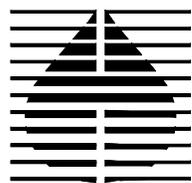


MARCH 12, 2004

PRODUCTION WELL SURVEY REPORT
FOR
REMEDIAL DESIGN WORK
MONTROSE SITE
TORRANCE, CALIFORNIA

DSGWRD 26 - 009

PREPARED FOR:
MONTROSE CHEMICAL CORPORATION OF CALIFORNIA



HARGIS + ASSOCIATES, INC.
HYDROGEOLOGY • ENGINEERING



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March 12, 2004

VIA FEDERAL EXPRESS

Mr. Jeffrey Dhont
Superfund Project Manager
U.S. ENVIRONMENTAL PROTECTION AGENCY
75 Hawthorn Street (SFD-7-1)
San Francisco, CA 94105-3901

Re: Submittal of Production Well Survey Report, Montrose Site, Torrance, California

Dear Mr. Dhont:

Enclosed are three copies of the final report titled:

Production Well Survey Report
For
Remedial Design Work
Montrose Site
Torrance, California
DSGWRD 26 - 009

This report is being submitted to the U. S. Environmental Protection Agency (EPA) in accordance with the statement of work for the Unilateral Administrative Order for Initial Groundwater Remedial Design Activities and your approval letter dated February 13, 2004.

If you have any questions or comments, please contact me.

Sincerely,

HARGIS + ASSOCIATES, INC.

Michael A. Palmer, RG 5915, CHG 146
Principal Hydrogeologist

MAP/ama

Enclosure

cc: Mr. Jeffrey Dhont, U.S. Environmental Protection Agency (3 copies)
Ms. Natasha Raykhman, CH2M Hill (2 copies)
Mr. Steve Acree, U.S. Environmental Protection Agency (1 copy)
Mr. Frank Gonzales, Department of Toxic Substances Control (1 copy)
Ms. Gloria Conti, Department of Toxic Substances Control (1 copy)
Mr. Joe Kelly, Montrose Chemical Corporation of California (1 copy)
Mr. Paul Sundberg, Consultant to Montrose Chemical Corporation of California (1 copy)
Karl Lytz, Esq., Latham & Watkins (1 copy)
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PRODUCTION WELL SURVEY REPORT
MONTROSE SITE
TORRANCE, CALIFORNIA
DSGWRD 26- 009

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ACRONYMS AND ABBREVIATIONS

AF	Acre-feet
bls	Below land surface
CWSC	California Water Service Company, Dominguez District
D&M	Dames & Moore
Del Amo GW RI	Final Groundwater Remedial Investigation for the Del Amo Study Area
DWR	California Department of Water Resources
EPA	U.S. Environmental Protection Agency
H+A	Hargis + Associates, Inc.
LACDPW	Los Angeles County Department of Public Works
Montrose	Montrose Chemical Corporation of California
pCBSA	parachlorobenzene sulfonic acid
RI	Remedial Investigation
ROD	Record of Decision
SOW	Scope of Work
study area	The area approximately 0.5 mile cross gradient and 1 mile downgradient of the terminus of the pCBSA groundwater plume as defined by the location of the 1 milligram per liter concentration contour of the 1995 Bellflower sand plume
UAO	Unilateral Administrative Order
WRD	Water Replenishment District of Southern California

PRODUCTION WELL SURVEY REPORT
MONTROSE SITE
TORRANCE, CALIFORNIA
DSGWRD 0926/36 - 009

1.0 INTRODUCTION

This report summarizes the results of a production well survey completed to update information regarding the location and operating status of groundwater production wells in the vicinity of the Montrose Chemical Corporation of California (Montrose) Site (Figure 1). This document has been developed in accordance with the requirements outlined in Section 1.3 of the Unilateral Administrative Order (UAO) Statement of Work (SOW), which was issued by the U. S. Environmental Protection Agency (EPA) to Montrose on May 8, 2003 (EPA, 2003). The information generated by this task will be used to develop a sampling program for specific production wells for analysis of parachlorobenzene sulfonic acid (pCBSA) as required in the Record of Decision (ROD), and to provide data to evaluate the potential impact of the groundwater remedial program on production wells in the area.

1.1 OBJECTIVES

In accordance with the UAO SOW, the objectives for the production well survey are as follows:

- Collect records from the local Watermaster, including applications, registrations, and permits pertaining to wells that are located in or are planned in the area of concern.

Well construction details, 5-year well pumping histories and rates, 5-year water level histories, and 5-year water quality data will be obtained, if available.

- Water purveyors in the area will be surveyed regarding new water production or injection wells under construction in the area, if any, and will be questioned regarding plans to install such wells in the next five years. Purveyors will include but not necessarily be limited to: the City of Torrance Municipal Water Department, the Southern California Water Company, the Dominguez Water Corporation, the Central- and West-Basin Municipal Water Districts, and the Central- and West-Basin Water Replenishment Districts. Well construction details, 5-year well pumping histories and rates, 5-year water level histories, and 5-year water quality data will be obtained, if available.
- An updated map of all well locations within the area of concern, with tabular summaries of well construction information, well status, well production rates, water level histories, and water quality data will be presented in the report, if available.
- One or more scaled figures, annotated as necessary, allowing EPA to ascertain the relative distance between the distributions of pCBSA, benzene, and chlorobenzene in groundwater and the water supply wells identified in the survey, will be provided.

1.2 PREVIOUS INVESTIGATIONS

Several investigations of regional wells in the Montrose Site vicinity have been conducted in the past, and the results have been used in the preparation of this report. In 1959, the U.S. Geological Survey published a comprehensive well inventory and hydrogeologic study for the Torrance - Santa Monica area (Poland et al., 1959). More recently, Hargis + Associates, Inc. (H+A) conducted a regional well survey in the early 1990s that evaluated and identified observation wells, production wells, and industrial supply wells within a 2-mile radius of the Montrose Site. The results of that survey were provided in the Remedial Investigation (RI)

Report (H+A, 1990; EPA, 1998). The status of water supply wells within 2 miles of the Del Amo site was updated in 1998 in the Final Groundwater Remedial Investigation for the Del Amo Study Area (Del Amo GW RI) (Dames & Moore [D&M], 1998).

A preliminary evaluation of regional wells was conducted by H+A on behalf of Montrose in late 2003 as part of pre-remedial design 'advance work' prior to issuance of the Consent Decree for remedial design for the Groundwater Remedy (H+A, 2002). That work is the starting point for this document.

1.3 PURPOSE AND SCOPE

This production well survey updates the identification and characterization of production wells within an area approximately 0.5 mile cross gradient and 1 mile downgradient of the terminus of the pCBSA groundwater plume as defined by the location of the 1 milligram per liter concentration contour of the 1995 Bellflower sand plume (study area) (Figure 2). This area is consistent with that defined in Section 13 Provision 4.04 of the ROD regarding additional data acquisition for pCBSA. This survey identifies production wells, both active and stand-by, and specifically highlights wells that have been installed since the last well update was conducted by H+A. This report also identifies two observation well clusters installed by a local water agency that may be suitable for monitoring the distribution of pCBSA prior to or during the execution of the groundwater remedy. Other older wells in the study area are included in this survey. However, the amount and availability of information for these wells is variable. The reader is directed to the Montrose RI (Task 15) Report and the Del Amo GW RI Report for a more detailed discussion of historical wells within the study area (H+A, 1990; D&M, 1998). Monitoring wells installed at gasoline service stations or other industrial facilities are not included in this survey.

1.4 AGENCY INQUIRIES

The following agencies and water utilities were contacted for information during this survey:

- City of Torrance, Municipal Water Department;
- Southern California Water Company;
- California Water Service Company (CWSC), Dominguez District (formerly Dominguez Water Corporation);
- County of Los Angeles, Department of Public Works (LACDPW) (formerly Los Angeles County Flood Control District);
- County of Los Angeles, Department of Health Services; Environmental Health Division; Water, Sewage and Subdivision Control Program;
- Central Basin and West Basin Municipal Water Districts, including review of Title 22 Groundwater Monitoring Reports (Central/West Basin Municipal Water Districts, 1998, 1999 and 2003);
- Water Replenishment District of Southern California (WRD), including review of Regional Groundwater Monitoring Reports (WRD, 2001 and 2002);
- California Department of Water Resources (DWR);
- DWR West Coast Basin Watermaster, including review of Watermaster Service Reports (DWR, 1998, 1999, 2000, 2001, and 2002); and
- U.S. Geological Survey, Water Resources Division.

EPA submitted a letter to DWR to obtain copies of the well logs (EPA, 2002). EPA then provided a confidential copy of the well logs to H+A. In compiling the information and data contained in the report, H+A made numerous inquiries to the above-mentioned organizations and agencies. Therefore, we believe that all reasonably available relevant information has been obtained. However, in the event that additional relevant information becomes available in the future, that information will be provided in the form of a supplemental technical memorandum to this report.

1.5 WATERMASTER RECORDS

In accordance with the UAO SOW, H+A requested information including records, applications, registrations and permits from the Watermaster pertaining to wells that have been or will be installed in the area of concern. The Watermaster has provided well logs and water level data. The Watermaster does not have any additional information including applications, registrations, and permits. The Watermaster does not have any knowledge of any proposed wells in the study area.

2.0 WELL INVENTORY

General information regarding production wells identified during this current survey as well as prior evaluations has been summarized (Table 1). Table 1 has been divided into four broad categories:

- Water production wells known to exist, in either active or standby status, or for observation;
- Inactive wells;
- Wells presumed to be abandoned or destroyed based on field inspections or other relevant information; and
- Wells documented to have been destroyed.

The locations of all known production wells or observation wells within the study area are shown on Figure 2. Wells that have been reported as destroyed or are presumed abandoned or destroyed are shown on Figure 3. The following information was compiled, if available: location, construction details, status, geologic logs, well production data, water level data, and water quality data. It should be noted that well logs obtained from DWR are confidential and are not available for public release without written authorization from the owner(s) of the well in accordance with California Water Code Section 13752.

In accordance with the UAO SOW requirements, three figures have been prepared that illustrate the location of water supply wells identified by this survey and the pCBSA, chlorobenzene, and benzene plumes (Figure 4 through 6). The plumes illustrated on these figures are the benzene plume in the upper Bellflower aquitard from the RI report, the pCBSA plume for the Bellflower sand from the RI report, and the chlorobenzene plume for the Bellflower sand from the 2002 Monitoring Report (EPA, 1998; H+A, 2003).

2.1 ACTIVE PRODUCTION WELLS

This section summarizes information obtained from the two water purveyors operating within the study area: the City of Torrance and CWSC. Since the previous production well evaluation, conducted in 1990, three production wells have been installed within the study area. These are the City of Torrance wells #7 and #8, and CWSC well 19-B (Table 1; Figure 2). The available information for the active production wells has been summarized in Table 2.

2.1.1 City of Torrance, Municipal Water Department

Torrance wells #4 and #5 were installed in 1965 and 1966, respectively, and are located approximately 9,500 feet west-southwest and cross-gradient relative to the Montrose property (Figure 2). The wells are screened from 180 to 812 feet below land surface (bls) and 210 to 786 feet bls, respectively. These broad screened intervals apparently encompass the Gage and Gardena-Silverado aquifers (Table 1).

The Watermaster reports no production for either of these wells since 1996 (Table 3). Both Torrance wells #4 and #5 are considered “standby” status wells. Recent communication with the City of Torrance indicates that the City is planning to destroy these two wells. Available water quality data for these wells have been summarized (Tables 4 through 8). Available water level data for these wells are summarized in Table 9.

Torrance well #7 was drilled in 1995, and is located approximately 9,200 feet south-southwest of the Montrose property (Figure 2). This location is also located cross-gradient to the direction of groundwater flow in the Bellflower sand and Gage aquifer relative to the Montrose Site. The well is screened from 280 feet to 850 feet bls, which appears to correlate with the Silverado aquifer (Table 1). The reported production for Torrance well #7 for the 2001-2002 water year was 402.8 acre-feet (AF) (Table 3). Recent communication with the City of Torrance indicates that this well is now on standby basis. Water quality analyses of groundwater from Torrance

well #7 have been summarized (Tables 4 through 8). Available water level data have also been summarized (Table 9).

Torrance well #8 was drilled in 1998, and is located approximately 9,400 feet south-southwest and cross-gradient relative to the Montrose Property (Figure 2). The well is screened from 270 feet to 700 feet bls, which appears to correlate with the Silverado aquifer (Table 1). No extraction was reported for Torrance well #8 for the 2001-2002 water year. Torrance Water Department personnel indicated that Torrance well #8 is only used for standby purposes due to secondary (aesthetic) water quality problems. Water level and water quality data for Torrance well #8 were not available.

The City of Torrance has no plans to install additional production wells at this time, based on communication with the City of Torrance, Municipal Water Department staff.

2.1.2 California Water Service Company, Dominguez District

CWSC, formerly Dominguez Water Corporation, well 279-01 (Dominguez 79) was installed in 1980, and is located approximately 15,000 feet southeast of the Montrose property (Figure 2). The reported production for CWSC well 279-01 for the 2001-2002 water year was 1,181 AF (Table 3). Recent communication with the CWSC indicates that this well is now on standby basis. Available water quality data for this well have been summarized (Tables 4 through 8). The CWSC has not provided water level data.

CWSC well 219-02 (Dominguez 19-B) was completed in 2001, and is located approximately 10,600 feet southeast of the Montrose property (Figure 2). CWSC well 219-02 is screened from 510 feet to 680 feet bls, which appears to correlate with the Silverado aquifer. However, the filter pack for CWSC well 219-02 reportedly extends to a depth of 200 feet bls, which is approximately 300 feet above the top of the screen, and would encompass what appears to be the Gage aquifer. This well is also located approximately downgradient relative to the Montrose

Site. The reported production for CWSC well 219-02 for the 2001-2002 water year was 1,436.2 AF (Table 3). CWSC has not provided water level or water quality data for this well.

CWSC has no plans to install additional production wells at this time, based on communication with the CWSC department staff.

2.2 REGIONAL OBSERVATION WELL CLUSTERS

In addition to the new production wells described above, two new nested observation well clusters have been installed within the study area by WRD. These wells were installed within the West Coast and Central Basins to provide zone-specific water level and water quality data.

The first of these nested wells, Madrid PM-3, was installed in 1995 and includes four individual wells screened in the Gage, Lynwood, Silverado, and Lower San Pedro aquifers, respectively. The Madrid PM-3 observation well cluster is located approximately 7,000 feet west-southwest of the Montrose property (Figure 2). Water level and water quality data were obtained for this well cluster and have been summarized (Tables 10 and 11).

The second of these nested wells, Carson-2, was installed in 2002 and includes 5 individual wells screened in the Gage, Lynwood, Silverado, Lower San Pedro, and Pico aquifers, respectively. The Carson 2 observation well cluster is located approximately 10,500 feet south-southeast from the Montrose property. Water level and water quality data were obtained for this well cluster and have been summarized (Tables 12 and 13).

2.3 OBSERVATION WELLS

Five wells in the study area have been used by the LACDPW as water level observation wells (Figure 2; Table 1). Two of these wells are currently active and have water level data within the last five years (Tables 1 and 14). Two of these wells, 846K and 835E, are inactive (Table 1).

