santa Fe Springs drinking water and for irrigation. The city does not have an alternate source available to meet the present demand for which groundwater is now used. Value = 3 Score = 9

Distance to Nearest Well

Location of nearest well drawing from aquifer of concern or occupied building not served by a public water supply:

REF 7 and REF 8
REF 13

Location on nearest active well is approximately 3000 ft from site Well # 2S11W32J04S owned by Whittier Union High School District. This well is a domestic and irrigation well per Chris Nagler of DWR.

Population Served by Ground Water Wells Within a 3-Mile Radius

Identified water-supply well(s) drawing from aquifer(s) of concern within a 3-mile radius and populations served by each:

City of Santa Fe Springs Wells:

State Well #	Owner #
REF 6 25/11W-30R035	1
REF 7 25/12W-25Q055	304W1
3S/11W-06D039	4

Whittier Union High School Dist.

2S/11W-32J04S	SH550

As well as others which may be located in 3 mile radius and are owned by Suburban Water Systems & San Gabriel Valley Water Co.

Total population served by ground water within a 3-mile radius:

REF 6 4200 connections x 3.8 persons per connection = 15,960

Value of 5

SCORE = 35

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SURFACE WATER ROUTE

1 OBSERVED RELEASE None

Contaminants detected in surface water at the facility or downhill from it (5 maximum):

Rationale for attributing the contaminants to the facility:

* * *

2 ROUTE CHARACTERISTICS

Facility Slope and Intervening Terrain

Average slope of facility in percent:

REF 7 Using the USGS Whittier, Calif. quad, a 10-foot rise a 2500-foot run was measured.

$\frac{10}{2500} \times 100\% = 0.4\%$ slope

Name/description of nearest downslope surface water:

San Gabriel River

REF 7

Average slope of terrain between facility and above-cited surface water body in percent:

160 - 120 = 40 ft. rise

REF 7 13000 ft. run

0.3 % slope Value of 0. SCORE = 0

Is the facility located either totally or partially in surface water? No

REF 7

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Is the facility completely surrounded by areas of higher elevation? No

REF 7

1-Year 24-Hour Rainfall in Inches

4 inches per HRS manual

REF 4

Value of 3. SCORE = 3

Distance to Nearest Downslope Surface Water

13000 ft. to San Gabriel River

REF 7 2000 ft to Sorenson Ave Drain

Value of 2. SCORE = 4

Physical State of Waste

See groundwater. SCORE = 3

* * *

3 CONTAINMENT

Containment

Method(s) of waste or leachate containment evaluated:

REF A Surface impoundment had breaks in the berm, historical evidence of surface outwash, and poor and inadequate run-on diversion structures SCORE = 3

Method with highest score:

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4 WASTE CHARACTERISTICS

Toxicity and Persistence

Compound(s) evaluated

See groundwater. SCORE= 18

Compound with highest score:

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility, excluding those with a containment score of 0 (Give a reasonable estimate even if quantity is above maximum):

See groundwater. SCORE= 8

Basis of estimating and/or computing waste quantity:

* * *

5 TARGETS

Surface Water Use

Use(s) of surface water within 3 miles downstream of the hazardous substance:

REF 10
REF 11

Although the San Gabriel River is within 3 miles, no fishing is done in this particular part of the river. (The river area is primarily used for groundwater recharge.)

Value of 0 SCORE= 0

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Is there tidal influence? No, not this far north.

Distance to a Sensitive Environment

Distance to 5-acre (minimum) coastal wetland, if 2 miles or less:

REF 7 Using the USGS quad and USFWS Pacific Coast Ecological Inventory map, site is not within 2 miles of any sensitive environment.

Value of 0. SCORE = 0

Distance to 5-acre (minimum) fresh-water wetland, if 1 mile or less:

Distance to critical habitat of an endangered species or national wildlife refuge, if 1 mile or less:

Population Served by Surface Water

Location(s) of water-supply intake(s) within 3 miles (free-flowing bodies) or 1 mile (static water bodies) downstream of the hazardous substance and population served by each intake:

There are no water-supply intakes of surface water in area.

REF 10

Value of 0.

SCORE = 0

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Computation of land area irrigated by above-cited intake(s) and conversion to population (1.5 people per acre):

Total population served:

Name/description of nearest of above water bodies:

Distance to above-cited intakes, measured in stream miles.

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AIR ROUTE

REF A

1 OBSERVED RELEASE

No observed air release Known, according to abandoned site project file.

Contaminants detected:

Date and location of detection of contaminants

Methods used to detect the contaminants:

Rationale for attributing the contaminants to the site:

* * *

2 WASTE CHARACTERISTICS

<u>Reactivity and Incompatibility</u>

Most reactive compound:

Most incompatible pair of compounds:

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Toxicity

Most toxic compound:

Hazardous Waste Quantity

Total quantity of hazardous waste:

Basis of estimating and/or computing waste quantity:

* * *

3 TARGETS

Population Within 4-Mile Radius

Circle radius used, give population, and indicate how determined:

0 to 4 mi 0 to 1 mi 0 to 1/2 mi 0 to 1/4 mi

Distance to a Sensitive Environment

Distance to 5-acre (minimum) coastal wetland, if 2 miles or less:

Distance to 5-acre (minimum) fresh-water wetland, if 1 mile or less:

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Distance to critical habitat of an endangered species, if 1 mile or less:

Land Use

Distance to commercial/industrial area, if 1 mile or less:

Distance to national or state park, forest, or wildlife reserve, if 2 miles or less:

Distance to residential area, if 2 miles or less:

Distance to agricultural land in production within past 5 years, if 1 mile or less:

Distance to prime agricultural land in production within past 5 years, if 2 miles or less:

Is a historic or landmark site (National Register or Historic Places and National Natural Landmarks) within the view of the site?

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REFERENCES - WASTE DISPOSAL, INC. RANKING PACKAGE

Reference	Source
A	Abandoned Site Project File from California Toxic Substances Control Division, Southern California Section
1	Planned Utilization for the Groundwater Basins of the Coastal Plain of Los Angeles County, Appendix A: Groundwater Geology, Department of Water Resources, Southern District Bulletin No. 104, June 1961.
2	Telephone conversation with George Farag, Los Angeles County Flood Control District, 11-14-84.
3	Dames & Moore: Summary of Findings of Preliminary Site Investigation of Waste Disposal, Inc. Site, 12-7-84.
4	Uncontrolled Hazardous Waste Site Ranking System - A Users Manual, Mitre Corp., 1982.
5	Sax, N.I., Dangerous Properties of Hazardous Materials, Fifth Edition, 1979.
6	Record of Communication with John Price, Chief Engineer of City of Santa Fe Springs, 8-5-85.
7	USGS Quadrangle: Whittier, California.
8	Telephone conversation with Chris Nagler, Department of Water Resources, 11-14-84,
8A	Central and West Basin Water Replenishment District, Annual Survey Report on Ground Water Replenishment, 1985.
9	Watermaster Service Central Basin Report, October 1984.
10	Telephone and personal conservations with George Beaty, City of Santa Fe Springs Planning and Development, 11-9-84.
11	Telephone conversation with Pat Moore, Department of Fish and Game, 11-9-84.

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References - Waste Disposal, Inc., contd.

Reference

12 Telephone conversation between Therese Gioia, USEPA Region IX and John Price, Santa Fe Springs, chief engineer. 10-15-85.

13 Telephone conversation between Kathleen Galloway, MITRE, and Chris Nagler, Dept. of Water Resources. 11-13-85.

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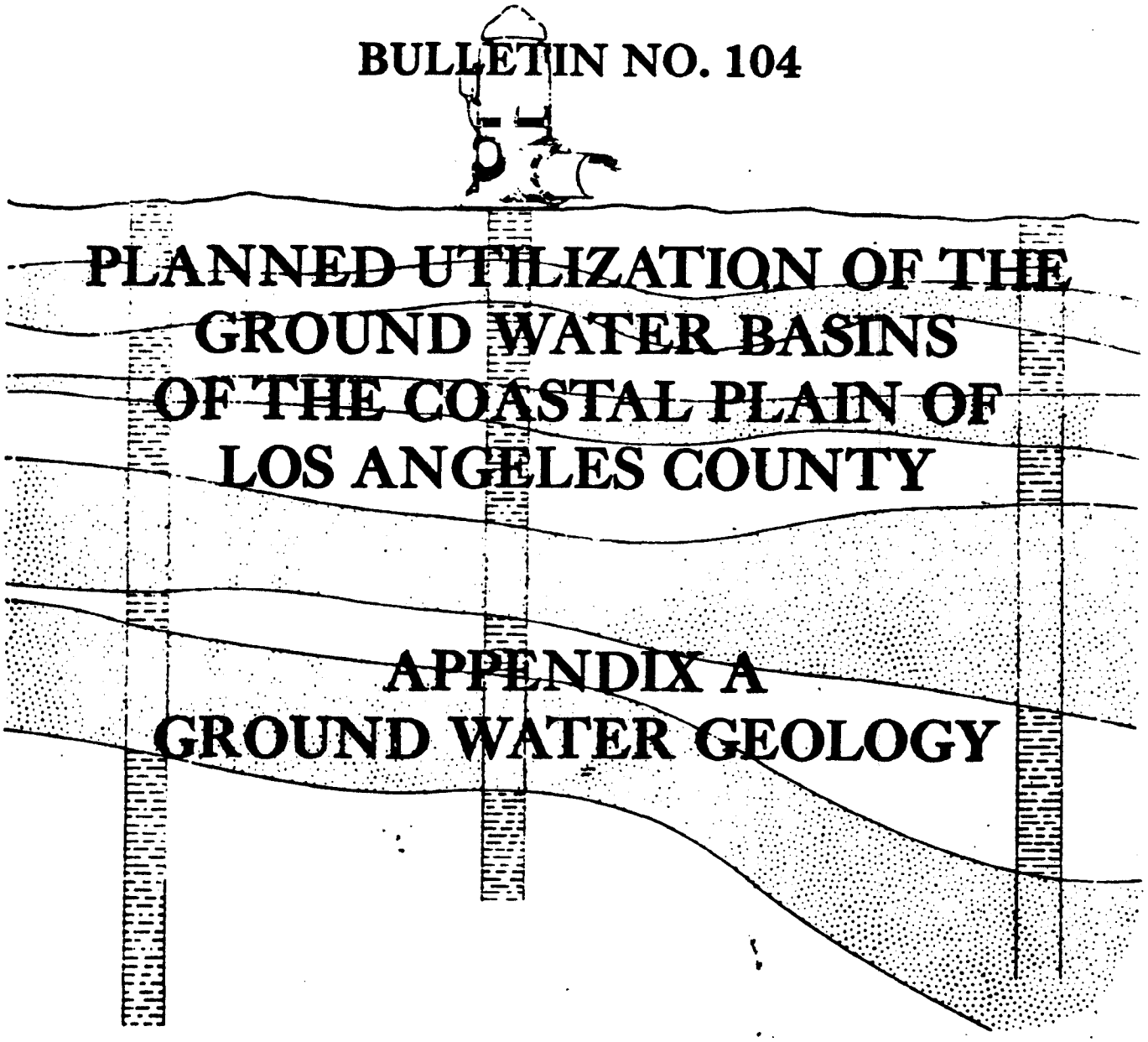
REFERENCE
REF 1

STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
SOUTHERN DISTRICT

BULLETIN NO. 104

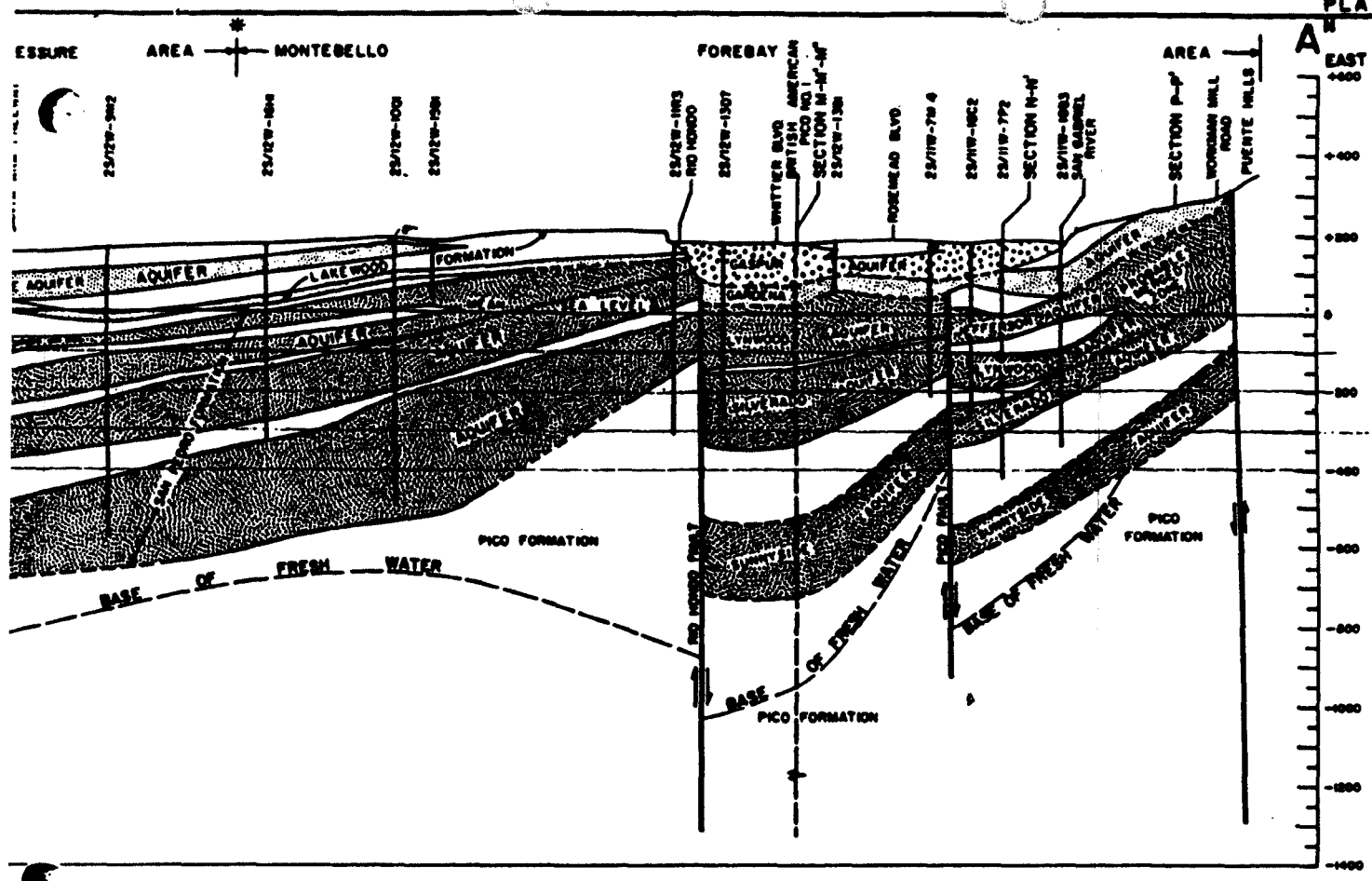


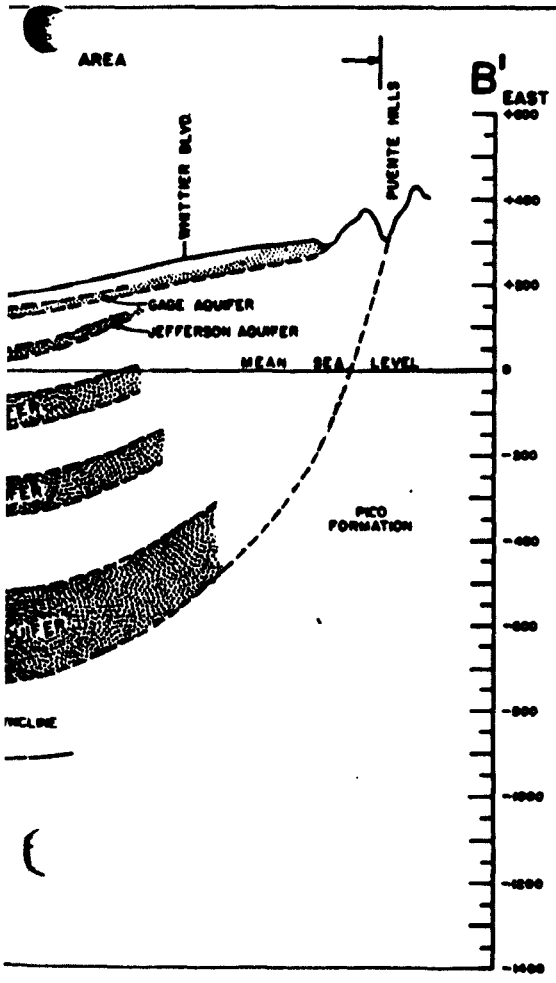
PLANNED UTILIZATION OF THE GROUND WATER BASINS OF THE COASTAL PLAIN OF LOS ANGELES COUNTY

APPENDIX A
GROUND WATER GEOLOGY

EDMUND G. BROWN
Governor

WILLIAM E. WARNE
Director





LEGEND

- AQUICLUDES AND DEEPER UNDIFFERENTIATED FORMATIONS
- AQUIFERS IN RECENT ALLUVIUM (INCLUDES THE GASPUR AND BALLONA AQUIFERS)
- AQUIFERS IN LAKEWOOD FORMATION (INCLUDES THE ARTESIA, EXPOSITION, GAGE, AND GARDENA AQUIFERS)
- AQUIFERS IN SAN PEDRO FORMATION (INCLUDES THE HOLLYDALE, JEFFERSON, LYNWOOD, SILVERADO, AND SUNNYSIDE AQUIFERS)
- WATER WELLS
- OIL WELLS
- FAULTS

* BOUNDARY BETWEEN FOREBAY AND PRESSURE AREA AS SHOWN ON PLATE 2 OF THIS REPORT

NOTE: LOCATIONS OF GEOLOGIC SECTIONS ARE SHOWN ON PLATE 3A AND 3B

STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
SOUTHERN CALIFORNIA DISTRICT

GROUND WATER GEOLOGY OF THE COASTAL PLAIN OF LOS ANGELES COUNTY

IDEALIZED GEOLOGIC SECTIONS A-A'-A" AND B-B'

HORIZONTAL SCALE OF FEET
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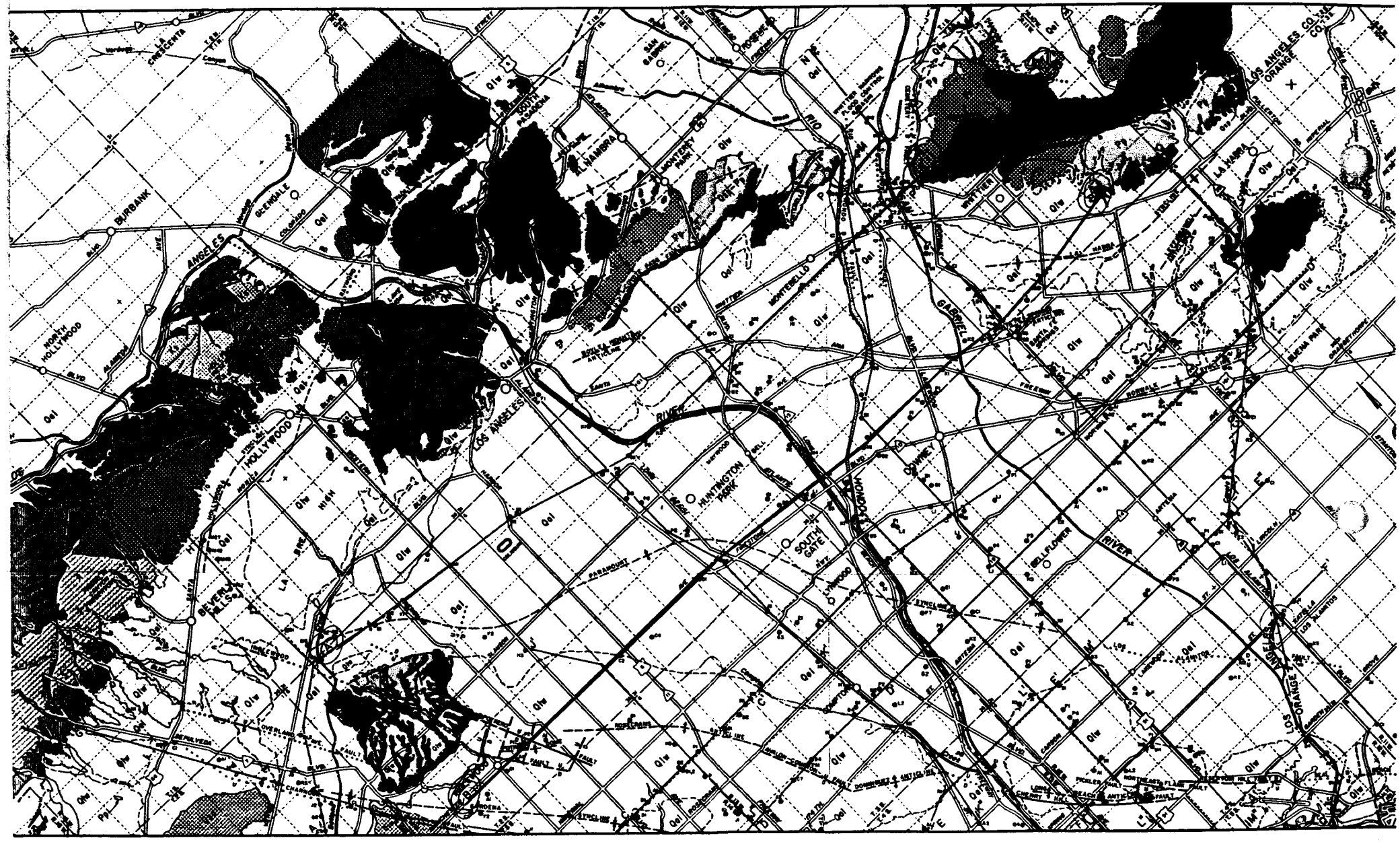
1961


BURBANK
GLENDALE
NORTH HOLLYWOOD
HOLLYWOOD
BEVERLY HILLS
LA CRESCENTA
SOUTH PASADENA
ALHAMBRA
MONTEREY PARK
SAN GABRIEL
ROSEMEAD
MONTEBELLO
WHITTIER
LA HABRA
BUENA PARK
HUNTINGTON PARK
SOUTH GATE
LYNWOOD
BELLFLOWER
LOS ANGELES
LOS ANGELES CO.
ORANGE CO.
RIVER
GABRIEL
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REF 2

State of California—Health and Welfare Agency

Department of Health Services
Hazardous Materials Management Section

MEMO OF CALL

Name: George Farag (Civil Engineering Tech) Date: 11-14-84

Firm: Los Angeles County Flood Control District Time: 0910

Address: Person Taking or Making Call: Carol J. Masson

Telephone No.: 213/226-4383

Subject: groundwater near Waste Disposal, Inc. - nearby wells

Message:

1. LACFCD 1644 G, a pumping well, owned by the City of Santa Fe Springs

DWR No: 2S/11W-32K5 395' NW of Greenleaf Ave and Reis St.

north of St. Paul High School, 10' N of chain link fence of school

on 4-13-84, 32.6' to water

well has multi-perforations: 40-58', 88-102', 131-134', 604-628'

2. LACFCD 1645 H

DWR No.: 2S/11W-32Q3, a pumping well, owned by Charlie F. Boring, 13033 Barton Rd.

213/944-2194

used for irrigation and public supply — 1979

845' W of Painter Extension, 581' N of Los Nietos Rd, 30' N of Barton Rd,

715' SE of Greenleaf Ave

on 6-11-84, 43.6' to water

gradient is 40 feet per mile

flow is south to southwest, almost parallel to Rio Hondo channel

wells are multiperforated and aquifers are connected anyway

F. C. Dist. Form 106 2M 9-31 Sheet 1

Location:
#13033 Barton Rd.
775' S.E. of ℄ Greenleaf Ave.
798' N.W. of ℄ Painter Ave.
85' N.E. of Barton Rd.
— 8-14-08.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT
WELL DATA

Well Numbers: DWR C-821C; Owner #10; 2S/11W-32Q3

Location and description (845' W. of Painter extension,)?
581' N. of Los Nietos Rd., 30' N. OF BARTON RD. 0.15 mi. W ~~E.~~ OF THE ℄ PAINTER STR., 50' S.E. OF #13033 ~~#13023~~ BARTON RD.

Description of reference point 6-4-51: (a) 3/4" HOLE, N.W. ~~E.~~ SIDE OF FLANGE, 0.5' ABOVE GROUND.
(b) Top of 8" meas. pipe at ground.

R. P. elev. above sea level ~~160~~ (a) 153.5' (b) 153.0' Datum USGS Topo.

How determined DWR

R. P. elev. above, below, ground

Owner 12/17/79 Charles F. Boring, #13033 Barton Road ~~Chino Feed Mill Co.~~ 944-2194

Use Irr., PUBLIC SUPPLY-6-4-51. None-Capped-4-24-57

Capacity of well

Depth of well 648' Sounded 500' -4-6-59

Size of well 14" Type Drilled

Power used

Type of motor, engine Make HP

Type of pump SUBMERGED Removed 4-24-57 Make

Capacity of pump

Year drilled or dug 8-20-25 Driller Saunders Bros.

Depth to water when drilled

Salinity of water

Temperature of water

Artesian when drilled Yes No

Artesian on date Yes No

F. C. Well No. 1645 H

Location field checked: CCG 8-13-58

R.P. (c) From 8/16/79 - Dist Levels of 9-26-77 - Elev. 155.2 - Same description as R.P. (b)

LOG OF WELL No. 1645 H

Drilled by Saunders Bros.

Date drilled

Depth from ground surface 648'

Struck water at ft. from ground.

Water rose to ft. from ground.

FROM	TO	CLASSIFICATION OF MATERIALS			
0	8	sand	545	558	clay
8	13	clay	558	562	gravel
13	20	sand	562	567	clay
20	36	sandy clay	567	570	gravel
36	40	sand	570	576	sand
40	45	gravel	576	580	clay
45	48	sand	580	586	sand
48	58	gravel	586	590	clay
58	88	sandy clay	590	594	gravel
88	102	gravel	594	604	sand
102	131	sandy clay	604	624	gravel
131	134	gravel	624	626	rock
134	240	sandy clay	626	648	sand.
240	255	hard brown clay	CEMENTED IN BOTTOM		
255	282	sandy clay			
282	306	hard clay			
306	320	sandy clay			
320	380	blue clay			
380	420	hard blue clay			
420	426	" " "			
426	466	" " "			
466	468	granite rock (the 3)			
468	475	sand			
475	480	sharp sand			
480	494	" "			
494	496	rock			
496	524	sharp sand			
524	528	rock			
528	535	clay			
535	545	gravel			

PERF: 40-58, 88-102, 131-134, 535-545, 558-562, 567-570, 590-594, 604-624.

76W348-106 -Cdb 8-67

SHEET 1

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
Water Conservation Division
WELL DATA

RECEIVED
U.S. EPA
REGION 9
COMM. CENTER
85 JUL 29 A11:07

Owner:

Location and Description: City of Sante Fe Springs; 395±' N.W. inter. of Greenleaf Ave. & Rees; north of Saint Paul High School; 10' north of chain-link fence, separating school parking lot from horse-pasture; 600±' S.E. of well 1644E.

Use: None

Elev. of average grd. at well: 150±' 147.7 r.p. (B) U. S. G. S. Datum

Elev. of grd. adjacent to well: U. S. G. S. Datum

Water surface reference points:

(a) From 1-20-70 To Elev. 150.0 How det. Topo.
Description: Top of casing at base of pump, at grd. surface.

(b) From 8-16-79 To Elev. 147.8 How det. Dist Levels 9-21-77
Description: At bottom of 8" discharge pipe at base of pump 0.1' above ground.

(c) From To Elev. How det.
Description:

(d) From To Elev. How det.
Description:

Type of well: Size 12"

Original depth: Soundings: 84.0'-1-20-70

Pumping equipment: Remains of old pump

Power used:

Capacity: Drawdown:

Date drilled: By

Artesian characteristics:

Quality of water:

Remarks:

(over)

Well Numbers

Owner

D. W. R. 2S/11W-32K5 Loc.

D. W. R.

F. C. 1644G

REF 3

SUMMARY OF FINDINGS
PRELIMINARY SITE CHARACTERIZATION
WASTE DISPOSAL, INC. SITE
FOR REDEVELOPMENT AGENCY,
CITY OF SANTA FE SPRINGS, CALIFORNIA

DAMES & MOORE JOB NO. 13262-005-01
SANTA BARBARA, CALIFORNIA
DECEMBER 7, 1984

Dames & Moore

21S/13-COVER

Dames & Moore

812 Anacapa Street, Suite A
Santa Barbara, CA 93101
(805) 963-9676 / 963-5976

December 7, 1984

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

Attention: Mr. Richard H. Weaver
Director

Gentlemen:

Summary of Findings
Preliminary Site Characterization
Waste Disposal, Inc. Site
For Redevelopment Agency,
City of Santa Fe Springs, California

We are pleased to transmit the above referenced summary report of our preliminary investigation of the former Waste Disposal, Inc. site in Santa Fe Springs, California. Should you have any questions concerning this summary, please contact us. We look forward to assisting you in the future.

Very truly yours,

DAMES & MOORE

Thomas A. Vinckier

Thomas A. Vinckier
Associate

TAV:RET:dah
21S/13-ltr

TABLE OF CONTENTS

Section		Page
1.0	INTRODUCTION	1
1.1	BACKGROUND	1
2.0	PURPOSE AND SCOPE	2
2.1	PURPOSE OF INVESTIGATION	2
2.2	SCOPE OF SERVICES	2
3.0	INVESTIGATIVE METHODS	3
3.1	HEALTH AND SAFETY PLAN	3
3.2	DRILLING AND SAMPLING PROGRAM	3
3.3	ANALYTICAL TESTING PROGRAM	4
4.0	INVESTIGATIVE RESULTS	5
4.1	DRILLING AND SAMPLING PROGRAM	5
4.2	ANALYTICAL RESULTS	6
4.2.1	CAM Inorganics	6
4.2.2	Priority Pollutant Organic Compounds	6

TABLES
FIGURES
APPENDIX A: Analytical Results
California Analytical Laboratories

LIST OF TABLES

Table

1 SUMMARY OF ANALYTICAL RESULTS FOR CAM INORGANIC COMPOUNDS (METALS)

2 SUMMARY OF ANALYTICAL RESULTS FOR IDENTIFIED PRIORITY POLLUTANTS (EPA METHODS 624 AND 625)

LIST OF FIGURES

Figure

1 BORING LOCATION MAP

2 LOG OF BORINGS DMEB-1 AND DMEB-2

3 LOG OF BORINGS DMEB-3 AND DMEB-4

1.0 INTRODUCTION

This report presents a summary of the results of our initial investigation of subsurface conditions at the former Waste Disposal Inc. site in Santa Fe Springs, California. Presently, the site is an undeveloped tract of land situated north of Los Nietos Road, west of Greenleaf Avenue and east of Santa Fe Springs Road (Figure 1). This initial investigation has been conducted for the Redevelopment Agency of the City of Santa Fe Springs in order to assess whether potentially hazardous materials are present in site soils.

1.1 BACKGROUND

The following site-use history is based on information assembled by the California Department of Health Services (DHS). This information indicates that the subject site contains a buried, concrete-lined reservoir (approximately 500 feet in diameter) that was probably used initially for petroleum storage. In the late 1920s or early 1930s, the reservoir was decommissioned. From the 1930s to the late 1950s, the decommissioned reservoir was used for the disposal of a variety of materials including:

- petroleum refinery tank bottoms;
- steel mill slag;
- brewery wastes;
- cesspool sewage; and,
- miscellaneous solid and liquid wastes.

In the late 1950s and early 1960s, the disposal site received principally spent drilling muds from oil field drilling operations. Minor amounts of construction debris (wood debris and concrete rubble) were also believed to be disposed of at the site during this time. Disposal activities declined in the 1960s, and by 1965 the reservoir and surrounding area were covered by a mantle of fill soil.

Historical aerial photographs indicate that several unlined sumps were present around the periphery of the reservoir. These sumps were considerably smaller in volume than the main disposal reservoir and probably received fluids

(largely water) which were apparently drained intermittently from the reservoir. Aerial photographs also show what appear to be small outwash features originating at the northwest and southeast margins of the reservoir.

2.0 PURPOSE AND SCOPE

2.1 PURPOSE OF INVESTIGATION

Available data suggest that some of the materials disposed of in the main reservoir and peripheral sumps contain potentially hazardous compounds. In order to assess whether hazardous compounds are present, and if so, their chemical composition, we conducted a limited program of soil and waste sampling and sample analysis. We point out that our investigation is not intended to be an exhaustive evaluation of the complete chemical composition and distribution of all wastes or waste constituents in the subsurface at the site. Rather, the investigation has been designed to:

- provide a generalized vertical profile of the chemical character of materials encountered in a single boring in the main reservoir; and,

- provide an indication of the presence and chemical characteristics of waste and/or waste constituents which may be present at three boring locations adjacent to the perimeter of the reservoir.

The scope of the investigation is outlined below.

2.2 SCOPE OF SERVICES

In order to accomplish the objectives of this investigation, we have completed the following tasks:

- Preparation of a health and safety plan that was followed during the field activities of this investigation;

- Collection of soil and/or waste samples from a total of four borings within and adjacent to the main disposal reservoir;

- Chemical testing of selected samples or sample composites for both priority pollutant organics (U.S. EPA) and total CAM* inorganics; and,

- Preparation of a report that contains a summary of field and laboratory methods, logs of the subsurface borings, and a summary of the results of chemical analyses of selected samples.

The four borings were drilled at the locations shown on Figure 1. Boring DMEB-1 was positioned near the center of the former reservoir. Borings DMEB-2, -3, and -4 were were located immediately northwest, northeast, and southeast of the reservoir perimeter.

3.0 INVESTIGATIVE METHODS

3.1 HEALTH AND SAFETY PLAN

A Health and Safety Plan was established prior to implementation of site activities. The purpose of the plan was to assign responsibilities, establish personnel protection protocol and safety procedures, and provide for contingencies in the event that unanticipated hazards arise during the course of field operations.

3.2 DRILLING AND SAMPLING PROGRAM

During the week of September 28, 1984, undisturbed soil and/or waste samples were collected from Borings DMEB-1 through DMEB-4 (Figure 1). The borings were drilled under the technical supervision of a Dames & Moore geologist utilizing 8-inch diameter hollow stem auger drilling equipment. A detailed log of the materials encountered during drilling was recorded at each boring location (Figures 2 and 3). Undisturbed samples were obtained, where possible, at 2-1/2 foot intervals using a Dames & Moore U-type sampler fitted with stainless steel sample sleeves. Upon recovery of each sample, the concentration of organic vapors emitted from the soil/waste sample was measured using a portable HNu photoionization detector. Two 3-inch-long sample sleeves

---

* CAM Inorganics: California Assessment Manual (January 11, 1984) list of persistent and bioaccumulative inorganic compounds (metals).

were immediately capped with aluminum foil, sealed within a polyurethane bag and placed inside a PVC sample container with plastic end caps. All samples were appropriately labeled and stored in ice chests cooled with blue ice. Refrigerated samples along with chain of custody documents were shipped by overnight courier to California Analytical Laboratories in Sacramento, California.

Prior to drilling each boring, all downhole drilling and sampling equipment was steam cleaned to reduce the potential for cross-hole contamination. In addition, the samplers were washed with detergent and rinsed in distilled water prior to each sampling interval. Upon completion of the drilling program, the borings were backfilled with cement in order to prevent downhole migration of near-surface waste materials. All drill cuttings were placed inside 55-gallon drums and temporarily stored in a secured location on site for future disposal at an appropriate waste facility.

3.3 ANALYTICAL TESTING PROGRAM

Selected samples and sample composites were analyzed by California Analytical Laboratories in Sacramento, California for CAM inorganics (metals) and U.S. EPA priority pollutant organics. All analyses were performed according to procedures specified by the California Department of Health Services (CAM metals) or the U.S. EPA (methods 624 and 625 for priority pollutants). It should be noted that the detection limits for priority pollutants vary considerably from sample to sample (Appendix A). This variation in detection limits is related to the total organic content of each sample; that is, detection limits for a sample consisting of clean sand (DMEB-3-9) are markedly lower than for a sample consisting primarily of waste material with a high organic content (DMEB-1-3) (Appendix A). This occurs because samples that contain relatively high levels of organics must be diluted in order to achieve adequate resolution of component organic species in the sample. This dilution factor results in an increase of the detection limits for that particular sample.

4.0 INVESTIGATIVE RESULTS

4.1 DRILLING AND SAMPLING PROGRAM

Detailed logs of the materials encountered in the four borings are presented in Figures 2 and 3. Also shown on the logs are the measured concentrations of organic vapors emitted from each sample. A brief narrative description of the materials encountered in each boring follows.

Boring DMEB-1 - This boring, located roughly in the center of the former disposal reservoir (Figure 1), encountered 2 to 3 feet of fill soil underlain by a thin layer of concrete. Soil intermixed with waste material, consisting of a black oily and/or tarry substance, was encountered from approximately 3 to 5 feet and from about 10 feet to the bottom of the boring at 22 feet (Figure 2). Below about 20 feet, the waste material graded to a soft, black viscous liquid. The boring was terminated at the top of a layer of concrete at 22.5 feet which may represent the base of the concrete-lined reservoir.

Boring DMEB-2 - Boring DMEB-2 was located to the northwest of the main reservoir (Figure 1). Soil mixed with waste material similar to that found in Boring DMEB-1 was encountered between depths of 3.5 to 14 feet (Figure 2). These materials are overlain by a layer of concrete above which is about 3 feet of fill soil. The boring was terminated at a depth of about 19 feet in dense clayey soils.

