



# California Regional Water Quality Control Board

## Los Angeles Region



Winston H. Hickox  
Secretary for  
Environmental  
Protection

320 W. 4th Street, Suite 200, Los Angeles, California 90013  
Phone (213) 576-6600 FAX (213) 576-6640  
Internet Address: <http://www.swrcb.ca.gov/~rwqcb4>

Gray Davis  
Governor

December 22, 2000

Mr. Pat Malloy  
Public Works Services Director  
City of Arcadia  
11800 Goldring Road  
P.O. Box 60021  
Arcadia, California 91066-6021

Dear Mr. Malloy:

**COVERAGE UNDER GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT AND WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES OF GROUNDWATER TO SURFACE WATERS – THE CITY OF ARCADIA, ANOAKIA WATER SUPPLY WELL, ARCADIA, CALIFORNIA (NPDES NO. CAG994001, CI-8218)**

We have completed our review of your application for a permit to discharge waste under the National Pollutant Discharge Elimination System (NPDES). The City of Arcadia will discharge up to 1 million gallon per day (1MGD) of groundwater during the well construction and testing process: during isolated zone aquifer testing, filling of the annular space with filter pack and concrete, and development of the well by air-lifting and pumping. However, the flow rate during aquifer testing may reach a maximum discharge rate of 3.0 MGD for a maximum of 48 hours, to enable determination of the productive capacity of the domestic water supply well.

Based on the information provided, the proposed discharge of groundwater meets the conditions specified in Order No. 97-045, "General National Pollutant Discharge Elimination System Permit and Waste Discharge Requirements for Groundwater Discharges from Construction and Project Dewatering to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties", adopted by this Board on May 12, 1997.

Enclosed are your Waste Discharge Requirements, which also serve as your General NPDES permit, consisting of Order No. 97-045 and Monitoring and Reporting Program No. 8218.

The discharge limitations in Part E of Order No. 97-045 are applicable to your discharge. In addition, the discharge limitations in Attachment A.7.g. and Attachment B are applicable to your discharge. Prior to discharge, the City of Arcadia shall take a representative sample of the effluent to determine compliance with the discharge limitations.

The Monitoring and Reporting Program requires you to implement the monitoring program on the effective date of coverage under Order No. 97-045. Monitoring reports shall be submitted monthly and are to be received by the Regional Board by the fifteenth day of the second month following each monthly sampling period. All monitoring reports should be sent to the Regional Board, ATTN: Information Technology Unit.

*California Environmental Protection Agency*



*Our mission is to preserve and enhance the quality of California's water resources for the benefit of present and future generations.*

Mr. Pat Malloy  
The City of Arcadia  
(Anoakia Water Supply Well)

- 2 -

December 22, 2000  
CI-8218

When submitting monitoring and technical reports to the Regional Board per these requirements, please include a reference to "Compliance File No. CI-8218 and NPDES No. CAG994001", which will assure that the reports are directed to the appropriate file and staff. Also, please do not combine your discharge monitoring reports with other reports. Submit each type of report as a separate document.

In order to avoid future annual fees, please submit written notification when the project has been completed and the permit is no longer needed.

We are sending Board Order No. 97-045 only to the applicant. For those on the mailing list, please refer to the Board Order previously sent to you. A copy of the Order will be furnished to anyone who requests it.

If you have any questions, please contact Thizar Tintut-Williams at (213) 576-6752.

Sincerely,



Dennis A. Dickerson  
Executive Officer

Enclosures: Board Order No. 97-045  
Monitoring and Reporting Program No. 8218  
Fact Sheet

cc: Environmental Protection Agency, Region 9, Clean Water Act Standards and Permits  
Office (WTR-5)  
U.S. Army Corps of Engineers  
NOAA, National Marine Fisheries Service  
Department of Interior, U.S. Fish and Wildlife Service  
John Youngerman, Division of Water Quality, State Water Resources Control Board  
Jorge Leon, Office of the Chief Counsel, State Water Resources Control Board  
California Department of Health Services, Drinking Water and Field Operations Branch  
Los Angeles County, Department of Public Works, Environmental Programs Division  
Los Angeles County, Department of Health Services  
Los Angeles County, Department of Public Works, Flood Control Division  
Los Angeles County Air Pollution Control District  
City of Arcadia  
LeAnne E. Hamilton, City of Arcadia