One well, 846E, is inactive, but has water level data in the last 5 years (Tables 1 and 14). The following is a brief summary of the two active LACDPW wells and the one inactive water level observation well with recent water level data:

- Active LACDPW Well 806C was installed in 1956 and is located approximately 4,200 feet south-southeast of the Montrose Property (Figure 2). The well is completed to a depth of 165 feet bls, which correlates to the Gage aquifer (Table 1). This well has recent water level data (Table 14).
- Inactive LACDPW Well 846E was installed in 1953 and is located approximately 13,400 feet east-southeast of the Montrose Property (Figure 2). The well is completed to a depth of 41 feet bls (Table 1). This well has water level data through October 2000 (Table 14).
- Active LACDPW Well 846G was installed in 1968 and is located approximately 13,800 feet southeast of the Montrose Property (Figure 2). The well is completed to a depth of 167 feet bls (Table 1). This well has recent water level data (Table 14).

In addition water level data were obtained for a LACDPW well that has since been destroyed or assumed to have been destroyed or abandoned (Table 1 and Table 14). The following is a brief summary of the well:

- LACDPW Well 818B was installed in 1921 and was located approximately 12,000 feet southeast of the Montrose Property (Figure 3). The well was completed to a depth of 251 feet bls (Table 1). Water level data for 1999 is available for this well (Table 14). Based on the field reconnaissance conducted in August 2003, this area has been recently redeveloped and this well is presumed to be abandoned or destroyed (Table 1).

2.4 DESTROYED WELLS

Three production wells have been reported destroyed since 1990. CWSC production well 19, which was drilled in 1916, was destroyed in 1991 (Table 1). In addition, CWSC production well

19A was completed in early 1991 in the same vicinity as CWSC production well 19, but was destroyed in 2000. The former Jones Chemical Company industrial supply well, well 795, was destroyed in 1995 (Table 1).

Twenty nine other regional wells within the study area were documented by the Watermaster or other agencies as destroyed (Table 1; Figure 3).

A field reconnaissance was conducted in August 2003 to locate wells with unknown status. No documentation of the destruction of these wells has been found. Some may have been destroyed before the County or other agencies required or maintained documentation of well destruction. Many others appear to have been covered during property development. Based on the field reconnaissance, 17 wells are presumed destroyed or abandoned. No evidence of these wells was found at land surface. Many of the wells are now located in areas that have undergone development or are apparently beneath structures, which implies the wells were destroyed or abandoned during the development process.

3.0 SUMMARY

Based on the information obtained during this production well survey, there is one production well located within the survey area that is currently being used for municipal supply purposes and five municipal supply wells that are on standby, as follows:

- CWSC well 219-02 (Active municipal supply);
- CWSC well 279-01 (Standby municipal supply);
- Torrance well #4 (766A) (Standby municipal supply);
- Torrance well #5 (766B) (Standby municipal supply);
- Torrance well #7 (Standby municipal supply); and
- Torrance well #8 (Standby municipal supply).

Well construction details, 5-year well pumping histories and rates, 5-year water level histories, and 5-year water quality data have been compiled based on available data. The City of Torrance and CWSC have no plans to install additional production wells at this time.

Information obtained during this task will be used with information from other UAO SOW tasks to evaluate the future sampling of production wells for pCBSA as required by the ROD as well as to provide information for evaluation of methods of insuring production well protection during the operating phase of the groundwater remedial program.

4.0 REFERENCES

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TABLE 1
REGIONAL WELLS IN THE AREA OF THE
pCBSA PLUME, MONTROSE SITE

WELL IDENTIFICATION			OWNER NAME	YEAR	LOG Y/N	X	Y	DEPTH (feet)	SCREENED INTERVAL (feet depth)	UNIT	USE	STATUS
DWR AND USGS	LACDPW	OTHER										
Active Wells:												
4S/13W-8R2	846G	N/A	LACFCD	1968	Y	210171	52134	180	157-167	N/A	Observation	Active; water level data to 4/03
4S/13W-17D3	N/A	19-B (219-02)	California Water Service Co. (formerly Dominguez)	2001	Y	206149	51050	750	510-680; Filter pack to 200 ft.	Silverado	Municipal Supply	Standby; 2001-2002 production: 1,436.2 AF (WM)
4S/13W-18K1	N/A	Carson-2#1	Water Replenishment District of So Cal	2002	Y	202755	47829	1308	1230-1250	Pico	Observation	Active
4S/13W-18K2	N/A	Carson-2#2	Water Replenishment District of So Cal	2002	Y	202755	47829	879	850-870	Lower San Pedro	Observation	Active
4S/13W-18K3	N/A	Carson-2#3	Water Replenishment District of So Cal	2002	Y	202755	47829	640	600-620	Silverado	Observation	Active
4S/13W-18K4	N/A	Carson-2#4	Water Replenishment District of So Cal	2002	Y	202755	47829	495	450-470	Lynwood	Observation	Active
4S/13W-18K5	N/A	Carson-2#5	Water Replenishment District of So Cal	2002	Y	202755	47829	266	230-250	Gage	Observation	Active
4S/13W-20C1	N/A	79 (279-01)	California Water Service Co. (formerly Dominguez)	1980 (USGS)	N	207573	45947	925 (USGS)	N/A	N/A	Municipal Supply	Active; 2001-2002 production: 1,181.0 AF (WM)
4S/14W-2N1	N/A	PM-3 Madrid Zone 1	Water Replenishment District of So Cal	1995	Y	189520	54950	685	640-680	Lower San Pedro	Observation	Active (WQ data 1995-2000, USGS)

TABLE 1
REGIONAL WELLS IN THE AREA OF THE
pCBSA PLUME, MONTROSE SITE

WELL IDENTIFICATION			OWNER NAME	YEAR	LOG Y/N	X	Y	DEPTH (feet)	SCREENED INTERVAL (feet depth)	UNIT	USE	STATUS
DWR AND USGS	LACDPW	OTHER										
Active Wells (continued):												
4S/14W-2N2	N/A	PM-3 Madrid Zone 2	Water Replenishment District of So Cal	1995	Y	189520	54950	525	480-520	Silverado	Observation	Active (WQ data 1995-2000, USGS)
4S/14W-2N3	N/A	PM-3 Madrid Zone 3	Water Replenishment District of So Cal	1995	Y	189520	54950	285	240-280	Lynwood	Observation	Active (WQ data 1995-2000, USGS)
4S/14W-2N4	N/A	PM-3 Madrid Zone 4	Water Replenishment District of So Cal	1995	Y	189520	54950	190	145-185	Gage	Observation	Active (WQ data 1995-2000, USGS)
4S/14W-10K2	766A	4	City of Torrance	1965	Y	187483	53260	812	180-812	Gage/ Gardena- Silverado	Municipal Supply	Standby; no 2001-2002 production, last pumped 1995-96, slated to be destroyed
4S/14W-10K3	766B	5	City of Torrance	1966	Y	187463	53929	816	210-786	Gage/ Gardena- Silverado	Municipal Supply	Standby; no 2001-2002 production, last pumped 1995-96, slated to be destroyed
4S/14W-12Q2	806C	N/A	LACFCD	1956	Y	197981	52656	165	Not Perforated	Gage	Observation	Active; water level data to 10/03
4S/14W-14J2	N/A	8	City of Torrance	1998	Y	193578	48149	940	270-550 590-700	Silverado	Municipal Supply	Standby; aesthetic problems
4S/14W-14K2	N/A	7	City of Torrance	1995	Y	192971	48447	950	280-500 560-730 770-850	Silverado	Municipal Supply	Standby; 2001-2002 production: 402.8 AF (WM)
Inactive Wells:												
N/A	846K	N/A	LACFCD	1971	N	210326	52483	20.7	N/A	N/A	Observation	Inactive (water level data to 1978)
4S/13W-8G2	835E	N/A	LACFCD	1954	Y	207793	55065	179	117-179	Gage	Observation	Inactive
4S/13W-8R1	846E	N/A	LACFCD	1953	Y	209950	52382	~ 41	N/A	N/A	Observation	Inactive (water level data to 2000)
4S/14W-14J1	N/A	MW-13	City of Torrance	1990	Y	193073	48265	101	78.4-98.4	N/A	Observation	Inactive

TABLE 1
REGIONAL WELLS IN THE AREA OF THE
pCBSA PLUME, MONTROSE SITE

WELL IDENTIFICATION			OWNER NAME	YEAR	LOG Y/N	X	Y	DEPTH (feet)	SCREENED INTERVAL (feet depth)	UNIT	USE	STATUS
DWR AND USGS	LACDPW	OTHER										
Presumed Abandoned or Destroyed Wells:												
N/A	798H	N/A	O.E. Karr	1938	N	196669	46078	N/A	N/A	N/A	N/A	Presumed abandoned or destroyed based on field inspection
4S/13W-6J1	824	N/A	Dominguez Estate Co.	1920	N	204588	57962	95 (60)	N/A	N/A	Domestic, Stock	Presumed abandoned or destroyed based on field inspection
4S/13W-6K1	814	N/A	R. Bealey	N/A	Y	202851	58119	82	60-70	N/A	Domestic	Presumed abandoned or destroyed based on field inspection
4S/13W-7C1	815B	25	Dominguez Water Co.	1956	Y	202700	56711	710	324-708	N/A	N/A	Presumed abandoned or destroyed based on field inspection
4S/13W-17C1	837	N/A	M. A. Stieg	1934	Y	206906	50330	85	N/A	N/A	Domestic Observation	Presumed abandoned or destroyed based on field inspection
4S/13W-17G1	837B	N/A	H. Diego	1940	N	207888	49276	87	N/A	N/A	Irrigation	Presumed abandoned or destroyed based on field inspection
4S/13W-18A1 (misidentified as 18H2 in some records)	827A	N/A	J.E. Hoepner	N/A	N	204760	50185	461	N/A	N/A	Irrigation	Presumed abandoned or destroyed based on field inspection
4S/13W-18J2	827E	N/A	Griggs	1940	N	204611	48066	67	N/A	N/A	N/A	Presumed abandoned or destroyed based on field inspection
4S/13W-18N1 (misidentified as 18P1 in some records)	818A	N/A	C.G. Fiesel	c. 1900	N	201141	46305	250	N/A	N/A	Domestic	Presumed abandoned or destroyed based on field inspection
4S/13W-18P1	818D	N/A	Daniel Crowley	1916	Y	201575	46296	276	227-256	N/A	N/A	Presumed abandoned or destroyed based on field inspection

TABLE 1
REGIONAL WELLS IN THE AREA OF THE
pCBSA PLUME, MONTROSE SITE

WELL IDENTIFICATION			OWNER NAME	YEAR	LOG Y/N	X	Y	DEPTH (feet)	SCREENED INTERVAL (feet depth)	UNIT	USE	STATUS
DWR AND USGS	LACDPW	OTHER										
Presumed Abandoned or Destroyed Wells:												
4S/13W-19B1 (identified as 18Q2 in USGS, 1959)	818B	# 2	General Petroleum Co.	1921	Y	203139	46213	251	212-245	N/A	Industrial Supply	Presumed abandoned or destroyed based on field inspection
3S/14W-34R1	774	N/A	N/A	N/A	Y	188833	60674	600	N/A	N/A	N/A	Presumed abandoned or destroyed based on field inspection
4S/14W-2B1	784	N/A	General Petroleum Corp.	1909+/-	N	191896	60691	N/A	N/A	N/A	Not used since 1912	Presumed abandoned or destroyed based on field inspection
4S/14W-11G2	785A	1	Columbia Steel Corp. (U.S. Steel)	1927	Y	192051	54264	613	293-304 350-364 380-388 577-598	Lynwood/Sil verado	Industrial Supply	Presumed abandoned or destroyed based on field inspection
4S/14W-12K1 (identified as 7E1 in USGS, 1959)	805	N/A	Frank S. Austin	1924	N	199535	54964	200	N/A	N/A	Observation	Presumed abandoned or destroyed based on field inspection
4S/14W-12Q1	806		Mrs. J.M. Carson	1902	Y	197750	52008	377	N/A	N/A	Observation	Presumed abandoned or destroyed based on field inspection
4S/14W-13N1	798A	N/A	H.C. March	1914	Y	194914	46320	395	269-295 315-340 353-363	N/A	N/A	Presumed abandoned or destroyed based on field inspection
4S/14W - 13P1	798	N/A	Mildred K. Reeves	N/A	N	196664	46204	200	N/A	N/A	N/A	Presumed abandoned or destroyed based on field inspection
Destroyed Wells:												
4S/13W-5M2	824F	#20	LACFCD	1953	N/A	204833	50879	76.8	N/A	N/A	Observation	Destroyed 1965
4S/13W-5Q1	835	#3	LACFCD	1931	N/A	207944	57392	105	N/A	N/A	Test Well	Destroyed (LACFCD)
4S/13W-6J2	824A	N/A	Dominguez Estate Co.	1941	N	204639	57391	173	N/A	N/A	N/A	Destroyed 1955 (LACFCD)
4S/13W-6K2	824E	#21	LACFCD	1953	Y	203239	59223	77.5	74.5-77.5	N/A	Observation	Destroyed 1965

TABLE 1
REGIONAL WELLS IN THE AREA OF THE
pCBSA PLUME, MONTROSE SITE

WELL IDENTIFICATION			OWNER NAME	YEAR	LOG Y/N	X	Y	DEPTH (feet)	SCREENED INTERVAL (feet depth)	UNIT	USE	STATUS
DWR AND USGS	LACDPW	OTHER										
Destroyed Wells (continued):												
4S/13W-6Q1	814A	N/A	LACFCD	1937	N	202873	57971	70	N/A	N/A	Observation	Destroyed 1985 (LACDPW)
4S/13W-7H1	825	N/A	Clyde Sheets	1948	Y	204826	55109	698	555-562 570-636 640-644 672-676	Silverado	Irrigation	Destroyed 1989 (LACDPW). Sold rights to City of Torrance (WM)
4S/13W-7L1	816	N/A	Sunset Oil Co.	1946	Y	202437	53713	580	528-580	Silverado	Industrial Supply	Destroyed 1972
4S13W-8C1	835A	Del Amo #1	Dominguez Water Corp.	Converted from oil well in 1950	N	206915	56194	Plugged from 1000 to 725	550-680 530-725	N/A	Irrigation Observation	Destroyed 1965
4S/13W-17D1	836A	19	California Water Service Co. (formerly Dominguez)	1916	Y	206150	51013	1,701 (plugged at 930 in 1950)	504-511 525-560 585-610 635-660	Silverado	Municipal Supply	Destroyed (WM, 1990/1991)
4S/13W-17D2	N/A	19A	California Water Service Co. (formerly Dominguez)	1990/ 1991	Y	206150	51013	670	510-665	Silverado	Municipal Supply	Destroyed 2000
4S/13W-17E1	827D	N/A	Crook & Huffin	N/A	N	205763	48531	121	N/A	N/A	N/A	Destroyed (USGS, 1959)
4S/13W-18A2	827	N/A	J.E. Hoepner	N/A	N	204104	50083	200	N/A	N/A	Domestic	Destroyed (USGS, 1959)
4S/13W-18H1	827B	N/A	B. Lynn	N/A	N	204413	48645	N/A	N/A	N/A	Not used since 1932	Destroyed (USGS, 1959)
4S/13W-18J1	827C	N/A	J.J. Dunlop	N/A	N	204261	48342	N/A	N/A	N/A	N/A	Destroyed (USGS, 1959)
4S/13W-19B2 (identified as 18Q1 in USGS, 1959)	818C	# 1	General Petroleum Co.	1921	Y	203173	46060	250	224-231	N/A	Industrial Supply	Destroyed; 2/69
4S/14W-1F1	794A	1	Boeing	1942	Y	196029	59457	600	473-514	Silverado	Industrial Supply	Destroyed 2001