Boring DMEB-3 - Boring DMEB-3, located near the northeastern boundary of the site, encountered loose sandy fill material (silty sand as well as asphalt and metal debris) down to a total depth of about 9 feet (Figure 3). Soils penetrated below this depth consisted of silty clay to clayey silt and, below 21 feet, clean fine- to medium-grained sand. No visible waste materials were encountered; however a slight odor was detected in sample 10 (11 feet) which was collected below the base of the surficial fill materials.

Boring DMEB-4 - Boring DMEB-4, located southeast of the perimeter of the reservoir (Figure 1), encountered a 2- to 3-foot-thick layer of black oily silty clay beneath approximately four feet of fill soil (Figure 3). From a depth of about 7 feet down to the bottom of the boring at 20 feet, the soils encountered consisted of silty clay grading downward to clayey sand.

4.2 ANALYTICAL RESULTS

4.2.1 CAM Inorganics

The results for the chemical analyses for CAM inorganics (metals) are shown on Table 1. The DHS considers any waste which contains a substance listed in Table 1 to be a hazardous waste if: (1) the total concentration of any listed inorganic compound exceeds the Total Threshold Limit Concentration (TTLC) for that compound; or, (2) the extractable concentration (in mg/l), as determined by a Waste Extraction Test (WET), of any listed inorganic compound exceeds the respective Soluble Threshold Limit Concentration (STLC) for that compound. It should be noted that the samples were analyzed only for total concentrations; WET tests were not performed. None of the samples analyzed contained inorganic compounds at total concentrations in excess of the respective TTLCs. Underlined values in Table 1 represent cases in which the total concentration of a metal exceeds its respective STLC. In these cases, WET tests must be performed and the results compared to listed STLC values in order to assess whether the sample would be considered a hazardous waste.

4.2.2 Priority Pollutant Organic Compounds

The results of the chemical analyses of samples for U.S. EPA priority pollutant organics are summarized in Table 2. Only those compounds which were detected in one or more samples are listed in Table 2; a complete listing of the analytical results is presented in Appendix A. The DHS may determine that a waste is hazardous if it contains any of the priority pollutant organic compounds. The California Administrative Code (Title 22, Division 4, Chapter 30, Article 9, Section 66680) states that a waste that "...contains a material cited in the List of Chemical Names or the List of Common Names presented in this Article shall be considered a hazardous waste...". Compounds that have been detected in the samples (Table 2) and that appear on the List of Chemical Names include benzene, trans-1,2 dichloroethene, ethylbenzene, methylene chloride, toluene, trichloroethene, and naphthalene.

TABLE 1

SUMMARY OF ANALYTICAL RESULTS FOR CAM* INORGANIC COMPOUNDS (METALS)[1]
(Results in mg/kg)

Element	Total Threshold Limit Concentration (mg/kg net wt.)	Soluble Threshold Limit Concentration (mg/l leachate)	DMEB-1 Sample 3	DMEB-1 Composite	DMEB-2 Composite	DMEB-2 Sample 6	DMEB-3 Sample 9	DMEB-3 Sample 10	DMEB-4 Sample 2
Arsenic	500	5	<5	<5	<5	<5	30	<5	<5
Antimony	500	15	<5	<5	<5	<5	<5	<5	<5
Barium	10,000	100	80	310	930	120	53	95	320
Beryllium	75	0.75	<0.5	<0.5	<0.5	0.65	<0.5	<0.5	<0.5
Cadmium	100	1	2.5	2.6	1.9	2.0	0.5	1.6	1.9
Chromium III/IV[2]	2500/500	560/5	21	310	24	30	7.1	18	27
Cobalt	8000	80	4.6	5.0	3.9	12	3.6	7.6	9.2
Copper	2500	25	44	57	28	28	9.4	17	34
Lead	1000	5	130	250	280	<5	<5	<5	17
Mercury	20	0.2	0.25	0.19	0.22	0.1	<0.1	<0.1	<0.1
Molybdenum	3500	350	<10	<10	<10	<10	<10	<10	<10
Nickel	2000	20	17	38	27	22	6.6	14	23
Selenium	100	1	<1	<1	<1	<1	<1	<1	<1
Silver	500	5	500	<2	<2	<2	<2	<2	<2
Thalium	700	7	<5	<5	30	<5	<5	<5	<5
Vanadium	2400	24	22	45	24	49	14	32	32
Zinc	5000	250	150	2300	130	57	22	42	220

[1] Samples were analyzed only for total concentration of metals; underlined values signify that total concentration found exceeds the Soluble Threshold Limit Concentrations.

[2] Reported as Cr III plus Cr IV.

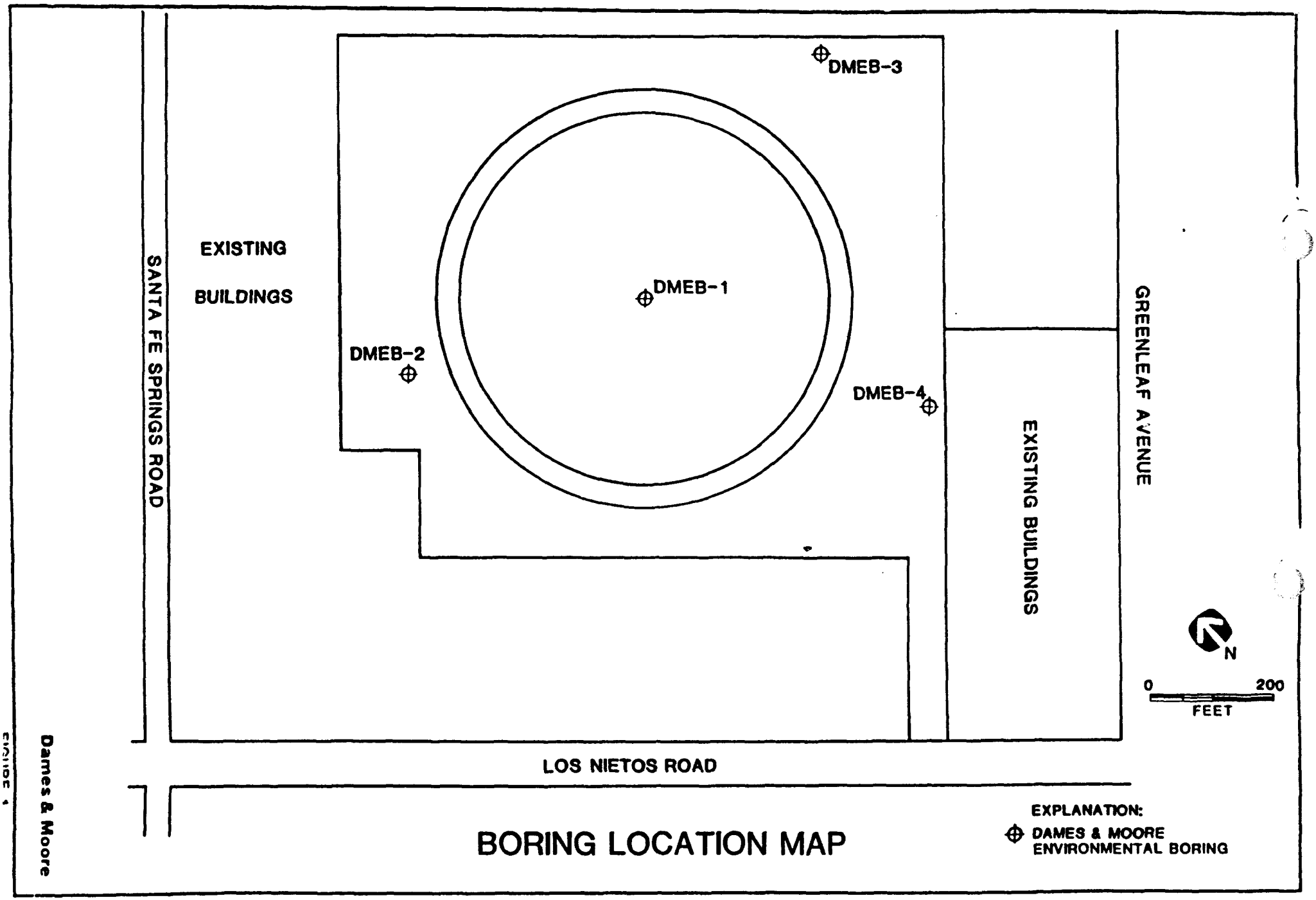
* CAM: California Assessment Manual, California Department of Health Services

TABLE 2

SUMMARY OF ANALYTICAL RESULTS FOR IDENTIFIED PRIORITY POLLUTANTS
(EPA METHODS 624 and 625)[1]
(micrograms/kilogram)

Identified Priority Pollutant	DMEB-1 Sample 3	DMEB-1 Composite	DMEB-2 Composite	DMEB-2 Sample 6	DMEB-3 Samples 9 and 10	DMEB-4 Sample 2
Volatiles (EPA Method 624)						
4V benzene	ND	5100	ND	ND	ND	ND
30V trans-1, 2, dichloroethene	ND	1100	ND	ND	ND	ND
38V ethylbenzene	1800	25000	1900	ND	ND	ND
44V methylene chloride	ND	7000	ND	ND	ND	ND
85V tetrachloroethene	ND	22000	ND	ND	ND	ND
86V toluene	3100	57000	ND	ND	ND	ND
87V trichloroethene	ND	13000	ND	ND	ND	ND
Hazardous Substances[2] (EPA Method 624)						
CL14 2-butanone	ND	5100	ND	ND	ND	ND
CL20 total xylenes	15000	120000	4800	ND	ND	ND
Base/Neutral Compounds (EPA Method 625)						
39B flouranthene	ND	ND	ND	ND	ND	210
55B naphthalene	29000	66000	13000	ND	ND	ND
72B benzo (a) anthracene	ND	ND	ND	ND	ND	380
73B benzo (a) pyrene	ND	ND	ND	ND	ND	1100
75B benzo (k) flouranthene	ND	ND	ND	ND	ND	1500
76B chrysene	ND	ND	ND	ND	ND	460
79B benzo (phi) perylene	ND	ND	ND	ND	ND	200
81B phenanthrene	24000	30000	ND	ND	ND	ND
83B indeno (1,2,3-cd) pyrene	ND	ND	ND	ND	ND	300
84B pyrene	ND	ND	ND	ND	ND	160

[1] Results are given only for those compounds which were detected in one or more samples; detection limits vary as shown in Appendix.
[2] Butanone and xylenes are non-priority pollutants.
ND: Not detected (see Appendix for detection limits)
21/S13-T2



BORING LOCATION MAP

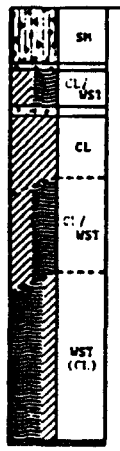
Dames & Moore

FIGURE 1

BORING DMEB-1

DRILLING METHOD: 8 INCH DIAMETER HOLLOW STEM AUGER

DEPTH IN FEET	SAMPLES ANALYZED	ORGANIC VAPOR CONCENTRATION* (HNu DETECTOR) (ppm)	BLOWS/6"	SAMPLE NO.	SAMPLE
0					
5		2	10/13/17	1	■
		2	5/16/34	2	■
10	DMEB 1-3	65	8/10/20	3	■
		2	13/11/28	4	■
15	DMEB-1 COMPOSITE	15	8/12/10	5	■
		3	2/3/3	6	■
20		5	0	7	■
25					



DESCRIPTION	
CONCRETE LAYER	(UNABLE TO SAMPLE)
DARK BROWN CLAY AND BLACK OILY WASTE MATERIAL WITH TRACE BRICK FRAGMENTS	
CONCRETE LAYER	(UNABLE TO SAMPLE)
DARK BROWN TO BLACK SILTY CLAY WITH BRICK AND CONCRETE FRAGMENTS	
GRADES TO DARK BROWN TO BLACK SILTY CLAY AND (OILY) WASTE MATERIAL	
GRADING TO MOSTLY SOFT, BLACK (OILY AND/OR TARRY) WASTE MATERIAL	
GRADING TO VERY SOFT, VISCOUS LIQUID WASTE	
CONCRETE LAYER	

BORING TERMINATED AT 22.5 FEET ON SEPTEMBER 25, 1984

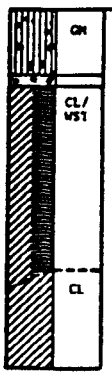
WST: WASTE MATERIAL

*FIELD MEASUREMENT

BORING DMEB-2

DRILLING METHOD: 8 INCH DIAMETER HOLLOW STEM AUGER

DEPTH IN FEET	SAMPLES ANALYZED	ORGANIC VAPOR CONCENTRATION* (HNu DETECTOR) (ppm)	BLOWS/6"	SAMPLE NO.	SAMPLE
0					
5		3	4/5/5	1	■
	DMEB-2 COMPOSITE	3	4/4/5	2	■
10		3	4-10"	3	■
		6	1/1/2	4	■
15		3	9/19/25	5	■
	DMEB 2-6	3	16/24/40	6	■
20					



DESCRIPTION	
LIGHT BROWN SILTY SAND GRAVEL TO 1 INCH	(UNABLE TO SAMPLE)
CONCRETE LAYER	
BLACK CLAYEY (OILY) WASTE MATERIAL, SOFT	
AS ABOVE	
MEDIUM BROWN SLIGHTLY SANDY SILTY CLAY, STIFF	
GRADING DENSER	

BORING TERMINATED AT 18.5 FEET ON SEPTEMBER 25, 1984

WST: WASTE MATERIAL

*FIELD MEASUREMENT

BORING DMEB-3

DRILLING METHOD: 8 INCH DIAMETER HOLLOW STEM AUGER

DEPTH IN FEET	SAMPLES ANALYZED	ORGANIC VAPOR CONCENTRATION* (HNu DETECTOR) (ppm)	BLOWS/6"	SAMPLE NO.	SAMPLE	SYMBOLS	DESCRIPTION
0						SM	LIGHT BROWN SILTY SAND WITH SOME GRAVEL AND ASPHALT FRAGMENTS
		2	5/7/12-4"	1	■		
5				(2)	□		AS ABOVE (SAMPLE NOT RECOVERED)
				(3)	□	CL/ML	ENCOUNTERED ASPHALT AND METAL FRAGMENTS (UNABLE TO SAMPLE)
10			8/13/8	(4)	□		(SAMPLE NOT RECOVERED)
	DMEB 3-10	2		10*	■		DARK BROWN SILTY CLAY TO CLAYEY SILT (WITH SLIGHT ODOR)
		2	5/11/9	5	■		AS ABOVE WITHOUT ODOR
15		2	11/7/9	6	■		
		2	18/45/50-4"	7	■		GRADING VERY DENSE
20		2	12/18/29	8	■		GRADING WITH TRACE SAND
	DMEB 3-9	2	9/12/15	9	■	SP	LIGHT BROWN CLEAN FINE TO MEDIUM SAND
25							

BORING TERMINATED AT A DEPTH OF 23.5 FEET ON SEPTEMBER 26, 1984

*FIELD MEASUREMENT

* BORING REDRILLED TO COLLECT SAMPLE NUMBER 10 AT 11 FEET

BORING DMEB-4

DRILLING METHOD: 8 INCH DIAMETER HOLLOW STEM AUGER

DEPTH IN FEET	SAMPLES ANALYZED	ORGANIC VAPOR CONCENTRATION* (HNu DETECTOR) (ppm)	BLOWS/6"	SAMPLE NO.	SAMPLE	SYMBOLS	DESCRIPTION
0						SM	
		2	50/63	1	■		LIGHT TO DARK BROWN SILTY SAND AND GRAVEL
5	DMEB 4-2	4	7/7/9	2	■	ML/CL	GRAY CLAYEY SILT GRADING DOWNWARD TO BLACK (OILY) SILTY CLAY
		2	6/9/11	3	■	ML	BLUISH TO GREENISH CLAYEY SILT
10		2	5/7/9	4	■		BLUISH GRAY SILTY CLAY WITH SOME BLACK (OILY) CLAY BLEBS
		3	5/14/20	5	■	CL	DARK GRAY SILTY CLAY
15		2	8/16/29	6	■		ORANGISH BROWN STIFF SILTY CLAY
		2	12/21/35	7	■		
20		2	8/9/16	8	■	SC	GREENISH GRAY CLAYEY SAND
25							

BORING TERMINATED AT 21 FEET ON SEPTEMBER 26, 1984

*FIELD MEASUREMENT

Dames & Moore

APPENDIX A

ANALYTICAL RESULTS
CALIFORNIA ANALYTICAL LABORATORIES

APPENDIX

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.

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	DMEB-1-3	10.0	soil	9/24/84	15:15	
-4	DMEB-1-4	12.5	soil	9/24/84	15:40	
-5	DMEB-1-5	15	soil	9/24/84	16:00	COMPOSITED
-6	DMEB-1-6	17.5	soil	9/24/84	16:15	
-7	DMEB-1-7	20	soil	9/24/84	16:40	
-8	DMEB-2-1	5	soil	9/25/84	10:30	
-9	DMEB-2-2	7.5	soil	9/25/84	10:45	COMPOSITED
-10	DMEB-2-3	10	soil	9/25/84	11:00	
-11	DMEB-2-4	12.5	soil	9/25/84	11:10	
-12	DMEB-2-5	15	soil	9/25/84	11:15	HOLD
-13	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	DMEB-3-9	22.5	soil	9/26/84	11:45	
-20	DMEB-3-10	11	soil	9/26/84	14:50	
-21	DMEB-4-1	2.5	soil	9/26/84	12:35	HOLD
-22	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.

DAMES & MOORE ENVIRONMENTAL BORING #1

Sample Number	Sample Depth(s)
DMEB-1-3	10 feet
DMEB-1 Composite	
4	12.5 feet
5	15 feet
6	17.5 feet
7	20 feet

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.

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 MW

APPROVED BY [illegible] DATE 11/2/84

California Analytical Laboratories, Inc.

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-dichloropropane	<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: MJM

Date: 10/25/84

EPA METHOD 624 (EXPANDED)
Data sheet

CLIENT ID: DMEB - 1 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: bjm

Approved by: MGM

Date: 11/7/84

EPA METHOD 625 PRIORITY POLLUTANTS
Data Sheet

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

PP#	ACID COMPOUNDS	ug/Kg
21A	2,4,6-trichlorophenol	<20000
22A	p-chloro-m-cresol	<20000
24A	2-chlorophenol	<20000
31A	2,4-dichlorophenol	<20000
34A	2,4-dimethylphenol	<20000
57A	2-nitrophenol	<40000
58A	4-nitrophenol	<100000
59A	2,4-dinitrophenol	<100000
60A	4,6-dinitro-o-cresol	<40000
64A	pentachlorophenol	<20000
65A	phenol	<20000

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

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: MM Date: 10/25/84

EPA METHOD 625 PRIORITY POLLUTANTS
Data Sheet

CLIENT ID: DMEB -1 COMPOSITE 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	<40000
31A	2,4-dichlorophenol	<40000	43B	bis(2-chloroethoxy) methane	<40000
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	<40000
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		82B	dibenzo(a,h)anthracene	<80000
	(as azobenzene)	<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: _____

Approved by: _____ Date: 11/7/84

DAMES & MOORE ENVIRONMENTAL BORING #2

Sample Number	Sample Depth(s)
DMEB-2 Composite	
1	5 feet
2	7.5 feet
3	10 feet
4	12.5 feet
DMEB-2-6	17.5 feet

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.

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 [illegible] DATE 4/2/84

California Analytical Laboratories, Inc.

EPA METHOD 624 (EXPANDED)
Data sheet

CLIENT ID: DMEB-2 COMPOSITE 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: Lynn

Approved by: [illegible]

Date: 11/7/84

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-dichloroethene	<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: 10/25/84

EPA METHOD 625 PRIORITY POLLUTANTS
Data Sheet

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

PP#	ACID COMPOUNDS	ug/Kg
21A	2,4,6-trichlorophenol	<20000
22A	p-chloro-m-cresol	<20000
24A	2-chlorophenol	<20000
31A	2,4-dichlorophenol	<20000
34A	2,4-dimethylphenol	<20000
57A	2-nitrophenol	<40000
58A	4-nitrophenol	<100000
59A	2,4-dinitrophenol	<100000
60A	4,6-dinitro-o-cresol	<40000
64A	pentachlorophenol	<20000
65A	phenol	<20000

PP#	BASE/NEUTRAL COMPOUNDS	ug/Kg
1B	acenaphthene	<20000
5B	benzidine	<80000
8B	1,2,4-trichlorobenzene	<20000
9B	hexachlorobenzene	<20000
12B	hexachloroethane	<20000
18B	bis(2-chloroethyl)ether	<20000
20B	2-chloronaphthalene	<20000
25B	1,2-dichlorobenzene	<20000
26B	1,3-dichlorobenzene	<20000
27B	1,4-dichlorobenzene	<20000
28B	3,3'-dichlorobenzidine	<40000
35B	2,4-dinitrotoluene	<40000
36B	2,6-dinitrotoluene	<40000
37B	1,2-diphenylhydrazine (as azobenzene)	<40000
39B	fluoranthene	<20000
40B	4-chlorophenyl phenyl ether	<20000
41B	4-bromophenyl phenyl ether	<20000
42B	bis(2-chloroisopropyl) ether	<40000
43B	bis(2-chloroethoxy) methane	<40000
52B	hexachlorobutadiene	<20000
53B	hexachlorocyclopentadiene	<20000
54B	isophorone	<20000
55B	naphthalene	13000
56B	nitrobenzene	<20000
62B	N-nitrosodiphenylamine	<20000
63B	N-nitrosodipropylamine	<20000
66B	bis(2-ethylhexyl)phthalate	<20000
67B	benzyl butyl phthalate	<20000
68B	di-n-butyl phthalate	<20000
69B	di-n-octyl phthalate	<20000
70B	diethyl phthalate	<20000
71B	dimethyl phthalate	<20000
72B	benzo(a)anthracene	<20000
73B	benzo(a)pyrene	<40000
74B	benzo(b)fluoranthene	<40000*
75B	benzo(k)fluoranthene	<40000*
76B	chrysene	<40000
77B	acenaphthylene	<20000
78B	anthracene	<20000
79B	benzo(ghi)perylene	<40000
80B	fluorene	<20000
81B	phenanthrene	<20000
82B	dibenzo(a,h)anthracene	<40000
83B	indeno(1,2,3-cd)pyrene	<40000
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: Lym

Approved by: [illegible] Date: 11/7/84

EPA METHOD 625 PRIORITY POLLUTANTS
Data Sheet

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

PP#	ACID COMPOUNDS	ug/Kg	PP#	BASE/NEUTRAL COMPOUNDS	ug/Kg
21A	2,4,6-trichlorophenol	<400	40B	4-chlorophenyl phenyl ether	<400
22A	p-chloro-m-cresol	<400	41B	4-bromophenyl phenyl ether	<400
24A	2-chlorophenol	<400	42B	bis(2-chloroisopropyl) ether	<800
31A	2,4-dichlorophenol	<400	43B	bis(2-chloroethoxy) methane	<800
34A	2,4-dimethylphenol	<400	52B	hexachlorobutadiene	<400
57A	2-nitrophenol	<800	53B	hexachlorocyclopentadiene	<400
58A	4-nitrophenol	<2000	54B	isophorone	<400
59A	2,4-dinitrophenol	<2000	55B	naphthalene	<400
60A	4,6-dinitro-o-cresol	<800	56B	nitrobenzene	<400
64A	pentachlorophenol	<400	62B	N-nitrosodiphenylamine	<400
65A	phenol	<400	63B	N-nitrosodipropylamine	<400
			66B	bis(2-ethylhexyl)phthalate	<400
	BASE/NEUTRAL COMPOUNDS		67B	benzyl butyl phthalate	<400
			68B	di-n-butyl phthalate	<400
1B	acenaphthene	<400	69B	di-n-octyl phthalate	<400
5B	benzidine	<1600	70B	diethyl phthalate	<400
8B	1,2,4-trichlorobenzene	<400	71B	dimethyl phthalate	<400
9B	hexachlorobenzene	<400	72B	benzo(a)anthracene	<400
12B	hexachloroethane	<400	73B	benzo(a)pyrene	<800
18B	bis(2-chloroethyl)ether	<400	74B	benzo(b)fluoranthene	<800*
20B	2-chloronaphthalene	<400	75B	benzo(k)fluoranthene	<800*
25B	1,2-dichlorobenzene	<400	76B	chrysene	<800
26B	1,3-dichlorobenzene	<400	77B	acenaphthylene	<400
27B	1,4-dichlorobenzene	<400	78B	anthracene	<400
28B	3,3'-dichlorobenzidine	<800	79B	benzo(ghi)perylene	<800
35B	2,4-dinitrotoluene	<800	80B	fluorene	<400
36B	2,6-dinitrotoluene	<800	81B	phenanthrene	<400
37B	1,2-diphenylhydrazine		82B	dibenzo(a,h)anthracene	<800
	(as azobenzene)	<800	83B	indeno(1,2,3-cd)pyrene	<800
39B	fluoranthene	<400	84B	pyrene	<400
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: bjm

Approved by: MDM Date: 11/7/84

DAMES & MOORE ENVIRONMENTAL BORING #3

Sample Number	Sample Depth(s)
DMEB-3-10*	11 feet
DMEB-3-9	22 feet

* Boring 3 was redrilled to collect sample number 10 at 11 feet.

C.A.M. METALS

Data Sheet

SAMPLE ID: DMEB-3-10 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 MW

APPROVED BY [illegible] DATE 11/2/84

California Analytical Laboratories, Inc.

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.

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

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

EPA METHOD 624 (EXPANDED)
Data sheet

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

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: MDM Date: 10/25/84

EPA METHOD 625 PRIORITY POLLUTANTS
Data Sheet

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

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	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: [signature]

Approved by: [signature] Date: 11/7/84

EPA METHOD 625 PRIORITY POLLUTANTS
Data Sheet

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

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

DAMES & MOORE ENVIRONMENTAL BORING #4

Sample Number	Sample Depth(s)
DMEB-4-2	5 feet

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.

EPA METHOD 624 (EXPANDED)
Data sheet

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

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: MM

Date: 10/25/84

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
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	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
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

REF 4

Uncontrolled Hazardous Waste Site Ranking System

A Users Manual

Kris W. Barrett
S. Steven Chang
Stuart A. Haus
Andrew M. Platt

August 1982

MTR-82W111

SPONSOR:
U.S. Environmental Protection Agency
CONTRACT NO.:
68-01-6278

The MITRE Corporation
Metrek Division
1820 Dolley Madison Boulevard
McLean, Virginia 22102

8/4

HH:

In case you need it for your records, the correct ~~contact~~ address for the contact for the Waste Disposal site is:

Joe Bennett
P.O. Box 4295
Whittier, CA 90607

(213) 696-3275

REF 5

Dangerous Properties of Industrial Materials

Fifth Edition

N. Irving Sax

eral Hazardous Substances Act (including The Federal Hazardous Substances Labeling Act), The Caustic Poisons Act and Chemical Substances Legislation in the 1970's such as OSHA (including NIOSH); The Poison Prevention Packaging Act of 1970; the Consumer Product Safety Act of 1973; The Environmental Protection Agency Acts; The Clean Air Act (as amended in 1977); The Clean Water Act; The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA); The Resource Conservation and Recovery Act of 1976 (RCRA); The Safe Drinking Water Act, as amended; The Toxic Substances Control Act (TSCA); The Federal Regulatory Agency Liason to include a MATRIX for fast reference to the regulations which cover some 28 dangerous chemicals; plus a listing of Federal Legislation, Agencies involved and jurisdiction; plus a 29 item list of references see **Section 10A.**

For industrial response to chronic health hazards—five facts about chronic health hazards, need to define issues, setting an acceptable level of risk, discovering a hazard, regulation of chronic health hazards see **Section 10B.**

For labeling and certification of hazardous materials in terms of originator, legal status, extent of coverage, format and application, federal regulatory agencies, hazardous materials transportation guides, rail transport, air transport, water transport, highway transport, radioactives, FDA, EPA, TSCA, OSHA, labeling systems of ANSI, UN, DOT, general labeling guidelines, NFPA, IATA see **Section 11.**

ABBREVIATIONS

ACGIH	American Conference of Governmental Industrial Hygienists
Acute tox data	Acute toxicity data
anh	anhydrous
ASA	American Standards Association
ASTM	American Society for Testing Materials
atm	atmospheres
at wt	atomic weight
autoign temp	autoignition temperature
BeV	billions of electron volts
bp	boiling point
carc	carcinogen
(CC)	closed cup
cc	cubic centimeters
cfm	cubic feet per minute
CG	Coast Guard
CNS	central nervous system
(COC)	Cleveland open cup
conc	concentration(s)
contg	containing
CTD	chronic toxicity data
°	degrees Celsius
d	density
decomp	decomposes or decomposition
dermal	skin absorption mode of exposure
DOT	Department of Transportation
exper	experimental
expl	explosive, explodes
°F	degrees Fahrenheit
flam	flammable
flash p	flash point
fc	foot candle
fp	freezing point
fpm	feet per minute
ft	feet
g	grams
GI	gastrointestinal
gpm	gallons per minute
HC	hydrocarbon(s)
HIGH	capable of causing death or permanent injury due to the exposures of normal use; incapacitating and poisonous. Requires special handling.
hr(s)	hour(s)
IATA	International Air Transport Association
IARC	International Agency for Research on Cancer
ic	intracerebral
id	intraduodenal
inhal	inhalation mode of exposure
im	intramuscular
imp	implantation
in	intradermal
ip	intraperitoneal
ipl	intrapleural
ir	intrarenal
irr	irritant, irritation
it	intratracheal
iv	intravenous
ivg	intravaginal
°K	degree Kelvin
KeV	thousands of electron volts
Kg (kg)	kilograms
Km (km)	kilometers
Kw (kw)	kilowatt(s)
Kwh (kwh)	kilowatt hours
LC	lethal concentration

LC_{50}	lethal concentration to 50% of a specified population
LC_{LO}	lowest published *lethal* concentration
LD	lethal dose
LD_{50}	lethal dose to 50% of a specified population
lel	lower explosive limit
LOW	causes readily reversible tissue changes which disappear after exposure stops. Causes some discomfort
lpm	liters per minute
m-	meta
M^3, m^3	cubic meters
MCA	Manufacturing Chemists Association
mg	milligrams
ml	milliliters
MLD	minimum lethal dose
mm	millimeters of mercury
MOD	may cause reversible or irreversible changes to exposed tissue, not permanent injury or death. Can cause considerable discomfort
mp	melting point
mppcf	millions of particles per cubic foot
mu mem	mucous membrane(s)
μg	micrograms
n-	normal
neo	causes formation of neoplasm(s) i.e., non-metastasizing abnormal or new growth(s).
NONE	no harm via exposures of normal use; harmful only due to overwhelming dose or unusual conditions
NO_x	oxides of N
o-	ortho
(OC)	open cup
oral	ingestion mode of exposure
p-	para
pa	parenteral mode of exposure
PO_x	oxides of P
ppb	parts per billion
pphm	parts per hundred million
ppm	parts per million
rec	rectal mode of exposure
recog	recognized
(S)	upon review IARC classifies it as a susp carc
sec-	secondary
SO_x	oxides of S
sc	subcutaneous
spont	spontaneous(ly)
spont htg	spontaneous heating
susp, (S)	suspected
sym	symmetrical
syn	synonym
(TCC)	Tag closed cup
TC_{LO}	lowest published toxic concentration
TD	toxic dose
tert-	tertiary
THR	summary tox statement; acute unless otherwise indicated
TLV	threshold limit values
(TOC)	Tag open cup
tox	toxic(ity)
U or uk	unknown, insufficient data or experience recorded or available to permit a statement
uel	upper explosive limit
ulc	Underwriters' Laboratory Classification
uns-	unsymmetrical
vap d	vapor density
vap press:	vapor pressure
>	greater than
<	less than
Δ	via heat or heating
1°	primary
α	alpha
β	beta
γ	gamma
(+)	upon review IARC classifies it a carcinogen
(−)	upon review IARC classifies it not a carcinogen
(±)	upon review IARC states insufficient data to classify
⟶	yields or causes

RADIOLOGIC ABBREVIATIONS

cpm	counts per minute
d	days
dpm	disintegrations per minute
e	electrical
ec	electron capture
ev	electron volts
fCi	femto curies
h	hours
m	minutes
mCi	millicuries
Ci	curies
MeV	millions of electron volts
MT	metric tons
MTU	metric tons of Uranium
Mw	megawatts
μCi	micro curies
nCi	nano curies
pCi	pico curies
s	seconds
t	thermal
$T_{\frac{1}{2}}$	half-life
y	years

BENZOIC ACID ANHYDRIDE See benzoic anhydride.

BENZOIC ACID-α-METHYLBENZYL ESTER. See α-methylbenzyl benzoic acid.

BENZOIC ALDEHYDE. See benzaldehyde.

BENZOIC ANHYDRIDE. Syn: *benzoic acid anhydride*. Crystals. $(C_6H_5CO)_2O$, mw: 226.2, mp: 42°, bp: 360°, d: 1.1989 @ 15°/4°, vap. press: 1 mm @ 135.6°.
THR = A MILD irr and allergen.
Fire Hazard: Slight, when heated.

BENZOL. See benzene.

BENZOL DILUENT. Flash p: −25°F, autoign. temp.: 450°F (these values will vary depending on the manufacturer).
THR = U.
Fire Hazard: Dangerous, when exposed to heat or flame or powerful oxidants.
To Fight Fire: Alcohol foam, water mist, fog, dry chemical.

BENZO(a)NAPHTHO(2,1,8-hi j)NAPHTHACENE.
THR = An exper carc. [*23*]

BENZO(a)NAPHTHO(8,1,2-cde)NAPHTHACENE. $C_{28}H_{16}$, mw: 352.4.
THR = An exper neo. [*3, 23*]

BENZO(h)NAPHTHO(1,2,f)QUINOLINE. $C_{21}H_{13}N$, mw: 279.4.
THR = An exper neo. [*3, 23*]

BENZO NITRILE. Syn: *phenyl cyanide*. Transparent, colorless oil, almond-like odor. C_6H_5CN, mw: 103.1, d: 1.246 @ 20°/4°, bp: 191°, d: 1.0102 @ 15°/15°F (OC), mp: −12.8°.
THR = HIGH. See nitriles.

BENZO(r,s,t)PENTAPHENE. Green-yellow needles. $C_{24}H_{14}$, mw: 302.4, mp: 280°–282°.
THR = An exper (+) neo and carc. [*3, 11, 23*]

BENZO(r,s,t)PENTAPHENE-5-CARBOXALDEHYDE. $C_{25}H_{14}O$, mw: 330.4.
THR = An exper neo. [*3*]

BENZO(ghi)PERYLENE.
THR = An exper carc. [*23*]

BENZO(a)PHENALENO(1,9-hi)ACRIDINE. $C_{27}H_{15}N$, mw: 353.4.
THR = An exper neo. [*3*]

BENZO(h)PHENALENO(1,9-6c)ACRIDINE.
THR = An exper neo. [*3*]

BENZO(d,e,f)PHENANTHRENE. See pyrene.

BENZO(c)PHENANTHRENE. $C_{18}H_{12}$, mw: 228.3.
THR = An exper carc. [*3, 23*]

BENZO(c)PHENANTHRENE-8-CARBOXALDEHYDE. $C_{19}H_{12}O$, mw: 256.3.
THR = An exper neo. [*3*]

5-BENZO(c)PHENANTHRYL METHYL KETONE. $C_{12}H_{14}O$, mw: 270.3.
THR = An exper carc. [*3*]

BENZO PHENONE. Syn: *phenyl ketone, diphenyl ketone*. Rhombic white crystals, persistent rose-like odor. $C_6H_5COC_6H_5$, mw: 182.21, mp (α): 49°, mp (β): 26°, mp (γ): 47°, bp: 305.4°, d (α): 1.0976 @ 50°/50°, d (β): 1.108 @ 23°/40°, vap. press: 1 mm @ 108.2.
THR = Details U. See also ketones.
Fire Hazard: Slight, when heated; can react with oxidiing materials.

BENZO PYRENE. See benzo(a)pyrene.

BENZO(a)PYRENE. Yellow crystals insol in water, sol in benzene, toluene, xylene. $C_{20}H_{12}$, mw: 252.3, mp: 179°, bp: 312° @ 10 mm.
THR = HIGH. An exper (+) carc, [*3, 11, 23*] neo and mutagen. A common contaminant of air, water, food, smoke.

BENZO(a)PYRENE-6-CARBOXALDEHYDE. $C_{21}H_{12}O$, mw: 280.3.
THR = An exper neo and carc. [*3*]

BENZO(a)PYRENE-6-CARBOXALDEHYDE THIO SEMICARBAZONE. $C_{22}H_{15}N_3S$, mw: 353.5.
THR = An exper carc. [*3*]

BENZO(a)PYRENE-4,5-EPOXIDE. $C_{20}H_{14}O$, mw: 270.2.
THR = An exper neo to mice via dermal route. [*103*]

BENZO(a)PYRENE-7,8-EPOXIDE. $C_{20}H_{14}O$, mw: 270.2.
THR = An exper neo to mice via dermal route. [*103*]

BENZO(a)PYRENE-6-METHANOL. $C_{21}H_{14}O$, mw: 282.4.
THR = An exper neo and carc. [*3*]

BENZO(a)PYRENE-4,5-OXIDE. $C_{20}H_{12}O$, mw: 268.3.
THR = An exper neo. [*3*]

BENZO(a)PYRENE-7,8-OXIDE.
THR = An exper carc. [*3*]

BENZO(a)PYREN-6-OL. $C_{20}H_{12}O$, mw: 268.3.
THR = An exper neo. [*3*] An exper neo to mice via sc and in routes. [*103*]

7H-BENZO(a)PYRIDO(3,2-g)CARBAZOLE. $C_{19}H_{12}N_2$, mw: 268.3.
THR = An exper neo. [*3, 23*]

7H-BENZO(c)PYRIDO(2,3-g)CARBAZOLE.
THR = An exper neo. [*3, 23*]

REF 6

RECORD OF COMMUNICATION	☑ PHONE CALL ☐ DISCUSSION ☐ FIELD TRIP ☐ CONFERENCE ☐ OTHER (SPECIFY) 213-868-0511 ext. 244 (Record of item checked above)	
TO: John Price Santa Fe Springs Chief Engineer	FROM: Therese Gioia	DATE 8-5-85 TIME 4:45 pm

SUBJECT

Source of city water and its usage

SUMMARY OF COMMUNICATION

Mr. Price said the cities water comes from two sources: 1) 60% from local groundwater 2) 40% from the Metropolitan Water District which is a blend of Colorado River water and State Project Water. Both sources are fed directly into the same piping for distribution. A small amount of blending may also occur in a 4 million gallon reservoir. 4 of the 5 wells drawing local groundwater are located within the 3 mile radius of the site. The city has 4200 connections which are both residential and industrial.