/ttw

***California Environmental Protection Agency***



*Our mission is to preserve and enhance the quality of California's water resources for the benefit of present and future generations.*

**State of California  
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LOS ANGELES REGION  
320 West 4th Street, Suite 200, Los Angeles**

**FACT SHEET  
WASTE DISCHARGE REQUIREMENTS  
FOR  
THE CITY OF ARCADIA  
(Anoakia Water Supply Well)**

**NPDES NO. CAG994001  
CI NO. 8218**

**PROJECT LOCATION**

West End of Anoakia Lane (a cul-de-sac)  
Arcadia, CA 91066

**FACILITY MAILING ADDRESS**

P.O. Box 60021  
Arcadia, CA 91066

**PROJECT DESCRIPTION**

The City of Arcadia proposes to construct a municipal water supply well on a triangular piece of property located adjacent to Anoakia Lane in Arcadia, California. The well will be constructed with 18-inch diameter casing and may extend to a depth of 1,000 feet. Groundwater will be discharged during the construction and testing process.

**VOLUME AND DESCRIPTION OF DISCHARGE**

The City of Arcadia will discharge up to 1 million gallon per day (1MGD) of groundwater during the well construction and testing process: during isolated zone aquifer testing, filling of the annular space with filter pack and concrete, and development of the well by air-lifting and pumping. However, the flow rate during aquifer testing may reach a maximum discharge rate of 3.0 MGD for a maximum of 48 hours, to enable determination of the productive capacity of the domestic water supply well. The groundwater will be stored temporarily in storage tanks that are connected in series, to remove fine sediments during the construction and testing process but not during the aquifer testing period. The aquifer/pumping test will include a step drawdown test and a constant rate test. During these testing activities, the groundwater will be discharged to the Arcadia Wash, an open box flood control channel located at Outfall point, OF-001 (Latitude 33° 52' 13", Longitude 118° 9' 42") (Figures 1 and 2 attached) and will flow to the Rio Hondo then to the Los Angeles River, a water of the United States.

**FREQUENCY OF DISCHARGE**

The City of Arcadia will discharge the groundwater between January and March 2001, for periods of up to four days continuously, at rates generally below 1 MGD. There may be intervals of no discharge lasting up to 7 days during this period.

#### **REUSE OF WATER**

Based on the surrounding land use and the nature of the project, reuse of the groundwater for construction or other uses is not feasible; therefore, the wastewater will be discharged to the flood control channel.

**State of California  
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LOS ANGELES REGION**

**MONITORING AND REPORTING PROGRAM NO. 8218  
for  
THE CITY OF ARCADIA  
(Anoakia Water Supply Well)  
(NPDES NO. CAG994001)**

**I. REPORTING REQUIREMENTS**

The Discharger shall implement this monitoring program on the effective date of coverage under this permit. Monitoring reports shall be submitted monthly and must be received by the Regional Board by the fifteenth day of the second month following each monthly sampling period. The first report (for January, 2001) under this monitoring program is due by March 15, 2001.

Before commencing any discharge, a representative sample shall be analyzed, and the test results must meet all discharge limitations stated in this permit.

If there is no discharge during a sampling period, the report shall so state. Monitoring reports must be addressed to the Regional Board, Attention: Information Technology Unit.

All monitoring reports shall include discharge limitations in the Order, tabulated analytical data, the chain of custody form, the analytical laboratory report (including, but not limited to, date and time of sampling, date of analyses, method of analysis, and detection limits), and discharge certification statement.