TABLE 1
REGIONAL WELLS IN THE AREA OF THE
pCBSA PLUME, MONTROSE SITE

WELL IDENTIFICATION			OWNER NAME	YEAR	LOG Y/N	X	Y	DEPTH (feet)	SCREENED INTERVAL (feet depth)	UNIT	USE	STATUS
DWR AND USGS	LACDPW	OTHER										
Destroyed Wells (continued):												
4S/14W-1F2	794B	2	Boeing	1942	Y	196074	59612	600	477-506 525-530 535-540	Silverado	Industrial Supply	Destroyed 1998
4S/14W-1F3	794C	3	Boeing	1942	Y	196065	59994	600	427-433 478-516 538-550	Silverado	Industrial Supply	Destroyed 1998
4S/14W-1P1	795	N/A	Stauffer Chemical (Jones Chemical Co.)	1943	Y	196622	56961	727	486-560 603-650 673-714	Silverado	Industrial Supply	Destroyed 1995
4S/14W-10J1	776	2	City of Torrance	1935	Y	188313	53388	623	170-320 360-520	Gage/ Gardena- Silverado	Municipal Supply	Destroyed (City of Torrance); Water level data to 1979
4S/14W-10K1	766	1	City of Torrance	N/A	N	187599	53354	703	N/A	N/A	Municipal Supply	Destroyed (City of Torrance)
4S/14W-11F1	785B	3	Columbia Steel Corp. (U.S. Steel)	1935	Y	191436	54027	600	198-200 260-280 305-390	Lynwood/Sil verado (merged)	Industrial Supply	Destroyed 1981 (LACDPW) Sold rights to City of Torrance (WM)
4S/14W-11F2	785C	4	Columbia Steel Corp. (U.S. Steel)	1939	Y	191313	54358	460	140-450	Gage - Lynwood/Sil verado (merged)	Industrial Supply	Destroyed 1981 (LACDPW) Sold rights to City of Torrance (WM)
4S/14W-11G1	785	2	Columbia Steel Corp. (U.S. Steel)	1942	Y	192486	54096	653	122-160 293-306 330-450	Lynwood/Sil verado	Industrial Supply	Destroyed (USGS, 1959) Sold rights to City of Torrance (WM)
4S/14W-11G4	785D	5	Columbia Steel Corp. (U.S. Steel)	1935	N	191778	54701	N/A	198-218 260-280 305-390	Lynwood- Silverado	Industrial Supply	Destroyed 1981 (LACDPW) Sold rights to City of Torrance (WM)
4S/14W-13B1	806A	N/A	U.S. Government	N/A	N	197537	50873	N/A	N/A	N/A	N/A	Destroyed (USGS, 1959)
4S/14W-13F1	797	DWP Torrance #1	City of Los Angeles / D.E.Crutcher / W.A. Jones	1931	Y	196705	49141	710	245-260 348-368 647-670	Lynwood/Sil verado	Observation	Destroyed (neighbor reported capped with cement)

TABLE 1
REGIONAL WELLS IN THE AREA OF THE
pCBSA PLUME, MONTROSE SITE

WELL IDENTIFICATION			OWNER NAME	YEAR	LOG Y/N	X	Y	DEPTH (feet)	SCREENED INTERVAL (feet depth)	UNIT	USE	STATUS
DWR AND USGS	LACDPW	OTHER										
Destroyed Wells (continued):												
4S/14W-13F2	797A	N/A	C.B. Poole	N/A	N	196448	48703	N/A	N/A	N/A	N/A	Destroyed (USGS, 1959)

NOTE: Data presented on this table based on U.S. Geological Survey Water-Supply Paper 1461 (Poland et al., 1959), the Montrose Task 15 Report (H+A, 1990) and Dames & Moore Groundwater RI Report (D&M, 1998) as well as on this survey.

FOOTNOTES

PCBSA = Parachlorobenzene Sulfonic Acid
DWR = California Department of Water Resources
USGS = U.S. Geological Survey
LACDPW = Los Angeles County Department of Public Works
WM = Water rights and transfer information obtained from West Basin Watermaster Service Report series.
LACFCD = Los Angeles County Flood Control District, now LACDPW
AF = Acre-Feet
WL = Water level
WQ = Water quality
So Cal = Southern California
N/A = Not available

TABLE 2
PRODUCTION WELL DATA SUMMARY

WELL IDENTIFICATION			OWNER NAME	YEAR	LOG Y/N	WATER LEVEL DATA	WATER QUALITY DATA	WELL PRODUCTION DATA	STATUS
DWR AND USGS	LACDPW	OTHER							
4S/13W-17D3	N/A	19-B (219-02)	California Water Service Co. (formerly Dominguez)	2001	Y	N/A	N/A	2001-2002 (WM)	Active; 2001-2002 production: 1,436.2 AF (WM)
4S/13W-20C1	N/A	79 (279-01)	California Water Service Co. (formerly Dominguez)	1980 (USGS)	N	N/A	1995-1997 (WBMWD); 2000 (USGS)	1990-2002 (WM)	Standby; 2001-2002 production: 1,181.0 AF (WM)
4S/14W-10K2	776A	4	City of Torrance	1965	N	Y	1994-1997 (WBMWD)	1990-2002 (WM)	Standby; no 2001-2002 production, last pumped 1995-96, slated to be destroyed
4S/14W-10K3	776B	5	City of Torrance	1966	N	Y	1994-1997 (WBMWD)	1990-2002 (WM)	Standby; no 2001-2002 production, last pumped 1995-96, slated to be destroyed
4S/14W-14J2	N/A	8	City of Torrance	1998	Y	N/A	N/A	N/A	Standby; aesthetic problems
4S/14W-14K2	N/A	7	City of Torrance	1995	Y	Y	1997-1998 (WBMWD)	1997-2002 (WM)	Standby; 2001-2002 production: 402.8 AF (WM)

NOTE: Refer to page 2 of this table for footnotes.

TABLE 2
PRODUCTION WELL DATA SUMMARY

Note: Data presented on this table based on Task 15 Report (H+A, 1990) and Dames & Moore Groundwater RI Report (D&M, 1998) as well as on this survey.

FOOTNOTES

DWR	=	California Department of Water Resources
USGS	=	U.S. Geological Survey
LACDPW	=	Los Angeles County Department of Public Works
WM	=	Water rights and transfer information obtained from West Basin Watermaster Service Report series.
WBMWD	=	West Basin Municipal Water District
AF	=	Acre-Feet
N/A	=	Not available

TABLE 3
WELL PRODUCTION DATA FROM WATERMASTER

.....TOTAL GROUNDWATER EXTRACTIONS IN ACRE-FEET PER YEAR.....

STATE WELL NUMBER	OWNERS DESIGNATION	JULY 1996	JULY 1997	JULY 1998	JULY 1999	JULY 2000	JULY 2001	JULY 2002
		THRU JUNE 1997	THRU JUNE 1998	THRU JUNE 1999	THRU JUNE 2000	THRU JUNE 2001	THRU JUNE 2002	THRU MARCH 2003
04S/14W-10K02S	Torrance 4	--	0.00	0.00	0.00	0.00	0.00	0.00
04S/14W-10K03S	Torrance 5	--	0.00	0.00	0.00	0.00	0.00	0.00
04S/14W-14K02S	Torrance 7	403.93	3,316.50	1,338.57	67.27	233.28	402.80	0.00
04S/13W-17D02S	Dominguez 19A	--	1,981.54	1,511.56	797.03	0.00	0.00	0.00
04S/13W-17D03S	Dominguez 219-02	--	--	--	--	--	1,436.19	2,232.67
04S/13W-20C01S	Dominguez 279-01	--	1,816.80	1,131.39	1,349.30	1,131.91	1,181.01	0.00

FOOTNOTES

(--) = No available data

TABLE 4

**SUMMARY OF GENERAL MINERALS AND INORGANIC ANALYSES
FROM CENTRAL/WEST BASIN MUNICIPAL WATER DISTRICTS**

STATE WELL NUMBER	04S/14W-10K02		04S/14W-10K03		04S/14W-14K02		04S/13W-17D02	04S/13W-20C01	
OWNER WELL NUMBER	TORRANCE 4		TORRANCE 5		TORRANCE 7		DOMINGUEZ 19A	DOMINGUEZ 279-01	
SAMPLE DATE	07/14/97	08/07/97	07/14/97	08/07/97	11/12/97	06/02/00	03/19/97	03/19/97	10/12/00
CONSTITUENT									
Hardness (mg/l CaCO ₃)	555	NA	593	NA	NA	200	100	148	NA
Calcium (mg/l)	140	NA	155	NA	NA	44	30	40	NA
Magnesium (mg/l)	50	NA	50	NA	NA	21	NA	NA	NA
Sodium (mg/l)	170	NA	145	NA	NA	110	NA	NA	NA
Potassium (mg/l)	13.0	NA	12.0	NA	NA	8.3	NA	NA	NA
Alkalinity (mg/l CaCO ₃)	220	NA	210	NA	NA	220	NA	NA	NA
Hydroxide (mg/l)	<1	NA	<1	NA	NA	<1.0	NA	NA	NA
Carbonate (mg/l)	1.1	NA	1.1	NA	NA	<1.0	NA	NA	NA
Bicarbonate (mg/l)	268	NA	256	NA	NA	270	NA	NA	NA
Sulfate (mg/l)	<0.5	NA	11	NA	NA	9.1	12	28	NA
pH (pH units)	7.8	NA	7.8	NA	NA	7.88	8.2	8.2	NA
EC (umhos/cm)	2,040	NA	1,880	NA	NA	840	367	433	510
TDS (mg/l)	1,330	NA	1,090	NA	NA	470	NA	NA	NA
Color (color units)	18	NA	25	NA	NA	15	5	7	NA
Odor (ton)	1	NA	16	NA	NA	1.0	NA	NA	NA
Turbidity (ntu)	5.2	NA	32.0	NA	NA	0.43	0.1	0.2	NA
MBAS (mg/l)	<0.02	NA	0.54	NA	NA	<0.1	NA	NA	NA
Copper (ug/l)	<50	NA	160	NA	NA	<50	<50	<50	NA
Iron (ug/l)	910/900	686	5,100/6,200	3,300	NA	170	NA	NA	NA
Manganese (ug/l)	<30	NA	150	NA	NA	36	NA	NA	NA
Zinc (ug/l)	<50	NA	77	NA	NA	54	NA	NA	NA
Chloride (mg/l)	475	NA	445	NA	NA	120	NA	NA	NA
Perchlorate (ug/l)	NA	NA	NA	NA	ND	<5	NA	NA	NA

FOOTNOTES

mg/l = Milligrams per liter
 CaCO₃ = Calcium carbonate
 NA = Not analyzed
 (<) = Less than; the numerical value is the Limit of Detection for that constituent
 umhos/cm = Umhos per centimeter
 EC= Electrical conductivity

ton = Threshold odor number
 ntu = Nephalometric turbidity units
 ug/l = Micrograms per liter
 ND= Not detected
 TDS= Total dissolved solids
 MBAS= Methylene blue active substances

TABLE 5
SUMMARY OF METAL ANALYSES
FROM CENTRAL/WEST BASIN MUNICIPAL WATER DISTRICTS

STATE WELL NUMBER OWNER WELL NUMBER SAMPLE DATE	04S/14W-10K02 TORRANCE 4 07/14/97	04S/14W-10K03 TORRANCE 5 07/14/97	04S/14W-14K02 TORRANCE 7 11/12/97 06/02/00		04S/13W-17D02 DOMINGUEZ 19A 03/19/97 04/28/97		04S/13W-20C01 DOMINGUEZ 279-01 03/19/97 04/28/97	
<u>CONSTITUENT</u>								
Aluminum (ug/l)	<50	120	NA	130	NA	NA	NA	NA
Arsenic (ug/l)	<2	<2	NA	<2	NA	NA	NA	NA
Barium (ug/l)	<100	<100	NA	<100	NA	NA	NA	NA
Cadmium (ug/l)	<1	<1	NA	<1	NA	NA	NA	NA
Chromium (ug/l)	<10	<10	NA	<10	NA	NA	NA	NA
Lead (ug/l)	<5	14.0	NA	10	<5	NA	<5	NA
Mercury (ug/l)	<1	<1	NA	<1	NA	NA	NA	NA
Selenium (ug/l)	<5	<5	NA	5.4	NA	NA	NA	NA
Silver (ug/l)	<10	<10	NA	<10	NA	NA	NA	NA
Nitrate (mg/l as NO ₃)	<2	<2	<2	<2	<2	NA	<2	NA
Fluoride (mg/l)	0.20	0.2	NA	0.29	0.31	NA	0.23	NA
Nitrite (mg/l as NO ₂)	<0.4	<0.4	<0.4	<400	<0.4	NA	<0.4	NA
Beryllium (ug/l)	<1	<1	NA	<1	NA	<1	NA	<1
Thallium (ug/l)	<1	<1	NA	<1	NA	<1	NA	<1
Nickel (ug/l)	<10	<10	NA	<10	NA	<10	NA	<10
Antimony (ug/l)	<6	<6	NA	<6	NA	<6	NA	<6

FOOTNOTES

- ug/l = Micrograms per liter
- NA = Not analyzed
- (<) = Less than; the numerical value is the Limit of Detection for that compound
- mg/l = Milligrams per liter
- NO₃ = Nitrite
- NO₂ = Nitrate