Other water systems serving the area within the 3-mile radius of the site are:

1) Suburban Water Systems
2) Whittier Union High School District
3) San Gabriel Valley Water Systems

CONCLUSIONS, ACTION TAKEN OR REQUIRED

The well not located in the 3-mile radius supplies less than 25% of the groundwater pumped. (See Ref) It is designated as #2 by the owner.

Mr. Price said that it would be extremely difficult to find or supply an alternate source of water if the local groundwater was not available. MWD water would not meet the water demand.

INFORMATION COPIES

TO:

EPA Form 1300-6 (7-72) REPLACES EPA HQ FORM 5300-3 WHICH MAY BE USED UNTIL SUPPLY IS EXHAUSTED.

RECORD OF COMMUNICATION

☒ PHONE CALL ☐ DISCUSSION ☐ FIELD TRIP ☐ CONFERENCE
☐ OTHER (SPECIFY)

(Record of item checked above)

TO:	FROM:	DATE
John Price Santa Fe Springs Chief Eng.	Therese Gioia	10-15-85
		TIME 9:00 AM

SUBJECT
Aquifers from which city's groundwater is drawn

SUMMARY OF COMMUNICATION

Mr. Price researched his records and found the following information regarding which aquifers are used for the city's water supply:

Well #1 ⇒ Silverado + Sunnyside
Well #2 ⇒ Hollydale, Jefferson, Lynwood, Silverado, and Sunnyside
Well #4 ⇒ Lynwood, Silverado, + Sunnyside
Well #304 ⇒ Silverado
Well #308 ⇒ Jefferson + Lynwood
Well #309 ⇒ Sunnyside

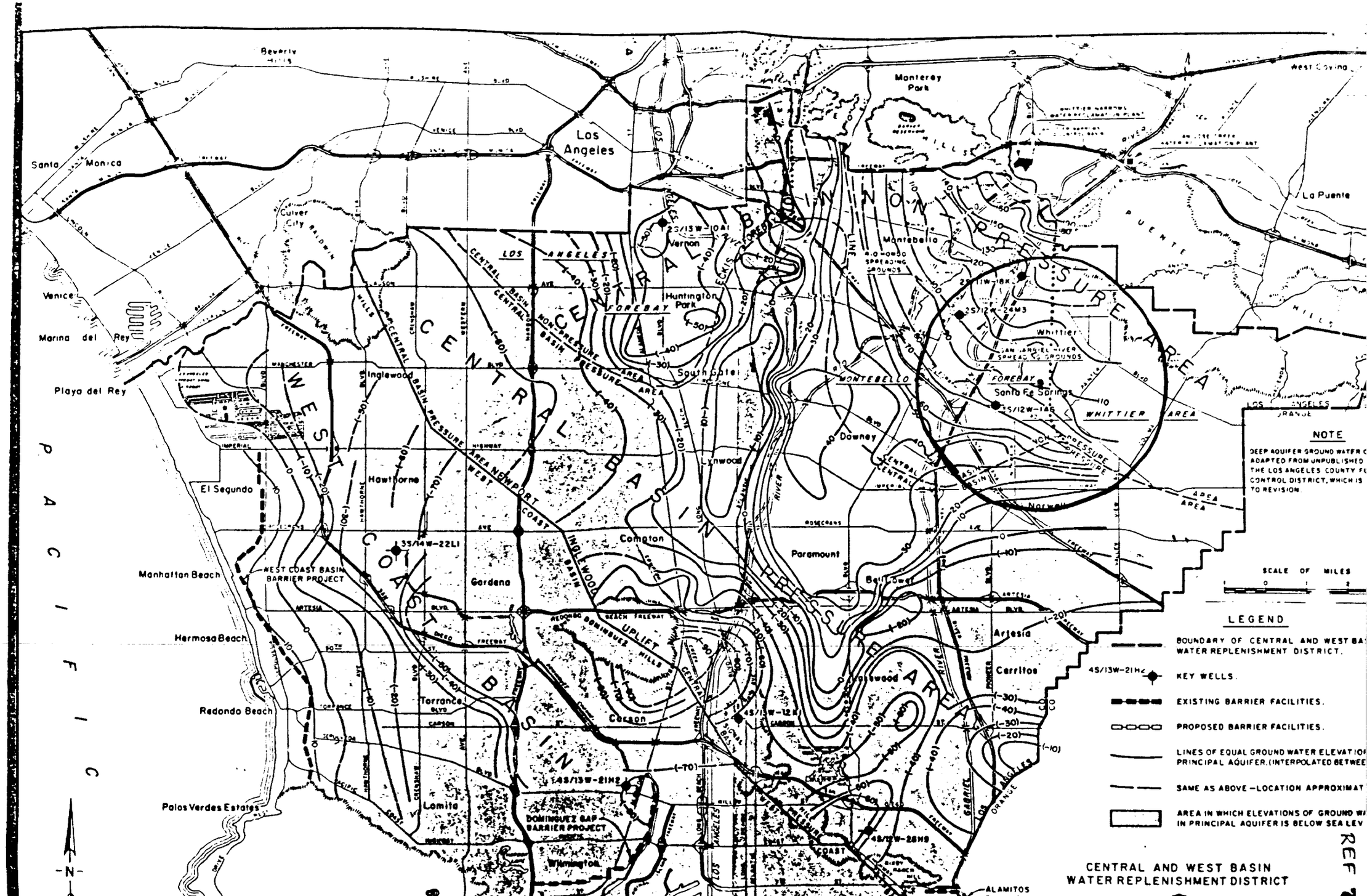
Mr. Price said Well #305 listed in the Watermaster Report is not used and that Well #308 is also unused. Well #309 is the only well to use the Sunnyside Aquifer alone.

CONCLUSIONS, ACTION TAKEN OR REQUIRED

Of the wells in the 3-mile radius, Well #309 represents less than 25% of the groundwater used by the city.

INFORMATION COPIES
TO:

EPA Form 1300-6 (7-72) REPLACES EPA HQ FORM 5300-3 WHICH MAY BE USED UNTIL SUPPLY IS EXHAUSTED.


Beverly Hills
Santa Monica
Los Angeles
Monterey Park
West Covina
La Puente
Culver City
Venice
Marina del Rey
Playa del Rey
Vernon
Huntington Park
Montebello
Whittier
Inglewood
South Gate
Santa Fe Springs
Downey
Lynwood
Norwalk
El Segundo
Hawthorne
Compton
Paramount
Bellflower
Manhattan Beach
Gardena
Artesia
Hermosa Beach
Cerritos
Redondo Beach
Torrance
Carson
Palos Verdes Estates
Lomita
Wilmington
Alamitos
PACIFIC
WEST COAST BASIN BARRIER PROJECT
DOMINGUEZ GAP BARRIER PROJECT
CENTRAL BASIN
WEST COAST BASIN
NON-PRESSURE AREA
PRESSURE AREA
NEWPORT-INGLEWOOD UPLIFT
LOS ANGELES RIVER
SAN GABRIEL RIVER
PUENTE HILLS
DOMINGUEZ HILLS
MONTEBELLO FOREBAY
WHITTIER AREA
NOTE
DEEP AQUIFER GROUND WATER C
ADAPTED FROM UNPUBLISHED
THE LOS ANGELES COUNTY FL
CONTROL DISTRICT, WHICH IS
TO REVISION
SCALE OF MILES
LEGEND
BOUNDARY OF CENTRAL AND WEST BA
WATER REPLENISHMENT DISTRICT.
KEY WELLS.
EXISTING BARRIER FACILITIES.
PROPOSED BARRIER FACILITIES.
LINES OF EQUAL GROUND WATER ELEVATIO
PRINCIPAL AQUIFER. (INTERPOLATED BETWEE
SAME AS ABOVE—LOCATION APPROXIMAT
AREA IN WHICH ELEVATIONS OF GROUND WA
IN PRINCIPAL AQUIFER IS BELOW SEA LEV
CENTRAL AND WEST BASIN
WATER REPLENISHMENT DISTRICT
REF 7

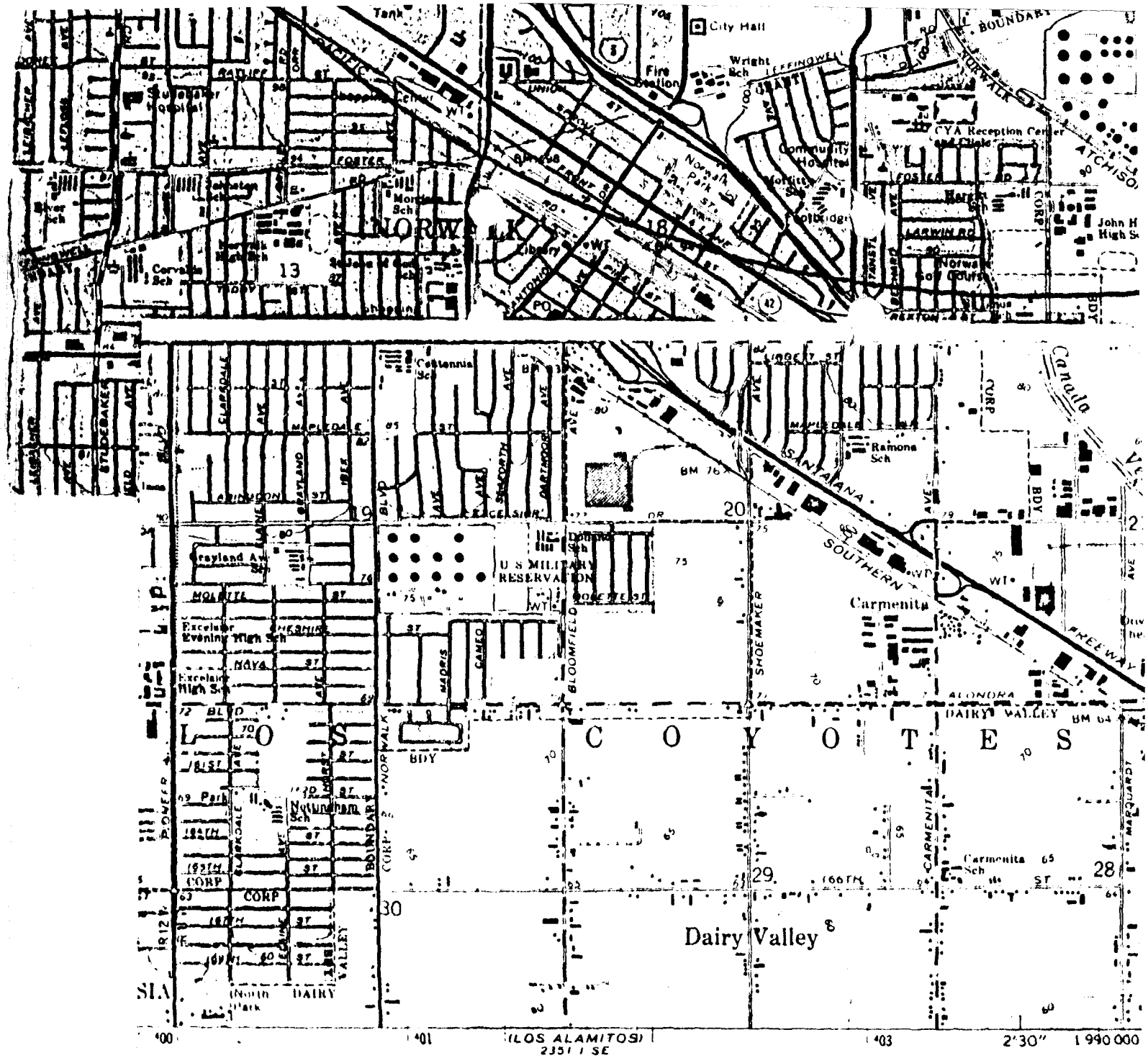
STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES

Ref 7
Waste Disposal

CALIFORNIA
7.5 MINUTE SERIES (TOPOGRAPHIC)
NE/4 DOWNEY 15' QUADRANGLE

LEIBACHER
AVE
STUDEBAKER
CLARKDALE
GRAYLAND
IBEX
BLVD
CAMEO
SEAFORTH
DARTMOOR
U S MILITARY RESERVATION
SHOEMAKER
SOUTHERN
FREEWAY
Carmenita
FAIRFORD
GRAYSTONE
HARVEST
ORR AND DAY
RD
BARD AVE
JERSEY
ALBURTIS
PIONEER
NORWALK
BLVD
Water Tank
City Hall
Drive in Theater
BLOOMFIELD
GREENSTONE
SANTA FE SPRINGS CORP BDY
PAINTER
BOUNDARY
ATCHISON
CYA Reception Center
SANTA FE SPRINGS

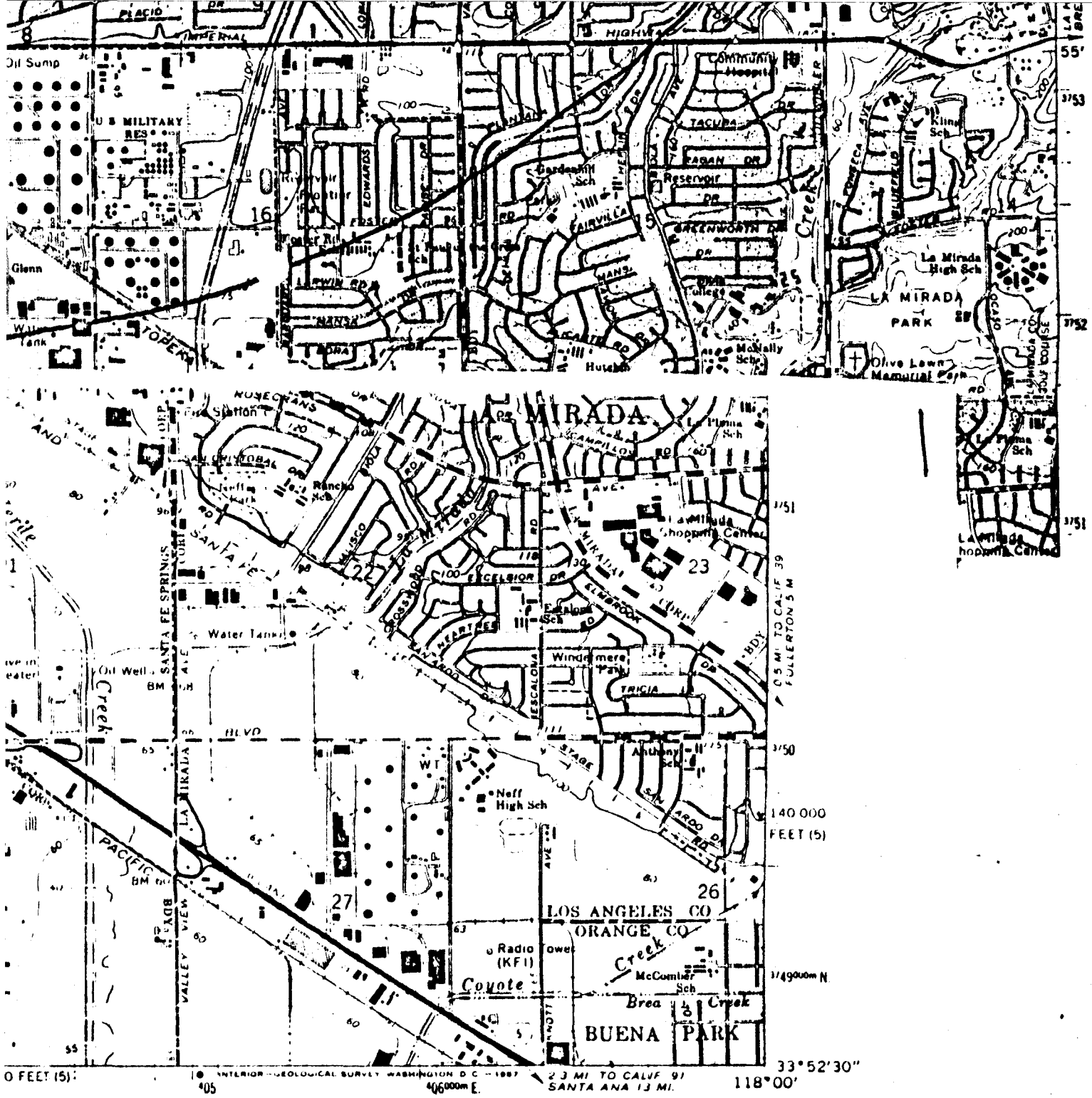
LA HABRA (CALIF 39) 1.9 MI.
LA HABRA (CALIF 39) BREA 5.8 MI.
LA HABRA (CALIF 39) ANAHEIM 12 MI.
T 3 S.
PACIFIC
GULLEN
CARNEL
GRANT
FLORENCE
VIRGINIA
Candlewood Country Club
Oil Well
Water Tanks
Footbridge
LEFFINGWELL
PLACID
IMPERIAL
HIGHWAY
Community Hospital
U S MILITARY RES
Reservoir
TACUBA
FABAN DR
GREENWORTH DR
La Mirada High Sch
LA MIRADA PARK
Olive Lawn Memorial Park
TOPEKA
LA MIRADA
SANTA FE
Water Tanks
Oil Well
SANTA FE SPRINGS
Windermere Park
TRICIA
C 5 MI TO CALIF 39 FULLERTON 5 MI



SCALE 1 24 000

CONTOUR INTERVAL 20 FEET
DOTTED LINES REPRESENT 5 FOOT CONTOURS
DATUM IS MEAN SEA LEVEL

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR WASHINGTON, D. C. 20242
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST



ROAD CLASSIFICATION

Heavy-duty — Light-duty

Medium-duty — Unimproved dirt

Interstate Route — State Route

QUADRANGLE LOCATION

WHITTIER, CALIF.

NE/4 DOWNEY 15' QUADRANGLE

N3352 5—W11800/7.5

1965

AMS 2351 I NE—SERIES V895

2047 - 0001

REF 8

State of California—Health and Welfare Agency

Department of Health Services
Hazardous Materials Management Section

MEMO OF CALL

Name: Chris Nagler

Date: 11-14-84

Firm: Dept of Water Resources

Time: 1130

Address:

Person Taking or Making Call: Carol J. Masson

Telephone No.: 213/ 620-4119

Subject: groundwater near Waste Disposal, Inc

Message:

2S/11W-32J4 - Whittier Union High School, 9401 S. Painter Ave
935' NW of Painter, 865' SW of Mallory = Slauson
currently pumping - domestic, irrigation
804' total depth (~3000' from hazardous substance)

According to Brookman Edmonston consulting firm's report to Central and West Basin Water Replenishment District, the area is a non pressurized zone which means an open aquifer. This area is used extensively for groundwater recharge.

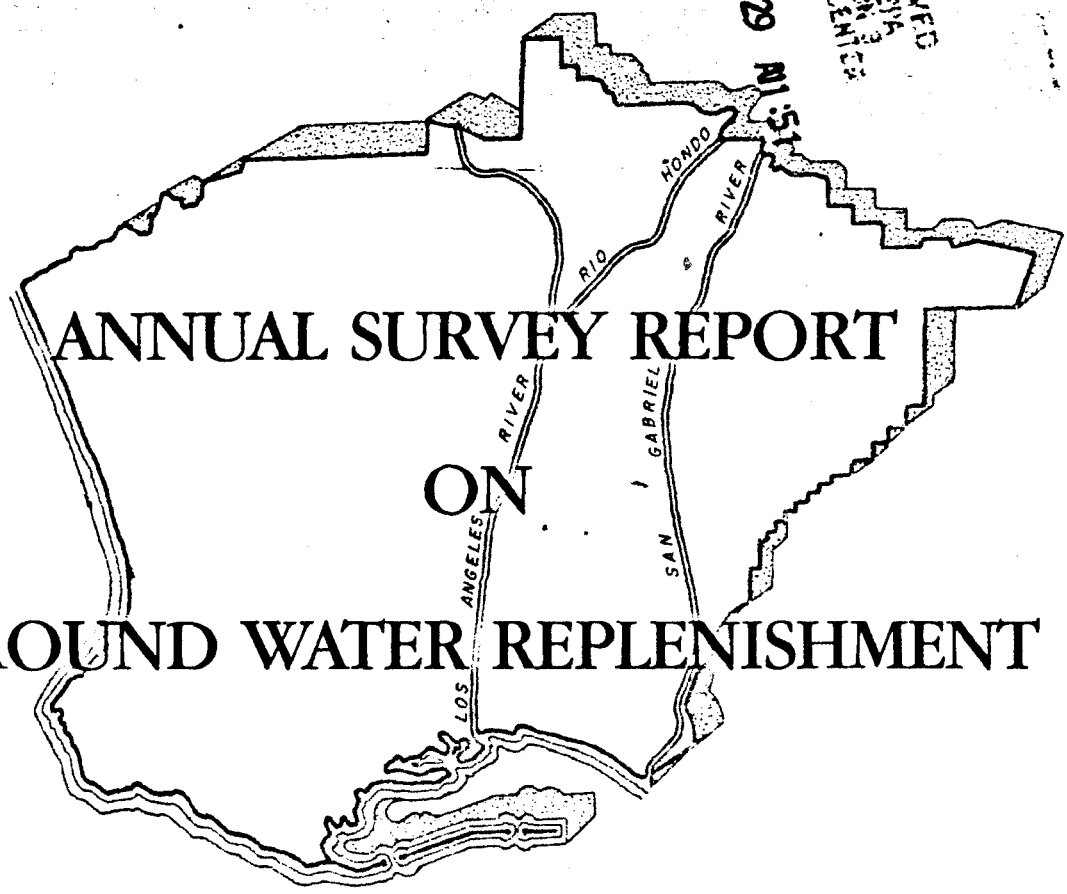
203 (8/78)

REF 8A

CENTRAL AND WEST BASIN
WATER REPLENISHMENT DISTRICT

7439 East Florence Avenue
Downey, California

'85 JUL 29 A11:51
RECEIVED
U.S. EPA
REGION 9
COMM. CENTER



ANNUAL SURVEY REPORT ON GROUND WATER REPLENISHMENT

1985

Bookman - Edmonston Engineering, Inc.
Glendale, California

REF 9

WATERMASTER SERVICE
CENTRAL BASIN
Los Angeles County

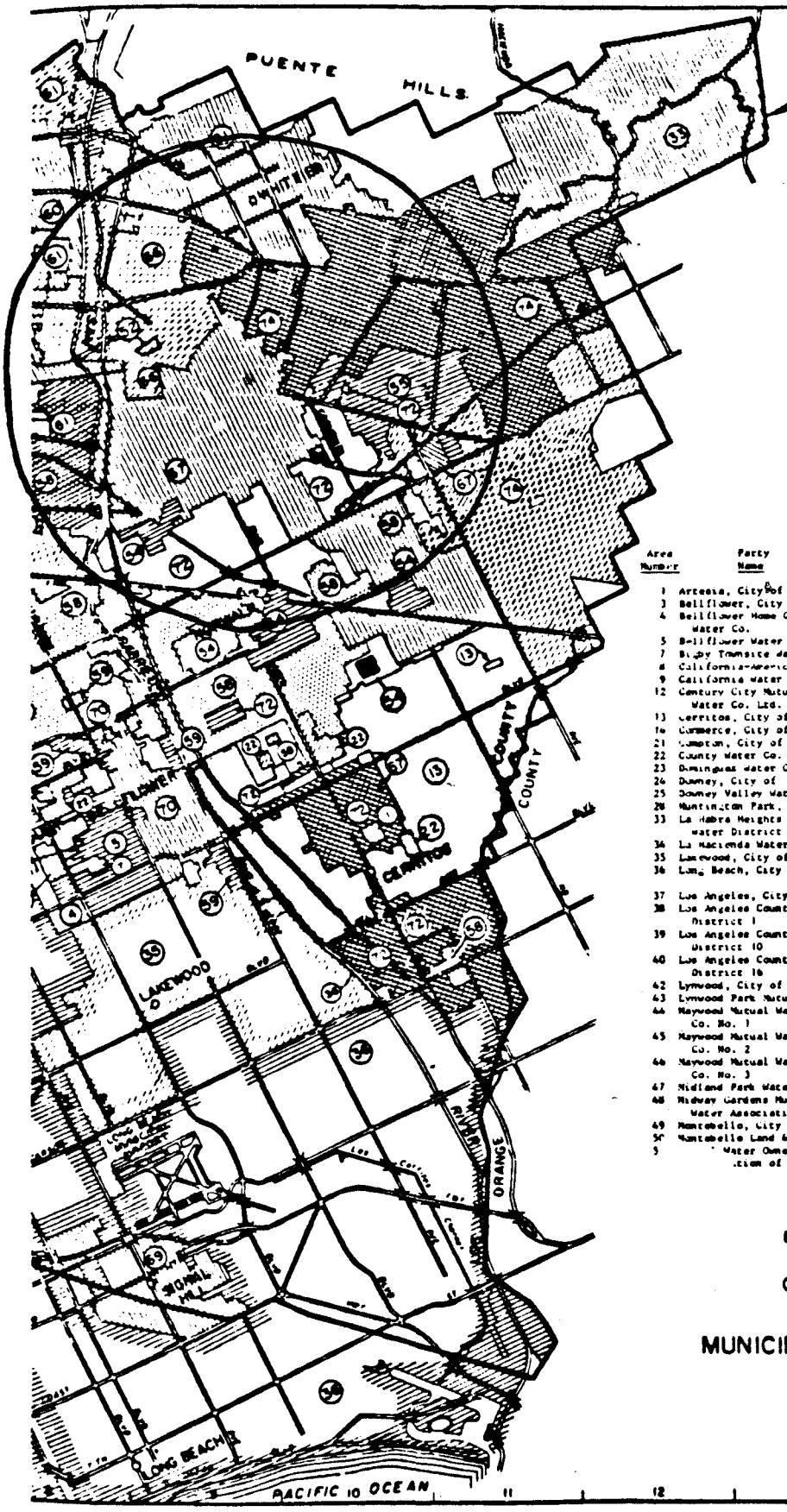
July 1, 1983 - June 30, 1984

State of California | **DEPARTMENT OF WATER RESOURCES** | The Resources Agency

Southern District

October 1984

FIGURE 5



INDEX TO FIGURE 5

WATER SERVICE AREAS OF PARTIES

Area Number	Party Name	Location on Figure
1	Artesia, City of	F-10
3	Bellflower, City of	F-8
4	Bellflower Home Garden Water Co.	G-8
5	Bellflower Water Co.	F-8
7	Bixby Transite Water Co.	F-8
8	California-American Water Co.	E-1
9	California Water Service Co.	B-5
12	Century City Mutual Water Co. Ltd.	F-9
13	Cerritos, City of	E-11;F-11
16	Commerce, City of	B-6
21	Compton, City of	F-6;G-5,6
22	County Water Co.	E-10;F-8,9,10
23	Domingues Water Corp.	J-6
24	Downey, City of	C-7;E-7
25	Downey Valley Water Co.	E-7
28	Huntington Park, City of	D-5
33	La Habra Heights County Water District	A-12
34	La Hacienda Water Co.	G-7
35	Lakewood, City of	G-9
36	Long Beach, City of	G-7,10;H-10; J-7,K-7,10
37	Los Angeles, City of	C-4;E-2;F-4
38	Los Angeles County Waterworks District 1	F-3
39	Los Angeles County Waterworks District 10	F-5
40	Los Angeles County Waterworks District 16	E-4
42	Lynwood, City of	F-6
43	Lynwood Park Mutual Water Co.	F-5
44	Maywood Mutual Water Co. No. 1	D-5
45	Maywood Mutual Water Co. No. 2	C-5
46	Maywood Mutual Water Co. No. 3	D-6
47	Midland Park Water Trust	F-6
48	Midway Gardens Mutual Water Association	G-7
49	Montebello, City of	A-7;B-6;C-7
50	Montebello Land & Water Co.	B-7
5	Water Owners ...tion of Los Nietos	C-9
56	Norwalk, City of	D-10,E-9,10
55	Orchard Dale Water District	C-10
57	Paramount, City of	F-7
58	Park Water Co.	C-7;D-7,8,10; E-6,7,8,9,10,F-5,6,7; G-5,6,11,H-3,5
59	Peerless Water Co.	E-8,9;F-8
60	Pico Water District	B-8
61	Pico Rivera, City of	A-8;B-7,8;C-7,8
66	San Gabriel Valley Water Co.	A-6,7,B-6;C-6
67	Santa Fe Springs, City of	D-9,11,F-10
68	Sativa Los Angeles County Water District	C-5
69	Signal Hill, City of	J-6
70	Somerset Mutual Water Co.	E-8,F-9
71	South Montebello Irrigation District	B-7
72	Southern California Water Co.	C-10;D-4,5,9,10; E-4,7,10,F-3,9,10, G-2,5,10,H-3,5
73	South Gate, City of	E-5
74	Suburban Water Systems	C-10,11;D-11
76	Tract Number 180 Water Co.	D-6
77	Tract 349 Mutual Water Co.	D-5
78	Uehling Water Co. Inc.	F-6;G-6
79	Vernon, City of	C-6
80	Walnut Park Mutual Water Co.	D-5
81	Whittier, City of	B-9

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SOUTHERN DISTRICT
CENTRAL BASIN WATERMASTER SERVICE

WATER SERVICE AREAS OF MUNICIPAL, MUTUAL AND PUBLIC UTILITY WATER SERVICE AGENCIES JUNE 1984

SCALE

MILES

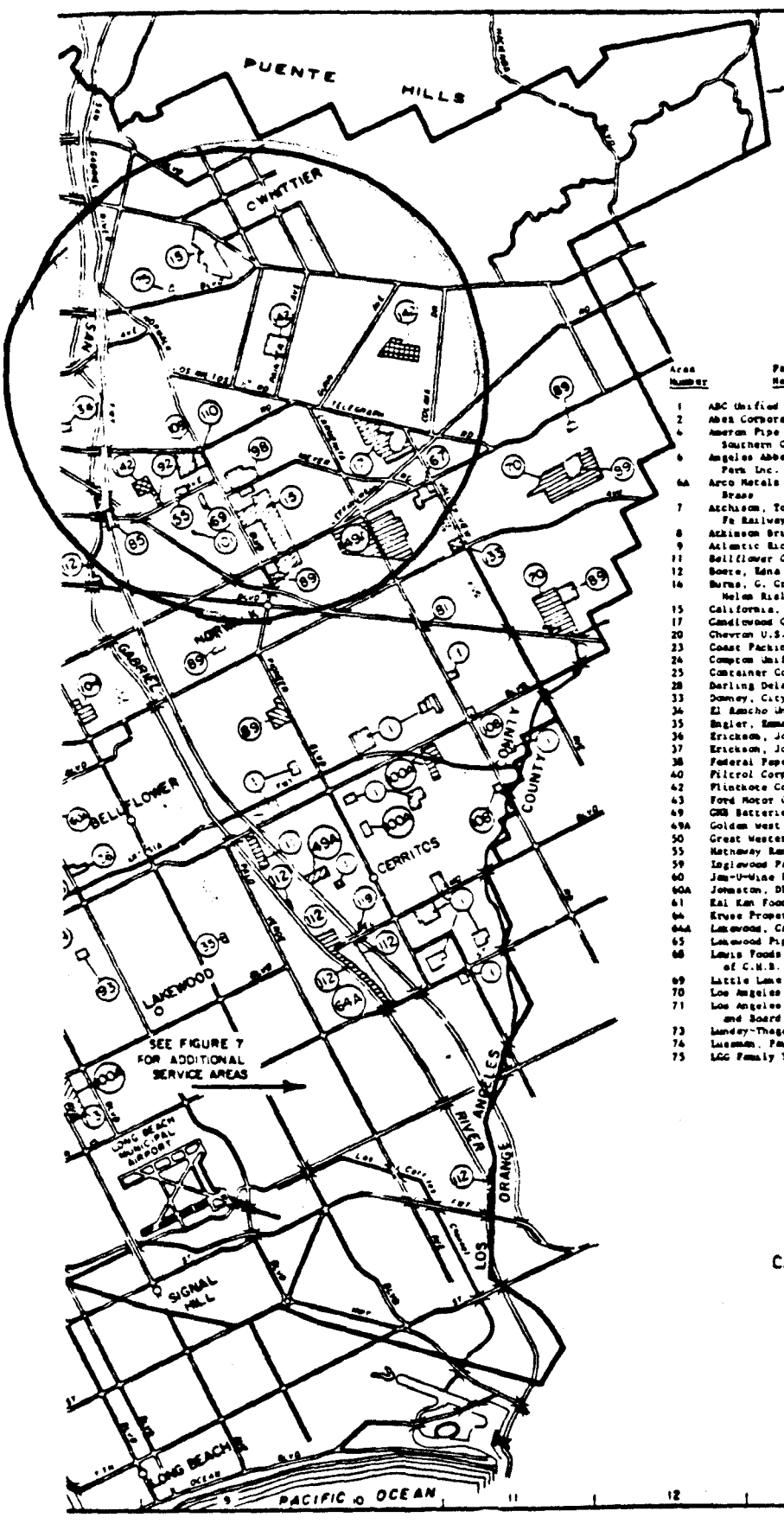
1 0 1 2 3

1984

BLE 16. GROUND WATER EXTRACTIONS
PARTIES REPORTING MONTHLY
(Continued)
In acre-feet

STATE WELL NUMBER	OWNERS DESIGNATION	PRODUCTION 1984 JUL	AUG	SEP	OCT	NOV	DEC	1985 JAN	FEB	MAR	APR	MAY	JUN	TOTAL	PARTY IDENT.
						CENTRAL ZONE 4 (CONTINUED)									
PICO WATER DISTRICT (CONTINUED)															3050
2S/12W-13L05S	8	15.76	0.00	14.64	44.08	47.15	36.82	27.73	53.01	46.60	99.47	143.03	55.03	896.10	
2S/12W-24E04S	5	53.10	38.72	0.00	0.00	0.00	0.00	50.47	88.92	78.62	44.28	47.63	89.43	458.03	
2S/12W-25E10S	6	87.54	47.77	14.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	150.28	
PARTY TOTALS:		237.40	287.46	252.33	279.67	215.74	227.27	240.03	258.08	295.35	293.21	381.08	363.91	3340.61	
PICO RIVERA, CITY OF															3053
2S/11W-05P01S	ROLF1	14.11	10.25	11.44	3.69	2.64	3.54E	9.52	7.95	6.54	10.67	0.00	27.56	100.41	
2S/12W-12A 5	W1	38.59	15.93	78.23	181.06	119.38	105.20	42.88	95.26	74.78	33.87	55.94	29.66	750.80	
2S/12W-12A05S	W2	149.61	201.94	144.94	0.00	0.00	0.00	116.54	143.79	203.25	194.41	215.68	211.00	1617.79	
2S/12W-23R04S	W3	2.95	57.35	121.30	14.00	4.01	3.82	8.47	8.98	11.89	9.72	9.85	1.67	259.00	
2S/12W-23B08S	W4	209.95	97.12	46.81	153.51	194.64	207.09	28.08	31.67	46.37	145.32	138.53	176.40	1507.51	
2S/12W-25G 5	W11	53.83	7.87	13.73	15.67	9.61	10.78	3.01	2.84	4.04	8.79	14.31	14.37	157.47	
2S/12W-25G01S	W12	25.34	80.14	26.35	5.17	6.24	3.49	154.95	175.85	121.20	17.04	93.00	74.75	737.56	
2S/12W-25H01S	W9	37.81	48.85	31.08	32.82	26.24	27.47	15.72	16.76	18.65	20.38	54.81	50.72	390.31	
2S/12W-26D07S	W5	52.68	28.35	44.96	35.54	6.97	6.42	7.06	3.54	3.79	2.32	8.87	1.57	194.09	
2S/12W-26E03S	W6	3.20	3.80	3.72	2.81	4.27	2.59	2.95	3.58	2.78	2.47	1.07	0.78	32.87	
2S/12W-26J01S	W7	3.07	2.17	2.11	0.88	1.26	1.08	0.55	1.67	0.99	0.28	1.83	1.43	17.32	
2S/12W-36H06S	W8	17.24	28.82	19.59	2.45	2.12	1.56	2.06	11.34	11.14	13.71	24.05	21.87	156.77	
PARTY TOTALS:		678.28	582.63	543.55	451.72	378.17	373.16	381.59	481.74	475.42	484.18	608.74	612.58	5022.78	
POWERINE OIL COMPANY															3950
3S/11W-06O 5	8	27.95E	38.81E	29.87E	29.72E	17.23E	17.06E	19.58E	31.42E	27.92E	0.00	0.00	0.00	232.46	
3S/11W-06R02S	7	6.35E	2.21E	1.83E	4.78E	10.64E	6.92E	5.43E	0.01E	0.35E	0.00	0.00	0.00	42.52	
3S/11W-07A01S	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	33.73E	0.00	0.00	0.00	0.00	33.73	
3S/11W-07B05S	6	29.50E	33.27E	30.55E	32.06E	31.72E	7.01E	24.07E	0.00	40.02E	16.12E	0.00	0.00	244.72	
PARTY TOTALS:		63.80	66.29	62.35	71.36	59.59	32.59	49.08	65.16	68.29	16.12	0.00	0.00	555.43	
ROCKVIEW DAIRIES INC															4115
3S/12W-05C06S	NF#1	3.10	3.92	2.99	4.50E	4.94	5.43	5.28	4.82	5.25	4.11	4.67	4.36	53.29	
ROMAN CATHOLIC ARCHBISHOP OF L A															4150
2S/12W-04K01S	50HP	0.00	0.02	0.18	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	
2S/12W-04K08S	100HP2	15.50	4.33	4.90	1.52	0.58	0.18	0.76	4.14	4.87	4.13	5.66	5.94	52.63	
3S/11W-31N03S	NFPAP	0.54	0.51	0.88	0.86	0.82	0.53	0.65	0.73	2.89	2.80E	0.94	0.64	12.90	
4S/12W-09D02S	ALLSO	0.00	28.05E	24.83E	9.79E	4.43E	0.43	1.06	6.58	8.37	9.78	17.11	17.58	128.01	
PARTY TOTALS:		16.06	32.91	30.79	12.17	5.75	1.14	3.27	11.45	16.13	16.80	23.71	24.16	194.34	
ROYDEN, HERBERT N.															4180
3S/11W-30N02S	3	2.95	4.70	4.28	1.75	1.66	1.25	1.02	1.34	1.23	1.55	2.70	2.24	26.75	
RUCHTI BROS															4190
PARTY TOTALS:		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
ST JOHN BOSCO SCHOOL															4300
3S/12W-15K03S	15HP	0.85	4.57	6.14	2.26	1.03	0.88	0.98	1.98	5.47	2.84	7.78	8.36	53.66	
SAN GABRIEL VALLEY WATER COMPANY															4330
2S/11W-18O 5	WW1	331.15	349.22	330.46	297.13	261.94	269.24	238.56	253.40	384.64	292.92	327.71	297.65	3538.80	
2S/11W-19F 5	WW6	160.67	138.98	114.44	74.95	53.19	41.32	80.60	83.34	94.31	100.76	154.80	169.93	1267.60	
PARTY TOTALS:		491.82	488.20	444.90	367.09	315.13	310.56	319.16	336.74	378.95	393.68	482.68	467.38	4806.20	
SANTA FE SPRINGS, CITY OF															4335
2S/11W-30R03S	1	174.91	181.49	149.87	181.76	171.47	182.94	152.09	179.22	189.59	174.75	194.67	181.99	2093.93
2S/12W-25D05S	304W1	119.85	119.87	109.44	94.47	47.98	99.65	102.24	111.18	123.11	98.67	109.83	73.72	1228.04
2S/12W-36D05S	305W1	0.00	0.00	0.00	0.00E	0.05	1.98	0.00	3.78	0.00	0.00	0.00	0.00	5.81
3S/11W-06D03S	4	15.31	23.09	10.74	0.00	0.30	8.80	7.25	4.59	0.00	0.92	0.00	0.00	56.78
3S/11W-20A09S	2	90.06	1.04	21.44	49.24	55.12	34.87	88.13	137.81	158.76	78.98	96.14	107.49	878.90
3S/12W-01F08S	300W2	113.67	75.92	0.00	0.00	0.00	0.00	0.00	0.00	36.07	57.06	65.29	108.54	657.29
PARTY TOTALS:		513.80	400.58	309.17	327.47	294.93	319.46	344.71	341.58	499.53	403.87	445.13	561.24	4820.67