**II. EFFLUENT MONITORING REQUIREMENTS**

Sampling stations shall be established for each point of discharge and shall be located where representative samples of that effluent can be obtained. Provisions shall be made to enable visual inspection before discharge. If oil sheen, debris, and/or other objectionable materials or odors are present, discharge shall not be commenced before compliance with the requirements is demonstrated. All visual observations shall be included in the monitoring report.

The Discharger shall notify this Regional Board in writing of the location(s) of the sampling stations once established.

The following shall constitute the discharge monitoring program:

<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Minimum Frequency of Analysis</u>
Total waste flow	gal/day	recorder	continuously
Temperature	°F	grab	once per discharge event
pH	pH units	grab	once per discharge event
Total suspended solids	mg/L	grab	once per discharge event
Turbidity	mg/L	grab	once per discharge event
BOD <sub>5</sub> @ 20°C	mg/L	grab	monthly
Oil and Grease	mg/L	grab	once per discharge event
Settleable Solids	ml/L	grab	once per discharge event
Sulfides	mg/L	grab	once per discharge event
Detergents as MBAS	mg/L	grab	monthly
Total dissolved solids	mg/L	grab	once per discharge event
Sulfate	mg/L	grab	once per discharge event
Chloride	mg/L	grab	once per discharge event
Nitrogen <sup>(1)</sup>	mg/L	grab	once per discharge event
Acute toxicity <sup>(2)</sup>	% survival	grab	<sup>(3)</sup>
Pollutants of concern (See Attachment B)		grab	<sup>(3)</sup>

(1) = Nitrate-nitrogen + Nitrite-nitrogen

(2) = Results of toxicity tests shall be included in the first monitoring report following sampling. By the method specified in "Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms" – September 1991, (EPA/600/4-90/027). Submission of bioassay results should include the information noted on pages 70-73 of the "Methods". The Fathead Minnow (*Pimephales promelas*) shall be used as the test species. If the results of the toxicity yield a survival of less than 90%, then the frequency of analysis shall be increased to monthly until at least three consecutive test results have been obtained and full compliance with Effluent Limitations has been demonstrated.

(3) = Sample shall be collected and analyzed once at the beginning of discharge and annually thereafter if appropriate.

### III. GENERAL PROVISIONS FOR REPORTING

- A. The Discharger shall inform this Regional Board 24 hours before the start of the discharge.
- B. Each monitoring report must affirm in writing that: "All analyses were conducted at a laboratory certified for such analyses by the California Department of Health Services, and in accordance with current U.S. EPA guideline procedures or as specified in this Monitoring Program."

- C. Samples must be analyzed within allowable holding time as specified in 40 CFR Part 136.3. All Quality Assurance/Quality Control (QA/QC) analyses should be performed on the same dates when samples are actually analyzed and documentation shall accompany the laboratory reports.
- D. The monitoring report shall specify the USEPA analytical method used, the Method Detection Limit (MDL) and the Minimum Level (ML) (Refer to Appendix I) for each pollutant. For the purpose of reporting compliance with numerical limitations, performance goals, and receiving water limitations, analytical data shall be reported with one of the following methods, as the case may be:
1. An actual numerical value for sample results greater than or equal to the ML; or
  2. "Detected, but Not Quantified (DNQ)" if results are greater than or equal to the laboratory's MDL but less than the ML;
  3. "Not-Detected (ND)" for sample results less than the laboratory's MDL with the MDL indicated for the analytical method used.

The MLs are those published by the State Water Resources Control Board in the *Policy for the Implementation of Toxic Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California, March 2, 2000*.

The ML employed for an effluent analysis shall be lower than the permit limit established for a given parameter, unless the Discharger can demonstrate that a particular ML is not attainable and obtains approval for a higher ML from the Executive Officer. At least once a year, the Discharger shall submit a list of the analytical methods employed for each test and associated laboratory QA/QC procedures.

#### IV. NOTIFICATION

The Discharger shall notify the Executive Officer in writing prior to discharge of any chemical that may be toxic to aquatic life. Such notification shall include:

1. Name and general composition of the chemical,
2. Frequency of use,
3. Quantities to be used,
4. Proposed discharge concentrations, and
5. EPA registration number, if applicable.