TABLE 6
**SUMMARY OF VOLATILE ORGANIC CHEMICAL ANALYSES
FROM CENTRAL/WEST BASIN MUNICIPAL WATER DISTRICTS**

STATE WELL NUMBER OWNER WELL NUMBER SAMPLE DATE	04S/14W-10K02 TORRANCE 4 07/14/97	04S/14W-10K03 TORRANCE 5 07/14/97	04S/14W-14K02 TORRANCE 7 06/02/00	04S/13W-17D02 DOMINGUEZ 19A 06/12/97	04S/13W-20C01 DOMINGUEZ 279-01 06/12/97 10/12/00	
CONSTITUENT						
Carbon Tetrachloride (ug/l)	ND	ND	ND	ND	ND	<0.06
1,2-Dichloroethane (ug/l)	ND	ND	ND	ND	ND	<0.1
1,1-Dichloroethylene (ug/l)	ND	ND	ND	ND	ND	<0.04
Tetrachloroethylene (ug/l)	ND	ND	ND	ND	ND	<0.1
1,1,1-Trichloroethane (ug/l)	ND	ND	ND	ND	ND	<0.03
1,1-Dichloroethane (ug/l)	ND	ND	ND	ND	ND	<0.04
cis-1,2-Dichloroethylene (ug/l)	ND	ND	ND	ND	ND	<0.04
Trichloroethylene (ug/l)	ND	ND	ND	ND	ND	<0.04
Methylene Chloride (ug/l)	ND	ND	ND	ND	ND	<0.2
Bromoform (ug/l)	ND	ND	ND	ND	ND	<0.06
Chloroform (ug/l)	ND	ND	ND	ND	ND	<0.02
Chlorodibromomethane (ug/l)	ND	ND	ND	ND	ND	<0.2
Bromodichloromethane (ug/l)	ND	ND	ND	ND	ND	<0.05
Ethylbenzene (ug/l)	ND	ND	ND	ND	ND	<0.03
Toluene (ug/l)	ND	ND	ND	ND	ND	<0.05
Total Xylenes (ug/l)	ND	ND	ND	ND	ND	<0.06
MTBE (ug/l)	ND	ND	ND	ND	ND	<0.2
ETBE (ug/l)	NA	NA	ND	NA	NA	<0.05
TAME (ug/l)	NA	NA	ND	NA	NA	NA
Dibromomethane (ug/l)	NA	NA	NA	NA	NA	<0.05
Benzene (ug/l)	NA	NA	NA	NA	NA	<0.04
Chlorobenzene (ug/l)	NA	NA	NA	NA	NA	<0.03
Chloroethane (ug/l)	NA	NA	NA	NA	NA	<0.1
Hexachloroethane (ug/l)	NA	NA	NA	NA	NA	<0.2
Methylbromide (ug/l)	NA	NA	NA	NA	NA	<0.3
Methylchloride (ug/l)	NA	NA	NA	NA	NA	<0.2
Trichlorofluoromethane (ug/l)	NA	NA	NA	NA	NA	<0.09
1,1,2-Trichloroethane (ug/l)	NA	NA	NA	NA	NA	<0.06
1,1,2,2-Tetrachloroethane (ug/l)	NA	NA	NA	NA	NA	<0.09
o-Dichlorobenzene (ug/l)	NA	NA	NA	NA	NA	<0.03
1,2-Dichloropropane (ug/l)	NA	NA	NA	NA	NA	<0.03
trans-1,2-Dichloroethylene (ug/l)	NA	NA	NA	NA	NA	<0.03
1,2,4-Trichlorobenzene (ug/l)	NA	NA	NA	NA	NA	<0.2
1,3-Dichlorobenzene (ug/l)	NA	NA	NA	NA	NA	<0.03
1,4-Dichlorobenzene (ug/l)	NA	NA	NA	NA	NA	<0.05
Dichlorodifluoromethane (ug/l)	NA	NA	NA	NA	NA	<0.3
trans-1,3-Dichloropropene (ug/l)	NA	NA	NA	NA	NA	<0.09
cis-1,3-Dichloropropene (ug/l)	NA	NA	NA	NA	NA	<0.09
Vinyl chloride (ug/l)	NA	NA	NA	NA	NA	<0.1
1,2,3,4-Tetramethyl benzene (ug/l)	NA	NA	NA	NA	NA	<0.2
Bromoethene (ug/l)	NA	NA	NA	NA	NA	<0.1
Methy tert-pentyl ether (ug/l)	NA	NA	NA	NA	NA	<0.1

NOTE: Refer to page 2 of this table for footnotes.

TABLE 6
**SUMMARY OF VOLATILE ORGANIC CHEMICAL ANALYSES
FROM CENTRAL/WEST BASIN MUNICIPAL WATER DISTRICTS**

STATE WELL NUMBER OWNER WELL NUMBER SAMPLE DATE	04S/14W-10K02 TORRANCE 4 07/14/97	04S/14W-10K03 TORRANCE 5 07/14/97	04S/14W-14K02 TORRANCE 7 06/02/00	04S/13W-17D02 DOMINGUEZ 19A 06/12/97	04S/13W-20C01 DOMINGUEZ 279-01 06/12/97 10/12/00	
trans-1,4-Dichloro-2-butene (ug/l)	NA	NA	NA	NA	NA	<0.7
Carbon disulfide (ug/l)	NA	NA	NA	NA	NA	<0.07
1,1-Dichloropropene (ug/l)	NA	NA	NA	NA	NA	<0.03
2,2-Dichloropropane (ug/l)	NA	NA	NA	NA	NA	<0.05
1,3-Dichloropropane (ug/l)	NA	NA	NA	NA	NA	<0.1
o-Ethyltoluene (ug/l)	NA	NA	NA	NA	NA	<0.06
1,2,3-Trimethylbenzene (ug/l)	NA	NA	NA	NA	NA	<0.1
1,2,4-Trimethylbenzene (ug/l)	NA	NA	NA	NA	NA	<0.06
Isopropyl benzene (ug/l)	NA	NA	NA	NA	NA	<0.03
n-Propylbenzene (ug/l)	NA	NA	NA	NA	NA	<0.04
1,3,5-Trimethylbenzene (ug/l)	NA	NA	NA	NA	NA	<0.04
Bromochloromethane (ug/l)	NA	NA	NA	NA	NA	<0.04
p-Isopropyltoluene (ug/l)	NA	NA	NA	NA	NA	<0.07
1,2,3-Trichloropropane (ug/l)	NA	NA	NA	NA	NA	<0.2
1,1,1,2-Tetrachloroethane (ug/l)	NA	NA	NA	NA	NA	<0.03
1,2,3-Trichlorobenzene (ug/l)	NA	NA	NA	NA	NA	<0.3
1,2-Dibromoethane (ug/l)	NA	NA	NA	NA	NA	<0.04
Freon 113 (ug/l)	NA	NA	NA	NA	NA	<0.06
3-Chloropropene (ug/l)	NA	NA	NA	NA	NA	<0.1
Methyl isobutyl ketone (ug/l)	NA	NA	NA	NA	NA	<0.4
Acetone (ug/l)	NA	NA	NA	NA	NA	<7
Bromobenzene (ug/l)	NA	NA	NA	NA	NA	<0.04
Ethyl ether (ug/l)	NA	NA	NA	NA	NA	<0.2
Diisopropyl ether (ug/l)	NA	NA	NA	NA	NA	<0.1
Dibromochloropropane (ug/l)	NA	NA	NA	NA	NA	<0.2

FOOTNOTES

ug/l = Micrograms per liter

ND = Not detected

(<) = Less than; the numerical value is less than the Limit of Detection for that compound

MTBE = Methyl tertiary butyl ether

ETBE = Ethyl tertiary butyl ether

NA = Not analyzed

TAME = Tertiary amyl methyl ether

Freon 113 = 1,1,2-Trichloro-1,2,2-trifluoroethane

TABLE 7

**SUMMARY OF RADIONUCLIDES ANALYSES
FROM CENTRAL/WEST BASIN MUNICIPAL WATER DISTRICTS**

STATE WELL NUMBER OWNER WELLNUMBER SAMPLE DATE	04S/14W-10K02 TORRANCE 4 07/14/97	04S/14W-10K03 TORRANCE 5 07/14/97	11/12/97	02/13/98	04S/14W-14K02 TORRANCE 7 04/10/98	06/02/00	09/11/00
<u>CONSTITUENT</u>							
Gross Alpha (pCi/l)	<2.0	<2.0	<1.0	2.2	<1.0	NA	NA
Alpha Error (pCi/l)	NA	NA	0.0	1.6	0.7	NA	NA
Uranium (pCi/l)	NA	NA	NA	NA	NA	NA	NA
Radium 226 (pCi/l)	NA	NA	NA	NA	NA	NA	NA
Radon 222 (pCi/l)	NA	NA	NA	NA	NA	117	140

FOOTNOTES

pCi/l = Picocuries per liter

(<) = Less than; the numerical value is less than the Limit of Detection for that analyte

NA = Not analyzed

TABLE 8
**SUMMARY OF SEMIVOLATILE ORGANIC CHEMICAL ANALYSES
FROM CENTRAL/WEST BASIN MUNICIPAL WATER DISTRICTS**

STATE WELL NUMBER OWNER WELL NUMBER SAMPLE DATE	04S/14W-14K02 TORRANCE 7 11/12/97 06/02/00		04S/13W-17D02 DOMINGUEZ 19A 06/12/97	45/13W-20C01 DOMINGUEZ 279-01 10/12/00
<u>CONSTITUENT</u>				
2,4-Dichloro-phenoxyacetic Acid (ug/l)	ND	NA	ND	NA
2,4,5-Trichlorophenoxypropionic Acid (ug/l)	NA	NA	ND	NA
Atrazine (ug/l)	ND	NA	ND	NA
Simazine (ug/l)	ND	NA	ND	NA
Chlordane (ug/l)	ND	NA	NA	NA
Glyphosate (ug/l)	ND	NA	ND	NA
Diquat (ug/l)	ND	NA	ND	NA
Carbaryl (ug/l)	ND	NA	ND	NA
Thiobencarb (ug/l)	NA	ND	ND	NA
Bis(2-Ethylhexyl) phthalate (ug/l)	NA	NA	ND	NA
Bentazon (ug/l)	NA	NA	ND	NA
Dinoseb (ug/l)	NA	NA	ND	NA
Hexachlorobenzene (ug/l)	NA	NA	ND	NA
Hexachlorocyclopentadiene (ug/l)	NA	NA	ND	NA
Pentachlorophenol (ug/l)	NA	NA	ND	NA
Picloram (ug/l)	NA	NA	ND	NA
Dalapon (ug/l)	NA	NA	ND	NA
Acrylonitrile (ug/l)	NA	NA	NA	<1
Naphthalene (ug/l)	NA	NA	NA	<0.2
Hexachlorobutadiene (ug/l)	NA	NA	NA	<0.1
Methyl acrylate (ug/l)	NA	NA	NA	<1
Isodurene (ug/l)	NA	NA	NA	<0.2
Ethyl-methyl acrylate (ug/l)	NA	NA	NA	<0.2
2-Hexanone (ug/l)	NA	NA	NA	<0.7
Sytrene (ug/l)	NA	NA	NA	<0.04
o-Chlorotoluene (ug/l)	NA	NA	NA	<0.03
p-Chlorotoluene (ug/l)	NA	NA	NA	<0.06
n-Butylbenzene (ug/l)	NA	NA	NA	<0.2
sec-Butylbenzene (ug/l)	NA	NA	NA	<0.03
tert-Butylbenzene (ug/l)	NA	NA	NA	<0.06
Methyl iodide (ug/l)	NA	NA	NA	<0.1
Methacrylonitrile (ug/l)	NA	NA	NA	<0.6
Methyl ethyl ketone (ug/l)	NA	NA	NA	<2
Methyl methacrylate (ug/l)	NA	NA	NA	<0.3
Tetrahydrofuran (ug/l)	NA	NA	NA	<2

FOOTNOTES

ug/l = Micrograms per liter
 ND = Not detected
 NA = Not analyzed

TABLE 9

**WATER LEVEL MEASUREMENTS, 1999-2003
CITY OF TORRANCE WELLS**

...Water Level Elevations, feet mean sea level...

Measurement Date	Torrance #7		
	Torrance #4 4S/14W-10K2	Torrance #5 4S/14W-10K3	4S/14W- 14K2
04/27/99	-31.1	-17.7	NS (106)
10/27/99	NM	-17.7	NM
10/31/01	-36.1	-2.2	NS (126)
04/01/02	-30.1	-20.7	NM
04/23/02	NM	NM	NS (96)
10/30/02	-30.1	NM	NM
10/31/02	NM	NM	NS (96.9)
04/28/03	-31.1	-20.7	NS (94.5)

NOTE: Water level measurements for Water Replenishment District well clusters Madrid PM-3 and Carson 2 tabulated separately (Tables 10 and 12)

FOOTNOTES

NM = Not Measured

NS = Not Surveyed. Measured depth to water from reference point shown in parentheses.

TABLE 10
WATER LEVEL MEASUREMENTS, MADRID WELL CLUSTER PM-3

Measurement Date, Time	Water Level Elevations, feet mean sea level			
	Zone 1 (640' - 680', Lower San Pedro)	Zone 2 (480' - 520', Silverado)	Zone 3 (240' - 280', Lynwood)	Zone 4 (145' - 185', Gage)
1/17/97	-19.98	-15.90	-15.64	-15.69
6/6/97	-20.29	-15.64	-15.28	-15.27
10/23/97	-20.12	-16.02	-15.72	-15.72
1/13/98	-20.12	-15.52	-15.32	-15.32
10/7/98	-20.13	-15.46	-15.19	-15.19
11/24/98	-18.88	-15.00	-14.69	-14.62
2/18/99	-18.87	-14.94	-14.77	-14.76
6/18/99	-19.11	-14.94	-14.78	-14.74
9/28/99	-19.38	-14.90	-14.75	-14.71
10/4/99	-19.45	-14.88	-14.71	-14.66
1/7/00	-19.44	-15.16	-14.99	-14.93
4/4/00	-19.23	-15.10	-14.94	-14.91
8/2/00	-19.41		-15.25	-15.20
9/27/00	-19.48	-15.49	-15.36	-15.29
1/2/01	-18.76	-14.83	-14.71	-14.65
4/2/01	-18.03	-13.85	-13.74	-13.68
6/28/01	-18.07	-13.75	-13.61	-13.53
9/25/01	-19.42	-14.08	-13.90	-13.82
12/27/01	-16.49	-13.12	-13.04	-13.00
3/25/02	-16.30	-12.95	-12.89	-12.82
6/28/02	-17.69	-13.98	-13.77	-13.71

TABLE 10
WATER LEVEL MEASUREMENTS, MADRID WELL CLUSTER PM-3

Measurement Date, Time	Water Level Elevations, feet mean sea level			
	Zone 1 (640' - 680', Lower San Pedro)	Zone 2 (480' - 520', Silverado)	Zone 3 (240' - 280', Lynwood)	Zone 4 (145' - 185', Gage)
7/8/02 0:00		-13.82		
7/15/02		-13.94		
8/16/02	-17.51	-14.02	-13.96	-13.92
8/19/02	-17.51	-13.92	-13.85	-13.82
8/22/02	-17.60	-14.08	-14.01	-13.98
8/26/02	-17.68	-14.05	-13.97	-13.92
8/30/02	-17.52	-14.06	-13.94	-13.90
8/30/02 14:00		-14.05	-13.94	-13.90
8/30/02 20:00		-14.04	-13.95	-13.91
8/31/02 2:00		-14.09	-13.99	-13.95
8/31/02 8:00		-14.12	-14.02	-13.98
8/31/02 14:00		-14.08	-13.97	-13.93
8/31/02 20:00		-14.06	-13.95	-13.92
9/1/02 2:00		-14.06	-13.95	-13.91
9/1/02 8:00		-14.10	-14.00	-13.96
9/1/02 14:00		-14.04	-13.94	-13.90
9/1/02 20:00		-14.04	-13.94	-13.91
9/2/02 2:00		-14.03	-13.92	-13.88
9/2/02 8:00		-14.08	-13.98	-13.93
9/2/02 14:00		-14.02	-13.91	-13.87
9/2/02 20:00		-14.06	-13.96	-13.92