FIGURE 6



INDEX TO FIGURE 6

WATER SERVICE AREAS OF PARTIES

Area Number	Party Name	Location on Figure
1	ABC Unified School Dist.	E-11,F-10
2	Abex Corporation	D-5
4	Ameron Pipe Products Group Southern California Div.	E-6
6	Angeles Abbey Memorial Park Inc.	G-6
6A	Arco Metals Company, American Brass	F-7
7	Atchison, Topeka and Santa Fe Railway Company	C-4,5
8	Atkinson Brick Company	C-5
9	Atlantic Richfield Company	C-8
11	Bellflower Christian School	F-9
12	Boere, Edna	G-7
14	Burns, C. Creswell and Helen Bishop	G-5
15	California, State of	B-9,D-9
17	Candlewood Country Club	C-10
20	Chevron U.S.A. Inc.	F-11
23	Coast Packing Company	C-4,E-8,9
24	Compton Unified School Dist.	G-6
25	Container Corp. of America	D-3
28	Darling Delaware Co. Inc.	C-5
33	Downey, City of	D-7
34	El Rancho Unified School Dist.	C-8
35	Engler, Emma	G-9
36	Erickson, John A.	F-8
37	Erickson, Jon A.	*
38	Federal Paper Board Co. Inc.	C-6
40	Filcrol Corporation	C-5
42	Flintkote Company, The	B-4
43	Ford Motor Company	C-8
49	GNB Batteries Inc.	E-3
49A	Golden west Refining Co.	C-4,D-10,F-10
50	Great Western Malting Co.	C-6
55	Hathaway Ranch	D-9
59	Inglewood Park Cemetery	F-2
60	Jan-U-Wine Foods Inc.	C-7
60A	Johnston, DL+CJ+RD+JA	F-8
61	Kai Kan Foods Inc.	C-4
64	Kruse Properties Company	A-8
64A	Lakewood, City of	C-10
65	Lakewood Pipe Company	F-8
68	Lewis Foods Inc., Division of C.H.B. Foods Inc.	G-8
69	Little Lake Cemetery Dist.	D-9
70	Los Angeles, County of	D-12,E-7
71	Los Angeles Paper Box and Board Mills	C-6
73	Lundey-Thagard Oil Co.	F-6
74	Luxman, Paul H., Jr. et al	C-8
75	LGG Family Trust	B-9
77	Memorial Parks Inc.	H-5
81	Mitsuuchi, Fumiko	E-11
85	Murata, Daisaku et al	D-8
88	Norris Industries Inc.	D-6
89	Norwalk-La Mirada Unified School District	C-11,D-9,11,E-9
90	ONE Farms	E-6
91A	Pacific Cold Storage (Tenant of Area 139)	
91B	Pacific Coast Packaging Corp.	D-6
92	Paradise Memorial Park	D-9
92A	Paramount, City of	F-8
93	Paramount Unified Sch. Dist.	F-7,G-8
93A	Paneer, Mark L. and Mary Virginia	G-7
95	Peterson Manufacturing Co.Inc.	C-4
96	Pico Boys Baseball Inc.	A-8
98	Pawerine Oil Company	D-9
100	Rockview Dairies Inc.	E-7
100A	Roman Catholic Archbishop of Los Angeles	B-5,E-10,F-10,H-8
101	Rosales, Elvira C.	D-9
103	Ruchti Brothers	E-7
104	St. John Bosco School	E-8
106	Scholle Corporation	G-6
107	Sessler, Celia	E-7
108	Shell Oil Company	F-11
109	Shriners Hospital & S.P.C.A.	D-9
110	Simmons, James E.	D-9
111	Simmons, Bennett E. et al	B-6
111A	Sinclair Paint Co.	C-7
112	Southern California Edison Co.	C-6, E-6,F-7,G-7,8,10,H-7,J-7,11
113	Southern Service Company & Environmentals Inc.	E-8
119	Stockmal, John F.	C-10
122	Sunset Cemetery Association	H-5
125	Thompson, O. T. and Drusilla	G-7
127	Union Pacific Railroad Co.	C-5
131	United States Gypsum Co.	D-6
133	Van Dam, Cornelius A. and Florence	D-11
139	Vernon Properties	C-5
140	Virginia Country Club	H-7
141	Weslock Company	G-6
142	Whittier Union High School District	C-10,11,D-9
143	Yamamoto, George and Alice	H-7,G-8

* No service area

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SOUTHERN DISTRICT
CENTRAL BASIN WATERMASTER SERVICE

WATER SERVICE AREAS OF INDIVIDUAL PARTIES
JUNE 1984

SCALE

1 1/2 0 1 2 3
MILES

1984

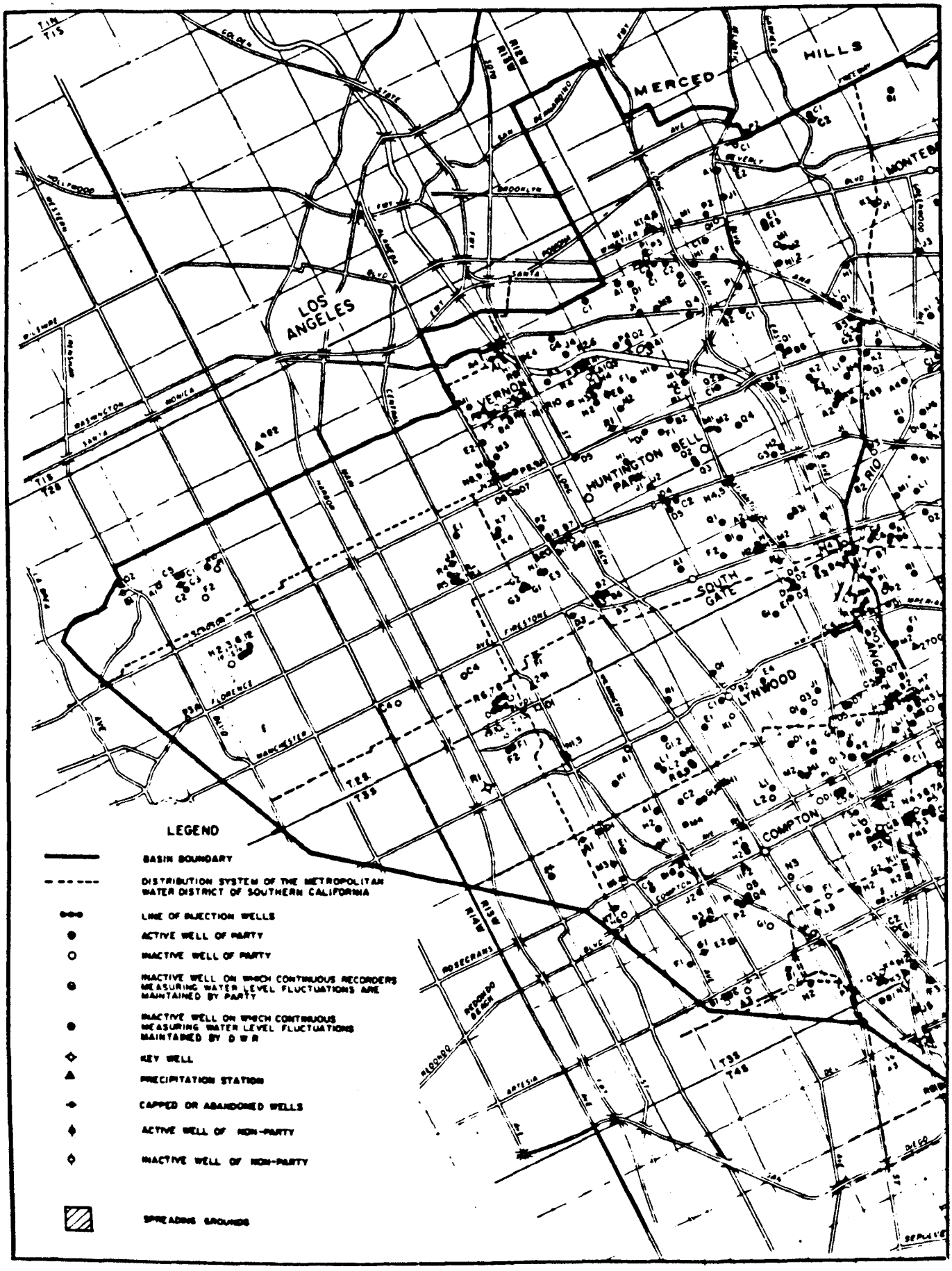
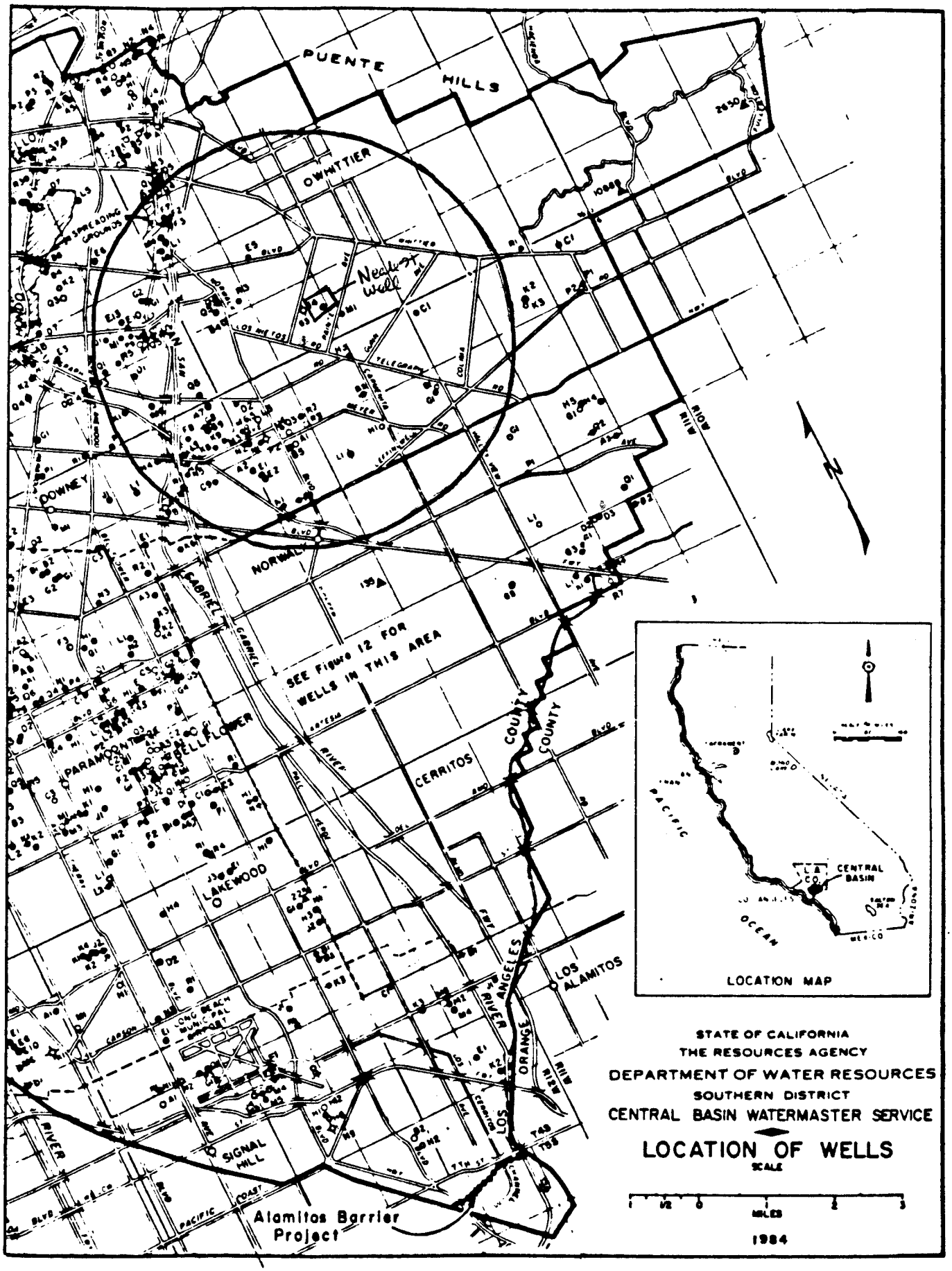
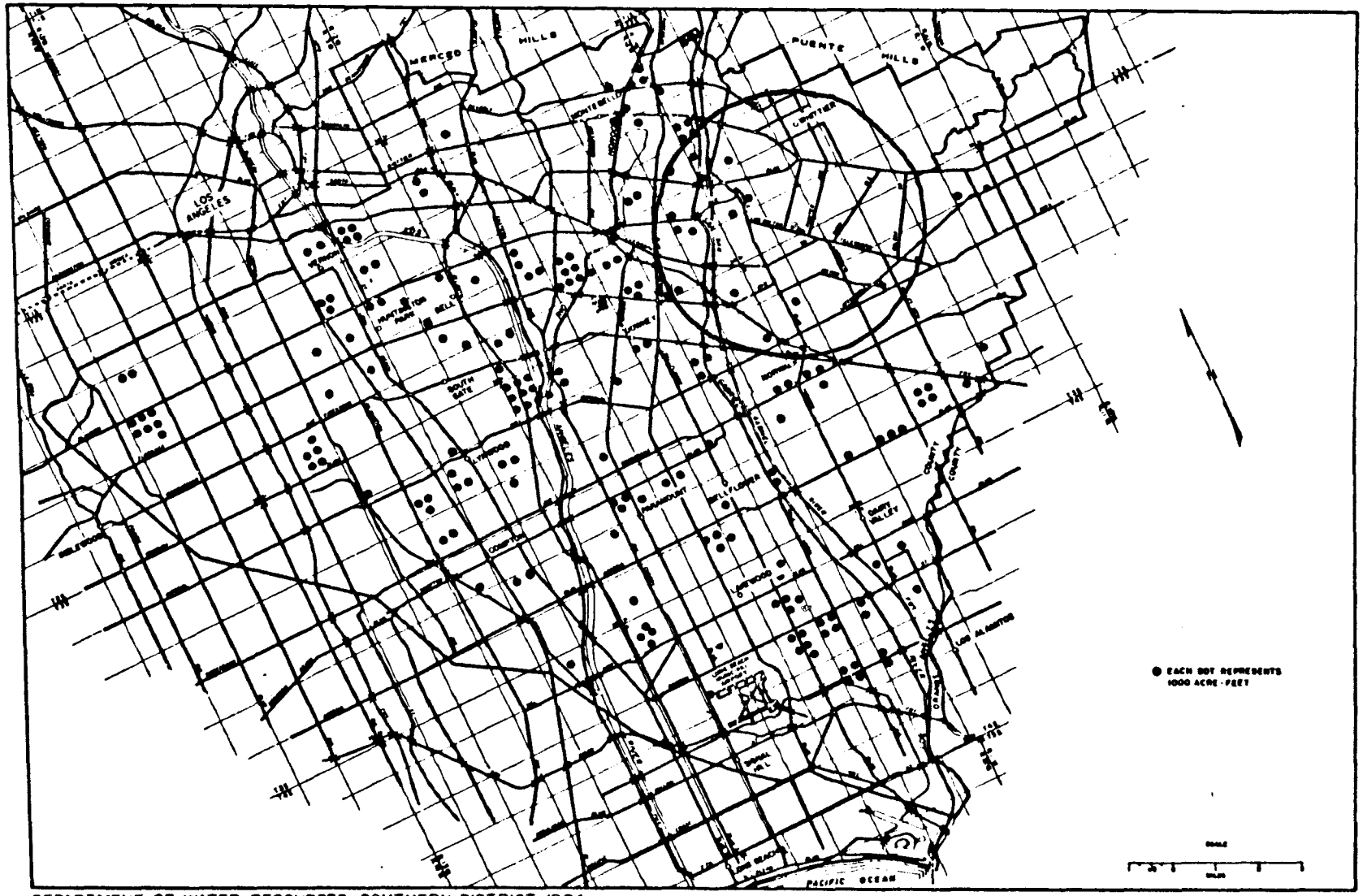

LEGEND
BASIN BOUNDARY
DISTRIBUTION SYSTEM OF THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA
LINE OF INJECTION WELLS
ACTIVE WELL OF PARTY
INACTIVE WELL OF PARTY
INACTIVE WELL ON WHICH CONTINUOUS RECORDERS MEASURING WATER LEVEL FLUCTUATIONS ARE MAINTAINED BY PARTY
INACTIVE WELL ON WHICH CONTINUOUS MEASURING WATER LEVEL FLUCTUATIONS MAINTAINED BY D W R
KEY WELL
PRECIPITATION STATION
CAPPED OR ABANDONED WELLS
ACTIVE WELL OF NON-PARTY
INACTIVE WELL OF NON-PARTY
SPREADING GROUNDS
LOS ANGELES
MERCED
HILLS
VERNON
HUNTINGTON PARK
BELL
SOUTH GATE
LYNWOOD
COMPTON
RIO
T1N
T1S
T2S
T3S
T4S

Figure 11


PUENTE HILLS
WHITTIER
Nearest well
DOWNEY
NORWALK
SEE Figure 12 FOR WELLS IN THIS AREA
PARAMOUNT
BELLFLOWER
CERRITOS
LAKEWOOD
LOS ALAMITOS
SIGNAL HILL
Alamitos Barrier Project
LOS ANGELES COUNTY
ORANGE COUNTY
RIVER
PACIFIC COAST
LOCATION MAP
PACIFIC OCEAN
CENTRAL BASIN
STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SOUTHERN DISTRICT
CENTRAL BASIN WATERMASTER SERVICE
LOCATION OF WELLS
SCALE
MILES
1984



DEPARTMENT OF WATER RESOURCES, SOUTHERN DISTRICT, 1984

Figure 8. PATTERN OF GROUND WATER PRODUCTION

FOR JULY 1983 TO JUNE 1984

REF 10

State of California—Health and Welfare Agency

Department of Health Services
Hazardous Materials Management Section

MEMO OF CALL

Name: George Beaty

Date: 11-9-84

Firm: City of Santa Fe Springs, Planning & Development

Time: 1000

Address:

Person Taking or Making Call: Carol Masson

Telephone No.: (213) 868-0511 x211

Subject: Waste Disposal, Inc

Message:

Mr. Beaty said no persons use the surface water (intakes) from Los Coyotes Creek or Sorenson Ave drain. He will provide me with the Census Tract No.s to calculate the populations within a 1½ and 3-mile radius. He will also provide me with the phone number of Central Basin Agency for groundwater information.

Mr. Beaty said there are buildings on site. He said there is some fence along the northern boundary (by St. Paul's High School), but not all the way around site and certainly not secure.

1500 - I went to the City of Santa Fe Springs and talked with George Beaty. Mr. Beaty gave me an aerial photo of the site. He said the population of Santa Fe Springs is 15,000, with the majority of residents within the western part of the city. Also John Gray of Public Works Dept. came by and circled 7 city wells on aerial map. There are 7 domestic wells: the shallow ones are 200' deep and in the residential area, the deepest are 1200'. The shallow wells are not currently used.

REF 11

State of California—Health and Welfare Agency

Department of Health Services
Hazardous Materials Management Section

MEMO OF CALL

Name: Pat Moore

Date: 11-9-84

Firm: Calif. Dept of Fish & Game, Inland Fisheries

Time: 1120

Address: Long Beach

Person Taking or Making Call: Carol Masson

Telephone No.: (213) 590-5151

Subject: Fishing at San Gabriel River between Pico Rivera and Bellflower

Message:

Pat Moore says that DFG does plant the San Gabriel River with trout on the east and west fork, but the fish would not make it that far down.
∴ No fishing in the area between Pico Rivera and Bellflower.

HS 203 (8/79)

Reference 12

RECORD OF COMMUNICATION

☑ PHONE CALL ☐ DISCUSSION ☐ FIELD TRIP ☐ CONFERENCE
☐ OTHER (SPECIFY)

(Record of item checked above)

TO:	FROM:	DATE
John Price Santa Fe Springs Chief Eng.	Therese Gioia	10-15-85 TIME 9:00 AM

SUBJECT
Aquifers from which city's groundwater is drawn

SUMMARY OF COMMUNICATION

Mr. Price researched his records and found the following information regarding which aquifers are used for the city's water supply:

Well #1 ⇒ Silverado + Sunnyside
Well #2 ⇒ Hollydale, Jefferson, Lynwood, Silverado, and Sunnyside
Well #4 ⇒ Lynwood, Silverado, + Sunnyside
Well #304 ⇒ Silverado
Well #308 ⇒ Jefferson + Lynwood
Well #309 ⇒ Sunnyside

Mr. Price said Well #305 listed in the Watermaster Report is not used and that Well #308 is also unused. Well #309 is the only well to use the Sunnyside Aquifer alone.

CONCLUSIONS, ACTION TAKEN OR REQUIRED

Of the wells in the 3-mile radius, Well #309 represents less than 25% of the groundwater used by the city.

INFORMATION COPIES
TO:

EPA Form 1300-6 (7-72) REPLACES EPA HQ FORM 5300-3 WHICH MAY BE USED UNTIL SUPPLY IS EXHAUSTED.

Reference 13

Telecon

From: Kathleen Galloway, MITRE KEG

To: Chris Nagler, DWR 213-620-4119

Date: 13 November, 1985

Time: 11:00 AM

Subject: Whittier Union District School Well No. 2S11W 32J04S located at the Sierra High School Campus.

The well is screened at 228 ft. which corresponds to the Lynnwood aquifer. It is 804 ft. deep and is also screened in the Sunnyside aquifer.

NARRATIVE SUMMARY - WASTE DISPOSAL, INC.

Facility consists of a concrete-lined 1,000,000 barrel capacity pond/sump, oil sumps, and a solid waste landfill. Types of waste include petroleum wastes, steel mill slag, brewery wastes, sewage, drilling muds, acetylene sludge, refinery tank bottoms, dicyclodistillate, and unidentified substances reportedly dumped at the facility at night. There have been numerous citizen complaints concerning conditions at the facility throughout its operation.

Results of a recent soil investigation show the presence of numerous hazardous substances at the facility. The groundwater aquifers below the site are connected through natural conditions and wells screened at multiple depths. The site presents a potential groundwater problem.

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11/14/85

ORIGINAL

DO NOT

Facility name: WASTE DISPOSAL, INC.

Location: 12817 Los Nietos Rd., Santa Fe Springs, California 90670

EPA Region: IX

Person(s) in charge of the facility: Adeline R. Bennett (owner) c/o M. Pitts
13978 Summit Drive
Whittier, CA 90602

Name of Reviewer: _____ Date: _____

General description of the facility:
(For example: landfill, surface impoundment, pile, container; types of hazardous substances; location of the facility; contamination route of major concern; types of information needed for rating; agency action, etc.)

Facility consists of a concrete-lined 1,000,000-barrel capacity pond/sump, oil sumps, and a solid waste landfill. Types of waste include petroleum wastes, steel mill slag, brewery wastes, sewage, drilling muds, acetylene sludge, refinery tank bottoms, dicyclo-distillate, and unidentified substances reportedly dumped at the facility at night. Years of operation are 1928 to 1965. This site presents a potential groundwater problem.

Scores: S_M = 34.6 S_{gw} = 59.66 S_{sw} = 0 S_a = 0)
S_{FE} =
S_{DC} =

SM = 34.60

FIGURE 1
HRS COVER SHEET

QA
Kathleen Galloway
11/14/85

Ground Water Route Work Sheet					
Rating Factor	Assigned Value (Circle One)	Multi-plier	Score	Max. Score	Ref. (Section)
1 Observed Release	(0) 45	1	0	45	3.1
If observed release is given a score of 45, proceed to line 4. If observed release is given a score of 0, proceed to line 2.					
2 Route Characteristics					3.2
Depth to Aquifer of Concern	0 1 2 (3)	2	6	6	
Net Precipitation	(0) 1 2 3	1	0	3	
Permeability of the Unsaturated Zone	0 (1) 2 3	1	1	3	
Physical State	0 1 2 (3)	1	3	3	
	Total Route Characteristics Score		10	15	
3 Containment	0 1 2 (3)	1	3	3	3.3
4 Waste Characteristics					3.4
Toxicity/Persistence	0 3 6 9 12 15 (18)	1	18	18	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 (8)	1	8	8	
	Total Waste Characteristics Score		26	26	
5 Targets					3.5
Ground Water Use	0 1 2 (3)	3	9	9	
Distance to Nearest Well/Population Served	0 4 6 8 10 / 12 16 18 20 / 24 30 32 (35) 40	1	35	40	
	Total Targets Score		44	49	
6 If line 1 is 45, multiply 1 x 4 x 5; If line 1 is 0, multiply 2 x 3 x 4 x 5			34,320	57,330	
7 Divide line 6 by 57,330 and multiply by 100		S_{gw} = 59.86			

FIGURE 2
GROUND WATER ROUTE WORK SHEET

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Surface Water Route Work Sheet					
Rating Factor	Assigned Value (Circle One)	Multi-plier	Score	Max. Score	Ref. (Section)
1 Observed Release	0 45	1	0	45	4.1
If observed release is given a value of 45, proceed to line 4. If observed release is given a value of 0, proceed to line 2.					
2 Route Characteristics					4.2
Facility Slope and Intervening Terrain	0 1 2 3	1	0	3	
1-yr. 24-hr. Rainfall	0 1 2 3	1	3	3	
Distance to Nearest Surface Water	0 1 2 3	2	4	6	
Physical State	0 1 2 3	1	3	3	
	Total Route Characteristics Score		10	15	
3 Containment	0 1 2 3	1	3	3	4.3
4 Waste Characteristics					4.4
Toxicity/Persistence	0 3 6 9 12 15 18	1	18	18	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7 8	1	8	8	
	Total Waste Characteristics Score		26	26	
5 Targets					4.5
Surface Water Use	0 1 2 3	3	0	9	
Distance to a Sensitive Environment	0 1 2 3	2	0	6	
Population Served/Distance to Water Intake Downstream	0 4 6 8 10 12 16 18 20 24 30 32 35 40	1	0	40	
	Total Targets Score		0	55	
6 If line 1 is 45, multiply 1 x 4 x 5 If line 1 is 0, multiply 2 x 3 x 4 x 5			0	64,350	
7 Divide line 6 by 64,350 and multiply by 100		S_{sw} =	0		

FIGURE 7
SURFACE WATER ROUTE WORK SHEET

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	S	S^2
Groundwater Route Score (S_{gw})	59.86	3583.22
Surface Water Route Score (S_{sw})	0	0
Air Route Score (S_a)	0	0
$S_{gw}^2 + S_{sw}^2 + S_a^2$		3583.22
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2}$		59.86
$\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2} / 1.73 = S_M =$		34.60

FIGURE 10
WORKSHEET FOR COMPUTING S_M

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WASTE DISPOSAL, INC

Air Route Work Sheet					
Rating Factor	Assigned Value (Circle One)	Multi-plier	Score	Max. Score	Ref. (Section)
1 Observed Release	0 45	1	0	45	5.1
Date and Location:					
Sampling Protocol:					
If line 1 is 0, the S_a = 0. Enter on line 5. If line 1 is 45, then proceed to line 2.					
2 Waste Characteristics					5.2
Reactivity and Incompatibility	1 2 3	1		3	
Toxicity	0 1 2	3		9	
Hazardous Waste Quantity	0 1 2 3 4 5 6 7	1		8	
	Total Waste Characteristics Score			20	
3 Targets					5.3
Population Within 4-Mile Radius	0 9 12 15 18 21 24 27 30	1		30	
Distance to Sensitive Environment	0 1 2 3	2		6	
Land Use	0 1 2 3	1		3	
	Total Targets Score			39	
4 Multiply 1 x 2 x 3				35,100	
5 Divide line 4 by 35,100 and multiply by 100		S_a = 0			

FIGURE 9
AIR ROUTE WORK SHEET

KED
11/14/85

June 28, 1982

DOCUMENTATION RECORDS
FOR
HAZARD RANKING SYSTEM

INSTRUCTIONS: The purpose of these records is to provide a convenient way to prepare an auditable record of the data and documentation used to apply the Hazard Ranking System to a given facility. As briefly as possible summarize the information you used to assign the score for each factor (e.g., "Waste quantity = 4,230 drums plus 800 cubic yards of sludges"). The source of information should be provided for each entry and should be a bibliographic-type reference that will make the document used for a given data point easier to find. Include the location of the document and consider appending a copy of the relevant page(s) for ease in review.

FACILITY NAME: WASTE DISPOSAL, INC.

LOCATION: 12817 Los Nietos Rd., Santa Fe Springs, CA 90670

LCA
11/14/85

GROUND WATER ROUTE

1 OBSERVED RELEASE None

Contaminants detected (5 maximum):

Rationale for attributing the contaminants to the facility:

* * *

2 ROUTE CHARACTERISTICS

Depth to Aquifer of Concern

Name/description of aquifers(s) of concern:

REF 1

Name of aquifer	Depth from surface at 25/11W-32
Gardena	50'
Hollydale	100'
Jefferson	150'
Lynwood	300-500'
Silverado	600-750'

Depth(s) from the ground surface to the highest seasonal level of the saturated zone [water table(s)] of the aquifer of concern:

Two nearby wells were measured by LACFCD in 1984:

REF 2

1. LACFCD 1644G = 25/11W-32K5, 32.6' to water on 4-13-84
2. LACFCD 1645H = 25/11W-32Q3, 43.6' to water on 6-11-84

Depth from the ground surface to the lowest point of waste disposal/storage:

REF 3 Analytical results indicate waste at a depth of 20 feet.

Depth to aquifer of concern: 32.6' - 22' = 10.60'

Value of 3. SCORE = 6

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Net Precipitation

Mean annual or seasonal precipitation (list months for seasonal):

REF 4 16 inches of mean annual precipitation.

Mean annual lake or seasonal evaporation (list months for seasonal):

REF 4 54 inches of mean annual lake evaporation.

Net precipitation (subtract the above figures):

16 - 54 inches = -38 inches. Value of 0.

SCORE = 0

Permeability of Unsaturated Zone

Soil type in unsaturated zone:

Soil samples were taken for Dames & Moore and analyzed by California Analytical Laboratories.

REF 3
1. West of reservoir : 14-18' clay with silt, sand
2. North-northeast of reservoir: 8-21' clay with silt, 22-24' sand
3. East-southeast of reservoir: 4-9' clay with silt, 9-18' silty clay, 18-20' clayey sand

Permeability associated with soil type:

REF 4 Based on Table 2 of Uncontrolled Hazardous Waste Site Ranking System: A Users Manual.

Value of 1. SCORE = 1

Physical State

Physical state of substances at time of disposal (or at present time for generated gases):

REF 3 Site investigation identified liquid waste at ≈ 22 feet.
REF A

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3 CONTAINMENT

Containment

Method(s) of waste or leachate containment evaluated:

REF 3 Integrity of cement lining of large surface impoundment has not been evaluated. Disposal in areas outside surface impoundment or possible leakage of impoundment is evident from sampling results of boring in area outside impoundment.

Method with highest score:

There is no containment in the contaminated areas outside the surface impoundment.

Value of 3 Score = 3

4 WASTE CHARACTERISTICS

Toxicity and Persistence

REF 3
REF 4
REF 5

Compound(s) evaluated:

Benzo(a)pyrene: 3 Toxicity 3 Persistence Phenanthrene: 3 Toxicity 2 Persistence

Phenol : 3 Toxicity, 1 Persistence

Benzene : 3 Toxicity, 1 Persistence

Toluene : 2 Toxicity, 1 Persistence

Compound with highest score:

Benzo (a) pyrene

Value of 18 SCORE = 18

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility, excluding those with a containment score of 0 (Give a reasonable estimate even if quantity is above maximum):

REF A and REF 3

270,599 yd^3 = volume of surface impoundment

Basis of estimating and/or computing waste quantity:

REF A and REF 3

Method: Cement-lined reservoir 25 ft deep and 610 feet diameter (diameter determined from scaled map)

Area = A = πr^2

Area x depth = Volume

* * *

292,247 ft^2 x 25 ft = 7,306,166 ft^3 / 4 = 270,599 yd^3

(27 ft^3 = yd^3)

Value of 8

RP 11/14/85

5 TARGETS

Ground Water Use

Use(s) of aquifer(s) of concern within a 3-mile radius of the facility:

REF 6
REF 12

The aquifers of concern are used to supply 60% of the city of Santa Fe Springs drinking water and for irrigation. The city does not have an alternate source available to meet the present demand for which groundwater is now used. Value = 3 Score = 9

Distance to Nearest Well

Location of nearest well drawing from aquifer of concern or occupied building not served by a public water supply:

REF 7 and REF 8
REF 13

Location on nearest active well is approximately 3000 ft from site Well # 2S11W32J04S owned by Whittier Union High School District. This well is a domestic and irrigation well per Chris Nagler of DWR.

Population Served by Ground Water Wells Within a 3-Mile Radius

Identified water-supply well(s) drawing from aquifer(s) of concern within a 3-mile radius and populations served by each:

City of Santa Fe Springs Wells:

	State Well #	Owner #
REF 6	2S/11W-30R035	1
REF 7	2S/12W-25Q055	304W1
	3S/11W-06D039	4

Whittier Union High School Dist.

2S/11W-32J04S SH550

As well as others which may be located in 3 mile radius and are owned by Suburban Water Systems & San Gabriel Valley Water Co.

Total population served by ground water within a 3-mile radius:

REF 6 4200 connections x 3.8 persons per connection = 15,960

Value of 5

SCORE = 3.5

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SURFACE WATER ROUTE

1 OBSERVED RELEASE *None*

Contaminants detected in surface water at the facility or downhill from it (5 maximum):

Rationale for attributing the contaminants to the facility:

* * *

2 ROUTE CHARACTERISTICS

<u>Facility Slope and Intervening Terrain</u>

Average slope of facility in percent:

REF 7 Using the USGS Whittier, Calif. quad, a 10-foot rise a 2500-foot run was measured.

$$\frac{10}{2500} \times 100\% = 0.4\% \text{ slope}$$

Name/description of nearest downslope surface water:

San Gabriel River

REF 7

Average slope of terrain between facility and above-cited surface water body in percent:

160 - 120 = 40 ft. rise

REF 7 13000 ft. run

0.3 % slope Value of 0. <u>SCORE = 0</u>

Is the facility located either totally or partially in surface water? No

REF 7

11/14/85

Is the facility completely surrounded by areas of higher elevation? No

REF 7

1-Year 24-Hour Rainfall in Inches

4 inches per HRS manual

REF 4

Value of 3. SCORE = 3

Distance to Nearest Downslope Surface Water

13000 ft. to San Gabriel River

REF 7 2000 ft to Sorenson Ave Drain

Value of 2. SCORE = 4

Physical State of Waste

See groundwater. SCORE = 3

* * *

3 CONTAINMENT

Containment

Method(s) of waste or leachate containment evaluated:

REF A Surface impoundment had breaks in the berm, historical evidence of surface outwash, and poor and inadequate run-on diversion structures SCORE = 3

Method with highest score:

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4 WASTE CHARACTERISTICS

Toxicity and Persistence

Compound(s) evaluated

See groundwater. SCORE= 18

Compound with highest score:

Hazardous Waste Quantity

Total quantity of hazardous substances at the facility, excluding those with a containment score of 0 (Give a reasonable estimate even if quantity is above maximum):

See groundwater. SCORE= 8

Basis of estimating and/or computing waste quantity:

* * *

5 TARGETS

Surface Water Use

Use(s) of surface water within 3 miles downstream of the hazardous substance:

REF 10
REF 11

Although the San Gabriel River is within 3 miles, no fishing is done in this particular part of the river. (The river area is primarily used for groundwater recharge.)