No discharge of such chemical shall be made prior to obtaining the Executive Officer's approval.

V. MONITORING FREQUENCIES

Monitoring frequencies may be adjusted by the Executive Officer to a less frequent basis if the Discharger requests same and the request is backed by statistical trends of monitoring data submitted.

Ordered by:

  
Executive Officer

Date: December 22, 2000



## APPENDIX I

### SWRCB Minimum Levels in ppb ( $\mu\text{g/L}$ )

The Minimum Levels (MLs) in this appendix are for use in reporting and compliance determination purposes in accordance with section 2.4 of this Policy. These MLs were derived from data for priority pollutants provided by State certified analytical laboratories in 1997 and 1998. These MLs shall be used until new values are adopted by the SWRCB and become effective. The following tables (Tables 2a - 2d) present MLs for four major chemical groupings: volatile substances, semi-volatile substances, inorganics, and pesticides & PCBs.

Table 2a - VOLATILE SUBSTANCES*	GC	GCMS
1,1 Dichloroethane	0.5	1
1,1 Dichloroethene	0.5	2
1,1,1 Trichloroethane	0.5	2
1,1,2 Trichloroethane	0.5	2
1,1,2,2 Tetrachloroethane	0.5	1
1,2 Dichlorobenzene (volatile)	0.5	2
1,2 Dichloroethane	0.5	2
1,2 Dichloropropane	0.5	1
1,3 Dichlorobenzene (volatile)	0.5	2
1,3 Dichloropropene (volatile)	0.5	2
1,4 Dichlorobenzene (volatile)	0.5	2
Acrolein	2.0	5
Acrylonitrile	2.0	2
Benzene	0.5	2
Bromoform	0.5	2
Bromomethane	1.0	2
Carbon Tetrachloride	0.5	2
Chlorobenzene	0.5	2
Chlorodibromo-methane	0.5	2
Chloroethane	0.5	2
Chloroform	0.5	2
Chloromethane	0.5	2
Dichlorobromo-methane	0.5	2
Dichloromethane	0.5	2
Ethylbenzene	0.5	2
Tetrachloroethene	0.5	2
Toluene	0.5	2
trans-1,2 Dichloroethylene	0.5	1
Trichloroethene	0.5	2
Vinyl Chloride	0.5	2

\*The normal method-specific factor for these substances is 1, therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance.

Table 2b - SEMI-VOLATILE SUBSTANCES*	GC	GCMS	LC	COLOR
1,2 Benzantracene	10	5		
1,2 Dichlorobenzene (semivolatle)	2	2		
1,2 Diphenylhydrazine		1		
1,2,4 Trichlorobenzene	1	5		
1,3 Dichlorobenzene (semivolatle)	2	1		
1,4 Dichlorobenzene (semivolatle)	2	1		
2 Chlorophenol	2	5		
2,4 Dichlorophenol	1	5		
2,4 Dimethylphenol	1	2		
2,4 Dinitrophenol	5	5		
2,4 Dinitrotoluene	10	5		
2,4,6 Trichlorophenol	10	10		
2,6 Dinitrotoluene		5		
2- Nitrophenol		10		
2-Chloroethyl vinyl ether	1	1		
2-Chloronaphthalene		10		
3,3' Dichlorobenzidine		5		
3,4 Benzofluoranthene		10	10	
4 Chloro-3-methylphenol	5	1		
4,6 Dinitro-2-methylphenol	10	5		
4- Nitrophenol	5	10		
4-Bromophenyl phenyl ether	10	5		
4-Chlorophenyl phenyl ether		5		
Acenaphthene	1	1	0.5	
Acenaphthylene		10	0.2	
Anthracene		10	2	
Benzidine		5		
Benzo(a) pyrene(3,4 Benzopyrene)		10	2	
Benzo(g,h,i)perylene		5	0.1	
Benzo(k)fluoranthene		10	2	
bis 2-(1-Chloroethoxyl) methane		5		
bis(2-chloroethyl) ether	10	1		
bis(2-Chloroisopropyl) ether	10	2		
bis(2-Ethylhexyl) phthalate	10	5		
Butyl benzyl phthalate	10	10		
Chrysene		10	5	
di-n-Butyl phthalate		10		
di-n-Octyl phthalate		10		
Dibenzo(a,h)-anthracene		10	0.1	
Diethyl phthalate	10	2		
Dimethyl phthalate	10	2		
Fluoranthene	10	1	0.05	
Fluorene		10	0.1	
Hexachloro-cyclopentadiene	5	5		