TABLE 10
WATER LEVEL MEASUREMENTS, MADRID WELL CLUSTER PM-3

Measurement Date, Time	Water Level Elevations, feet mean sea level			
	Zone 1 (640' - 680', Lower San Pedro)	Zone 2 (480' - 520', Silverado)	Zone 3 (240' - 280', Lynwood)	Zone 4 (145' - 185', Gage)
9/3/02 2:00		-14.06	-13.96	-13.92
9/3/02 8:00		-14.11	-14.01	-13.97
9/3/02 14:00		-14.05	-13.95	-13.90
9/3/02 20:00		-14.09	-13.99	-13.95
9/4/02 2:00		-14.11	-14.00	-13.96
9/4/02 8:00		-14.15	-14.04	-14.00
9/4/02 14:00		-14.12	-14.00	-13.96
9/4/02 20:00		-14.12	-14.02	-13.98
9/5/02 2:00		-14.11	-13.99	-13.95
9/5/02 8:00		-14.12	-14.02	-13.98
9/5/02 14:00		-14.11	-13.99	-13.96
9/5/02 20:00		-14.11	-14.00	-13.96
9/6/02 2:00		-14.05	-13.94	-13.90
9/6/02 8:00		-14.07	-13.97	-13.93
9/6/02 14:00		-14.07	-13.96	-13.92
9/6/02 20:00		-14.05	-13.95	-13.92
9/7/02 2:00		-14.06	-13.95	-13.92
9/7/02 8:00		-14.10	-13.99	-13.96
9/7/02 14:00		-14.08	-13.97	-13.93
9/7/02 20:00		-14.11	-14.01	-13.97
9/8/02 2:00		-14.13	-14.03	-13.99

TABLE 10
WATER LEVEL MEASUREMENTS, MADRID WELL CLUSTER PM-3

Measurement Date, Time	Water Level Elevations, feet mean sea level			
	Zone 1 (640' - 680', Lower San Pedro)	Zone 2 (480' - 520', Silverado)	Zone 3 (240' - 280', Lynwood)	Zone 4 (145' - 185', Gage)
9/8/02 8:00		-14.15	-14.05	-14.01
9/8/02 14:00		-14.10	-13.99	-13.96
9/8/02 20:00		-14.10	-14.01	-13.97
9/9/02 2:00		-14.09	-13.99	-13.96
9/9/02 8:00		-14.09	-14.00	-13.96
9/9/02 14:00		-14.06	-13.95	-13.92
9/9/02 20:00		-14.04	-13.95	-13.92
9/10/02 2:00		-14.02	-13.92	-13.87
9/10/02 8:00		-14.00	-13.90	-13.87
9/10/02 14:00		-13.95	-13.85	-13.81
9/10/02 20:00		-13.99	-13.89	-13.87
9/11/02 2:00		-13.99	-13.89	-13.85
9/11/02 8:00		-14.01	-13.91	-13.88
9/11/02 14:00		-13.99	-13.88	-13.83
9/11/02 20:00		-14.01	-13.91	-13.87
9/12/02 2:00		-14.01	-13.90	-13.86
9/12/02 8:00		-14.04	-13.95	-13.91
9/12/02 14:00		-13.97	-13.86	-13.83
9/12/02 20:00		-13.96	-13.86	-13.83
9/13/02 2:00		-13.95	-13.85	-13.81
9/13/02 8:00		-13.97	-13.88	-13.84

TABLE 10
WATER LEVEL MEASUREMENTS, MADRID WELL CLUSTER PM-3

Measurement Date, Time	Water Level Elevations, feet mean sea level			
	Zone 1 (640' - 680', Lower San Pedro)	Zone 2 (480' - 520', Silverado)	Zone 3 (240' - 280', Lynwood)	Zone 4 (145' - 185', Gage)
9/13/02 14:00		-13.93	-13.83	-13.79
9/13/02 20:00		-13.95	-13.85	-13.82
9/14/02 2:00		-13.96	-13.86	-13.82
9/14/02 8:00		-13.99	-13.89	-13.86
9/14/02 14:00	-17.57	-13.94	-13.84	-13.80
9/14/02 20:00		-13.95	-13.85	-13.82
9/15/02 2:00		-13.97	-13.86	-13.82
9/15/02 8:00		-13.99	-13.89	-13.86
9/15/02 14:00		-13.93	-13.83	-13.78
9/15/02 20:00		-13.90	-13.80	-13.76
9/16/02 2:00		-13.91	-13.80	-13.76
9/16/02 8:00		-13.94	-13.85	-13.81
9/16/02 14:00		-13.91	-13.80	-13.76
9/16/02 20:00		-13.90	-13.80	-13.77
9/17/02 2:00		-13.91	-13.81	-13.77
9/17/02 8:00		-13.94	-13.84	-13.80
9/17/02 14:00		-13.91	-13.79	-13.75
9/17/02 20:00		-13.91	-13.81	-13.76
9/18/02 2:00		-13.94	-13.83	-13.79
9/18/02 8:00		-13.97	-13.86	-13.81

TABLE 10
WATER LEVEL MEASUREMENTS, MADRID WELL CLUSTER PM-3

Measurement Date, Time	Water Level Elevations, feet mean sea level			
	Zone 1 (640' - 680', Lower San Pedro)	Zone 2 (480' - 520', Silverado)	Zone 3 (240' - 280', Lynwood)	Zone 4 (145' - 185', Gage)
9/18/02 14:00		-13.92	-13.81	-13.77
9/18/02 20:00		-13.95	-13.84	-13.81
9/19/02 2:00		-13.99	-13.89	-13.85
9/19/02 8:00		-14.00	-13.89	-13.85
9/19/02 14:00		-13.94	-13.83	-13.78
9/19/02 20:00		-13.97	-13.88	-13.84
9/20/02 2:00		-13.98	-13.88	-13.84
9/20/02 8:00		-14.02	-13.92	-13.88
9/20/02 14:00		-13.97	-13.86	-13.82
9/20/02 20:00		-13.99	-13.89	-13.85
9/21/02 2:00		-14.01	-13.90	-13.87
9/21/02 8:00		-14.06	-13.95	-13.92
9/21/02 14:00		-14.00	-13.89	-13.84
9/21/02 20:00		-14.01	-13.91	-13.87
9/22/02 2:00		-14.04	-13.93	-13.89
9/22/02 8:00		-14.05	-13.95	-13.91
9/22/02 14:00		-13.99	-13.87	-13.83
9/22/02 20:00		-13.98	-13.88	-13.84
9/23/02 2:00		-13.98	-13.88	-13.84
9/23/02 8:00		-14.00	-13.89	-13.86
9/23/02 14:00	-17.56	-13.95	-13.84	-13.79

TABLE 10
WATER LEVEL MEASUREMENTS, MADRID WELL CLUSTER PM-3

Measurement Date, Time	Water Level Elevations, feet mean sea level			
	Zone 1 (640' - 680', Lower San Pedro)	Zone 2 (480' - 520', Silverado)	Zone 3 (240' - 280', Lynwood)	Zone 4 (145' - 185', Gage)
9/23/02 20:00		-13.93	-13.83	-13.80
9/24/02 2:00		-13.97	-13.86	-13.83
9/24/02 8:00		-13.99	-13.89	-13.86
9/24/02 14:00		-13.96	-13.85	-13.81
9/24/02 20:00		-13.96	-13.87	-13.83
9/25/02 2:00		-13.99	-13.88	-13.84
9/25/02 8:00		-14.03	-13.94	-13.90
9/25/02 14:00		-13.97	-13.85	-13.81
11/5/02	-17.68	-14.00	-13.86	-13.79
12/26/02	-17.05	-13.33	-13.26	-13.21
4/1/03	-16.36	-12.62	-12.56	-12.53
6/25/03	-16.75	-13.01	-12.91	-14.85
9/8/03	-17.16	-13.40	-13.26	-13.24
9/30/03	-17.10	-13.48	-13.37	-13.34
12/30/03	-16.74	-13.18	-13.11	-13.08



TABLE 11

WATER QUALITY DATA, MADRID WELL CLUSTER PM-3

WELL IDENTIFIER, DATE OF SAMPLE COLLECTION

State Well Number	4S/14W-2N1	4S/14W-2N1	4S/14W-2N1	4S/14W-2N2	4S/14W-2N2	4S/14W-2N2	4S/14W-2N3	4S/14W-2N3	4S/14W-2N3	4S/14W-2N4	4S/14W-2N4	4S/14W-2N4
Owner Well Number	PM-3 Madrid Zone 1	PM-3 Madrid Zone 1	PM-3 Madrid Zone 1	PM-3 Madrid Zone 2	PM-3 Madrid Zone 2	PM-3 Madrid Zone 2	PM-3 Madrid Zone 3	PM-3 Madrid Zone 3	PM-3 Madrid Zone 3	PM-3 Madrid Zone 4	PM-3 Madrid Zone 4	PM-3 Madrid Zone 4
Sample Date	5/3/2000	10/11/2000	5/29/2001	5/3/2000	10/11/2000	5/29/2001	5/3/2000	10/11/2000	5/29/2001	5/3/2000	10/11/2000	5/29/2001
CONSTITUENT												
General Mineral:												
Total Dissolved Solid (TDS), mg/l	380	410	349	280	300	300	590	700	730	800	800	800
Cation Sum, meq/l	7.1	6.9	6.92	5.02	4.93	4.88	10.8	11.4	11.8	13.4	13.4	13.2
Anion Sum, meq/l	7.11	7.14	7.02	5	5.2	4.94	11.2	11.1	13.1	14.2	14.5	14.1
Iron, Total, ICAP, mg/l	ND	ND	ND	0.15	0.16	0.13	ND	0.12	0.14	0.13	0.46	0.38
Manganese, Total, ICAP/MS, ug/l	50	44	45	58	57	53	66	75	78	330	350	310
Turbidity, NTU	3.6	0.2	1.3	0.2	0.75	0.15	16	0.1	3	2.7	0.85	0.55
Alkalinity, mg/l	324	324	319	198	210	201	195	212	218	204	208	208
Boron, mg/l	0.31	0.34	0.33	0.093	0.11	0.11	0.1	0.11	0.11	0.31	0.35	0.32
Bicarbonate as HCO ₃ , calculated, mg/l	393	394	387	241	256	245	238	258	266	249	253	253
Calcium, Total, ICAP, mg/l	14	12	12	38	40	37	99	110	110	110	110	100
Carbonate as CO ₃ , Calculated, mg/l	5.1	4.06	5.02	1.97	1.05	1.59	0.775	1.06	1.09	0.644	0.655	1.04
Hardness (Total, as CaCO ₃), mg/l	76.1	67.4	72.3	140	145	145	362	394	439	398	402	369
Chloride, mg/l	21.7	22.8	22	36.3	34.9	32	252	226	258	316	322	319
Fluoride, mg/l	0.3	0.31	0.31	0.37	0.37	0.38	0.33	0.32	0.32	0.27	0.28	0.28
Hydroxide as OH, Calculated, mg/l	0.03	0.03	0.03	0.02	0.01	0.02	0.009	0.01	0.01	0.007	0.007	0.01
Langelier Index - 25 degree	0.6	0.43	0.52	0.62	0.37	0.51	0.63	0.81	0.82	0.59	0.6	0.76
Magnesium, Total, ICAP, mg/l	10	9.1	9.3	11	11	11	28	29	32	30	31	29
Nitrate-N by IC, mg/l	ND											
Nitrite, Nitrogen by IC, mg/l	ND											
Potassium, Total, ICAP, mg/l	14	13	13	3.2	2.8	3	5.1	5.2	5.3	6.7	6.5	6.4
Sodium, Total, ICAP, mg/l	120	120	120	49	45	47	79	78	81	120	120	130
Sulfate, mg/l	ND	ND	ND	ND	ND	ND	7.39	20.8	68	58.5	60.7	43
Surfactants, mg/l	ND	0.136	ND	ND	0.163							
Total Nitrate, Nitrite-N, CALC, mg/l	ND											
Total Organic Carbon, mg/l	3.2	3.1	2.77	0.5	ND	ND	1	0.9	0.54	1.3	1	ND
Carbon Dioxide, mg/l	3.94	4.97	3.88	3.83	8.11	4.9	9.5	8.18	8.43	12.5	12.7	8.02
General Physical:												
Apparent Color, ACU	25	30	30	5	5	5	3	5	5	5	10	3
Lab pH Units	8.3	8.2	8.3	8.1	7.8	8	7.7	7.8	7.8	7.6	7.6	7.8
Odor, TON	2	1	4	2	3	1	2	3	1	4	4	2
pH of CaCO ₃ saturation (25C), pH Units	7.704	7.77	7.778	7.483	7.435	7.488	7.073	6.992	6.979	7.007	7	7.042
pH of CaCO ₃ saturation (60C), pH Units	7.3	7.3	7.3	7	7	7	6.6	6.5	6.5	6.6	6.6	6.6
Specific Conductance, umhos/cm	610	640	604	455	475	447	990	1160	1180	1320	1410	1290
Radon, pCi/l	ND	NA	NA	160	NA	NA	93	NA	NA	240	NA	NA
Metals:												
Aluminum, Total, ICAP/MS, ug/l	ND											
Antimony, Total, ICAP/MS, ug/l	ND											
Arsenic, Total, ICAP/MS, ug/l	ND	ND	ND	ND	ND	ND	1.5	1.9	1.3	4.5	5.9	7.6
Barium, Total, ICAP/MS, ug/l	31	26	26	22	24	22	64	75	77	80	84	73