Value of 0 SCORE= 0

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Is there tidal influence? No, not this far north.

Distance to a Sensitive Environment

Distance to 5-acre (minimum) coastal wetland, if 2 miles or less:

REF 7 Using the USGS quad and USFWS Pacific Coast Ecological Inventory map, site is not within 2 miles of any sensitive environment.

Value of 0. SCORE = 0

Distance to 5-acre (minimum) fresh-water wetland, if 1 mile or less:

Distance to critical habitat of an endangered species or national wildlife refuge, if 1 mile or less:

Population Served by Surface Water

Location(s) of water-supply intake(s) within 3 miles (free-flowing bodies) or 1 mile (static water bodies) downstream of the hazardous substance and population served by each intake:

There are no water-supply intakes of surface water in area.

REF 10

Value of 0.

SCORE = 0

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Computation of land area irrigated by above-cited intake(s) and conversion to population (1.5 people per acre):

Total population served:

Name/description of nearest of above water bodies:

Distance to above-cited intakes, measured in stream miles.

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AIR ROUTE

REF A 1 OBSERVED RELEASE No observed air release Known, according to abandoned site project file.

Contaminants detected:

Date and location of detection of contaminants

Methods used to detect the contaminants:

Rationale for attributing the contaminants to the site:

* * *

2 WASTE CHARACTERISTICS

Reactivity and Incompatibility

Most reactive compound:

Most incompatible pair of compounds:

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Toxicity

Most toxic compound:

Hazardous Waste Quantity

Total quantity of hazardous waste:

Basis of estimating and/or computing waste quantity:

* * *

3 TARGETS

Population Within 4-Mile Radius

Circle radius used, give population, and indicate how determined:

0 to 4 mi 0 to 1 mi 0 to 1/2 mi 0 to 1/4 mi

Distance to a Sensitive Environment

Distance to 5-acre (minimum) coastal wetland, if 2 miles or less:

Distance to 5-acre (minimum) fresh-water wetland, if 1 mile or less:

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Distance to critic habitat of an endangered speci , if 1 mile or less:

Land Use

Distance to commercial/industrial area, if 1 mile or less:

Distance to national or state park, forest, or wildlife reserve, if 2 miles or less:

Distance to residential area, if 2 miles or less:

Distance to agricultural land in production within past 5 years, if 1 mile or less:

Distance to prime agricultural land in production within past 5 years, if 2 miles or less:

Is a historic or landmark site (National Register or Historic Places and National Natural Landmarks) within the view of the site?

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REFERENCES - WASTE DISPOSAL, INC. RANKING PACKAGE

Reference	Source
A	Abandoned Site Project File from California Toxic Substances Control Division, Southern California Section
1	Planned Utilization for the Groundwater Basins of the Coastal Plain of Los Angeles County, Appendix A: Groundwater Geology, Department of Water Resources, Southern District Bulletin No. 104, June 1961.
2	Telephone conversation with George Farag, Los Angeles County Flood Control District, 11-14-84.
3	Dames & Moore: Summary of Findings of Preliminary Site Investigation of Waste Disposal, Inc. Site, 12-7-84.
4	Uncontrolled Hazardous Waste Site Ranking System - A Users Manual, Mitre Corp., 1982.
5	Sax, N.I., Dangerous Properties of Hazardous Materials, Fifth Edition, 1979.
6	Record of Communication with John Price, Chief Engineer of City of Santa Fe Springs, 8-5-85.
7	USGS Quadrangle: Whittier, California.
8	Telephone conversation with Chris Nagler, Department of Water Resources, 11-14-84,
8A	Central and West Basin Water Replenishment District, Annual Survey Report on Ground Water Replenishment, 1985.
9	Watermaster Service Central Basin Report, October 1984.
10	Telephone and personal conservations with George Beaty, City of Santa Fe Springs Planning and Development, 11-9-84.
11	Telephone conversation with Pat Moore, Department of Fish and Game, 11-9-84.

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References - Waste Disposal, Inc., Contd.

Reference

12 Telephone conversation between Therese Gioia, USEPA Region IX and John Price, Santa Fe Springs, chief engineer. 10-15-85.

13 Telephone conversation between Kathleen Galloway, MITRE, and Chris Nagler, Dept. of Water Resources. 11-13-85.

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11/14/85

REF A

FINAL DISPOSITION

Name Santa Ana ASP

Date January 31, 1983

Site Name Waste Disposal, Inc.

Site Address 12700 E. Los Nietos Road

City Santa Fe Springs Zip Code 90670 County Los Angeles

RCRA # Superfund # SWIS # 19-49-0142

REFERRAL: Date(s) referred: June 30, 1982

Referral Agency Name(s): DOHS-LA-HWMB-Enforcement

Reason referred: The Site was essentially an unregulated dump between 1928 to about 1965 and is used as a dumping ground for oil field contractors and operators. The site accepted rotary drilling mud, steel mill slag, dry mud from oil field sumps, and acetylene sludge. The operators on the site accepted liquid wastes without identification, and wastes were received at night. *(Continued below)

INCLUDE IN ASP SITE SUMMARIES: (date and initial)

	Yes	No (explain below)
Lead Person	Ozden Mindevalli OOM.	
Regional Administrator	John Hinton 5/17/83	
Project Manager	Thomas Bailey 6/28/83	
Other (Coordinator)	Ned Therien 5/9/83	

Reason for not including in the site summaries:

In the early 60's, the site also received Pazone, which is refinery tank bottom sediment. The site is surrounded by residential areas and is adjacent to high school playing field. The site could be a source of groundwater contamination in this area. It is recommended that DOHS-HWMB-Enforcement do a detailed investigation of this site.

ABANDONED SITE PROJECT

MAP SITE #9:

FIRM: Waste Disposal Inc.
12700 E. Los Nietos Road
Santa Fe Springs

STATUS: Inactive

aka Pitts-Hudson-Caneer-Carter Dump
aka Los Nietos Dump
aka Whittier Area Disposal Dump
Aka Chicksan Co.
aka Security Engineering

CURRENT OWNERS: Santa Fe Springs Recycling
P.O. Box 5115
Fullerton, CA 92635

FINDINGS: Site was a licensed Class III disposal Site. Received rotary drilling mud, steel mill slag, dry mud from oil field sumps, acetylene sludge, dicyclodistilate, cesspool operations fluids and numerous reports of operator receiving materials without identification and wastes were received at night without supervision. Site had odor problems and owner was fined many times during the period 4-49 to 7-58 when it was in operation.

Neighbors of Waste Disposal, Inc. complained to all government agencies about the problem at the dump and their adversed health and economic effects to no avail. In 8-58 the neighbors took Waste Disposal to Court (Whittier Court Case #M11447, M11449, M11519 and M15183) claiming the activities at Waste Disposal were causing adverse health effects (vomiting, loss of appetite, headaces), loss of property value, noise during night hours and wastes dropped in the streets. The relief requested from the court was 1) suspend operations immediately and make steps toward permenent closing of the site and 2) revoke permit because operator received wastes he was unlicensed for.

Tips from area businessmen revealed that Waste Disposal stopped receiving liquid wastes around 1958 and took concrete from highway construction until about 1964 or 65.

The size of the dump was considerably larger during the 1950's when the entrance was right on the road edge.

The LACFCD memo indicates that Waste Disposal overlies fine sands, sandy clays and gravels. Shallow wells within 500 ft & 4200 ft water table depth in 1955 about 85 feet.
**

CURRENT CONDITION: Open field littered with demolition debris in the center portion and site has businesses over the roadside border.

RECOMMENDATION: Field Survey teams recommends to check air photo for exact size of site through the years of operation, and to schedule interviews with Santation District Inspectors. Agency Search Team recommends that the Whittier Court Case files be investigated, and all other possible sources such as Santa Fe Springs City Hall and The County Health Dept., etc. The type of industries that border the dump during the 1950's and the high school should be taken into consideration.

** Historical research shows an open oil storage tank on property.

page 1

Waste Disposal Inc.
12817 Los Nietos Rd.
Santa Fe Springs, Ca 90670

History

The Abandoned Site Project files date this dump to 1928. It was first permitted after citizen complaints, in 1949 and had developed from borrow pits. In 1949 the facility consisted of a large concrete lined basin (25 ft deep and extending 10 ft above ground level) capable of holding 1,000,000 bbl (barrels, not gallons). The central area consisted of about 11 acres altho at one time the site was estimated at more than 30 acres. Around the large pond were oil sumps and landfill for solid waste. Much documentation about the site has been lost as agencies threw away old files. Several aerial photos document its use into the early 1960s. Some correspondence files exist from the period 1949 to 1958. The history is one of problems and neglect.

Problem:

The West Disposal site was "completely unregulated site of dumps, several oil dumps, solid waste landfill and a large reservoir, when finally permitted in 1949 after 20 years of operation. Although it was supposed to be limited to ~~24 hr~~ a 6:00 AM to ~~50 ft~~ 6:00 PM operation, the dump was actually open 24 hours a day. In 1953, within days of receiving an order to comply (close at night) the operator secured a variance for 24 hour a day operation. Eight months later the firm was ordered to maintain a 24 hour caretaker. Correspondence contains repeated allegations that the pond received many undesignated liquids. In 1957 the owner was quoted by the Whittier News "... it soon became evident that there was no practical means of controlling the continuing and promiscuous dumping." In other words, no one knows what materials were dumped. Refinery tank bottoms probably contained phenols and a variety of metals. The materials from the pond were allowed to drain onto the grounds. Aerial photos from 1956 and 1960 showed breaks in the berms and outwash patterns over the ground. In

(in old [illegible] ing of the facility there is not "drain" on the north side.

1952 the operator secured a permit to lay pipe on top of Greenleaf ~~St~~ Ave for two weeks to drain fluids from the dump. In 1953, ten months later the pipe was still on top of the street. In 1957 the pipe was still in the ground. In February 13, 1957 an inspector noticed an aluminum pipe running from the dump down Greenleaf Ave. Leaks in the pipe showed there was oil in the water. Local ~~complainants~~ people contacted regulatory agencies because they felt allowing oil flow to the sewer was an offense. The giant sump apparently acted only as a settling basin. Regulatory response to most of the citizens' complaints during the 1950s was evasive and non-committal. Foul odors caused sickness of workmen at the site and many problems for local people. Those living near the dump claimed adverse effects including illness, discomfort; loss of appetite, headaches, nausea, vomiting and inability to eat the hungry. Some days children couldn't play outside and ~~a nearby school~~ windows had to be closed at a nearby school. Letters from the school principal and superintendent remain from the ~~[illegible]~~ 1950s. In 1957 the ~~operator~~ owners ~~was~~ were charged with 3 violations of section 24 24= of the Health and Safety Code. A year later

they pleaded guilty in [illegible] and paid a $100.00 fine. Two similar lines were suspended.

St Paul High School and athletic fields are very near the site (northeast and north perhaps a 1000 ft. away).

Photos from Colorado use from 11-27-53 (L.A. County Engineering Facility) show the reservoir almost brim full with oily material outside the retaining wall.

Soils below the site were described as alternating fine sand, sandy clays and gravels. Depth to ground water 45 ft (1949) and 30 ft (1943).

Recommendation

Core samples from the site are necessary to determine the presence and concentration of hazardous materials. This site may have contributed to groundwater contamination. Well testing is recommended. High Priority is recommended because of the long history of promiscuous dumping", the large volume of material, proximity to groundwater and the adjacent school and athletic field.

PRELIMINARY ASSESSMENT
Region 9

Preparer's Name Linse Erica Date July 19 1984

	SOURCE	INFORMATION
1. Site ID Number		
2. Site Name	Abandoned site file	Waste Disposal Inc.
3. Site Location	Santa Fe Springs, Long Beach, Planning Dept, City hall, Santa Fe Springs	12617 Los Nietos Rd Santa Fe Springs, Ca
4. County	" "	Los Angeles
5. Owner (Address & telephone no.)	"	Adeline R. Bennett In care of M. Pitts 13978 Summit Drive Whittier, Ca 90602
6. Operator (Address & telephone no.)	" "	Operator was Waste Disposal Inc. 12731 E. Los Nietos Rd. Whittier, Ca
7. Type of Ownership	" "	Private
8. Status	" "	Inactive
9. Source Activity	Regional Planning Commission - County of Los Angeles letter 30 Aug 1949 To A.H. Adams Director of Planning	Petroleum wastes, steel mill slag, Brewery wastes, Cesspool sewage, and midnight dumping.
10. Years of Operation	Abandoned site file	1928 to about 1965
11. Facility Type	↓ ↓	OIL SUMPS AND a concrete lined 1,000,000 Bbl pond. Also a solid waste landfill (Class I)
12. Waste Type and Description		drilling muds, slag, dry mud from oil field sumps, acetylene sludge, liquid wastes without identification, brewery wastes, sewage, refinery tank bottoms, and a dicyclo distillate. In 1957 owner stated "no practical means of controlling the continuing and promiscuous dumping".

EPA-IX-FORM 890 1/18/83

12. Contacts Mr. George Beaty, Planning Dept, Santa Fe Springs City Hall 213-868-0511 X211

13. Incidents 1953 Workman at site became ill and had to leave the premises - unable to continue working because of the smell.

Fire and Explosion ___ Direct Contact ___

14. Inspections (date, type, by whom, recommendations)

18 July 1949 Zoning investigation, L.D. Tweedy, Borrow pit and solid fill dumping

May 1956 Field investigation. Solid materials are being dumped to east of the cement reservoir and oil well mud is being dumped to the west

2-2-57 order investigation, management cited on legal complaint.
2-13-57 same 2-18-57 same.

15. Enforcement History (list date, type of action, requirements, outcome)

Before 1949 operated without permit. 6 AM-6 PM OPERATION - NOT 24 HRS/DAY.
4 MARCH 1953 ORDER TO COMPLY WITH
March 6-27, 1956 Whittier Municipal Court, Cases number M 11447, M 11449, M 11519. Owners plead guilt to section 24 243 Health & Safety Code. One $100 fine paid; 2 suspended.

16. Initial recommendation for further action:

Air sampling to determine presence and concentration of hazardous materials. Soil testing is recommended. High Priority is recommended because of the long history of [illegible] dumping; the large volume of materials, proximity to groundwater and the adjacent school.

17. EPA recommendation for further action:

18. Response Termination: __ No Further Action __ Pending __ Active

Justification:

TYPE OF ACTION	NAME OF AGENCY OR CONTACT	TELEPHONE # OR ADDRESS	INFORMATION RECEIVED
RWQCB File Search	RWQCB casefile 53-131		AKA Whittier Disposal Area, Los Nietos Dump, Pitts-Hudson-Caneer-Carter Dump. 7-29-53 LACE: Ind waste Permit 6130 acceptance of acetylene sludge into Rotary mud sump. 5-27-55 Request to exten boundaries 200,000 sq.ft. 8-22-55 LACFCD: Site overlies fine sands, sandy clays, gravels, OK to extend of stipulate material to be dumped. Shallow wells within 500 ft. depth of H_2O table = 85ft. 7-11-58 Letter from "Spokesman" of Whittier History of dump 4-49 to 7-58 many complaints about odor (many health side-effects: vomit, loss of appetite, headaches loss of tenants, loss of prospective purchases, truck drippings on street Noise during sleeping hours (continued)

TYPE OF ACTION	NAME OR AGENCY CONTACT	TELEPHONE # OR ADDRESS	INFORMATION RECEIVED
File Search	RWQCB		(cont.) 4-19-72 Telecon Memo. Dump closed ≈10 yrs. Class III Disposal Site acetylene sludge, brewery residue, cesspool operation fluids.
File Search	LACE I 629 P 9057 (cont.) dumped mud from oil wells, stopped in 1955, then took concrete from Hwy. construction, stopped in 64-65.		Aug 5, 1953 permit LACE Division of sanitation Industrial Waste Section. Rotary drilling mud, clec earth rock, sand + gravel, paving fragments, concrete brick, plaster, steel mill slag, dry mud cake from oil field sumps (production tank sludge), acetylene sludge. 4-22-59 Arthur Pickett to Menlo L. Wilhalms people associated with waste disposal Inc. N.B. Hudson 206 E. Penn, Wh D.L. Carter 8306 S. Oceanview, whit. [redacted]. Marvin Pitts 8520S. Catalina, Whit. F. Caneer 401 Hill, whit (← cont. above)

SITE INFORMATION SUMMARY

Waste Disposal, Inc.
12700 E. Los Nietos Road
Santa Fe Springs, CA 90670

HISTORY

Waste Disposal Inc. was in operation from 1928 to 1965 and was classified as a Class III disposal site. This site was also known as Pitts-Hudson-Caneer-Carter Dump, Los Nietos Dump, Whittier Area Disposal Dump, Chicksan Company, and Security Engineering. The site is currently owned by Santa Few Springs Recycling, P.O. Box 5115, Fullerton, CA 92635.

DESCRIPTION OF PROBLEM

The site was essentially an unregulated dump, between 1928 to about 1949, and was used as a dumping ground for oil field contractors and operators. Between 1949 to 1958, the site accepted rotary drilling mud, steel mill slag, dry mud from oil field sumps and acetylene sludge.

Interviews with Los Angeles County Sanitation District inspectors revealed that the operator of the dump accepted liquid waste without identification and wastes were received at night.

In 1958, a citizen's group took Waste Disposal to court alledging that activities caused adverse health effects, loss of property values and nightly activity as well as other problems. (Whittier Court Case # M11447, M11449, M11519, and M15183).

Files at the Los Angeles County Engineers were destroyed, however a color slide of the site survived. The pit was unlined and accepted payone, which is refinery tank bottom sediment. A questionnaire returned from Powerine Refinery stated that "unspecified refinery wastes" were accepted at the dump.

This site is considered to be extremely hazardous by the L.A. (A-D) Area ASP staff due to the fact that it is surrounded by residential areas and is adjacent to a high school playing field. The site could also be a source of grounwater contamination in this area.

SAMPLING AND RESULTS

The Abandoned Site Project staff have not sampled the site at this time. Core samples are required to determine the extent and composition of material present beneath the ground surface.

CLEANUP AND MITIGATION

Cleanup and mitigation measures are pending sampling of the site.

A.H.Adams, Director of Planning
The Regional Planning Commission
County of Los Angeles, California

REF A

Case No. 634

We, the undersigned, all property owners and residents of property in adjoining areas to the land involved in this permit, respectfully request the Planning Commission to deny this permit wholly and completely.

The dumping conducted on this property in the past has been so hazardous and annoying to us that numerous times we have discussed getting up a petition against this dump.....at the time of the Kathy Fiscus incident, we were all again aware of the danger to our children and children for miles around in this dump. The dumping and trucking conducted in the past has been very very objectionable to us....if a permit is granted we feel certain that all dumping and trucking operations would be increased considerably and would be more than most of us could stand.

The place in the dump now referred to as "solid dump" is in reality solid dump around the edges with a fluid fill in the center....you can see the logs and rafts the small boys have floated out to the middle...this is where one small boy already has fallen in but luckily saved by an older boy....this is where the so called solid dump has left crevices and cavities have formed many caves for the smallchildren to play in. This is a neighborhood of small children... and a scant five six blocks away is an elementary school of over 500 students. While this property is fenced, it is not adequate to keep children out and it is only a question of time until a serious accident or death occurs in this place if the children are not protected. A gate is provided on Los Nietos but it is locked only part of the time.....on the Greenleaf side, there is no gate...only a makeshift affair where part of the fence is put down to allow trucks to enter.....this section of fence is left down completelymany many times.

We have a condition here of constant floating clouds of dust that prevail for hours and hours.....not only the hours that actual dumping or trucking is carried on but hours after as much of the dust floats onto Greenleaf Ave and then is re-raised and re-floated everytime a car goes by. This dust is not only dust from the dirt but the more harmful silt of plaster, brick, etc. causing a definite health hazard, unending home and property cleaning problems and many hazards and annoyances.

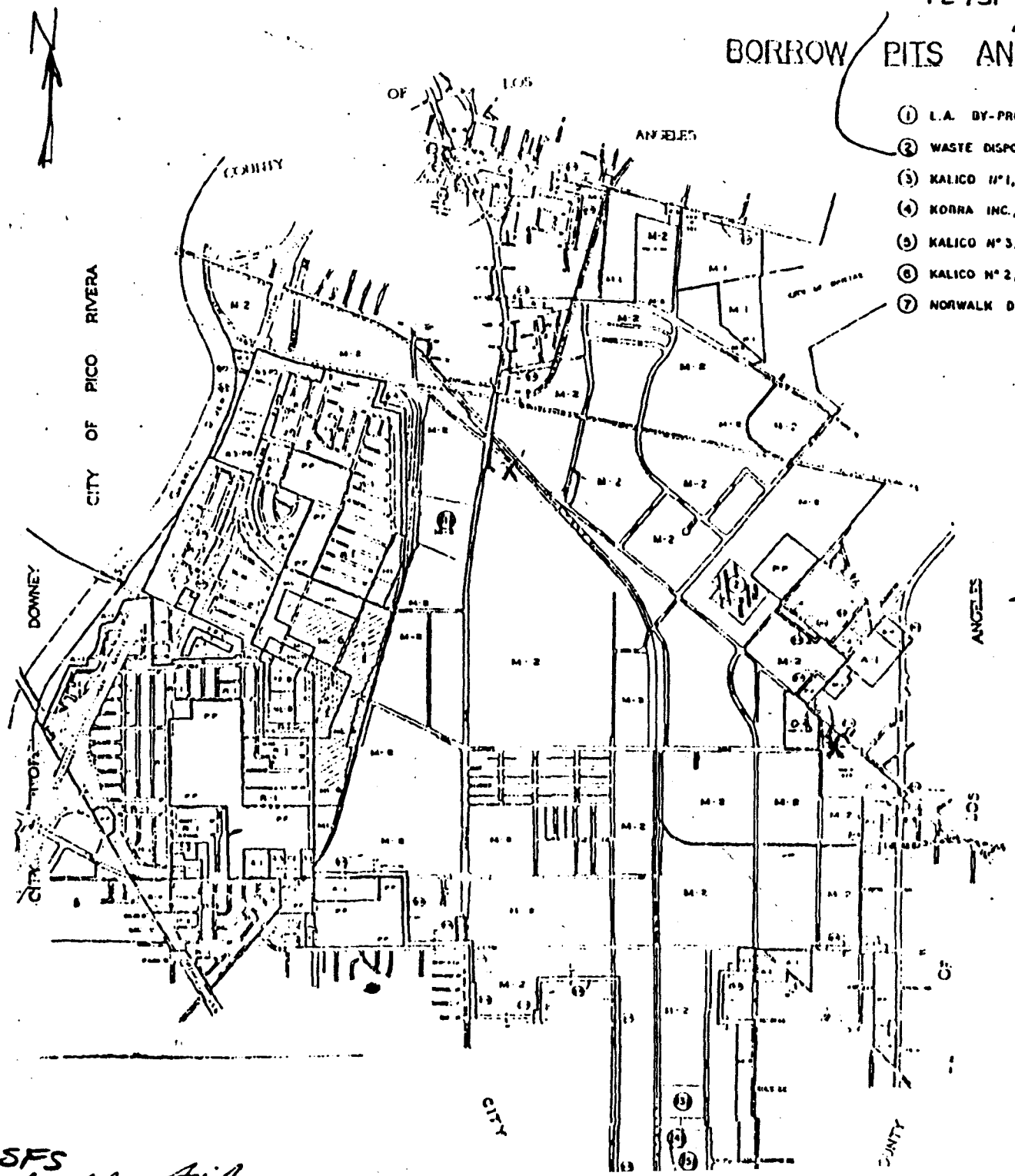
These list only the outstanding objections; there are many more such as dumped paper floating over on our property; trucks working all hours of the night; trucks dragging mud, etc out onto the highway, and many others.

Stanley W. Cleveland Pauline R. Cleveland 12923 E. Burton St.
Donald Krebsbach Frances A. Krebsbach 12910 E. Burton Rd
Jon H. Bennett. Jewel O. Bennett 12943 E. Los Nietos St.
Ed A Wilhelm Maude D Wilhelm 12947 E Burton Rd
James R. Kirkland, Ruby M. Kirkland 12934 Burton Rd Whitt.
David G. Albert 13003 E. Burton Rd. Whittier Cal
Bert Gilbertson 13023 East Burton Road Whittier Calif
Ruby E. Gilbertson 13023 East Burton Road Whittier Calif

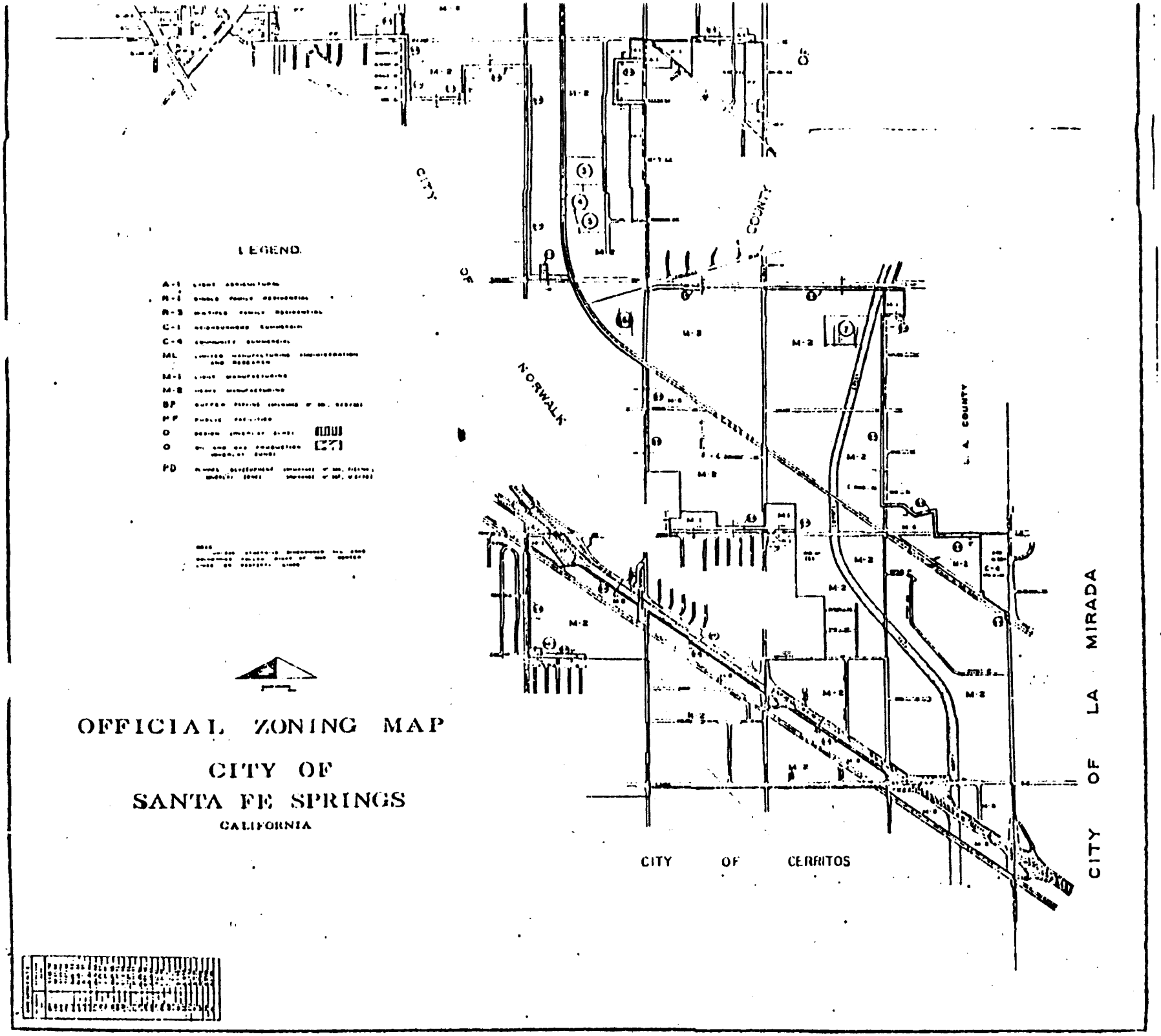
12731 E. Los Nietos Rd
Regional Planning Commission

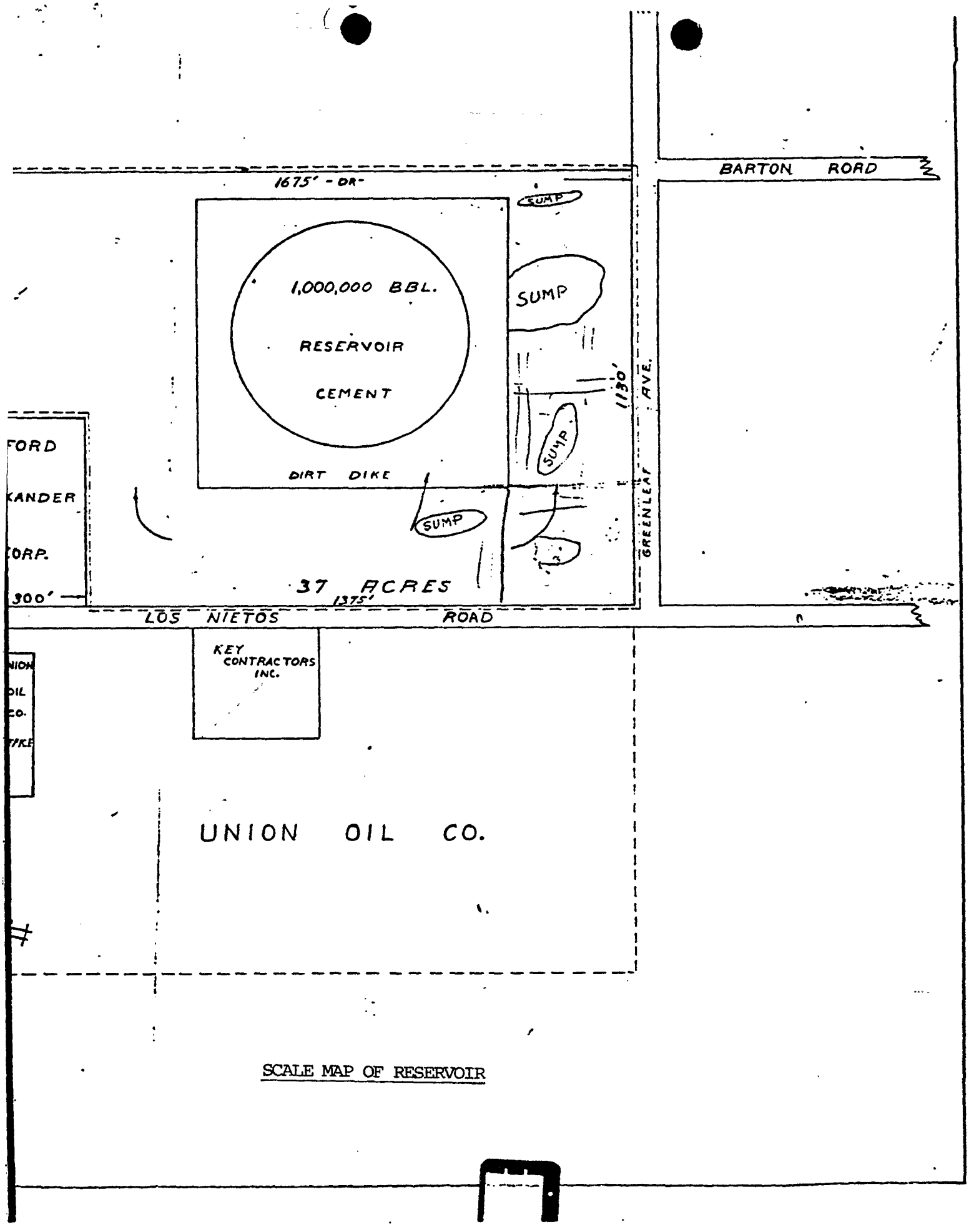
BORROW PITS AND/OR DUMP SITES

1. L.A. BY-PRODUCTS, 9615 NORWALK BLVD.
2. WASTE DISPOSAL INC., 12817 LOS NIETOS RD.
3. KALICO N°1, 11801 GREENSTONE AVE.
4. KORRA INC., 12027 GREENSTONE AVE.
5. KALICO N°3, 12201 GREENSTONE AVE.
6. KALICO N°2, 12924 IMPERIAL HWY.
7. NORWALK DUMP, 13780 IMPERIAL HWY.

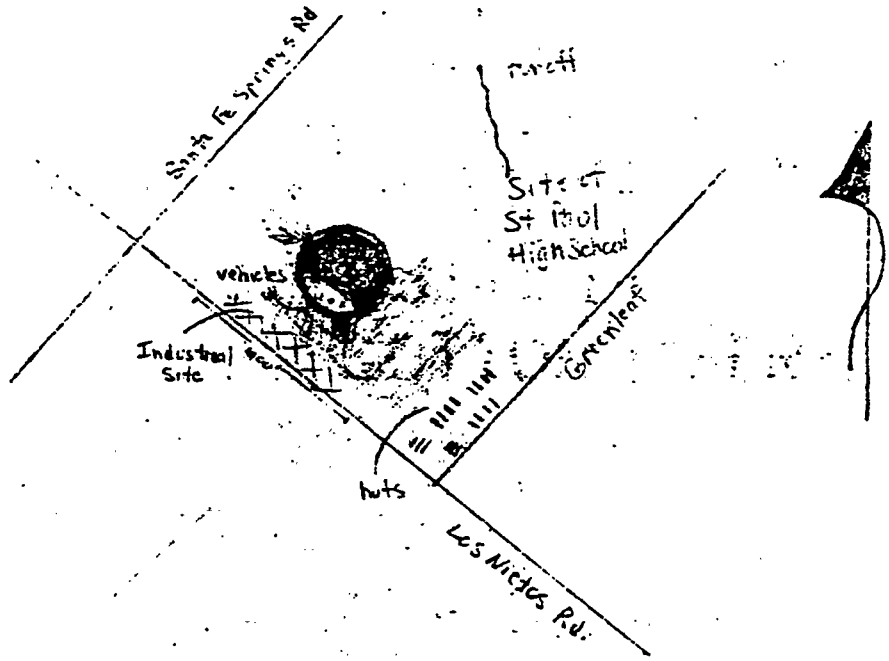


SFS


LEGEND
A-1
R-1
R-3
C-1
C-4
ML
M-1
M-2
BP
P-F
O
O
PD
OFFICIAL ZONING MAP
CITY OF
SANTA FE SPRINGS
CALIFORNIA
CITY OF NORWALK
COUNTY
L. A. COUNTY
CITY OF LA MIRADA
CITY OF CERRITOS
M-2
M-1

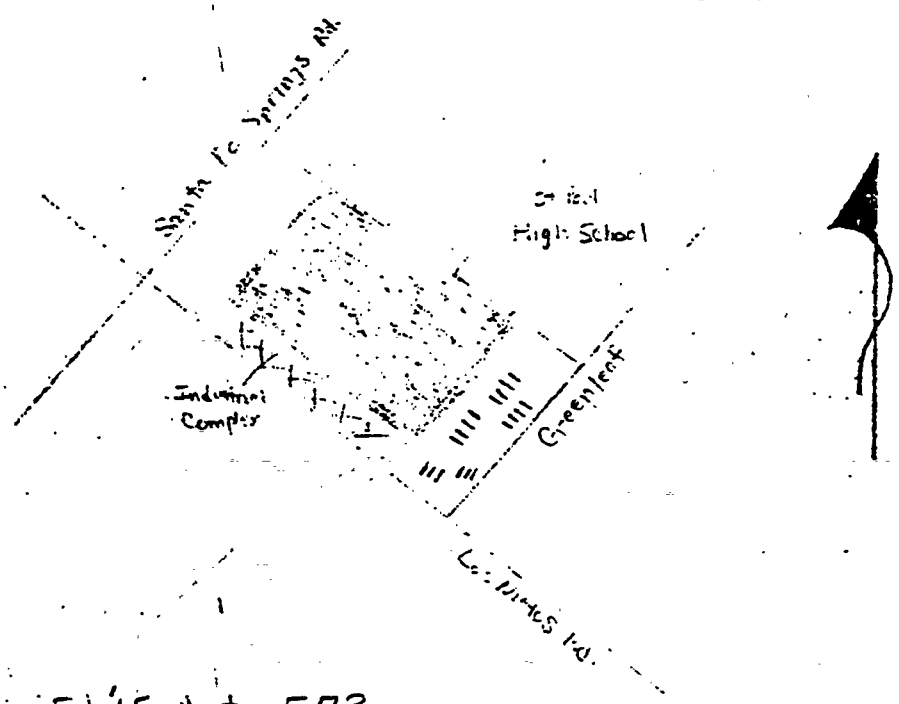


SCALE MAP OF RESERVOIR



Date 6-30-60 photo 2313 L25

Waste Disposal is still active. Vehicles present seem to be filling in pit with soil material. Breachs in the berm are still evident. St. Paul High School is now constructed to the northeast of the site.