TABLE 11
WATER QUALITY DATA, MADRID WELL CLUSTER PM-3
WELL IDENTIFIER, DATE OF SAMPLE COLLECTION

State Well Number	4S/14W-2N1	4S/14W-2N1	4S/14W-2N1	4S/14W-2N2	4S/14W-2N2	4S/14W-2N2	4S/14W-2N3	4S/14W-2N3	4S/14W-2N3	4S/14W-2N4	4S/14W-2N4	4S/14W-2N4
Owner Well Number	PM-3 Madrid Zone 1	PM-3 Madrid Zone 1	PM-3 Madrid Zone 1	PM-3 Madrid Zone 2	PM-3 Madrid Zone 2	PM-3 Madrid Zone 2	PM-3 Madrid Zone 3	PM-3 Madrid Zone 3	PM-3 Madrid Zone 3	PM-3 Madrid Zone 4	PM-3 Madrid Zone 4	PM-3 Madrid Zone 4
Sample Date	5/3/2000	10/11/2000	5/29/2001	5/3/2000	10/11/2000	5/29/2001	5/3/2000	10/11/2000	5/29/2001	5/3/2000	10/11/2000	5/29/2001
Metals (continued):												
Beryllium, Total, ICAP/MS, ug/l	NA	ND	ND									
Chromium, Total, ICAP/MS, ug/l	19	ND	1.3	9.2	ND	ND	11	ND	ND	13	ND	1.1
Chromium, Hexavalent (Cr VI), mg/l	ND			ND			ND			ND		
Cadmium, Total, ICAP/MS, ug/l	NA	ND	ND									
Copper, Total, ICAP/MS, ug/l	ND											
Lead, Total, ICAP/MS, ug/l	ND											
Mercury, ug/l	NA	ND	ND									
Nickel, Total, ICAP/MS, ug/l	ND	7.4	13	7.4	7.7	5.9						
Selenium, Total, ICAP/MS, ug/l	ND											
Silver, Total, ICAP/MS, ug/l	ND											
Thallium, Total, ICAP/MS, ug/l	NA	ND	ND									
Zinc, Total, ICAP/MS, ug/l	ND											
Volatile Organic Compounds:												
1,1-Dichloroethane, ug/l	ND	ND	NA	ND	ND	ND	ND	3.5	NA	12	15	6.5
1,1-Dichloroethylene, ug/l	ND	ND	NA	ND	ND	ND	ND	0.9	NA	65	85	43
1,2-Dichloroethane, ug/l	NA	ND	NA	NA	ND	ND	NA	ND	NA	NA	ND	ND
Benzene, ug/l	ND	ND	NA	ND	ND	ND	ND	ND	NA	ND	ND	ND
Carbon Tetrachloride, ug/l	ND	ND	NA	ND	ND	ND	ND	ND	NA	ND	ND	ND
Chloroform (Trichloromethane), ug/l	ND	ND	NA	ND	ND	ND	ND	ND	NA	ND	ND	ND
cis-1,2-Dichloroethylene, ug/l	ND	ND	NA	ND	ND	ND	1.4	1.6	NA	1	1.5	1
Di-Isopropyl Ether, ug/l	ND	ND	NA	ND	ND	ND	ND	ND	NA	ND	ND	ND
Ethyl benzene, ug/l	ND	ND	NA	ND	ND	ND	ND	ND	NA	ND	ND	ND
Fluorotrichloromethane (Freon 11), ug/l	ND	ND	NA	ND	ND	ND	ND	ND	NA	ND	ND	ND
Freon 12, ug/l	ND	NA	NA									
Isopropylbenzene, ug/l	ND	ND	NA	ND	ND	ND	ND	ND	NA	ND	ND	ND
Methyl Tert-butyl ether (MTBE), ug/l	ND	NA	NA									
Methylene Chloride, ug/l	ND	NA	NA									
m,p-Xylenes, ug/l	NA	ND	NA	NA	ND	ND	NA	ND	NA	NA	ND	ND
n-Propylbenzene, ug/l	ND	ND	NA	ND	ND	ND	ND	ND	NA	ND	ND	ND
sec-Butylbenzene, ug/l	NA	ND	NA	NA	ND	ND	NA	ND	NA	NA	ND	ND
Tetrachloroethylene (PCE), ug/l	ND	ND	NA	ND	ND	ND	ND	ND	NA	ND	ND	ND
trans-1,2-Dichloroethylene, ug/l	NA	ND	NA	NA	ND	ND	NA	ND	NA	NA	ND	ND
Trichloroethylene (TCE), ug/l	ND	ND	NA	ND	ND	ND	ND	ND	NA	1.4	1.6	1.4

NOTE: Source of data: Water Replenishment District of Southern California (WRD, 2001 and 2002)

FOOTNOTES

 mg/l = Milligrams per liter
 meq/l = Milliequivalents per liter
 ug/l = Micrograms per liter
 ND = Not Detected

 NA = Not Analyzed
 NTU = Nephelometric Turbidity Units
 ACU = Apparent color units
 TON = Threshold odor number

 umhos/cm = Umhos per centimeter
 pCi/l = Picocuries per liter

TABLE 12
WATER LEVEL MEASUREMENTS, CARSON-2 WELL CLUSTER

.....Water Level Elevations, feet mean sea level.....

Measurement Date	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
	(1230' - 1250', Pico)	(850' - 870', Lower San Pedro)	(600' - 620', Silverado)	(450' - 470', Lynwood)	(230' - 250', Gage)
08/16/02	-47.45	-45.22	-44.59	-39.47	-35.83
08/19/02	-47.36	-45.19	-44.55	-39.38	-35.71
08/22/02	-47.42	-45.28	-44.65	-39.46	-35.76
08/23/02	-47.40	-45.29	-44.66	-39.52	-35.91
08/30/02	NR	-41.39	-41.00	-37.65	-34.92
09/29/02	-47.46	-45.80	-45.17	-40.00	-36.36
12/26/02	-48.82	-47.27	-46.64	-41.42	-37.69
03/31/03	-47.85	-45.82	-45.21	-40.09	-36.55
06/17/03	-48.19	-46.16	-45.63	-40.92	-35.62
07/10/03	-48.49	-46.47	-45.85	-40.8	-37.28
09/30/03	-48.07	-45.56	-45	-40.09	-36.74
10/09/03	NR	NR	-44.66	NR	NR
12/31/03	-47.39	-41.63	-41.27	-35.3	NR

NR = Not recorded

TABLE 13
WATER QUALITY DATA, CARSON-2 WELL CLUSTER

State Well Number	<u>WELL IDENTIFIER, DATE OF SAMPLE COLLECTION</u>				
	4S/13W-18K1	4S/13W-18K2	4S/13W-18K3	4S/13W-18K4	4S/13W-18K5
Owner Well Number	Carson-2	Carson-2	Carson-2	Carson-2	Carson-2
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
Sample Date	8/7/2002	8/8/2002	8/9/2002	8/8/2002	8/7/2002
CONSTITUENT					
General Mineral:					
Total Dissolved Solids (TDS), mg/l	240	270	260	290	270
Cation Sum, meq/l	3.8	4.87	4.65	5.26	4.9
Anion Sum, meq/l	3.87	4.59	4.5	4.85	4.55
Alkalinity, mg/l	166	191	188	212	183
Bicarbonate as HCO ₃ , Calculated, mg/l	201	231	228	258	223
Boron, mg/l	0.13	0.13	0.12	0.11	0.1
Calcium, mg/l	4.9	13	23	36	40
Carbon Dioxide, mg/l	2.01	1.8	2.3	4.1	3.54
Carbonate as CO ₃ , Calculated, mg/l	2.61	3.8	3	2.1	1.82
Chloride, mg/l	19	21	21	21	20
Fluoride, mg/l	0.34	0.23	0.32	0.26	0.31
Hardness (Total, as CaCO ₃), mg/l	16.8	50.5	89.1	139	136
Hydroxide as OH, Calculated, mg/l	0.03	0.04	0.03	0.02	0.02
Iron, mg/l	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Lab Turbidity, NTU	2.5	2.8	0.75	2.5	6
Langelier Index - 25 degree, None	-0.09	0.4	0.6	0.6	0.6
Magnesium, mg/l	1.1	4.4	7.7	12	8.7
Nitrate as Nitrogen by IC, mg/l	< 0.2	< 0.1	< 0.1	< 0.1	< 0.2
Nitrite, Nitrogen by IC, mg/l	< 0.2	< 0.1	< 0.1	< 0.1	< 0.2
pH of CaCO ₃ Saturation (@25C), Units	8.452	8	7.7	7.5	7.495
pH of CaCO ₃ Saturation (@60C), Units	8	7.5	7.3	7	7.1
Potassium, mg/l	2.8	4.8	4.8	4.8	3.7
Sodium, mg/l	78	86	63	54	48
Sulfate, mg/l	< 4	8	6.3	< 2	15
Surfactants, mg/l	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Total Nitrate, Nitrite-N, CALC, mg/l	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Total Organic Carbon, mg/l	2.9	1.1	1.1	1.2	0.5
General Physical:					
Apparent Color, ACU	30	15	10	3	3
Lab pH, Units	8.3	8.4	8.3	8.1	8.1
Odor, TON	3	2	8	2	3
Radon, pCi/l	< 50	54	54	100	73
Radon 222, Two Sigma Error, pCi/l	NA	11	9.7	13	13
Specific Conductance, umhos/cm	367	427	412	445	432
Metals:					
Aluminum, ug/l	32	< 25	< 25	< 25	< 25
Antimony, ug/l	< 1	< 1	< 1	< 1	< 1
Arsenic, ug/l	2.1	< 1	1.3	< 1	1.1
Barium, ug/l	2.5	5.6	11	17	18
Beryllium, ug/l	< 1	< 1	< 1	< 1	< 1
Cadmium, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Copper, ug/l	< 2	< 2	< 2	< 2	< 2
Hexavalent Chromium (Cr VI), ug/l	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Lead, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Manganese, ug/l	7.8	16	22	17	34

TABLE 13
WATER QUALITY DATA, CARSON-2 WELL CLUSTER

State Well Number	<u>WELL IDENTIFIER, DATE OF SAMPLE COLLECTION</u>				
	4S/13W-18K1	4S/13W-18K2	4S/13W-18K3	4S/13W-18K4	4S/13W-18K5
Owner Well Number	Carson-2	Carson-2	Carson-2	Carson-2	Carson-2
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
Sample Date	8/7/2002	8/8/2002	8/9/2002	8/8/2002	8/7/2002
CONSTITUENT					
Metals (continued):					
Mercury, ug/l	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Nickel, ug/l	< 5	< 5	< 5	< 5	< 5
Selenium, ug/l	< 5	< 5	< 5	< 5	< 5
Silver, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Thallium, ug/l	< 1	< 1	< 1	< 1	< 1
Total Chromium, ug/l	< 1	< 1	< 1	< 1	< 1
Zinc, ug/l	< 5	< 5	< 5	< 5	< 5
Volatile Organic Compounds:					
1,1,1,2-Tetrachloroethane, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,1-Trichloroethane, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2,2-Tetrachloroethane, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1,2-Trichloroethane, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1-Dichloroethane, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1-Dichloroethylene, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,1-Dichloropropene, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2,3-Trichlorobenzene, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2,3-Trichloropropane, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2,4-Trichlorobenzene, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2,4-Trimethylbenzene, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2-Dichloroethane, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2-Dichloropropane, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,3,5-Trimethylbenzene, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,3-Dichlorobenzene, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,3-Dichloropropane, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
2,2-Dichloropropane, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
2-Butanone (MEK), ug/l	< 5	< 5	< 5	< 5	< 5
4-Methyl-2-Pentanone (MIBK), ug/l	< 5	< 5	< 5	< 5	< 5
Benzene, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Bromobenzene, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Bromochloromethane, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Bromodichloromethane, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Bromoform, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Bromomethane (Methyl Bromide), ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Carbon Tetrachloride, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chlorodibromomethane, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chloroethane, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform (Trichloromethane), ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Chloromethane (Methyl Chloride), ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
cis-1,2-Dichloroethylene, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
cis-1,3-Dichloropropene, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Dibromomethane, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Di-Isopropyl Ether, ug/l	< 5	< 5	< 5	< 5	< 5
Ethyl Benzene, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Ethyl Tertiary Butyl Ether, ug/l	< 3	< 3	< 3	< 3	< 3
Fluorotrichloromethane (Freon11), ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Freon 12, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

TABLE 13
WATER QUALITY DATA, CARSON-2 WELL CLUSTER

State Well Number	<u>WELL IDENTIFIER, DATE OF SAMPLE COLLECTION</u>				
	4S/13W-18K1	4S/13W-18K2	4S/13W-18K3	4S/13W-18K4	4S/13W-18K5
Owner Well Number	Carson-2	Carson-2	Carson-2	Carson-2	Carson-2
	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
Sample Date	8/7/2002	8/8/2002	8/9/2002	8/8/2002	8/7/2002
<u>CONSTITUENT</u>					
Volatile Organic Compounds (continued):					
Hexachlorobutadiene, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Isopropylbenzene, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
m,p-Xylenes, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Methyl Tert Butyl Ether (MTBE), ug/l	< 3	< 3	< 3	< 3	< 3
Methylene Chloride, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
n-Butylbenzene, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
n-Propylbenzene, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
o-Chlorotoluene, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
o-Dichlorobenzene (1,2-DCB), ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
o-Xylene, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
p-Chlorotoluene, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
p-Dichlorobenzene, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
p-Isopropyltoluene, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
sec-Butylbenzene, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Styrene, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
tert-Butylbenzene, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Tertiary Amyl Methyl Ether, ug/l	< 3	< 3	< 3	< 3	< 3
Tetrachloroethylene (PCE), ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Toluene, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
trans-1,2-Dichloroethylene, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
trans-1,3-Dichloropropene, ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethylene (TCE), ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Trichlorotrifluoroethane (Freon 113), ug/l	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl chloride (VC), ug/l	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Perchlorate, ug/l	< 4	< 4	< 4	< 4	< 4

NOTE: Source of data: Water Replenishment District of Southern California

FOOTNOTES

- mg/l = Milligrams per liter
- meq/l = Milliequivalents per liter
- ug/l = Micrograms per liter
- NA = Not Analyzed
- NTU = Nephelometric Turbidity Units
- ACU = Apparent color units
- TON = Threshold odor number
- pCi/l = Picocuries per liter
- umhos/cm = Umhos per centimeter

TABLE 14
WATER LEVEL MEASUREMENTS
LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS WELLS

WELL IDENTIFIER	DATE MEASURED	REFERENCE POINT ELEVATION (feet msl)	DEPTH TO WATER (feet)	WATER LEVEL ELEVATION (feet msl)
806C	4/21/99	25.6	45.1	-19.5
	11/12/99	25.6	25.6	0.0
	4/17/00	25.6	50.0	-24.4
	10/13/00	25.6	50.0	-24.4
	4/22/01	25.6	44.6	-19.0
	10/22/01	25.6	44.3	-18.7
	4/2/02	25.6	49.3	-23.6
	10/23/02	25.6	50.5	-24.9
	4/2/03	25.6	59.2	-33.6
	10/8/03	25.6	47.9	-22.3
818B	4/27/99	40.7	86.0	-45.3
846E	4/21/99	18.6	22.9	-4.3
	11/12/99	18.6	23.6	-5.0
	4/17/00	18.6	22.8	-4.2
	10/13/00	18.6	22.0	-3.4
846G	4/21/99	15.2	43.3	-28.1
	11/12/99	15.2	44.1	-28.9
	4/17/00	15.2	43.6	-28.4
	10/13/00	15.2	42.8	-27.6
	4/14/01	15.2	42.3	-27.1
	10/14/01	15.2	44.6	-29.4
	4/2/02	15.2	42.2	-27.0
	10/31/02	15.2	40.6	-25.4
	4/2/03	15.2	43.5	-28.3