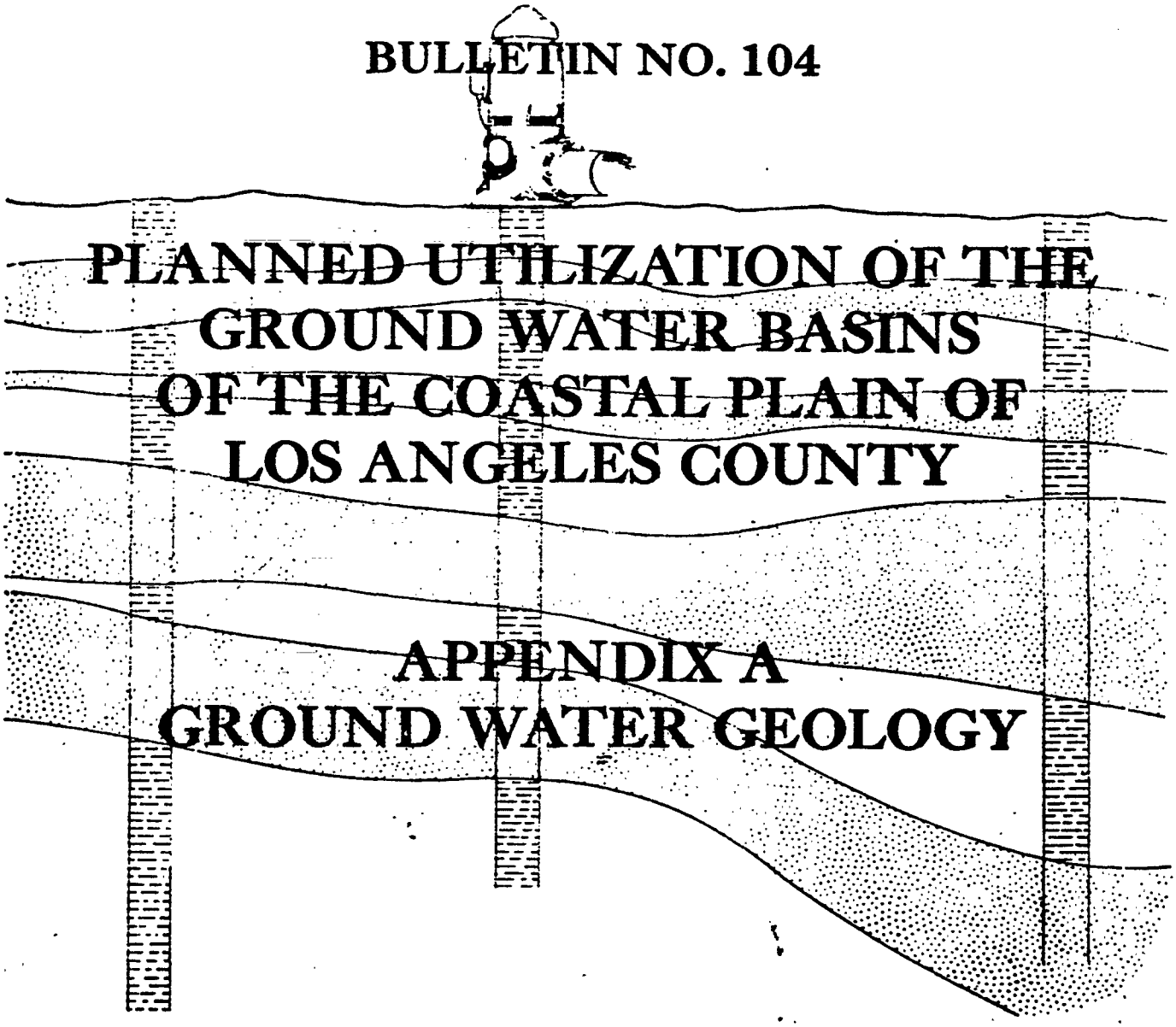
Date: Jan-Feb '65 photo E 73

Waste Disposal is no longer active. Circular pit is now covered over with soil.

REFERENCE
REF 1

STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
SOUTHERN DISTRICT

BULLETIN NO. 104

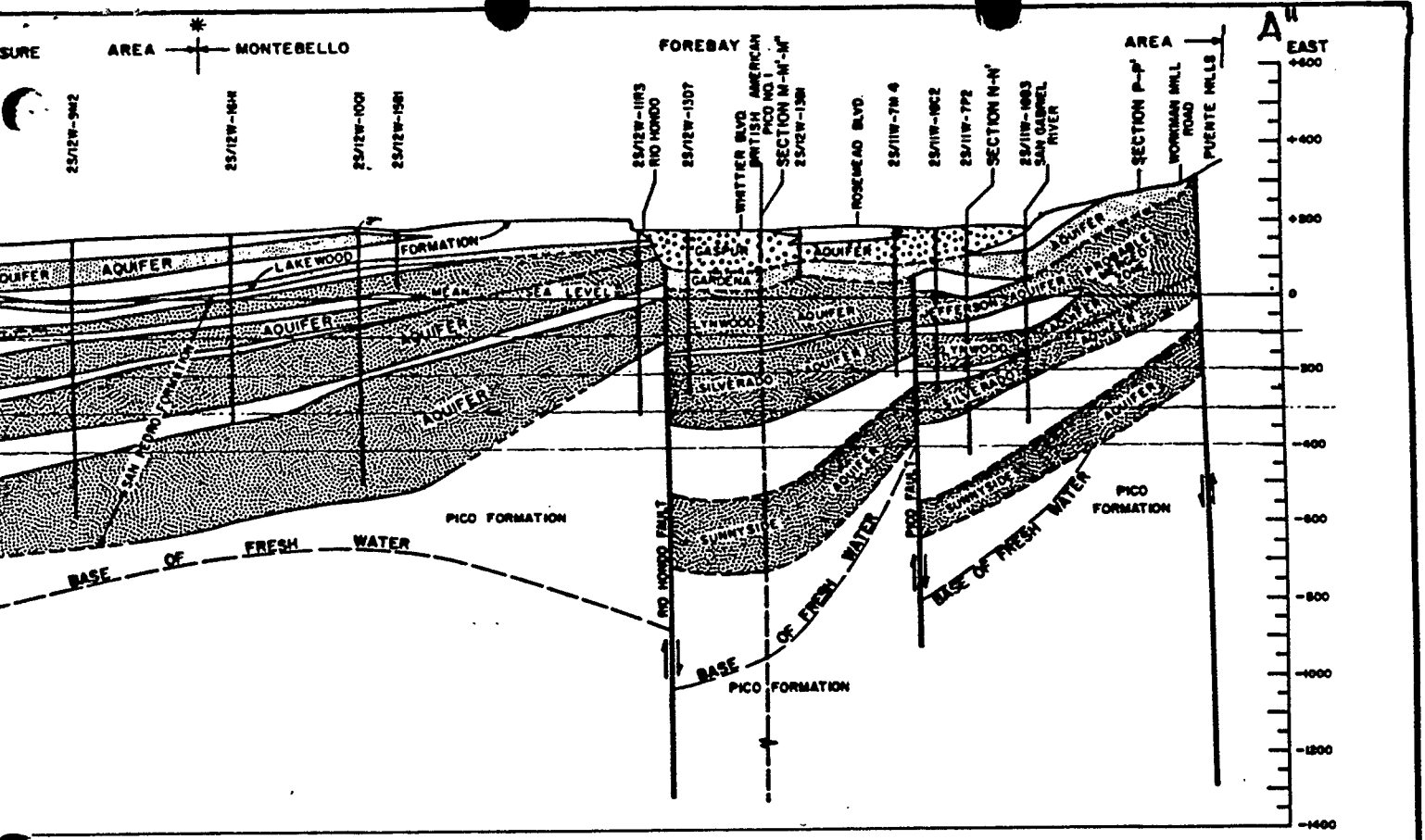


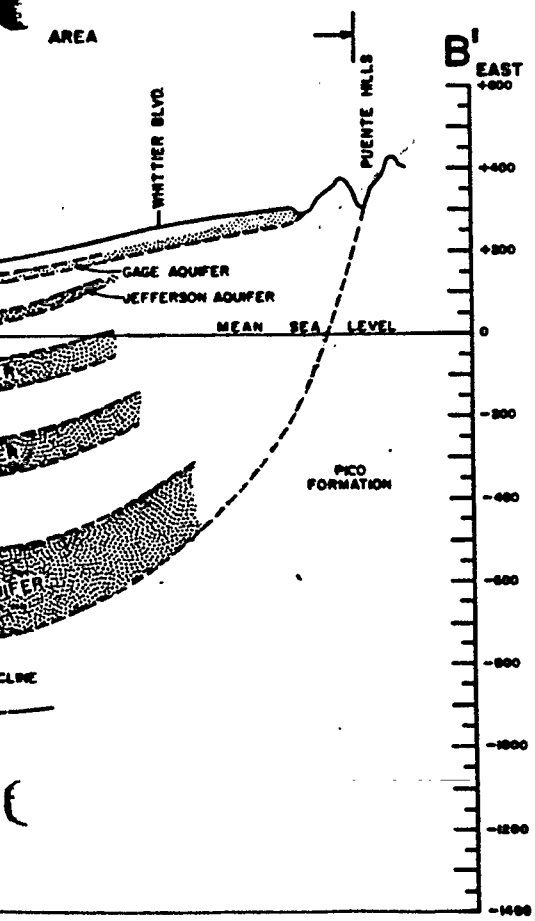
PLANNED UTILIZATION OF THE GROUND WATER BASINS OF THE COASTAL PLAIN OF LOS ANGELES COUNTY

APPENDIX A
GROUND WATER GEOLOGY

EDMUND G. BROWN
Governor

WILLIAM E. WARNE
Director





LEGEND

- AQUICLUDES AND DEEPER UNDIFFERENTIATED FORMATIONS
- AQUIFERS IN RECENT ALLUVIUM (INCLUDES THE GASPUR AND BALLONA AQUIFERS)
- AQUIFERS IN LAKEWOOD FORMATION (INCLUDES THE ARTESIA, EXPOSITION, GAGE, AND GARDENA AQUIFERS)
- AQUIFERS IN SAN PEDRO FORMATION (INCLUDES THE HOLLYDALE, JEFFERSON, LYNWOOD, SILVERADO, AND SUNNYSIDE AQUIFERS)
- WATER WELLS
- OIL WELLS
- FAULTS

✳ BOUNDARY BETWEEN FOREBAY AND PRESSURE AREA AS SHOWN ON PLATE 2 OF THIS REPORT

NOTE: LOCATIONS OF GEOLOGIC SECTIONS ARE SHOWN ON PLATE 3A AND 3B

STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
SOUTHERN CALIFORNIA DISTRICT

GROUND WATER GEOLOGY OF THE COASTAL PLAIN OF LOS ANGELES COUNTY

IDEALIZED GEOLOGIC SECTIONS A-A'-A'' AND B-B'

HORIZONTAL SCALE OF FEET
2000 0 2000 4000 6000

1961

LOS ANGELES
ORANGE
BELLFLOWER
DOWNEY
HONDO
SOUTH GATE
HUNTINGTON PARK
MONTEBELLO
MONTEREY PARK
ALHAMBRA
SAN GABRIEL
ROSEMEAD
EL MONTE
GLENDALE
BURBANK
HOLLYWOOD
NORTH HOLLYWOOD
BEVERLY HILLS
LA HABRA
RIVER
GABRIEL
RIO
HONDO FAULT
CEMETERY
CANYON
STANTON
FULLERTON
ATLANTIC
LAKEWOOD
WHITTIER
BOWNEY
FREEWAY
BLVD
AVE
STREET
HIGH
LA BREA
WESTERN
HARBOR
ALAMEDA
COLORADO
GRANADA
PASADENA
SANTA
CONEJO
CRESCENTA
ORANGE CO
LOS ANGELES CO
AIO
100
0

REF 2

te of California—Health and Welfare Agency

Department of Health Services
Hazardous Materials Management Section

MEMO OF CALL

me: George Farag (Civil Engineering Tech) Date: 11-14-84

m: Los Angeles County Flood Control District Time: 0910

dress: Person Taking or Making Call: Carol J. Masson

ephone No.: 213/226-4383

bject: groundwater near Waste Disposal, Inc. - nearby wells

ssage:

1. LACFCD 1644G, a pumping well, owned by the City of Santa Fe Springs

DWR No: 2S/11W-32K5 395' NW of Greenleaf Ave and Reis St.

north of St. Paul High School, 10' N of chain link fence of school

on 4-13-84, 32.6' to water

well has multi-perforations: 40-58', 88-102', 131-134', 604-628'

2. LACFCD 1645H

DWR No.: 2S/11W-32Q3, a pumping well, owned by Charlie F. Boring, 13033 Barton Rd.

213/944-2194

used for irrigation and public supply — 1979

845' W of Painter Extension, 581' N of Los Nietos Rd, 30' N of Barton Rd,

775' SE of Greenleaf Ave

on 6-11-84, 43.6' to water

gradient is 40 feet per mile

flow is south to southwest, almost parallel to Rio Hondo channel

wells are multiperforated and aquifers are connected anyway

F. C. Dist. Form 106 2M 9-31 Sheet 1

Location:
#13033 Barton Rd.
775' S.E. of ℄ Greenleaf Ave.
793' N.W. of ℄ Painter Ave.
35' N.E. of Barton Rd.
— 8-14-58.

LOS ANGELES COUNTY FLOOD CONTROL DISTRICT
HYDROGRAPHIC DEPARTMENT
WELL DATA

Location and description (845' W. of Painter extension,)? 581' N. of Los Nietos Rd., 30' N. OF BARTON RD., 0.15 mi. W ~~E.~~ OF THE ℄ PAINTER STR., 50' S.E. OF ~~#13023~~ #13033 BARTON RD.

Description of reference point (a) 6-4-51: 3/4" HOLE, NW ~~E~~ SIDE OF FLANGE, 0.5' ABOVE GROUND.
(b) Top of 2" meas. pipe at ground.

R. P. elev. above sea level ~~160~~ (a) 153.5' (b) 153.0' Datum USGS Topo.

How determined DWR

R. P. elev. above, below, ground

Owner 12/17/79 Charles F. Boring, #13033 Barton Road ~~Chino Trad. Water Co.~~ 944-2194

Use Irr., PUBLIC SUPPLY-6-4-51. None-Capped-4-24-57

Capacity of well

Depth of well 648' Sounded 500' -4-6-59

Size of well 14" Type Drilled

Power used

Type of motor, engine Make HP

Type of pump SUBMERGED Removed 4-24-57 Make

Capacity of pump

Year drilled or dug 5-20-25 Driller Saunders Bros.

Depth to water when drilled

Salinity of water

Temperature of water

Artesian when drilled Yes No

Artesian on date Yes No

Location field checked - CCG 8-13-58

R.P. (c) From 8/16/79 - Dist Levels of 9-26-77 - Elev. 155.2 - Same Description as R.P. (b)

Well Numbers

DWR C-821C; Owner #10. 23/11W-32Q3

F. C. Well No. 1645 H

LOG OF WELL No. 1645 H

Drilled by Saunders Bros.

Date drilled

Depth from ground surface 648'

Struck water at ft. from ground.

Water rose to ft. from ground.

FROM	TO	CLASSIFICATION OF MATERIALS			
0	8	sand	545	558	clay
8	13	clay	558	562	gravel
13	20	sand	562	567	clay
20	36	sandy clay	567	570	gravel
36	40	sand	570	576	sand
40	45	gravel	576	580	clay
45	48	sand	580	586	sand
48	58	gravel	586	590	clay
58	88	sandy clay	590	594	gravel
88	102	gravel	594	604	sand
102	131	sandy clay	604	624	gravel
131	134	gravel	624	626	rock
134	240	sandy clay	626	648	sand.
240	255	hard brown clay	CEMENTED IN BOTTOM		
255	282	sandy clay			
282	306	hard clay			
306	320	sandy clay			
320	380	blue clay			
380	420	hard blue clay			
420	426	" " "			
426	466	" " "			
466	468	granite rock (the 3)			
468	475	sand			
475	480	sharp sand			
480	494	" "			
494	496	rock			
496	524	sharp sand			
524	528	rock			
528	535	clay			
535	545	gravel			

PERF: 40-58, 88-102, 131-134, 535-545, 558-562, 567-570, 590-594, 604-624.

76W348—106 —Cdb 8-67

SHEET 1

LOS ANGELES COUNTY
FLOOD CONTROL DISTRICT
Water Conservation Division
WELL DATA

RECEIVED
U.S. EPA
REGION 9
COMM. CENTER
85 JUL 29 A11:07

Owner:

Location and Description: City of Sante Fe Springs; 395±' N.W. inter. of Greenleaf Ave. & Rees; 50±' north of Saint Paul High School; 10' north of chain-link fence, separating school parking lot from horse-pasture; 600±' S.E. of well 1644E.

Use: None

Elev. of average grd. at well: 150±' 147.7 r.p. (B) U. S. G. S. Datum

Elev. of grd. adjacent to well: U. S. G. S. Datum

Water surface reference points:

(a) From 1-20-70 To Elev. 150.0 How det. Topo.
Description: Top of casing at base of pump, at grd. surface.

(b) From 8-16-79 To Elev. 147.8 How det. Dist Levels 9-21-77
Description: At bottom of 8" discharge pipe at base of pump 0.1' above ground.

(c) From To Elev. How det.
Description:

(d) From To Elev. How det.
Description:

Type of well: Size 12"

Original depth: Soundings: 84.0' - 1-20-70

Pumping equipment: Remains of old pump

Power used:

Capacity: Drawdown:

Date drilled: By

Artesian characteristics:

Quality of water:

Remarks:

(over)

Well Numbers

Owner

D. W. R. 2S/14W-32K5

Loc.

D. W. R.

F. C. 1644G

REF 3

SUMMARY OF FINDINGS
PRELIMINARY SITE CHARACTERIZATION
WASTE DISPOSAL, INC. SITE
FOR REDEVELOPMENT AGENCY,
CITY OF SANTA FE SPRINGS, CALIFORNIA

DAMES & MOORE JOB NO. 13262-005-01
SANTA BARBARA, CALIFORNIA
DECEMBER 7, 1984

Dames & Moore

21S/13-COVER

Dames & Moore

812 Anacapa Street, Suite A
Santa Barbara, CA 93101
(805) 963-9676 / 963-5976

December 7, 1984

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

Attention: Mr. Richard H. Weaver
Director

Gentlemen:

Summary of Findings
Preliminary Site Characterization
Waste Disposal, Inc. Site
For Redevelopment Agency,
City of Santa Fe Springs, California

We are pleased to transmit the above referenced summary report of our preliminary investigation of the former Waste Disposal, Inc. site in Santa Fe Springs, California. Should you have any questions concerning this summary, please contact us. We look forward to assisting you in the future.

Very truly yours,

DAMES & MOORE

Thomas A. Vinckier

Thomas A. Vinckier
Associate

TAV:RET:dah
21S/13-ltr

TABLE OF CONTENTS

Section		Page
1.0	INTRODUCTION	1
1.1	BACKGROUND	1
2.0	PURPOSE AND SCOPE	2
2.1	PURPOSE OF INVESTIGATION	2
2.2	SCOPE OF SERVICES	2
3.0	INVESTIGATIVE METHODS	3
3.1	HEALTH AND SAFETY PLAN	3
3.2	DRILLING AND SAMPLING PROGRAM	3
3.3	ANALYTICAL TESTING PROGRAM	4
4.0	INVESTIGATIVE RESULTS	5
4.1	DRILLING AND SAMPLING PROGRAM	5
4.2	ANALYTICAL RESULTS	6
4.2.1	CAM Inorganics	6
4.2.2	Priority Pollutant Organic Compounds	6

TABLES
FIGURES
APPENDIX A: Analytical Results
California Analytical Laboratories

LIST OF TABLES

Table

1 SUMMARY OF ANALYTICAL RESULTS FOR CAM INORGANIC COMPOUNDS (METALS)

2 SUMMARY OF ANALYTICAL RESULTS FOR IDENTIFIED PRIORITY POLLUTANTS (EPA METHODS 624 AND 625)

LIST OF FIGURES

Figure

1 BORING LOCATION MAP

2 LOG OF BORINGS DMEB-1 AND DMEB-2

3 LOG OF BORINGS DMEB-3 AND DMEB-4

1.0 INTRODUCTION

This report presents a summary of the results of our initial investigation of subsurface conditions at the former Waste Disposal Inc. site in Santa Fe Springs, California. Presently, the site is an undeveloped tract of land situated north of Los Nietos Road, west of Greenleaf Avenue and east of Santa Fe Springs Road (Figure 1). This initial investigation has been conducted for the Redevelopment Agency of the City of Santa Fe Springs in order to assess whether potentially hazardous materials are present in site soils.

1.1 BACKGROUND

The following site-use history is based on information assembled by the California Department of Health Services (DHS). This information indicates that the subject site contains a buried, concrete-lined reservoir (approximately 500 feet in diameter) that was probably used initially for petroleum storage. In the late 1920s or early 1930s, the reservoir was decommissioned. From the 1930s to the late 1950s, the decommissioned reservoir was used for the disposal of a variety of materials including:

- petroleum refinery tank bottoms;
- steel mill slag;
- brewery wastes;
- cesspool sewage; and,
- miscellaneous solid and liquid wastes.

In the late 1950s and early 1960s, the disposal site received principally spent drilling muds from oil field drilling operations. Minor amounts of construction debris (wood debris and concrete rubble) were also believed to be disposed of at the site during this time. Disposal activities declined in the 1960s, and by 1965 the reservoir and surrounding area were covered by a mantle of fill soil.

Historical aerial photographs indicate that several unlined sumps were present around the periphery of the reservoir. These sumps were considerably smaller in volume than the main disposal reservoir and probably received fluids

(largely water) which were apparently drained intermittently from the reservoir. Aerial photographs also show what appear to be small outwash features originating at the northwest and southeast margins of the reservoir.

2.0 PURPOSE AND SCOPE

2.1 PURPOSE OF INVESTIGATION

Available data suggest that some of the materials disposed of in the main reservoir and peripheral sumps contain potentially hazardous compounds. In order to assess whether hazardous compounds are present, and if so, their chemical composition, we conducted a limited program of soil and waste sampling and sample analysis. We point out that our investigation is not intended to be an exhaustive evaluation of the complete chemical composition and distribution of all wastes or waste constituents in the subsurface at the site. Rather, the investigation has been designed to:

- provide a generalized vertical profile of the chemical character of materials encountered in a single boring in the main reservoir; and,

- provide an indication of the presence and chemical characteristics of waste and/or waste constituents which may be present at three boring locations adjacent to the perimeter of the reservoir.

The scope of the investigation is outlined below.

2.2 SCOPE OF SERVICES

In order to accomplish the objectives of this investigation, we have completed the following tasks:

- Preparation of a health and safety plan that was followed during the field activities of this investigation;

- Collection of soil and/or waste samples from a total of four borings within and adjacent to the main disposal reservoir;

- Chemical testing of selected samples or sample composites for both priority pollutant organics (U.S. EPA) and total CAM* inorganics; and,

- Preparation of a report that contains a summary of field and laboratory methods, logs of the subsurface borings, and a summary of the results of chemical analyses of selected samples.

The four borings were drilled at the locations shown on Figure 1. Boring DMEB-1 was positioned near the center of the former reservoir. Borings DMEB-2, -3, and -4 were were located immediately northwest, northeast, and southeast of the reservoir perimeter.

3.0 INVESTIGATIVE METHODS

3.1 HEALTH AND SAFETY PLAN

A Health and Safety Plan was established prior to implementation of site activities. The purpose of the plan was to assign responsibilities, establish personnel protection protocol and safety procedures, and provide for contingencies in the event that unanticipated hazards arise during the course of field operations.

3.2 DRILLING AND SAMPLING PROGRAM

During the week of September 28, 1984, undisturbed soil and/or waste samples were collected from Borings DMEB-1 through DMEB-4 (Figure 1). The borings were drilled under the technical supervision of a Dames & Moore geologist utilizing 8-inch diameter hollow stem auger drilling equipment. A detailed log of the materials encountered during drilling was recorded at each boring location (Figures 2 and 3). Undisturbed samples were obtained, where possible, at 2-1/2 foot intervals using a Dames & Moore U-type sampler fitted with stainless steel sample sleeves. Upon recovery of each sample, the concentration of organic vapors emitted from the soil/waste sample was measured using a portable HNu photoionization detector. Two 3-inch-long sample sleeves

---

* CAM Inorganics: California Assessment Manual (January 11, 1984) list of persistent and bioaccumulative inorganic compounds (metals).

were immediately capped with aluminum foil, sealed within a polyurethane bag and placed inside a PVC sample container with plastic end caps. All samples were appropriately labeled and stored in ice chests cooled with blue ice. Refrigerated samples along with chain of custody documents were shipped by overnight courier to California Analytical Laboratories in Sacramento, California.

Prior to drilling each boring, all downhole drilling and sampling equipment was steam cleaned to reduce the potential for cross-hole contamination. In addition, the samplers were washed with detergent and rinsed in distilled water prior to each sampling interval. Upon completion of the drilling program, the borings were backfilled with cement in order to prevent downhole migration of near-surface waste materials. All drill cuttings were placed inside 55-gallon drums and temporarily stored in a secured location on site for future disposal at an appropriate waste facility.

3.3 ANALYTICAL TESTING PROGRAM

Selected samples and sample composites were analyzed by California Analytical Laboratories in Sacramento, California for CAM inorganics (metals) and U.S. EPA priority pollutant organics. All analyses were performed according to procedures specified by the California Department of Health Services (CAM metals) or the U.S. EPA (methods 624 and 625 for priority pollutants). It should be noted that the detection limits for priority pollutants vary considerably from sample to sample (Appendix A). This variation in detection limits is related to the total organic content of each sample; that is, detection limits for a sample consisting of clean sand (DMEB-3-9) are markedly lower than for a sample consisting primarily of waste material with a high organic content (DMEB-1-3) (Appendix A). This occurs because samples that contain relatively high levels of organics must be diluted in order to achieve adequate resolution of component organic species in the sample. This dilution factor results in an increase of the detection limits for that particular sample.

4.0 INVESTIGATIVE RESULTS

4.1 DRILLING AND SAMPLING PROGRAM

Detailed logs of the materials encountered in the four borings are presented in Figures 2 and 3. Also shown on the logs are the measured concentrations of organic vapors emitted from each sample. A brief narrative description of the materials encountered in each boring follows.

Boring DMEB-1 - This boring, located roughly in the center of the former disposal reservoir (Figure 1), encountered 2 to 3 feet of fill soil underlain by a thin layer of concrete. Soil intermixed with waste material, consisting of a black oily and/or tarry substance, was encountered from approximately 3 to 5 feet and from about 10 feet to the bottom of the boring at 22 feet (Figure 2). Below about 20 feet, the waste material graded to a soft, black viscous liquid. The boring was terminated at the top of a layer of concrete at 22.5 feet which may represent the base of the concrete-lined reservoir.

Boring DMEB-2 - Boring DMEB-2 was located to the northwest of the main reservoir (Figure 1). Soil mixed with waste material similar to that found in Boring DMEB-1 was encountered between depths of 3.5 to 14 feet (Figure 2). These materials are overlain by a layer of concrete above which is about 3 feet of fill soil. The boring was terminated at a depth of about 19 feet in dense clayey soils.

Boring DMEB-3 - Boring DMEB-3, located near the northeastern boundary of the site, encountered loose sandy fill material (silty sand as well as asphalt and metal debris) down to a total depth of about 9 feet (Figure 3). Soils penetrated below this depth consisted of silty clay to clayey silt and, below 21 feet, clean fine- to medium-grained sand. No visible waste materials were encountered; however a slight odor was detected in sample 10 (11 feet) which was collected below the base of the surficial fill materials.

Boring DMEB-4 - Boring DMEB-4, located southeast of the perimeter of the reservoir (Figure 1), encountered a 2- to 3-foot-thick layer of black oily silty clay beneath approximately four feet of fill soil (Figure 3). From a depth of about 7 feet down to the bottom of the boring at 20 feet, the soils encountered consisted of silty clay grading downward to clayey sand.

4.2 ANALYTICAL RESULTS

4.2.1 CAM Inorganics

The results for the chemical analyses for CAM inorganics (metals) are shown on Table 1. The DHS considers any waste which contains a substance listed in Table 1 to be a hazardous waste if: (1) the total concentration of any listed inorganic compound exceeds the Total Threshold Limit Concentration (TTLC) for that compound; or, (2) the extractable concentration (in mg/l), as determined by a Waste Extraction Test (WET), of any listed inorganic compound exceeds the respective Soluble Threshold Limit Concentration (STLC) for that compound. It should be noted that the samples were analyzed only for total concentrations; WET tests were not performed. None of the samples analyzed contained inorganic compounds at total concentrations in excess of the respective TTLCs. Underlined values in Table 1 represent cases in which the total concentration of a metal exceeds its respective STLC. In these cases, WET tests must be performed and the results compared to listed STLC values in order to assess whether the sample would be considered a hazardous waste.

4.2.2 Priority Pollutant Organic Compounds

The results of the chemical analyses of samples for U.S. EPA priority pollutant organics are summarized in Table 2. Only those compounds which were detected in one or more samples are listed in Table 2; a complete listing of the analytical results is presented in Appendix A. The DHS may determine that a waste is hazardous if it contains any of the priority pollutant organic compounds. The California Administrative Code (Title 22, Division 4, Chapter 30, Article 9, Section 66680) states that a waste that "...contains a material cited in the List of Chemical Names or the List of Common Names presented in this Article shall be considered a hazardous waste...". Compounds that have been detected in the samples (Table 2) and that appear on the List of Chemical Names include benzene, trans-1,2 dichloroethene, ethylbenzene, methylene chloride, toluene, trichloroethene, and naphthalene.

TABLE 1

SUMMARY OF ANALYTICAL RESULTS FOR CAM* INORGANIC COMPOUNDS (METALS)[1]
(Results in mg/kg)

Element	Total Threshold Limit Concentration (mg/kg net wt.)	Soluble Threshold Limit Concentration (mg/l leachate)	DMEB-1 Sample 3	DMEB-1 Composite	DMEB-2 Composite	DMEB-2 Sample 6	DMEB-3 Sample 9	DMEB-3 Sample 10	DMEB-4 Sample 2
Arsenic	500	5	<5	<5	<5	<5	30	<5	<5
Antimony	500	15	<5	<5	<5	<5	<5	<5	<5
Barium	10,000	100	80	310	930	120	53	95	320
Beryllium	75	0.75	<0.5	<0.5	<0.5	0.65	<0.5	<0.5	<0.5
Cadmium	100	1	2.5	2.6	1.9	2.0	0.5	1.6	1.9
Chromium III/IV[2]	2500/500	560/5	21	310	24	30	7.1	18	27
Cobalt	8000	80	4.6	5.0	3.9	12	3.6	7.6	9.2
Copper	2500	25	44	57	28	28	9.4	17	34
Lead	1000	5	130	250	280	<5	<5	<5	17
Mercury	20	0.2	0.25	0.19	0.22	0.1	<0.1	<0.1	<0.1
Molybdenum	3500	350	<10	<10	<10	<10	<10	<10	<10
Nickel	2000	20	17	38	27	22	6.6	14	23
Selenium	100	1	<1	<1	<1	<1	<1	<1	<1
Silver	500	5	500	<2	<2	<2	<2	<2	<2
Thalium	700	7	<5	<5	30	<5	<5	<5	<5
Vanadium	2400	24	22	45	24	49	14	32	32
Zinc	5000	250	150	2300	130	57	22	42	220

[1] Samples were analyzed only for total concentration of metals; underlined values signify that total concentration found exceeds the Soluble Threshold Limit Concentrations.

[2] Reported as Cr III plus Cr IV.

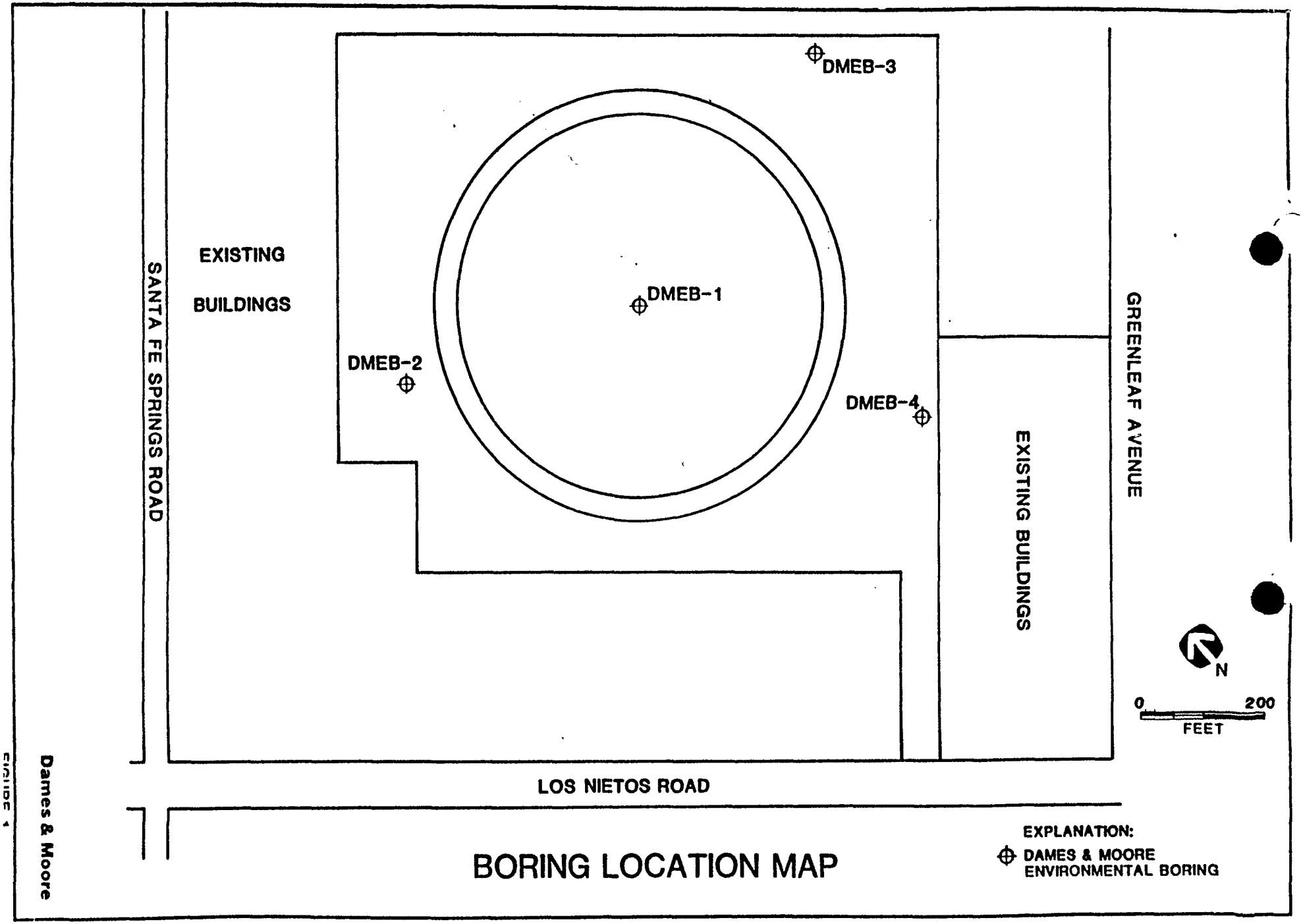
* CAM: California Assessment Manual, California Department of Health Services

TABLE 2

SUMMARY OF ANALYTICAL RESULTS FOR IDENTIFIED PRIORITY POLLUTANTS
(EPA METHODS 624 and 625)[1]
(micrograms/kilogram)

Identified Priority Pollutant	DMEB-1 Sample 3	DMEB-1 Composite	DMEB-2 Composite	DMEB-2 Sample 6	DMEB-3 Samples 9 and 10	DMEB-4 Sample 2
Volatiles (EPA Method 624)						
4V benzene	ND	5100	ND	ND	ND	ND
30V trans-1, 2, dichloroethene	ND	1100	ND	ND	ND	ND
38V ethylbenzene	1800	25000	1900	ND	ND	ND
44V methylene chloride	ND	7000	ND	ND	ND	ND
85V tetrachloroethene	ND	22000	ND	ND	ND	ND
86V toluene	3100	57000	ND	ND	ND	ND
87V trichloroethene	ND	13000	ND	ND	ND	ND
Hazardous Substances[2] (EPA Method 624)						
CL14 2-butanone	ND	5100	ND	ND	ND	ND
CL20 total xylenes	15000	120000	4800	ND	ND	ND
Base/Neutral Compounds (EPA Method 625)						
39B flouranthene	ND	ND	ND	ND	ND	210
55B naphthalene	29000	66000	13000	ND	ND	ND
72B benzo (a) anthracene	ND	ND	ND	ND	ND	380
73B benzo (a) pyrene	ND	ND	ND	ND	ND	1100
75B benzo (k) flouranthene	ND	ND	ND	ND	ND	1500
76B chrysene	ND	ND	ND	ND	ND	460
79B benzo (phi) perylene	ND	ND	ND	ND	ND	200
81B phenanthrene	24000	30000	ND	ND	ND	ND
83B indeno (1,2,3-cd) pyrene	ND	ND	ND	ND	ND	300
84B pyrene	ND	ND	ND	ND	ND	160

[1] Results are given only for those compounds which were detected in one or more samples; detection limits vary as shown in Appendix.
[2] Butanone and xylenes are non-priority pollutants.
ND: Not detected (see Appendix for detection limits)
21/S13-T2



BORING LOCATION MAP

Dames & Moore

FIGURE 1

BORING DMEB-1

DRILLING METHOD: 8 INCH DIAMETER HOLLOW STEM AUGER

DEPTH IN FEET	SAMPLES ANALYZED	ORGANIC VAPOR CONCENTRATION* (HNu DETECTOR) (ppm)	BLOWS/6"	SAMPLE NO.	SAMPLE	SYMBOLS	DESCRIPTION
0						SM	CONCRETE LAYER (UNABLE TO SAMPLE)
		2	10/13/17	1	■	CL/WST	DARK BROWN CLAY AND BLACK OILY WASTE MATERIAL WITH TRACE BRICK FRAGMENTS
5							CONCRETE LAYER (UNABLE TO SAMPLE)
		2	5/16/34	2	■	CL	DARK BROWN TO BLACK SILTY CLAY WITH BRICK AND CONCRETE FRAGMENTS
10	DMEB 1-3	65	8/10/20	3	■	CL/WST	GRADES TO DARK BROWN TO BLACK SILTY CLAY AND (OILY) WASTE MATERIAL
		2	13/11/28	4	■		
15	DMEB-1-1 COMPOSITE	15	8/12/10	5	■		GRADING TO MOSTLY SOFT, BLACK (OILY AND/OR TARRY) WASTE MATERIAL
		3	2/3/3	6	■	WST (CL)	
20		5	0	7	■		GRADING TO VERY SOFT, VISCOUS LIQUID WASTE
25							CONCRETE LAYER BORING TERMINATED AT 22.5 FEET ON SEPTEMBER 25, 1984

*FIELD MEASUREMENT

WST: WASTE MATERIAL

BORING DMEB-2

DRILLING METHOD: 8 INCH DIAMETER HOLLOW STEM AUGER

DEPTH IN FEET	SAMPLES ANALYZED	ORGANIC VAPOR CONCENTRATION* (HNu DETECTOR) (ppm)	BLOWS/6"	SAMPLE NO.	SAMPLE	SYMBOLS	DESCRIPTION
0						GM	LIGHT BROWN SILTY SAND GRAVEL TO 1 INCH (UNABLE TO SAMPLE)
							CONCRETE LAYER
5		3	4/5/5	1	■	CL/WST	BLACK CLAYEY (OILY) WASTE MATERIAL, SOFT
		3	4/4/5	2	■		
10	DMEB-2 COMPOSITE	3	4-18"	3	■		AS ABOVE
		6	1/1/2	4	■		
15		3	9/19/25	5	■	CL	MEDIUM BROWN SLIGHTLY SANDY SILTY CLAY, STIFF
	DMEB 2-6	3	16/24/40	6	■		GRADING DENSER
20							BORING TERMINATED AT 18.5 FEET ON SEPTEMBER 25, 1984

*FIELD MEASUREMENT

WST: WASTE MATERIAL

BORING DMEB-3

DRILLING METHOD: 8 INCH DIAMETER HOLLOW STEM AUGER

DEPTH IN FEET	SAMPLES ANALYZED	ORGANIC VAPOR CONCENTRATION* (HNu DETECTOR) (ppm)	BLOWS/6"	SAMPLE NO.	SAMPLE
0					
		2	5/7/12-4"	1	■
5				(2)	□
				(3)	□
10			8/13/8	(4)	□
	DMEB 3-10	2		10*	■
		2	5/11/9	5	■
15		2	11/7/9	6	■
		2	18/45/50-4"	7	■
20		2	12/18/29	8	■
	DMEB 3-9	2	9/12/15	9	■
25					

*FIELD MEASUREMENT

SYMBOLS	DESCRIPTION	
SM	LIGHT BROWN SILTY SAND WITH SOME GRAVEL AND ASPHALT FRAGMENTS	
	AS ABOVE	(SAMPLE NOT RECOVERED)
CL/ML	ENCOUNTERED ASPHALT AND METAL FRAGMENTS	(UNABLE TO SAMPLE)
	DARK BROWN SILTY CLAY TO CLAYEY SILT (WITH SLIGHT ODOR)	(SAMPLE NOT RECOVERED)
	AS ABOVE WITHOUT ODOR	
	GRADING VERY DENSE	
	GRADING WITH TRACE SAND	
SP	LIGHT BROWN CLEAN FINE TO MEDIUM SAND	

BORING TERMINATED AT A DEPTH OF 23.5 FEET ON SEPTEMBER 26, 1984

* BORING REDRILLED TO COLLECT SAMPLE NUMBER 10 AT 11 FEET

BORING DMEB-4

DRILLING METHOD: 8 INCH DIAMETER HOLLOW STEM AUGER

DEPTH IN FEET	SAMPLES ANALYZED	ORGANIC VAPOR CONCENTRATION* (HNu DETECTOR) (ppm)	BLOWS/6"	SAMPLE NO.	SAMPLE
0					
		2	50/63	1	■
5	DMEB 4-2	4	7/7/9	2	■
		2	6/9/11	3	■
10		2	5/7/9	4	■
		3	5/14/20	5	■
15		2	8/16/29	6	■
		2	12/21/35	7	■
20		2	8/9/16	8	■
25					

*FIELD MEASUREMENT

SYMBOLS	DESCRIPTION
SM	LIGHT TO DARK BROWN SILTY SAND AND GRAVEL
ML/CL	GRAY CLAYEY SILT GRADING DOWNWARD TO BLACK (OILY) SILTY CLAY
ML	BLUISH TO GREENISH CLAYEY SILT
CL	BLUISH GRAY SILTY CLAY WITH SOME BLACK (OILY) CLAY BLEBS
	DARK GRAY SILTY CLAY
	ORANGISH BROWN STIFF SILTY CLAY
SC	GREENISH GRAY CLAYEY SAND

BORING TERMINATED AT 21 FEET ON SEPTEMBER 26, 1984

Dames & Moore

APPENDIX A

ANALYTICAL RESULTS
CALIFORNIA ANALYTICAL LABORATORIES

APPENDIX

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.

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	DMEB-1-3	10.0	soil	9/24/84	15:15	
-4	DMEB-1-4	12.5	soil	9/24/84	15:40	
-5	DMEB-1-5	15	soil	9/24/84	16:00	COMPOSITED
-6	DMEB-1-6	17.5	soil	9/24/84	16:15	
-7	DMEB-1-7	20	soil	9/24/84	16:40	
-8	DMEB-2-1	5	soil	9/25/84	10:30	
-9	DMEB-2-2	7.5	soil	9/25/84	10:45	COMPOSITED
-10	DMEB-2-3	10	soil	9/25/84	11:00	
-11	DMEB-2-4	12.5	soil	9/25/84	11:10	
-12	DMEB-2-5	15	soil	9/25/84	11:15	HOLD
-13	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	DMEB-3-9	22.5	soil	9/26/84	11:45	
-20	DMEB-3-10	11	soil	9/26/84	14:50	
-21	DMEB-4-1	2.5	soil	9/26/84	12:35	HOLD
-22	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.

DAMES & MOORE ENVIRONMENTAL BORING #1

Sample Number	Sample Depth(s)
DMEB-1-3	10 feet
DMEB-1 Composite	
4	12.5 feet
5	15 feet
6	17.5 feet
7	20 feet

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 [signature] DATE 11/2/84

California Analytical Laboratories, Inc.

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 MW

APPROVED BY [illegible] DATE 11/2/84

California Analytical Laboratories, Inc.

PA 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-dichloropropane	<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

EPA METHOD 624 (EXPANDED)
Data sheet

CLIENT ID: DMEB - 1 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: bjm

Approved by: MGM

Date: 11/7/84

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: DB

Approved by: MM Date: 10/25/84

EPA METHOD 625 PRIORITY POLLUTANTS
Data Sheet

CLIENT ID: DMEB -1 COMPOSITE 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	<40000
31A	2,4-dichlorophenol	<40000	43B	bis(2-chloroethoxy) methane	<40000
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	<40000
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		82B	dibenzo(a,h)anthracene	<80000
	(as azobenzene)	<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: Lynn

Approved by: [illegible] Date: 11/7/84

DAMES & MOORE ENVIRONMENTAL BORING #2

Sample Number	Sample Depth(s)
DMEB-2 Composite	
1	5 feet
2	7.5 feet
3	10 feet
4	12.5 feet
DMEB-2-6	17.5 feet

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.

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 [illegible] DATE 4/2/84

California Analytical Laboratories, Inc.

EPA METHOD 624 (EXPANDED)
Data sheet

CLIENT ID: DMEB-2 COMPOSITE 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: Lynn

Approved by: [illegible]

Date: 11/7/84

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-dichloropropene	<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: MMM

Date: 10/25/84

EPA METHOD 625 PRIORITY POLLUTANTS
Data Sheet

CLIENT ID: DMEB -2 COMPOSITE 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	<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	<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: Lym

Approved by: [illegible] Date: 11/7/84

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	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: Lym

Approved by: MDM Date: 11/7/84

DAMES & MOORE ENVIRONMENTAL BORING #3

Sample Number	Sample Depth(s)
DMEB-3-10*	11 feet
DMEB-3-9	22 feet

* Boring 3 was redrilled to collect sample number 10 at 11 feet.

C.A.M. METALS

Data Sheet

SAMPLE ID: DMEB-3-10 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 MW

APPROVED BY [illegible] DATE 11/2/84

California Analytical Laboratories, Inc.

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.

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

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

EPA METHOD 624 (EXPANDED)
Data sheet

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

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: MDM

Date: 10/25/84

EPA METHOD 625 PRIORITY POLLUTANTS
Data Sheet

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

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: lym

Approved by: [illegible] Date: 11/7/84

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

DAMES & MOORE ENVIRONMENTAL BORING #4

Sample Number	Sample Depth(s)
DMEB-4-2	5 feet

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.

EPA METHOD 624 (EXPANDED)
Data sheet

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

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: MM Date: 10/25/84

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
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	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
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

REF 4

Uncontrolled Hazardous Waste Site Ranking System

A Users Manual

Kris W. Barrett
S. Steven Chang
Stuart A. Haus
Andrew M. Platt

August 1982

MTR-82W111

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The MITRE Corporation
Metrek Division
1820 Dolley Madison Boulevard
McLean, Virginia 22102

REF 5

Dangerous Properties of Industrial Materials

Fifth Edition

N. Irving Sax

eral Hazardous Substances Act (including The Federal Hazardous Substances Labeling Act), The Caustic Poisons Act and Chemical Substances Legislation in the 1970's such as OSHA (including NIOSH); The Poison Prevention Packaging Act of 1970; the Consumer Product Safety Act of 1973; The Environmental Protection Agency Acts; The Clean Air Act (as amended in 1977); The Clean Water Act; The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA); The Resource Conservation and Recovery Act of 1976 (RCRA); The Safe Drinking Water Act, as amended; The Toxic Substances Control Act (TSCA); The Federal Regulatory Agency Liason to include a MATRIX for fast reference to the regulations which cover some 28 dangerous chemicals; plus a listing of Federal Legislation, Agencies involved and jurisdiction; plus a 29 item list of references see **Section 10A.**

For industrial response to chronic health hazards—five facts about chronic health hazards, need to define issues, setting an acceptable level of risk, discovering a hazard, regulation of chronic health hazards see **Section 10B.**

For labeling and certification of hazardous materials in terms of originator, legal status, extent of coverage, format and application, federal regulatory agencies, hazardous materials transportation guides, rail transport, air transport, water transport, highway transport, radioactives, FDA, EPA, TSCA, OSHA, labeling systems of ANSI, UN, DOT, general labeling guidelines, NFPA, IATA see **Section 11.**

ABBREVIATIONS

ACGIH	American Conference of Governmental Industrial Hygienists
Acute tox data	Acute toxicity data
anh	anhydrous
ASA	American Standards Association
ASTM	American Society for Testing Materials
atm	atmospheres
at wt	atomic weight
autoign temp	autoignition temperature
BeV	billions of electron volts
bp	boiling point
carc	carcinogen
(CC)	closed cup
cc	cubic centimeters
cfm	cubic feet per minute
CG	Coast Guard
CNS	central nervous system
(COC)	Cleveland open cup
conc	concentration(s)
contg	containing
CTD	chronic toxicity data
°	degrees Celsius
d	density
decomp	decomposes or decomposition
dermal	skin absorption mode of exposure
DOT	Department of Transportation
exper	experimental
expl	explosive, explodes
°F	degrees Fahrenheit
flam	flammable
flash p	flash point
fc	foot candle
fp	freezing point
fpm	feet per minute
ft	feet
g	grams
GI	gastrointestinal
gpm	gallons per minute
HC	hydrocarbon(s)
HIGH	capable of causing death or permanent injury due to the exposures of normal use; incapacitating and poisonous. Requires special handling.
hr(s)	hour(s)
IATA	International Air Transport Association
IARC	International Agency for Research on Cancer
ic	intracerebral
id	intraduodenal
inhal	inhalation mode of exposure
im	intramuscular
imp	implantation
in	intradermal
ip	intraperitoneal
ipl	intrapleural
ir	intrarenal
irr	irritant, irritation
it	intratracheal
iv	intravenous
ivg	intravaginal
°K	degree Kelvin
KeV	thousands of electron volts
Kg (kg)	kilograms
Km (km)	kilometers
Kw (kw)	kilowatt(s)
Kwh (kwh)	kilowatt hours
LC	lethal concentration

LC_{50}	lethal concentration to 50% of a specified population
LC_{LO}	lowest published *lethal* concentration
LD	lethal dose
LD_{50}	lethal dose to 50% of a specified population
lel	lower explosive limit
LOW	causes readily reversible tissue changes which disappear after exposure stops. Causes some discomfort
lpm	liters per minute
m-	meta
M^3, m^3	cubic meters
MCA	Manufacturing Chemists Association
mg	milligrams
ml	milliliters
MLD	minimum lethal dose
mm	millimeters of mercury
MOD	may cause reversible or irreversible changes to exposed tissue, not permanent injury or death. Can cause considerable discomfort
mp	melting point
mppcf	millions of particles per cubic foot
mu mem	mucous membrane(s)
μg	micrograms
n-	normal
neo	causes formation of neoplasm(s) i.e., non-metastasizing abnormal or new growth(s).
NONE	no harm via exposures of normal use; harmful only due to overwhelming dose or unusual conditions
NO_x	oxides of N
o-	ortho
(OC)	open cup
oral	ingestion mode of exposure
p-	para
pa	parenteral mode of exposure
PO_x	oxides of P
ppb	parts per billion
pphm	parts per hundred million
ppm	parts per million
rec	rectal mode of exposure
recog	recognized
(S)	upon review IARC classifies it as a susp carc
sec-	secondary
SO_x	oxides of S
sc	subcutaneous
spont	spontaneous(ly)
spont htg	spontaneous heating
susp, (S)	suspected
sym	symmetrical
syn	synonym
(TCC)	Tag closed cup
TC_{LO}	lowest published toxic concentration
TD	toxic dose
tert-	tertiary
THR	summary tox statement; acute unless otherwise indicated
TLV	threshold limit values
(TOC)	Tag open cup
tox	toxic(ity)
U or uk	unknown, insufficient data or experience recorded or available to permit a statement
uel	upper explosive limit
ulc	Underwriters' Laboratory Classification
uns-	unsymmetrical
vap d	vapor density
vap press:	vapor pressure
>	greater than
<	less than
Δ	via heat or heating
1°	primary
α	alpha
β	beta
γ	gamma
(+)	upon review IARC classifies it a carcinogen
(−)	upon review IARC classifies it not a carcinogen
(±)	upon review IARC states insufficient data to classify
⟶	yields or causes

RADIOLOGIC ABBREVIATIONS

cpm	counts per minute
d	days
dpm	disintegrations per minute
e	electrical
ec	electron capture
ev	electron volts
fCi	femto curies
h	hours
m	minutes
mCi	millicuries
Ci	curies
MeV	millions of electron volts
MT	metric tons
MTU	metric tons of Uranium
Mw	megawatts
μCi	micro curies
nCi	nano curies
pCi	pico curies
s	seconds
t	thermal
$T_{\frac{1}{2}}$	half-life
y	years

BENZOIC ACID ANHYDRIDE See benzoic anhydride.

BENZOIC ACID-α-METHYLBENZYL ESTER. See α-methylbenzyl benzoic acid.

BENZOIC ALDEHYDE. See benzaldehyde.

BENZOIC ANHYDRIDE. Syn: *benzoic acid anhydride*. Crystals. $(C_6H_5CO)_2O$, mw: 226.2, mp: 42°, bp: 360°, d: 1.1989 @ 15°/4°, vap. press: 1 mm @ 135.6°.
THR = A MILD irr and allergen.
Fire Hazard: Slight, when heated.

BENZOL. See benzene.

BENZOL DILUENT. Flash p: −25°F, autoign. temp.: 450°F (these values will vary depending on the manufacturer).
THR = U.
Fire Hazard: Dangerous, when exposed to heat or flame or powerful oxidants.
To Fight Fire: Alcohol foam, water mist, fog, dry chemical.

BENZO(a)NAPHTHO(2,1,8-hi j)NAPHTHACENE.
THR = An exper carc. [*23*]

BENZO(a)NAPHTHO(8,1,2-cde)NAPHTHACENE. $C_{28}H_{16}$, mw: 352.4.
THR = An exper neo. [*3, 23*]

BENZO(h)NAPHTHO(1,2,f)QUINOLINE. $C_{21}H_{13}N$, mw: 279.4.
THR = An exper neo. [*3, 23*]

BENZO NITRILE. Syn: *phenyl cyanide*. Transparent, colorless oil, almond-like odor. C_6H_5CN, mw: 103.1, d: 1.246 @ 20°/4°, bp: 191°, d: 1.0102 @ 15°/15°F (OC), mp: −12.8°.
THR = HIGH. See nitriles.

BENZO(r,s,t)PENTAPHENE. Green-yellow needles. $C_{24}H_{14}$, mw: 302.4, mp: 280°–282°.
THR = An exper (+) neo and carc. [*3, 11, 23*]

BENZO(r,s,t)PENTAPHENE-5-CARBOXALDEHYDE. $C_{25}H_{14}O$, mw: 330.4.
THR = An exper neo. [*3*]

BENZO(ghi)PERYLENE.
THR = An exper carc. [*23*]

BENZO(a)PHENALENO(1,9-hi)ACRIDINE. $C_{27}H_{15}N$, mw: 353.4.
THR = An exper neo. [*3*]

BENZO(h)PHENALENO(1,9-6c)ACRIDINE.
THR = An exper neo. [*3*]

BENZO(d,e,f)PHENANTHRENE. See pyrene.

BENZO(c)PHENANTHRENE. $C_{18}H_{12}$, mw: 228.3.
THR = An exper carc. [*3, 23*]

BENZO(c)PHENANTHRENE-8-CARBOXALDEHYDE. $C_{19}H_{12}O$, mw: 256.3.
THR = An exper neo. [*3*]

5-BENZO(c)PHENANTHRYL METHYL KETONE. $C_{12}H_{14}O$, mw: 270.3.
THR = An exper carc. [*3*]

BENZO PHENONE. Syn: *phenyl ketone, diphenyl ketone*. Rhombic white crystals, persistent rose-like odor. $C_6H_5COC_6H_5$, mw: 182.21, mp (α): 49°, mp (β): 26°, mp (γ): 47°, bp: 305.4°, d (α): 1.0976 @ 50°/50°, d (β): 1.108 @ 23°/40°, vap. press: 1 mm @ 108.2.
THR = Details U. See also ketones.
Fire Hazard: Slight, when heated; can react with oxidiing materials.

BENZO PYRENE. See benzo(a)pyrene.

BENZO(a)PYRENE. Yellow crystals insol in water, sol in benzene, toluene, xylene. $C_{20}H_{12}$, mw: 252.3, mp: 179°, bp: 312° @ 10 mm.
THR = HIGH. An exper (+) carc. [*3, 11, 23*] neo and mutagen. A common contaminant of air, water, food, smoke.

BENZO(a)PYRENE-6-CARBOXALDEHYDE. $C_{21}H_{12}O$, mw: 280.3.
THR = An exper neo and carc. [*3*]

BENZO(a)PYRENE-6-CARBOXALDEHYDE THIO SEMICARBAZONE. $C_{22}H_{15}N_3S$, mw: 353.5.
THR = An exper carc. [*3*]

BENZO(a)PYRENE-4,5-EPOXIDE. $C_{20}H_{14}O$, mw: 270.2.
THR = An exper neo to mice via dermal route. [*103*]

BENZO(a)PYRENE-7,8-EPOXIDE. $C_{20}H_{14}O$, mw: 270.2.
THR = An exper neo to mice via dermal route. [*103*]

BENZO(a)PYRENE-6-METHANOL. $C_{21}H_{14}O$, mw: 282.4.
THR = An exper neo and carc. [*3*]

BENZO(a)PYRENE-4,5-OXIDE. $C_{20}H_{12}O$, mw: 268.3.
THR = An exper neo. [*3*]

BENZO(a)PYRENE-7,8-OXIDE.
THR = An exper carc. [*3*]

BENZO(a)PYREN-6-OL. $C_{20}H_{12}O$, mw: 268.3.
THR = An exper neo. [*3*] An exper neo to mice via sc and in routes. [*103*]

7H-BENZO(a)PYRIDO(3,2-g)CARBAZOLE. $C_{19}H_{12}N_2$, mw: 268.3.
THR = An exper neo. [*3, 23*]

7H-BENZO(c)PYRIDO(2,3-g)CARBAZOLE.
THR = An exper neo. [*3, 23*]

REF 6

RECORD OF COMMUNICATION	☑ PHONE CALL ☐ DISCUSSION ☐ FIELD TRIP ☐ CONFERENCE ☐ OTHER (SPECIFY) 213-868-0511 ext. 244 (Record of item checked above)	
TO: John Price Santa Fe Springs Chief Engineer	FROM: Therese Gioia	DATE 8-5-85 TIME 4:45 pm

SUBJECT

Source of city water and its usage

SUMMARY OF COMMUNICATION

Mr. Price said the cities water comes from two sources: 1) 60% from local groundwater 2) 40% from the Metropolitan Water District which is a blend of Colorado River water and State Project Water. Both sources are fed directly into the same piping for distribution. A small amount of blending may also occur in a 4 million gallon reservoir. 4 of the 5 wells drawing local groundwater are located within the 3 mile radius of the site. The city has 4200 connections which are both residential and industrial.

Other water systems serving the area within the 3-mile radius of the site are:

1) Suburban Water Systems
2) Whittier Union High School District
3) San Gabriel Valley Water Systems

CONCLUSIONS, ACTION TAKEN OR REQUIRED

The well not located in the 3-mile radius supplies less than 25% of the groundwater pumped. (See Ref) It is designated as #2 by the owner.

Mr. Price said that it would be extremely difficult to find or supply an alternate source of water if the local groundwater was not available. MWD water would not meet the water demand.

INFORMATION COPIES
TO:

EPA Form 1300-6 (7-72) REPLACES EPA HQ FORM 5300-3 WHICH MAY BE USED UNTIL SUPPLY IS EXHAUSTED.

RECORD OF COMMUNICATION

☒ PHONE CALL ☐ DISCUSSION ☐ FIELD TRIP ☐ CONFERENCE
☐ OTHER (SPECIFY)

(Record of item checked above)

TO:	FROM:	DATE / TIME
John Price Santa Fe Springs Chief Eng.	Therese Gioia	DATE 10-15-85 TIME 9:00 AM

SUBJECT
Aquifers from which city's groundwater is drawn

SUMMARY OF COMMUNICATION

Mr. Price researched his records and found the following information regarding which aquifers are used for the city's water supply:

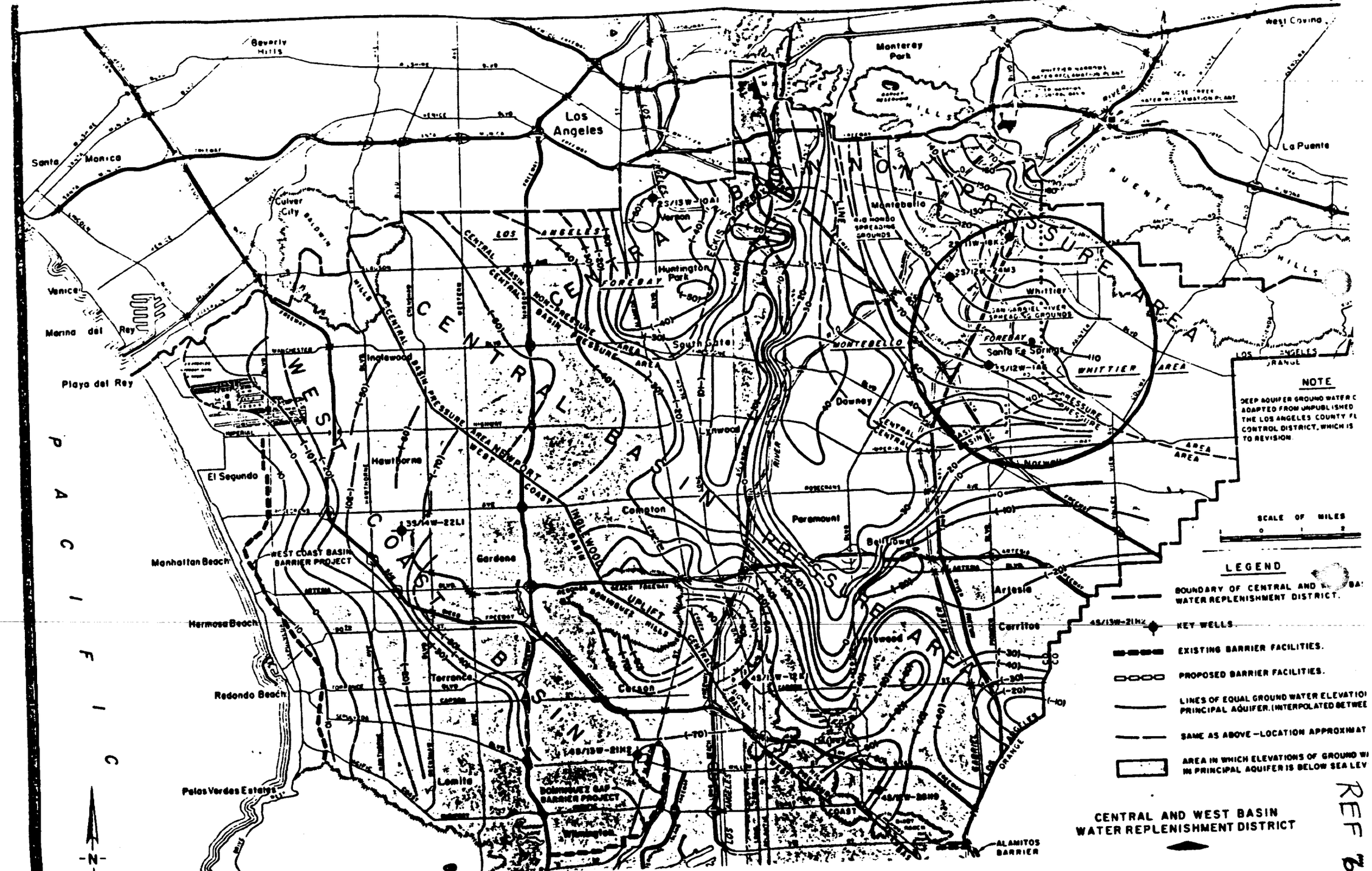
Well #1 ⇒ Silverado + Sunnyside
Well #2 ⇒ Hollydale, Jefferson, Lynwood, Silverado, and Sunnyside
Well #4 ⇒ Lynwood, Silverado, + Sunnyside
Well #304 ⇒ Silverado
Well #305 ⇒ Jefferson + Lynwood
Well #309 ⇒ Sunnyside

Mr. Price said Well #305 listed in the Watermaster Report is not used and that Well #308 is also unused. Well #309 is the only well to use the Sunnyside Aquifer alone.

CONCLUSIONS, ACTION TAKEN OR REQUIRED

Of the wells in the 3-mile radius, Well #309 represents less than 25% of the groundwater used by the city.

INFORMATION COPIES
TO:


Beverly Hills
Santa Monica
Los Angeles
Monterey Park
West Covina
La Puente
Culver City
Vernon
Montebello
Huntington Park
Whittier
Venice
Marina del Rey
Playa del Rey
Inglewood
South Gate
Santa Fe Springs
Downey
Norwalk
Hawthorne
El Segundo
Compton
Paramount
Bellflower
Manhattan Beach
Gardena
Artesia
Hermosa Beach
Cerritos
Redondo Beach
Torrance
Carson
Palos Verdes Estates
Lomita
Wilmington
WEST COAST BASIN BARRIER PROJECT
DOMINGUEZ GAP BARRIER PROJECT
ALAMITOS BARRIER
CENTRAL BASIN
WEST COAST BASIN
NON-PRESSURE AREA
PRESSURE AREA
NEWPORT INGLEWOOD UPLIFT
PACIFIC
NOTE
DEEP AQUIFER GROUND WATER C
ADAPTED FROM UNPUBLISHED
THE LOS ANGELES COUNTY FL
CONTROL DISTRICT, WHICH IS
TO REVISION.
SCALE OF MILES
LEGEND
BOUNDARY OF CENTRAL AND
WATER REPLENISHMENT DISTRICT.
KEY WELLS.
EXISTING BARRIER FACILITIES.
PROPOSED BARRIER FACILITIES.
LINES OF EQUAL GROUND WATER ELEVATIO
PRINCIPAL AQUIFER. (INTERPOLATED BETWEE
SAME AS ABOVE—LOCATION APPROXIMAT
AREA IN WHICH ELEVATIONS OF GROUND W
IN PRINCIPAL AQUIFER IS BELOW SEA LEV
CENTRAL AND WEST BASIN
WATER REPLENISHMENT DISTRICT
REF

STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES

Rate 7
Water Disposal

CALIFORNIA
7.5 MINUTE SERIES (TOPOGRAPHIC)

SCALE 1:24000

CONTOUR INTERVAL 20 FEET
DOTTED LINES REPRESENT STATE CONTAINING
DATUM IS MEAN SEA LEVEL

ROAD CLASSIFICATION

Heavy duty — Light duty
Medium duty — Unimproved dirt
( ) Interstate Route ( ) State Route

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U S GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR WASHINGTON, D C 20242
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

WHITTIER, CALIF.
NEW BRIDGE IN SEARCHLIGHT
N3352.5—W11800/7.5

1965

AMS 2351 I NE-SERIES V895

2047- 00001

REF 8

State of California—Health and Welfare Agency

Department of Health Services
Hazardous Materials Management Section

MEMO OF CALL

Name: Chris Nagler

Date: 11-14-84

Firm: Dept of Water Resources

Time: 1130

Address:

Person Taking or Making Call: Carol J. Masson

Telephone No.: 213/ 620-4119

Subject: groundwater near Waste Disposal, Inc.

Message:

2S/11W-32J4 - Whittier Union High School, 9401 S. Painter Ave
935' NW of Painter, 865' SW of Mallory = Slauson
currently pumping - domestic, irrigation
804' total depth (~3000' from hazardous substance)

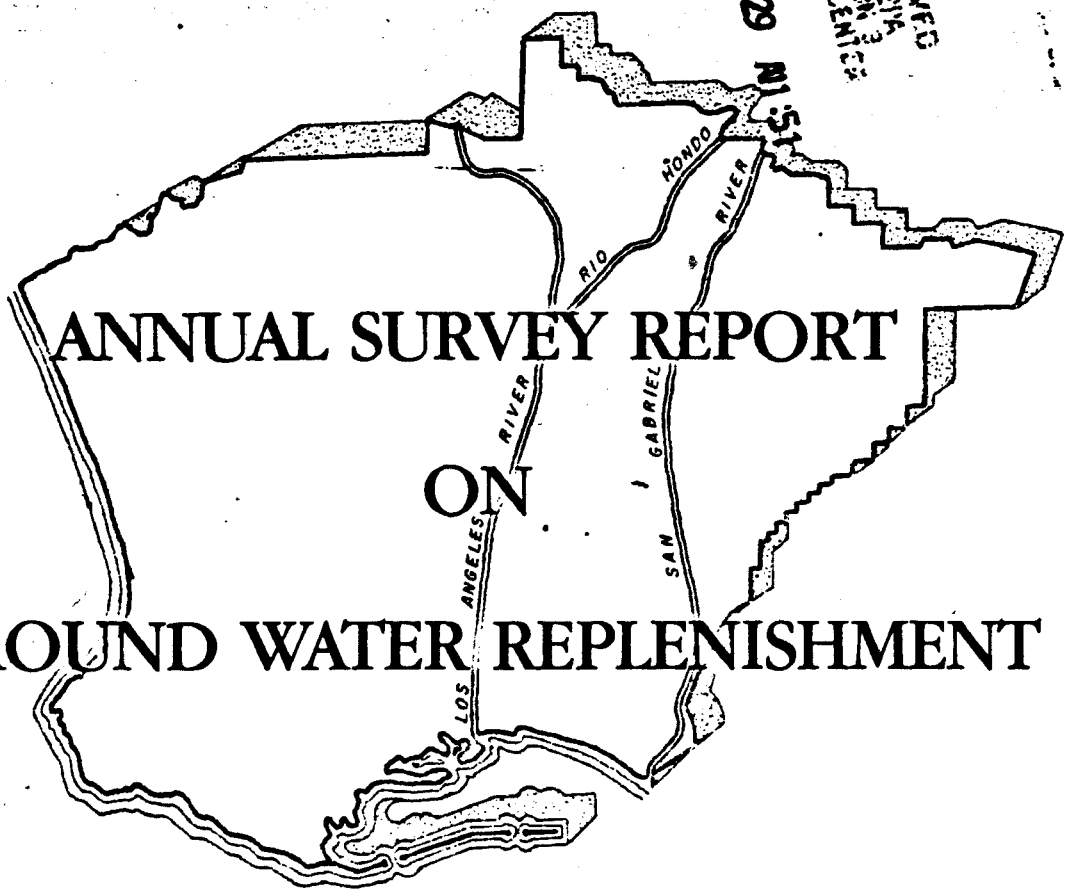
According to Brookman Edmonston consulting firm's report to Central and West Basin Water Replenishment District, the area is a non pressurized zone which means an open aquifer. This area is used extensively for groundwater recharge.