FOOTNOTES

msl = Mean sea level

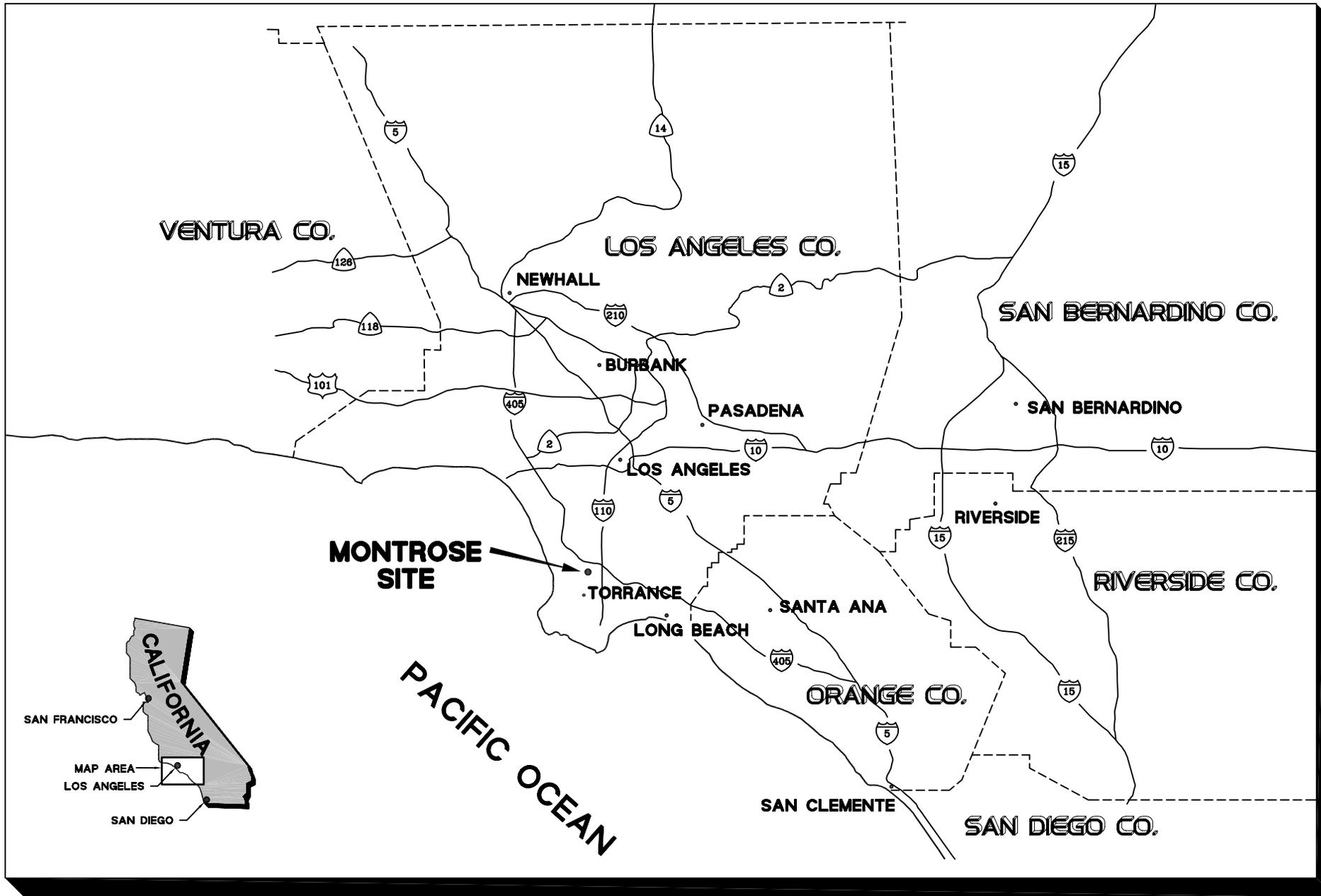
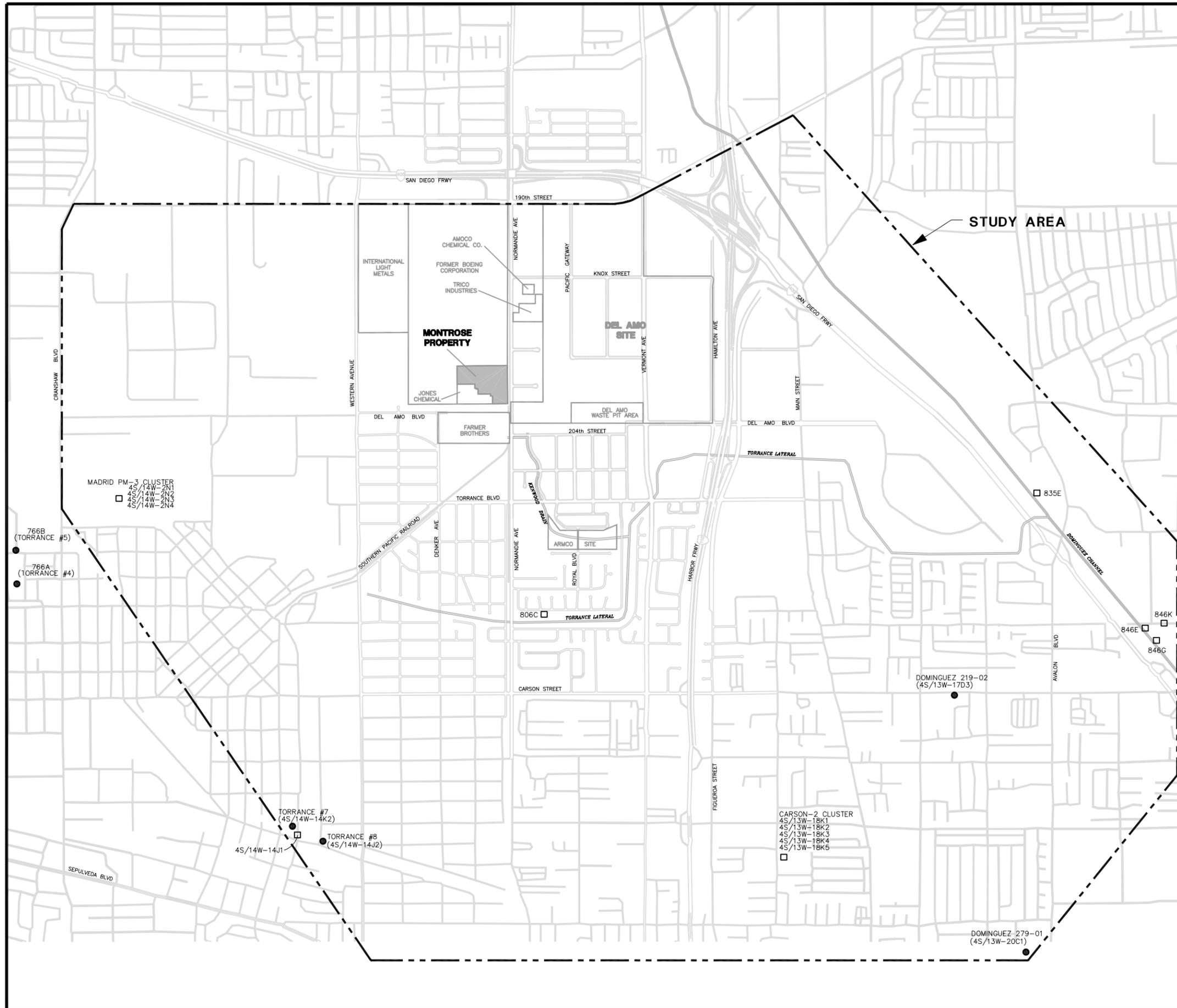


FIGURE 1. SITE LOCATION

EXPLANATION

- MUNICIPAL PUBLIC WATER SUPPLY WELL
- OBSERVATION OR TEST WELL
- 835E WELL NUMBERING SYSTEM USED BY LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS (LACDPW), FORMERLY LOS ANGELES COUNTY FLOOD CONTROL DISTRICT (LACFCD)
- 4S/14W-14K2 WELL NUMBERING SYSTEM USED BY THE STATE OF CALIFORNIA, DEPARTMENT OF WATER RESOURCES

NOTE: DOES NOT INCLUDE MONITOR OR DESTROYED WELLS.

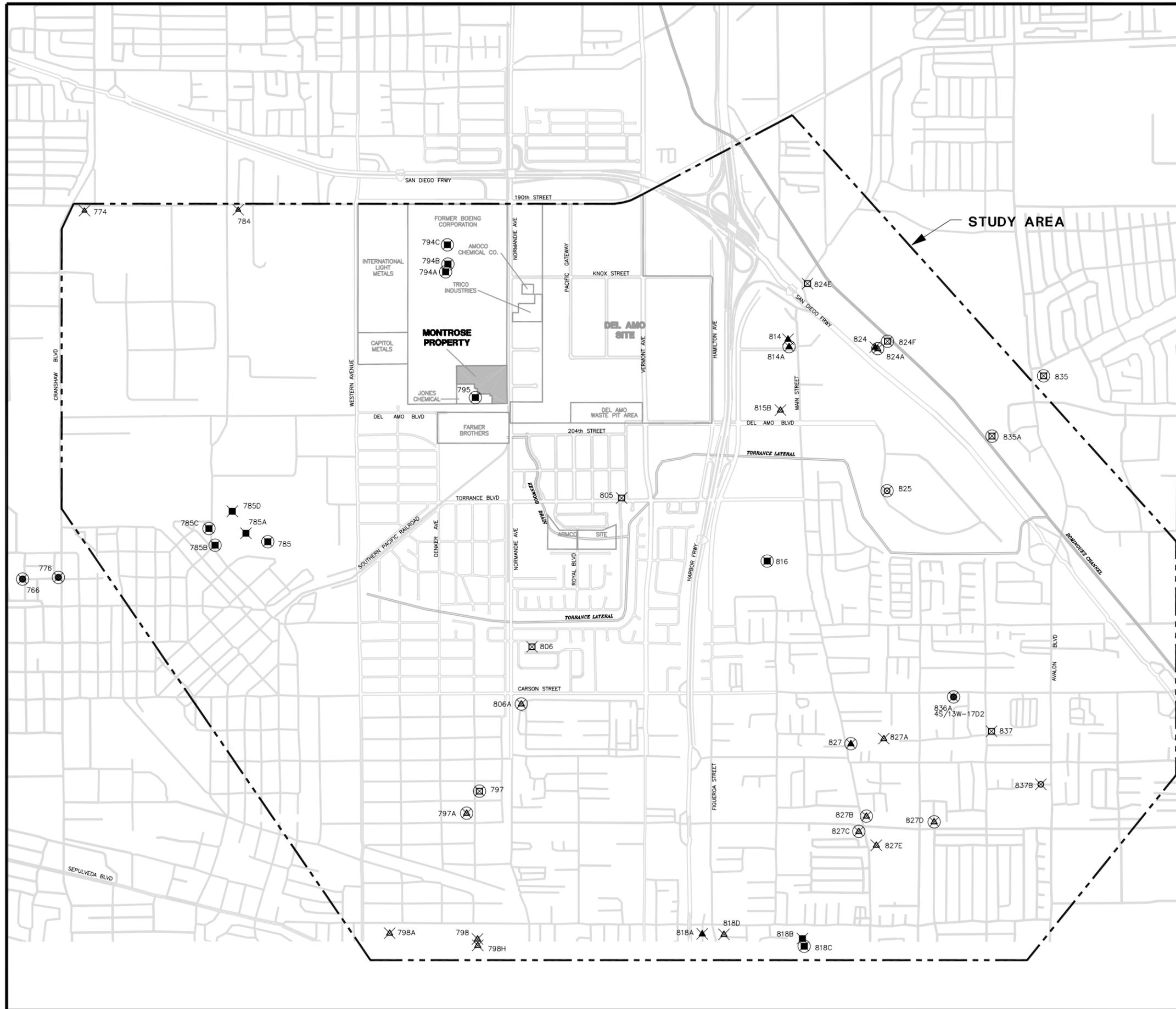
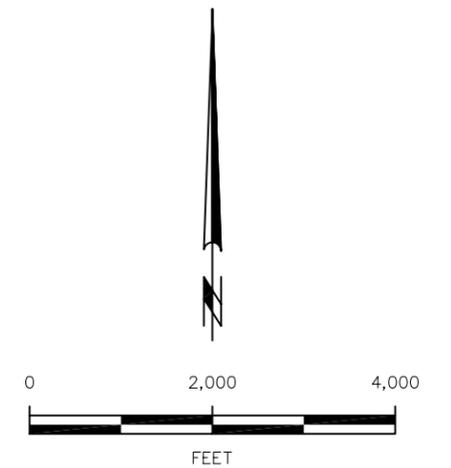


MONTROSE CHEMICAL CORPORATION OF CALIFORNIA TORRANCE, CALIFORNIA		
WELL LOCATIONS		
 HARGIS+ASSOCIATES, INC. Hydrogeology/Engineering	03/04	
FIGURE 2		
PREP BY GTC REV BY MAP RPT NO. 857.17	410-4554	A

EXPLANATION

- MUNICIPAL PUBLIC WATER SUPPLY WELL
- INDUSTRIAL SUPPLY WELL
- ▲ DOMESTIC WELL
- IRRIGATION WELL
- OBSERVATION OR TEST WELL
- △ WELL OF UNKNOWN USE
- 785A WELL NUMBERING SYSTEM USED BY LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS (LACDPW), FORMERLY LOS ANGELES COUNTY FLOOD CONTROL DISTRICT (LACFCD)
- 4S/14W-14K2 WELL NUMBERING SYSTEM USED BY THE STATE OF CALIFORNIA, DEPARTMENT OF WATER RESOURCES
- ⊗ DESTROYED WELLS
- ⊗ PRESUMED ABANDONED OR DESTROYED WELLS

NOTE: DOES NOT INCLUDE MONITOR OR DESTROYED WELLS LESS THAN 50 FEET DEEP.