203 (8/78)

REF 8A

CENTRAL AND WEST BASIN
WATER REPLENISHMENT DISTRICT
7439 East Florence Avenue
Downey, California

'85 JUL 29 A11:51
RECEIVED
U.S. EPA
REGION 3
COMM. CENTER



ANNUAL SURVEY REPORT ON GROUND WATER REPLENISHMENT

1985

Bookman - Edmonston Engineering, Inc.
Glendale, California

REF 9

WATERMASTER SERVICE
CENTRAL BASIN
Los Angeles County

July 1, 1983 - June 30, 1984

State of California

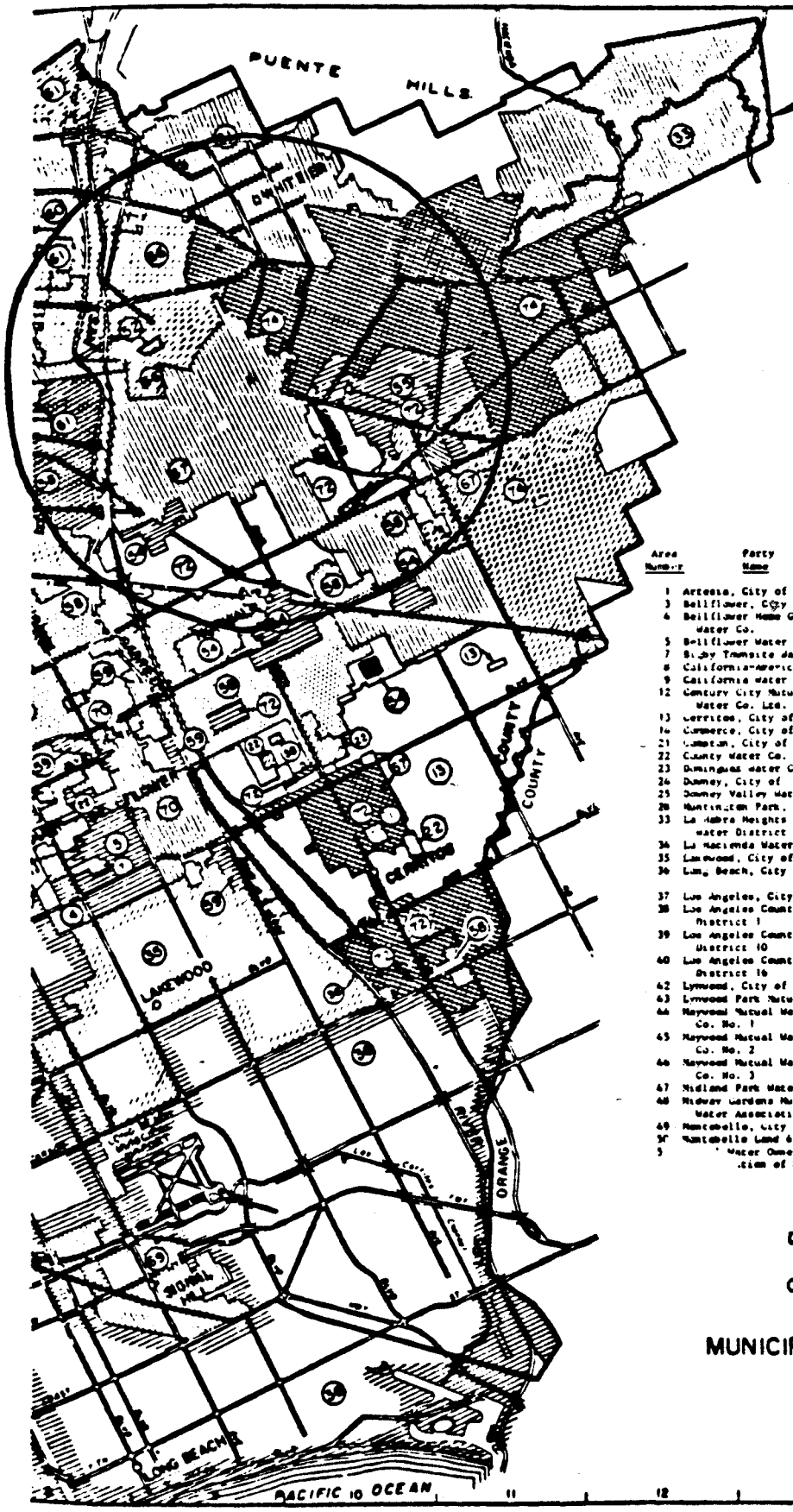
DEPARTMENT OF WATER RESOURCES

Southern District

The Resources Agency

October 1984

FIGURE 5



INDEX TO FIGURE 5

WATER SERVICE AREAS OF PARTIES

Area Number	Party Name	Location on Figure
1	Artesia, City of	F-10
3	Bellflower, City of	F-8
4	Bellflower Home Garden Water Co.	G-8
5	Bellflower Water Co.	F-8
7	Bixby Townsite Water Co.	F-8
8	California-American Water Co.	E-1
9	California Water Service Co.	B-5
12	Century City Mutual Water Co. Ltd.	F-9
13	Cerritos, City of	E-11;F-11
14	Commerce, City of	B-6
21	Compton, City of	F-6;G-5,6
22	County Water Co.	E-10,F-8,9,10
23	Dominguez Water Corp.	J-6
24	Downey, City of	C-7;E-7
25	Downey Valley Water Co.	E-7
28	Huntington Park, City of	B-5
33	La Habra Heights County Water District	A-12
34	La Hacienda Water Co.	G-7
35	Lakewood, City of	G-9
36	Long Beach, City of	G-7,10;H-10; J-7,K-7,10
37	Los Angeles, City of	C-4;E-2,F-4
38	Los Angeles County Waterworks District 1	F-3
39	Los Angeles County Waterworks District 10	F-5
40	Los Angeles County Waterworks District 16	E-4
42	Lynwood, City of	F-6
43	Lynwood Park Mutual Water Co.	F-5
44	Maywood Mutual Water Co. No. 1	D-5
45	Maywood Mutual Water Co. No. 2	C-5
46	Maywood Mutual Water Co. No. 3	D-6
47	Midland Park Water Trust	F-6
48	Midway Gardens Mutual Water Association	G-7
49	Montebello, City of	A-7;B-6;C-7
50	Montebello Land & Water Co.	D-7
5	Water Owners [illegible]tion of Los Angeles	C-9
56	Norwalk, City of	D-10,E-9,10
55	Orchard Dale Water District	C-10
57	Paramount, City of	F-[illegible]
58	Park Water Co.	C-7,D-7,8,10; E-6,7,8,9,10;F-5,6,7; G-5,6,11,H-1,5
59	Peerless Water Co.	E-8,9,F-8
60	Pico Water District	B-8
61	Pico Rivera, City of	A-8,B-7,8;C-7,8
66	San Gabriel Valley Water Co.	A-6,7,B-6;C-6
67	Santa Fe Springs, City of	D-9,11,E-10
68	Sativa Los Angeles County Water District	C-5
69	Signal Hill, City of	J-9
70	Somerset Mutual Water Co.	E-8,F-9
71	South Montebello Irrigation District	B-7
72	Southern California Water Co.	C-10,D-4,5,9,10; E-4,7,10,F-3,9,10, G-2,5,10,H-3,5
73	South Gate, City of	E-4
74	Suburban Water Systems	C-10,11,D-11
76	Tract Number 180 Water Co.	D-6
77	Tract 349 Mutual Water Co.	D-5
78	Dehling Water Co. Inc.	F-6;G-6
79	Vernon, City of	C-4
80	Walnut Park Mutual Water Co.	D-5
81	Whittier, City of	B-9

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SOUTHERN DISTRICT
CENTRAL BASIN WATERMASTER SERVICE

WATER SERVICE AREAS OF MUNICIPAL, MUTUAL AND PUBLIC UTILITY WATER SERVICE AGENCIES JUNE 1984

SCALE

MILES

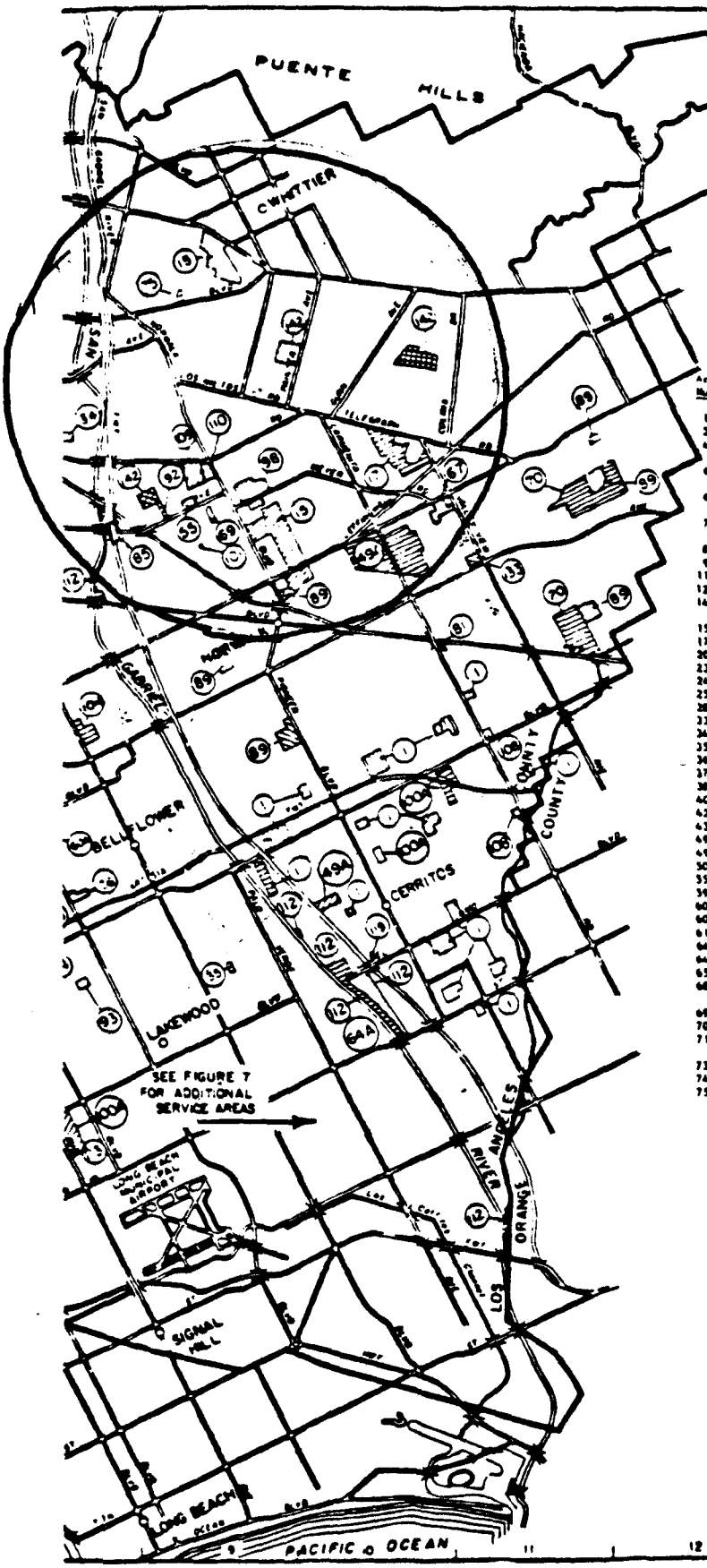
1 0 1 2 3

1984

TABLE 16. GROUND WATER EXTRACTIONS
PARTIES REPORTING MONTHLY
(Continued)
In acre-feet

STATE WELL NUMBER	OWNERS DESIGNATION	PRODUCTION 1967 JUL	AUG	SEP	OCT	NOV	DEC	1968 JAN	FEB	MAR	APR	MAY	JUN	TOTAL	PARTY IDENT.
						CENTRAL ZONE 4 (CONTINUED)									
PICO WATER DISTRICT (CONTINUED)															3050
25/12W-13L05S	8	15.74	0.00	14.64	44.00	47.15	36.82	27.73	53.01	66.60	90.67	143.83	98.03	900.10	
25/12W-24E04S	5	53.18	38.77	0.04	0.00	0.00	0.00	54.47	84.02	78.42	48.24	47.63	89.43	488.03	
25/12W-25E10S	6	87.54	67.77	14.97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	150.28	
PARTY TOTALS:		237.48	247.44	252.33	279.67	215.74	227.27	240.03	248.08	295.35	293.21	281.08	363.01	3340.61	
PICO RIVERA, CITY OF															3053
25/11W-05P01S	ADLF1	14.11	10.25	11.44	3.69	2.64	3.54E	9.52	7.25	6.54	10.67	8.00	27.56	100.41	
25/12W-12A 5	W1	38.59	15.93	78.23	141.04	119.34	105.20	49.88	95.24	94.78	93.47	95.04	89.66	750.80	
25/12W-12A05S	W2	169.61	241.94	144.94	0.00	0.00	0.00	114.54	143.78	283.25	148.41	215.68	211.00	1617.79	
25/12W-23R04S	W3	2.95	57.35	121.39	18.98	4.81	3.82	4.47	8.98	11.89	9.72	9.05	1.67	259.88	
25/12W-23R08S	W4	209.05	87.17	46.81	153.51	194.64	287.00	24.08	31.67	44.37	145.32	134.53	196.40	1507.51	
25/12W-25G 5	W11	53.03	7.47	13.73	15.67	9.41	10.70	3.01	7.04	6.04	8.79	14.31	14.37	157.47	
25/12W-25R01S	W12	25.34	48.14	24.35	5.17	6.24	3.49	154.95	195.85	121.20	17.04	93.00	74.75	737.54	
25/12W-25W01S	W9	37.81	48.85	31.08	32.02	26.24	27.67	14.72	16.76	18.65	28.38	54.81	58.72	390.31	
25/12W-26D07S	W5	52.48	28.35	44.04	35.54	6.07	6.42	7.06	3.44	3.79	7.32	8.87	1.57	194.09	
25/12W-26E03S	W6	3.20	3.48	3.72	2.01	4.27	2.59	7.95	3.58	2.78	2.47	1.07	0.78	32.87	
25/12W-26D01S	W7	3.07	2.17	2.11	0.88	1.24	1.08	0.55	1.67	0.99	0.29	1.03	1.43	17.32	
25/12W-36H06S	W8	17.24	28.87	19.50	2.45	2.17	1.56	7.06	11.34	11.14	13.71	24.05	21.07	156.77	
PARTY TOTALS:		678.20	582.63	543.55	451.72	379.17	373.16	391.59	481.74	475.62	484.18	609.74	612.58	5022.70	
POWERINE OIL COMPANY															3950
35/11W-06O 5	8	27.95E	38.81E	29.97E	29.72E	17.23E	17.84E	19.58E	31.42E	27.92E	0.00	0.00	0.00	232.46	
35/11W-06R02S	7	6.35E	2.21E	1.83E	4.78E	10.64E	6.92E	5.43E	0.01E	0.35E	0.00	0.00	0.00	42.52	
35/11W-07A01S	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	33.73E	0.00	0.00	0.00	0.00	33.73	
35/11W-07B05S	6	29.58E	33.27E	38.55E	39.86E	31.72E	7.81E	24.07E	0.00	48.02E	16.12E	0.00	0.00	246.72	
PARTY TOTALS:		63.80	66.29	62.35	71.36	60.59	32.59	49.08	65.16	68.29	16.12	0.00	0.00	555.43	
ROCKVIEW DAIRIES INC															4115
35/12W-05C06S	WW1	3.18	3.92	2.99	4.50E	4.94	5.43	5.28	4.82	5.25	4.11	4.67	4.36	53.29	
ROMAN CATHOLIC ARCHBISHOP OF L A															4150
25/12W-04K01S	50WP	0.00	0.07	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.20	
25/12W-04K04S	10WP2	15.58	4.31	4.90	1.52	0.50	0.18	4.76	4.16	4.87	4.13	5.64	5.94	52.43	
35/11W-31N03S	WPAP	0.56	0.51	0.08	0.04	0.02	0.53	4.65	0.73	2.09	2.09E	0.04	0.64	12.00	
45/12W-08D02S	ALLSO	0.00	28.05E	24.83E	0.79E	4.47E	0.43	1.06	6.58	8.37	9.78	17.11	17.58	128.01	
PARTY TOTALS:		16.06	32.91	30.79	12.17	5.75	1.14	9.27	11.45	16.13	16.00	23.71	24.16	194.34	
ROYDEN, MERRITT W.															4180
35/11W-30W02S	3	2.95	4.79	4.29	1.75	1.64	1.25	1.02	1.34	1.23	1.55	2.78	2.24	26.75	
RUCHTI BROS															4190
PARTY TOTALS:		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
ST JOHN BOSCO SCHOOL															4300
35/12W-15K03S	15WP	8.05	4.57	6.14	2.26	1.03	0.88	0.98	1.98	5.47	2.84	7.78	8.34	53.66	
SAN GABRIEL VALLEY WATER COMPANY															4330
25/11W-18O 5	WW1	371.15	349.27	378.46	297.13	261.94	269.24	234.54	253.40	304.64	292.02	327.71	297.65	3538.88	
25/11W-19F 5	WW6	160.67	134.98	116.44	74.95	53.19	41.32	80.60	83.34	74.31	100.76	154.89	169.93	1247.40	
PARTY TOTALS:		491.82	448.24	444.90	347.09	315.13	310.56	319.14	336.74	378.95	393.68	482.60	467.38	4786.28	
SANTA FE SPRINGS, CITY OF															4395
25/11W-30B03S	1	176.91	141.40	169.83	181.76	171.47	182.94	159.09	190.22	189.59	174.75	194.67	191.99	2003.93	
25/12W-25Q05S	304W1	119.05	119.07	104.44	94.47	47.90	99.65	102.24	111.18	123.11	98.67	109.83	73.22	1228.04	
25/12W-36D05S	305W1	0.00	0.00	0.00	0.00E	0.05	1.94	0.00	3.78	0.00	0.00	0.00	0.00	5.81	
35/11W-06D03S	4	15.31	23.04	18.24	0.00	0.30	0.00	9.25	4.50	0.00	0.02	0.00	0.00	64.70	
35/11W-20R05S	2	98.84	1.04	21.44	40.24	35.12	34.87	40.13	137.41	158.76	78.04	96.16	107.49	878.99	
35/12W-01F04S	309W2	113.47	75.97	0.00	0.00	0.00	0.00	0.00	0.00	34.07	47.86	85.29	108.34	467.29	
PARTY TOTALS:		513.80	400.54	309.17	327.47	294.93	319.44	344.71	341.58	499.53	403.07	445.15	561.24	6828.67	

FIGURE 6



INDEX TO FIGURE 6

WATER SERVICE AREAS OF PARTIES

Area Number	Party Name	Location on Figure
1	ABC Unified School Dist.	E-11,F-10
2	Abex Corporation	D-5
6	American Pipe Products Group Southern California Div.	E-6
6	Angeles Abbey Memorial Park Inc.	G-6
6A	Arco Metals Company, American Brass	F-7
7	Atchison, Topeka and Santa Fe Railway Company	C-4,5
8	Atkinson Brick Company	G-5
9	Atlantic Richfield Company	C-6
11	Bellflower Christian School	F-9
12	Beurre, Rene	G-7
14	Burns, C. Cromwell and Helen Hedges	G-5
15	California, State of	D-9,F-9
17	Candlewood Country Club	C-10
20	Chevron U.S.A. Inc.	F-11
23	Coast Packing Company	C-4,E-8,9
24	Compton Unified School Dist.	G-9
25	Container Corp. of America	D-3
28	Darling Delaware Co. Inc.	C-5
33	Downey, City of	D-7
34	El Rancho Unified School Dist.	C-8
35	Engler, Rene	G-9
36	Erickson, John A.	F-8
37	Erickson, Jon A.	*
38	Federal Paper Board Co. Inc.	C-6
40	Filtrol Corporation	C-5
42	Flintkote Company, The	D-6
43	Ford Motor Company	C-8
49	GNB Batteries Inc.	E-3
49A	Golden West Refining Co.	C-4,D-10,F-10
50	Great Western Malting Co.	C-4
55	Hathaway Ranch	D-9
59	Inglewood Park Cemetery	F-2
60	Jim-O-Wine Foods Inc.	C-7
60A	Jonnston, DL+CL+RD+JA	F-8
61	Kal Kan Foods Inc.	C-4
66	Kruse Properties Company	A-8
66A	Lakewood, City of	G-10
65	Lakewood Pipe Company	F-8
68	Lewis Foods Inc., Division of C.H.B. Foods Inc.	G-8
69	Little Lake Cemetery Dist.	D-9
70	Los Angeles, County of	D-12,E-7
71	Los Angeles Power Sea and Board Mills	C-4
73	Lundey-Thagard Oil Co.	F-4
74	Luxmam, Paul H., Jr. et al	G-8
75	LGG Family Trust	D-9
77	Memorial Parks Inc.	D-5
81	Matsumchi, Pumaka	E-11
85	Murata, Daisaku et al	D-8
88	Morris Industries Inc.	D-4
89	Norwalk-La Mirada Unified School District	C-11,D-8,11,E-9
90	ONE Farms	E-6
91A	Pacific Cold Storage (Tenant of Area 139)	
91B	Pacific Coast Packaging Corp.	D-6
92	Paradise Memorial Park	D-9
92A	Paramount, City of	F-8
93	Paramount Unified Sch. Dist.	F-7,G-8
93A	Pender, Mark L. and Mary Virginia	G-7
95	Petersen Manufacturing Co.Inc.	C-4
96	Pico Boys Baseball Inc.	A-8
98	Pomerine Oil Company	D-9
100	Rancview Dairies Inc.	E-7
100A	Roman Catholic Archbishop of Los Angeles	D-5,E-10,F-10,H-8
101	Rosales, Elvira C.	D-9
103	Rucker Brothers	E-7
104	St. John Bosco School	E-8
106	Schulle Corporation	C-6
107	Sessler, Calis	E-7
108	Shell Oil Company	F-11
109	Shriners Hospital & S.P.C.A.	D-9
110	Simms, James E.	D-9
111	Simms, Bennett E. et al	D-6
111A	Sinclair Paint Co.	C-7
112	Southern California Edison Co.	C-6, E-6,F-7,G-7,8,10,H-7,J-7,11
113	Southern Service Company & Environmentals Inc.	E-8
119	Stanzel, John F.	C-10
122	Sunset Cemetery Association	D-5
125	Thompson, O. T. and Drusilla	C-7
127	Union Pacific Railroad Co.	C-5
131	United States Gypsum Co.	D-6
133	Van Dam, Cornelius A. and Florence	D-11
139	Vernon Properties	C-5
140	Virginia Country Club	H-7
141	Woolock Company	G-6
142	Whittier Union High School District	C-10,11,D-9
143	Yamamoto, George and Alice	H-7,G-8

* No service area

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SOUTHERN DISTRICT
CENTRAL BASIN WATERMASTER SERVICE

WATER SERVICE AREAS OF INDIVIDUAL PARTIES
JUNE 1984

SCALE

1 1/2 0 1 2 3
MILES

1984

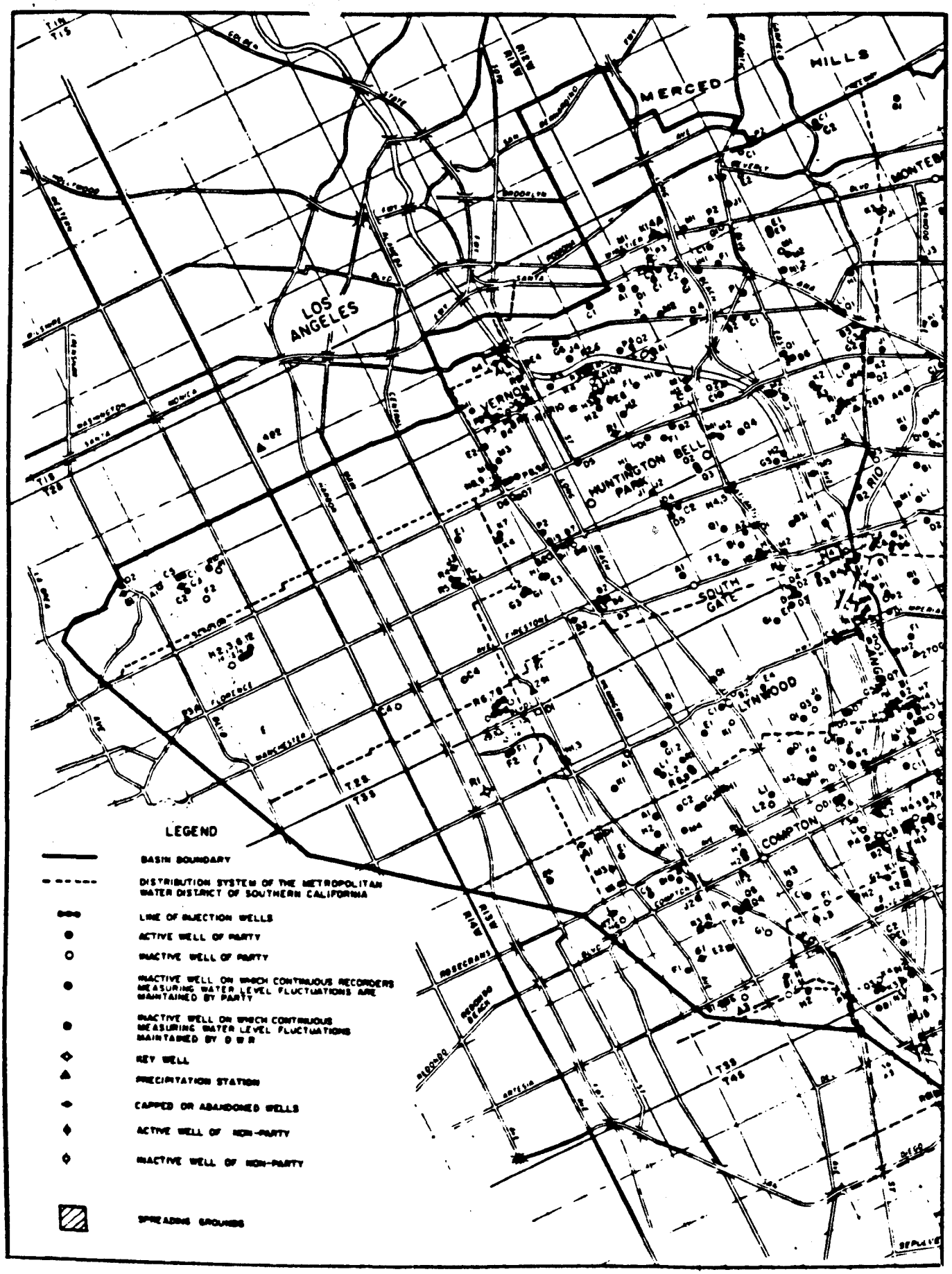
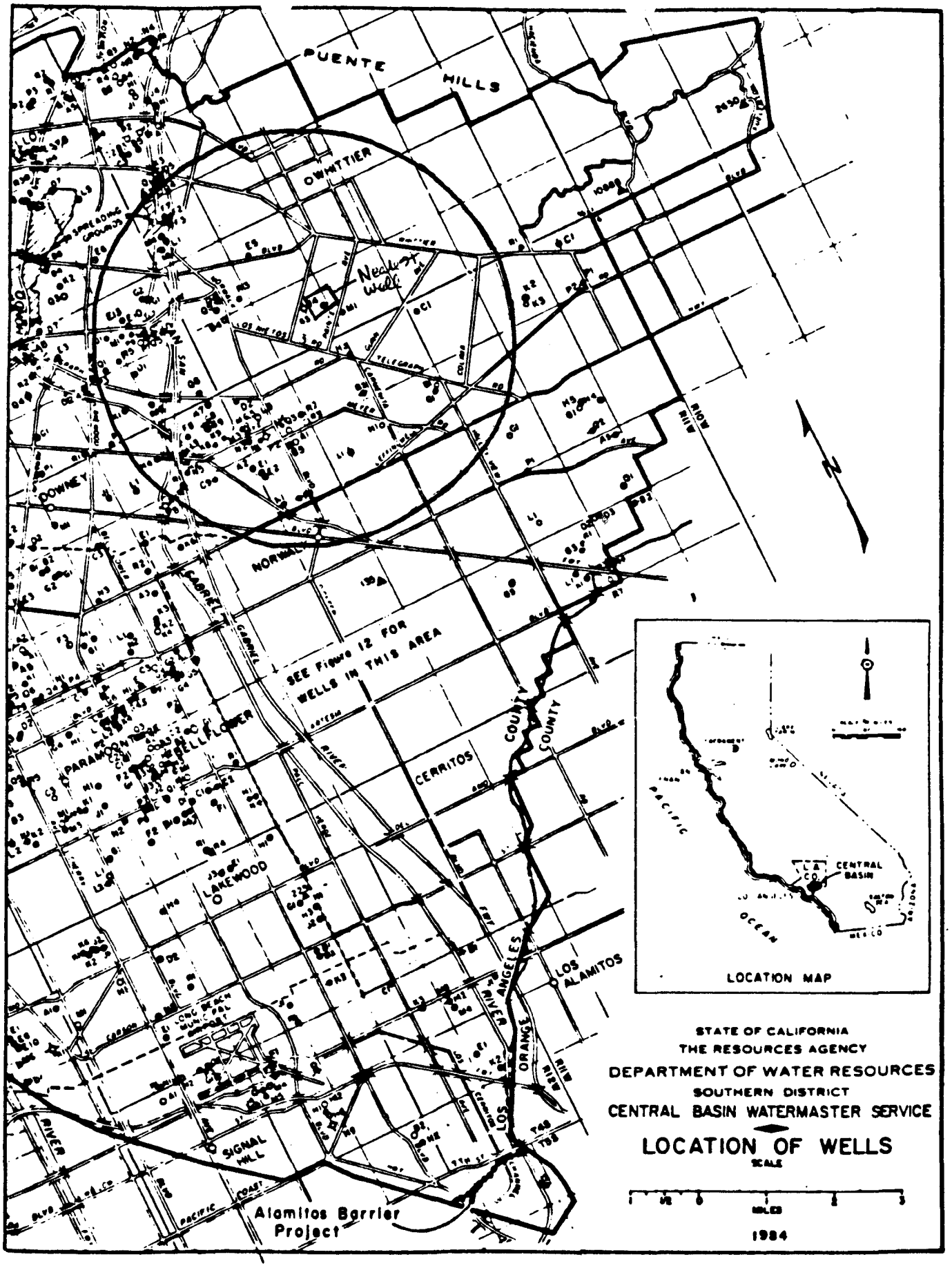
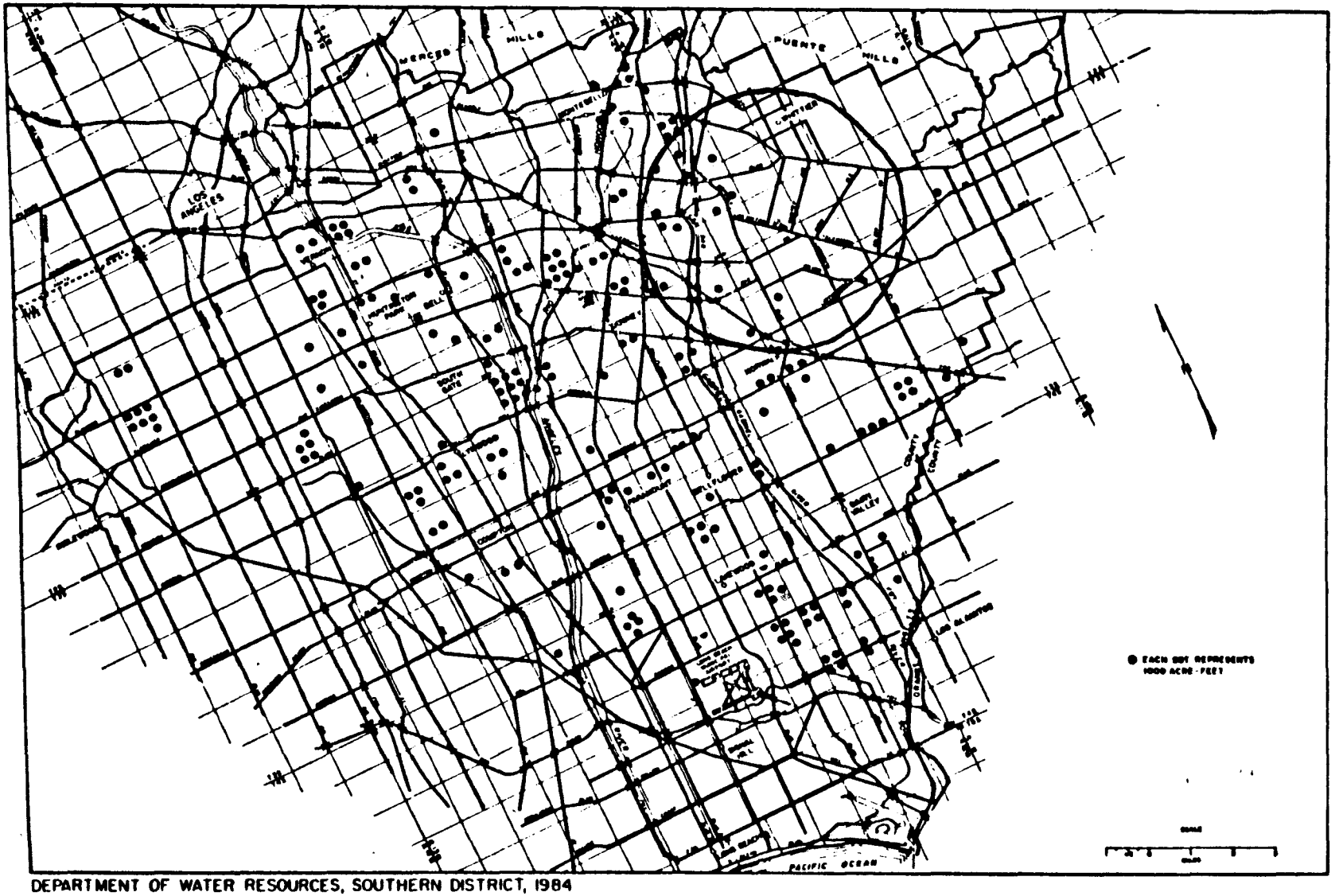

LOS ANGELES
MERCED
HILLS
VERNON
HUNTINGTON PARK
BELL
SOUTH GATE
LYNWOOD
COMPTON
LEGEND
BASIN BOUNDARY
DISTRIBUTION SYSTEM OF THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA
LINE OF INJECTION WELLS
ACTIVE WELL OF PARTY
INACTIVE WELL OF PARTY
INACTIVE WELL ON WHICH CONTINUOUS RECORDERS MEASURING WATER LEVEL FLUCTUATIONS ARE MAINTAINED BY PARTY
INACTIVE WELL ON WHICH CONTINUOUS MEASURING WATER LEVEL FLUCTUATIONS MAINTAINED BY D W R
REF WELL
PRECIPITATION STATION
CAPPED OR ABANDONED WELLS
ACTIVE WELL OF NON-PARTY
INACTIVE WELL OF NON-PARTY
SPREADING GROUNDS

Figure 11


PUENTE HILLS
WHITTIER
Nearest well
DOWNEY
NORWALK
SEE FIGURE 12 FOR WELLS IN THIS AREA
PARAMOUNT
BELLFLOWER
CERRITOS
LAKEWOOD
LOS ALAMITOS
SIGNAL HILL
Alamitos Barrier Project
LOS ANGELES RIVER
ORANGE COUNTY
PACIFIC OCEAN
CENTRAL BASIN
LOCATION MAP
STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
SOUTHERN DISTRICT
CENTRAL BASIN WATERMASTER SERVICE
LOCATION OF WELLS
SCALE
MILES
1984



DEPARTMENT OF WATER RESOURCES, SOUTHERN DISTRICT, 1984

Figure 8. PATTERN OF GROUND WATER PRODUCTION

FOR JULY 1983 TO JUNE 1984

State of California—Health and Welfare Agency

REF 10

Department of Health Services
Hazardous Materials Management Section

MEMO OF CALL

Name: George Beaty

Date: 11-9-84

Firm: City of Santa Fe Springs, Planning & Development

Time: 1000

Address:

Person Taking or Making Call: Carol Marrion

Telephone No.: (213) 868-0511 x211

Subject: Waste Disposal, Inc.

Message:

Mr. Beaty said no persons use the surface water (intakes) from Los Coyotes Creek or Sorenson Ave drain. He will provide me with the Census Tract No.s to calculate the populations within a 1½ and 3-mile radius. He will also provide me with the phone number of Central Basin Agency for groundwater information.

Mr. Beaty said there are buildings on site. He said there is some fence along the northern boundary (by St. Paul's High School), but not all the way around site and certainly not secure.

1500 - I went to the City of Santa Fe Springs and talked with George Beaty. Mr. Beaty gave me an aerial photo of the site. He said the population of Santa Fe Springs is 15,000, with the majority of residents within the western part of the city. Also John Gray of Public Works Dept. came by and circled 7 city wells on aerial map. There are 7 domestic wells: the shallow ones are 200' deep and in the residential area, the deepest are 1200'. The shallow wells are not currently used.

H 203 (8/79)

State of California—Health and Welfare Agency

REF II

Department of Health Services
Hazardous Materials Management Section

MEMO OF CALL

Name: Pat Moore

Date: 11-9-84

Firm: Calif. Dept of Fish & Game, Inland Fisheries

Time: 1120

Address: Long Beach

Person Taking or Making Call: Carol Masson

Telephone No.: (213) 590-5151

Subject: Fishing at San Gabriel River between Pico Rivera and Bellflower

Message:

Pat Moore says that DFG does plant the San Gabriel River with trout on the east and west fork, but the fish would not make it that far down.
∴ No fishing in the area between Pico Rivera and Bellflower.

14 203 (8/79)

Reference 12

RECORD OF COMMUNICATION

☒ PHONE CALL ☐ DISCUSSION ☐ FIELD TRIP ☐ CONFERENCE
☐ OTHER (SPECIFY)

(Record of item checked above)

TO:	FROM:	DATE
John Price Santa Fe Springs Chief Eng.	Therese Gioia	10-15-85
		TIME 9:00 AM

SUBJECT
Aquifers from which city's groundwater is drawn

SUMMARY OF COMMUNICATION

Mr. Price researched his records and found the following information regarding which aquifers are used for the city's water supply:

Well #1 ⇒ Silverado + Sunnyside
Well #2 ⇒ Hollydale, Jefferson, Lynwood, Silverado, and Sunnyside
Well #4 ⇒ Lynwood, Silverado, + Sunnyside
Well #304 ⇒ Silverado
Well #308 ⇒ Jefferson + Lynwood
Well #309 ⇒ Sunnyside

Mr. Price said Well #305 listed in the Watermaster Report is not used and that Well #308 is also unused. Well #309 is the only well to use the Sunnyside Aquifer alone.

CONCLUSIONS, ACTION TAKEN OR REQUIRED

Of the wells in the 3-mile radius, Well #309 represents less than 25% of the groundwater used by the city.

INFORMATION COPIES
TO:

EPA Form 1300-6 (7-72) REPLACES EPA HQ FORM 5300-3 WHICH MAY BE USED UNTIL SUPPLY IS EXHAUSTED.

Reference 13

Telecon

From: Kathleen Galloway, MITRE KED

To: Chris Nagler, DWR 213-620-4119

Date: 13 November, 1985

Time: 11:00 AM

Subject: Whittier Union District School Well No. 2S11W 32J Ø4S located at the Sierra High School Campus.

The well is screened at 228 ft. which corresponds to the Lynnwood aquifer. It is 804 ft. deep and is also screened in the Sunnyside aquifer.

ROUTING AND TRANSMITTAL SLIP

Date 7-13-89

TO: (Name, office symbol, room number, building, Agency/Post)	Initials	Date
1. CSC		
2.		
3.		
4.		
5.		

Action	File	Note and Return
Approval	For Clearance	Per Conversation
As Requested	For Correction	Prepare Reply
Circulate	For Your Information	See Me
Comment	Investigate	Signature
Coordination	Justify	

REMARKS

Please place where file belongs in cabinets (File is w/ Bob Mondel in Emerging Response ... pls mark change out card.)

DO NOT use this form as a RECORD of approvals, concurrences, disposals, clearances, and similar actions

FROM: (Name, org. symbol, Agency/Post) Paul

Room No.—Bldg.

Phone No.

5041-102

OPTIONAL FORM 41 (Rev. 7-76)
Prescribed by GSA
FPMR (41 CFR) 101-11.206

* U.S. GPO: 1988 — 201-759

United States
Environmental Protection
Agency

Regional Administrator
215 Fremont Street
San Francisco CA 94105

Region 9
Arizona, California
Hawaii, Nevada
Pacific Islands

EPA Environmental News

FOR IMMEDIATE RELEASE: Tuesday, July 21, 1987

Contact: Al Zemsky, U.S. EPA
(415) 974-7762

U.S. EPA ANNOUNCES REVISED SUPERFUND NATIONAL PRIORITIES LIST FOR SITES IN ARIZONA AND CALIFORNIA

(San Francisco)—The U.S. Environmental Protection Agency today announced the addition of 99 hazardous waste sites to its final Superfund National Priorities List (NPL), including 14 sites in California and one in Arizona. These sites were proposed for the NPL in October 1984 and June 1986 and are now eligible for long-term action under the Superfund site cleanup program. By being listed as a final NPL site, fund money may be spent on actual cleanup, rather than limited to the investigation of contamination.

Eight of the California sites are federal facilities: Castle AFB (Merced), Lawrence Livermore Laboratory (Livermore), Mather AFB (Sacramento), McClellan AFB (Sacramento), Sacramento Army Depot, Moffett Naval Air Station (Sunnyvale), Norton AFB (San Bernardino) and Sharpe Army Depot (Lathrop). Four of the sites are in the South Bay area: Applied Materials and National Semiconductor in Santa Clara, Monolithic Memories in Sunnyvale and Teledyne Semiconductor in Mountain View. The other sites are Firestone Tire & Rubber Co. in Salinas, Waste Disposal, Inc. in Santa Fe Springs and Hassayampa Landfill in Maricopa County, Arizona.

The Superfund program provides funds to clean up the nation's most serious hazardous waste sites. These funds are authorized under the Superfund Amendments and Reauthorization Act (SARA) of 1986.

The NPL is the Agency's list of hazardous waste sites potentially posing the greatest long-term threat to human health and the environment. NPL sites are determined through a process which ranks the sites according to threats to nearby populations through actual or potential contamination of groundwater supplies, surface water or air.

With today's additions, there are now 55 sites listed on the final NPL in the geographic area of U.S. EPA, Region 9 (Arizona, California, Hawaii, Nevada and Pacific Islands) and 24 sites listed as proposed.

\# \# \#