MONTROSE CHEMICAL CORPORATION
OF CALIFORNIA
TORRANCE, CALIFORNIA

DESTROYED WELLS



HARGIS+ASSOCIATES, INC.
Hydrogeology/Engineering

03/04

FIGURE 3

PREP BY RAN REV BY MAP RPT NO. 857.17 410-4551 | A

EXPLANATION

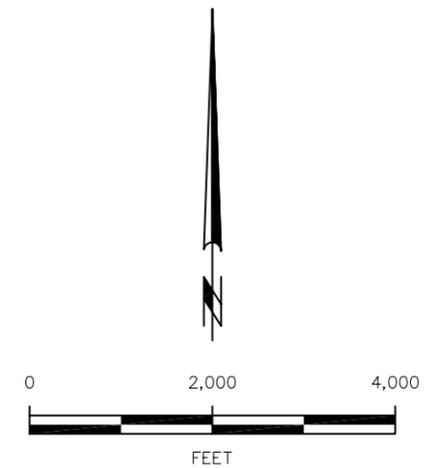
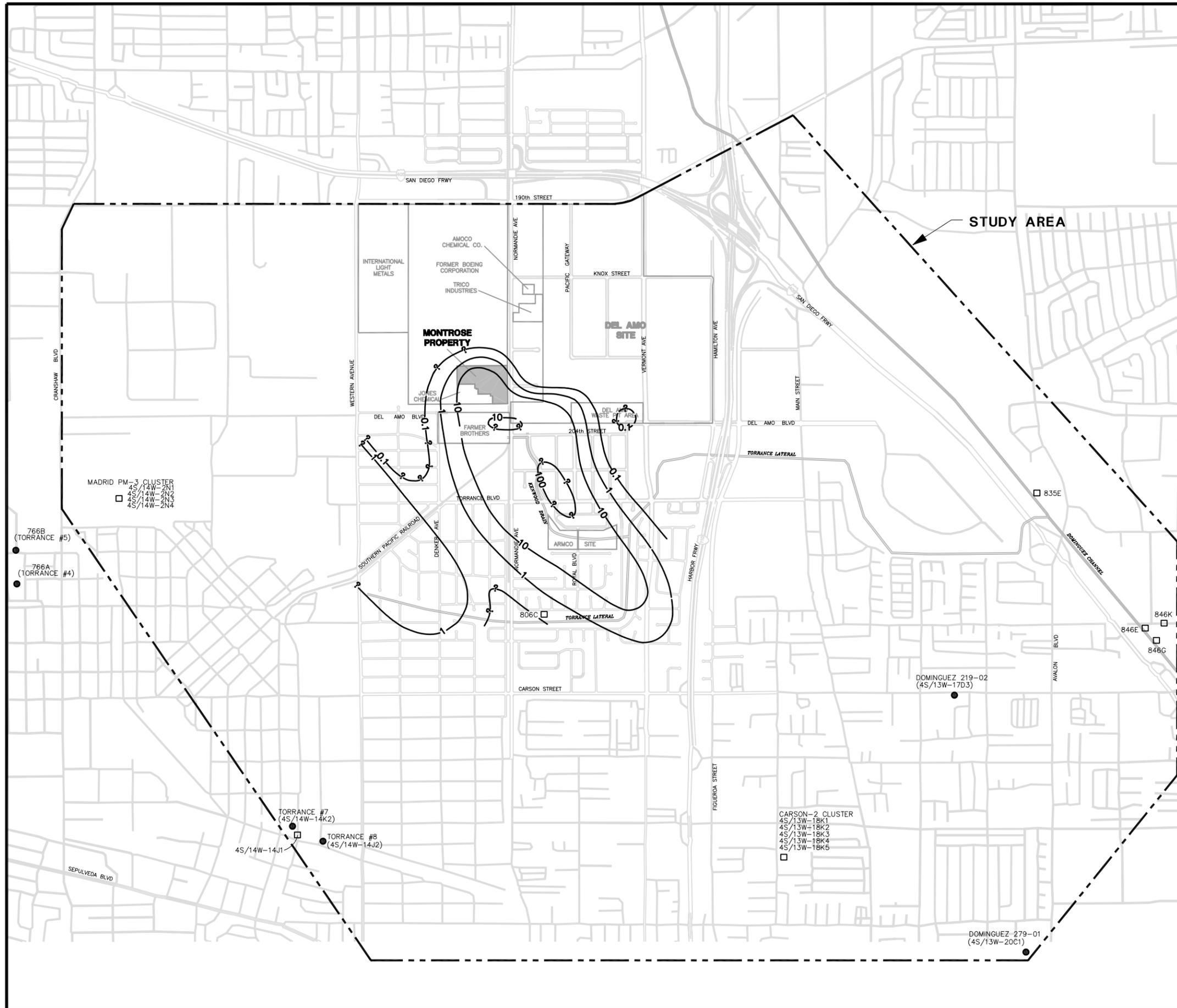
- MUNICIPAL PUBLIC WATER SUPPLY WELL
- OBSERVATION OR TEST WELL

835E WELL NUMBERING SYSTEM USED BY LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS (LACDPW), FORMERLY LOS ANGELES COUNTY FLOOD CONTROL DISTRICT (LACFCD)

4S/14W-14K2 WELL NUMBERING SYSTEM USED BY THE STATE OF CALIFORNIA, DEPARTMENT OF WATER RESOURCES

? ——— 10 ——— ?
 CONTOUR LINE OF EQUAL CONCENTRATION OF pCBSA IN MICROGRAMS PER LITER
 DASHED WHERE APPROXIMATE, QUERIED WHERE INFERRED

NOTE: DOES NOT INCLUDE MONITOR OR DESTROYED WELLS.
 WATER QUALITY CONTOURS FROM THIS MAP ARE FROM 1995.

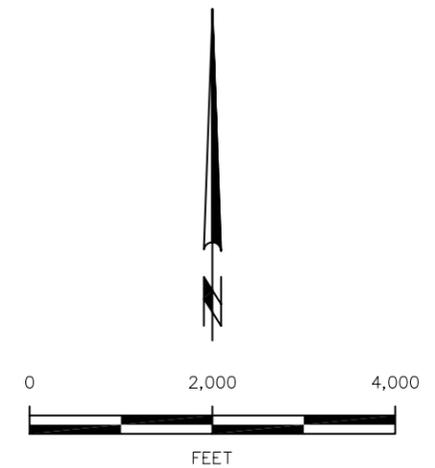
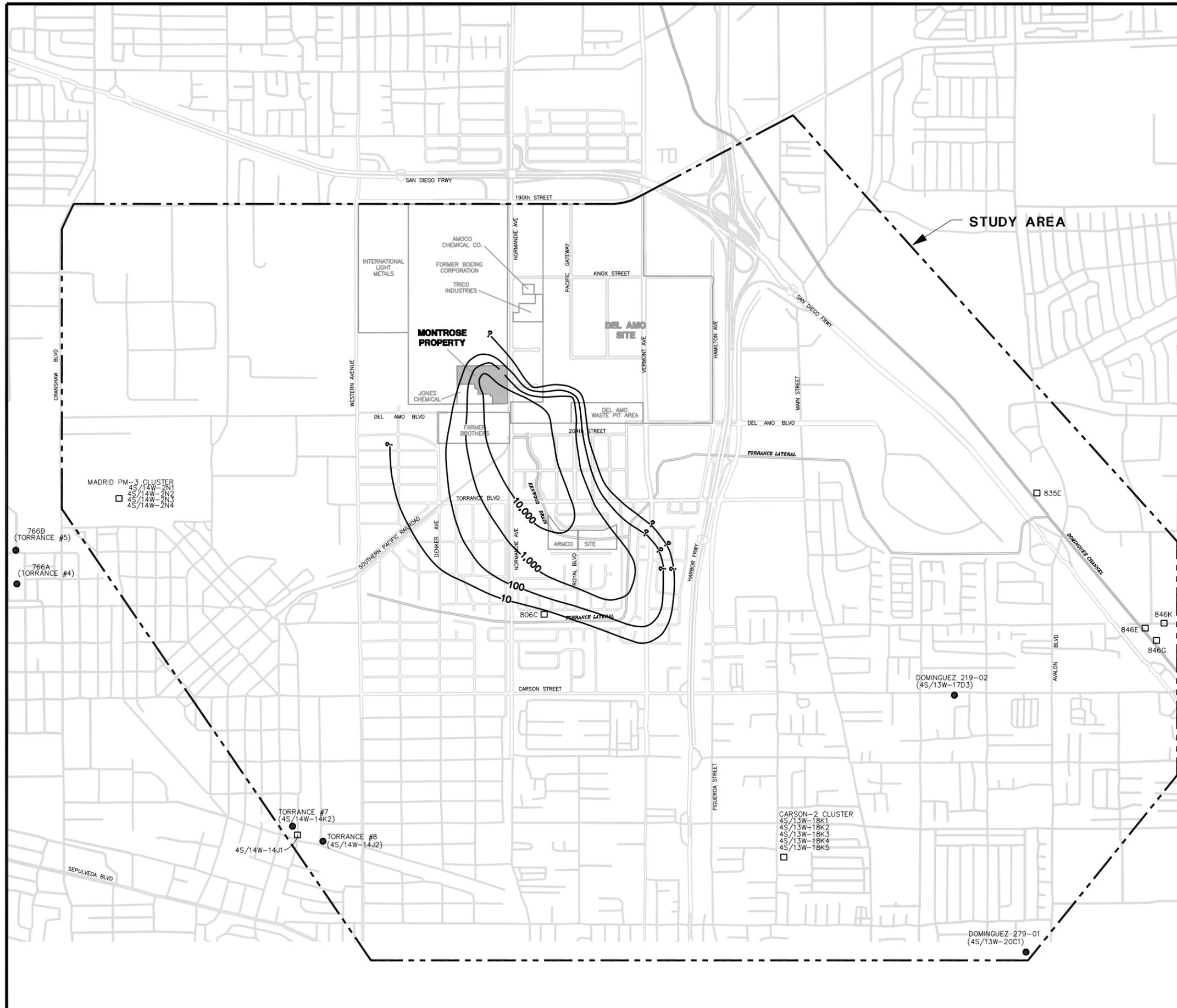


MONTROSE CHEMICAL CORPORATION OF CALIFORNIA TORRANCE, CALIFORNIA	
pCBSA IN GROUNDWATER BELLFLOWER SAND	
 HARGIS+ASSOCIATES, INC. Hydrogeology/Engineering	03/04
FIGURE 4	
PREP BY GTC REV BY MAP RPT NO. 857.17	210-2211 A

EXPLANATION

- MUNICIPAL PUBLIC WATER SUPPLY WELL
- OBSERVATION OR TEST WELL
- 835E WELL NUMBERING SYSTEM USED BY LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS (LACDPW), FORMERLY LOS ANGELES COUNTY FLOOD CONTROL DISTRICT (LACFCD)
- 4S/14W-14K2 WELL NUMBERING SYSTEM USED BY THE STATE OF CALIFORNIA, DEPARTMENT OF WATER RESOURCES
- ? ——— 10 ——— ?
CONTOUR LINE OF EQUAL CONCENTRATION OF CHLOROBENZENE IN MICROGRAMS PER LITER
DASHED WHERE APPROXIMATE, QUERIED WHERE INFERRED

NOTE: DOES NOT INCLUDE MONITOR OR DESTROYED WELLS.
WATER QUALITY CONTOURS ON THIS MAP ARE FROM OCTOBER 2002.

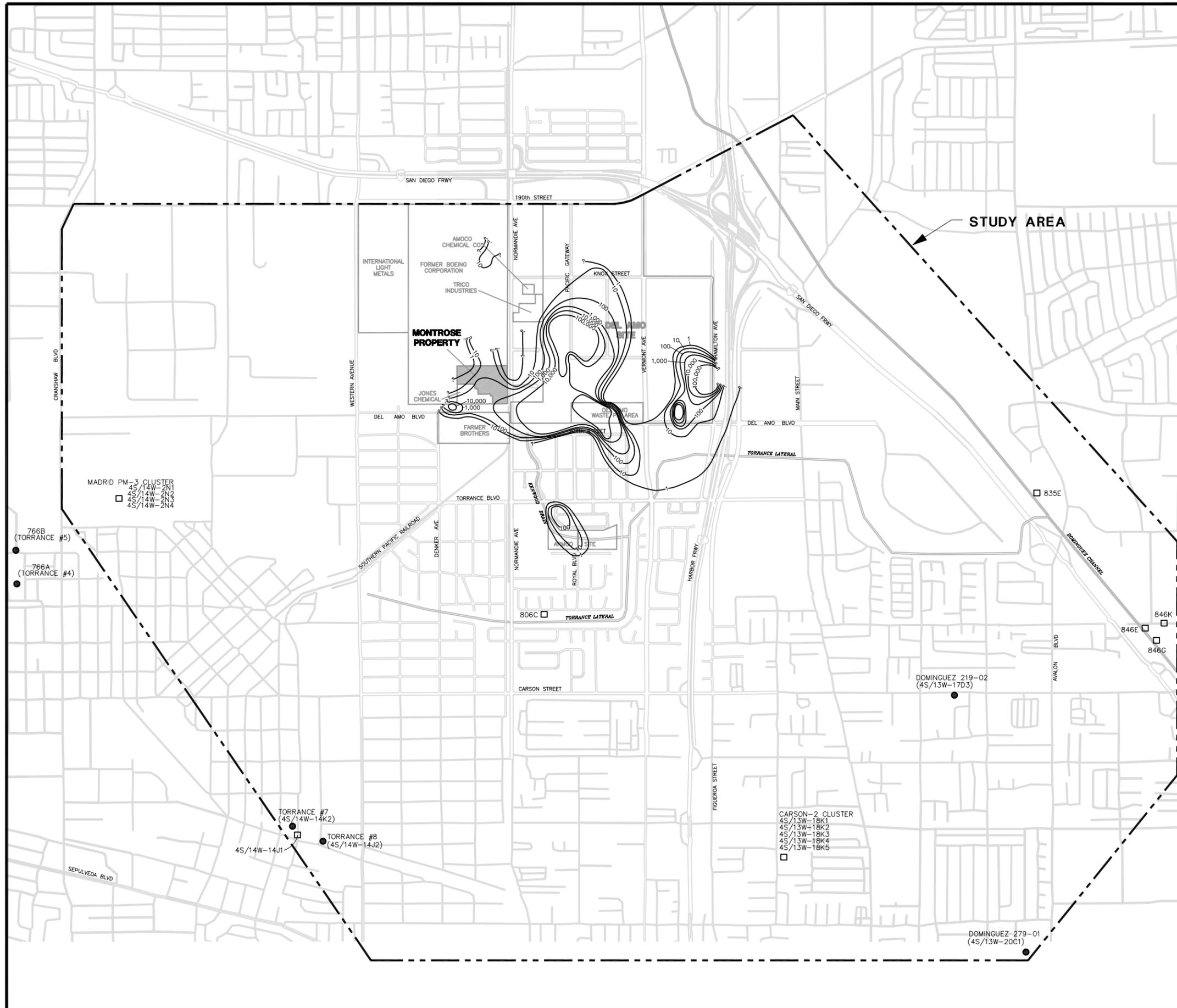


<p>MONTROSE CHEMICAL CORPORATION OF CALIFORNIA TORRANCE, CALIFORNIA</p>	
<p>CHLOROBENZENE IN GROUNDWATER BELLFLOWER SAND</p>	
 <p>HARGIS+ASSOCIATES, INC. Hydrogeology/Engineering</p>	<p>03/04</p>
<p>FIGURE 5</p>	
<p>PREP BY GTC REV BY MAP RPT NO. 857.17 210-2212 A</p>	

EXPLANATION

- MUNICIPAL PUBLIC WATER SUPPLY WELL
- OBSERVATION OR TEST WELL
- 835E WELL NUMBERING SYSTEM USED BY LOS ANGELES COUNTY DEPARTMENT OF PUBLIC WORKS (LACDPW), FORMERLY LOS ANGELES COUNTY FLOOD CONTROL DISTRICT (LACFCD)
- 4S/14W-14K2 WELL NUMBERING SYSTEM USED BY THE STATE OF CALIFORNIA, DEPARTMENT OF WATER RESOURCES
- ? ——— 10 ——— ?
CONTOUR LINE OF EQUAL CONCENTRATION OF BENZENE IN MICROGRAMS PER LITER
DASHED WHERE APPROXIMATE, QUERIED WHERE INFERRED

NOTE: DOES NOT INCLUDE MONITOR OR DESTROYED WELLS.
WATER QUALITY CONTOURS ON THIS MAP ARE FROM 1995.



MONTROSE CHEMICAL CORPORATION OF CALIFORNIA TORRANCE, CALIFORNIA	
BENZENE IN GROUNDWATER UPPER BELLFLOWER AQUITARD	
 HARGIS+ASSOCIATES, INC. Hydrogeology/Engineering	03/04
FIGURE 6	
PREP BY GTC REV BY MAP RPT NO. 857.17	210-2213 A