Table 2b - SEMI-VOLATILE SUBSTANCES*	GC	GCMS	LC	COLOR
Hexachlorobenzene	5	1		
Hexachlorobutadiene	5	1		
Hexachloroethane	5	1		
Indeno(1,2,3,cd)-pyrene		10	0.05	
Isophorone	10	1		
N-Nitroso diphenyl amine	10	1		
N-Nitroso-dimethyl amine	10	5		
N-Nitroso -di n-propyl amine	10	5		
Naphthalene	10	1	0.2	
Nitrobenzene	10	1		
Pentachlorophenol	1	5		
Phenanthrene		5	0.05	
Phenol **	1	1		50
Pyrene		10	0.05	

\* With the exception of phenol by colorimetric technique, the normal method-specific factor for these substances is 1000, therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance multiplied by 1000.

\*\* Phenol by colorimetric technique has a factor of 1.

Table 2c — INORGANICS*	FAA	GFAA	ICP	ICPMS	SPGFAA	HYDRIDE	CVAA	COLOR	DCP
Antimony	10	5	50	0.5	5	0.5			1000
Arsenic		2	10	2	2	1		20	1000
Beryllium	20	0.5	2	0.5	1				1000
Cadmium	10	0.5	10	0.25	0.5				1000
Chromium (total)	50	2	10	0.5	1				1000
Chromium VI	5							10	
Copper	25	5	10	0.5	2				1000
Cyanide								5	
Lead	20	5	5	0.5	2				10,000
Mercury				0.5			0.2		
Nickel	50	5	20	1	5				1000
Selenium		5	10	2	5	1			1000
Silver	10	1	10	0.25	2				1000
Thallium	10	2	10	1	5				1000
Zinc	20		20	1	10				1000

\* The normal method-specific factor for these substances is 1, therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance.

Table 2d - PESTICIDES - PCBs*	GC
4,4'-DDD	0.05
4,4'-DDE	0.05
4,4'-DDT	0.01
a-Endosulfan	0.02
a-Hexachloro-cyclohexane	0.01
Aldrin	0.005
b-Endosulfan	0.01
b-Hexachloro-cyclohexane	0.005
Chlordane	0.1
d-Hexachloro-cyclohexane	0.005
Dieldrin	0.01
Endosulfan Sulfate	0.05
Endrin	0.01
Endrin Aldehyde	0.01
Heptachlor	0.01
Heptachlor Epoxide	0.01
Lindane(g-Hexachloro-cyclohexane)	0.02
PCB 1016	0.5
PCB 1221	0.5
PCB 1232	0.5
PCB 1242	0.5
PCB 1248	0.5
PCB 1254	0.5
PCB 1260	0.5
Toxaphene	0.5

\* The normal method-specific factor for these substances is 100, therefore, the lowest standard concentration in the calibration curve is equal to the above ML value for each substance multiplied by 100.

**Techniques:**

GC - Gas Chromatography

GCMS - Gas Chromatography/Mass Spectrometry

HRGCMS - High Resolution Gas Chromatography/Mass Spectrometry (i.e., EPA 1613, 1624, or 1625)

LC - High Pressure Liquid Chromatography

FAA - Flame Atomic Absorption

GFAA - Graphite Furnace Atomic Absorption

HYDRIDE - Gaseous Hydride Atomic Absorption

CVAA - Cold Vapor Atomic Absorption

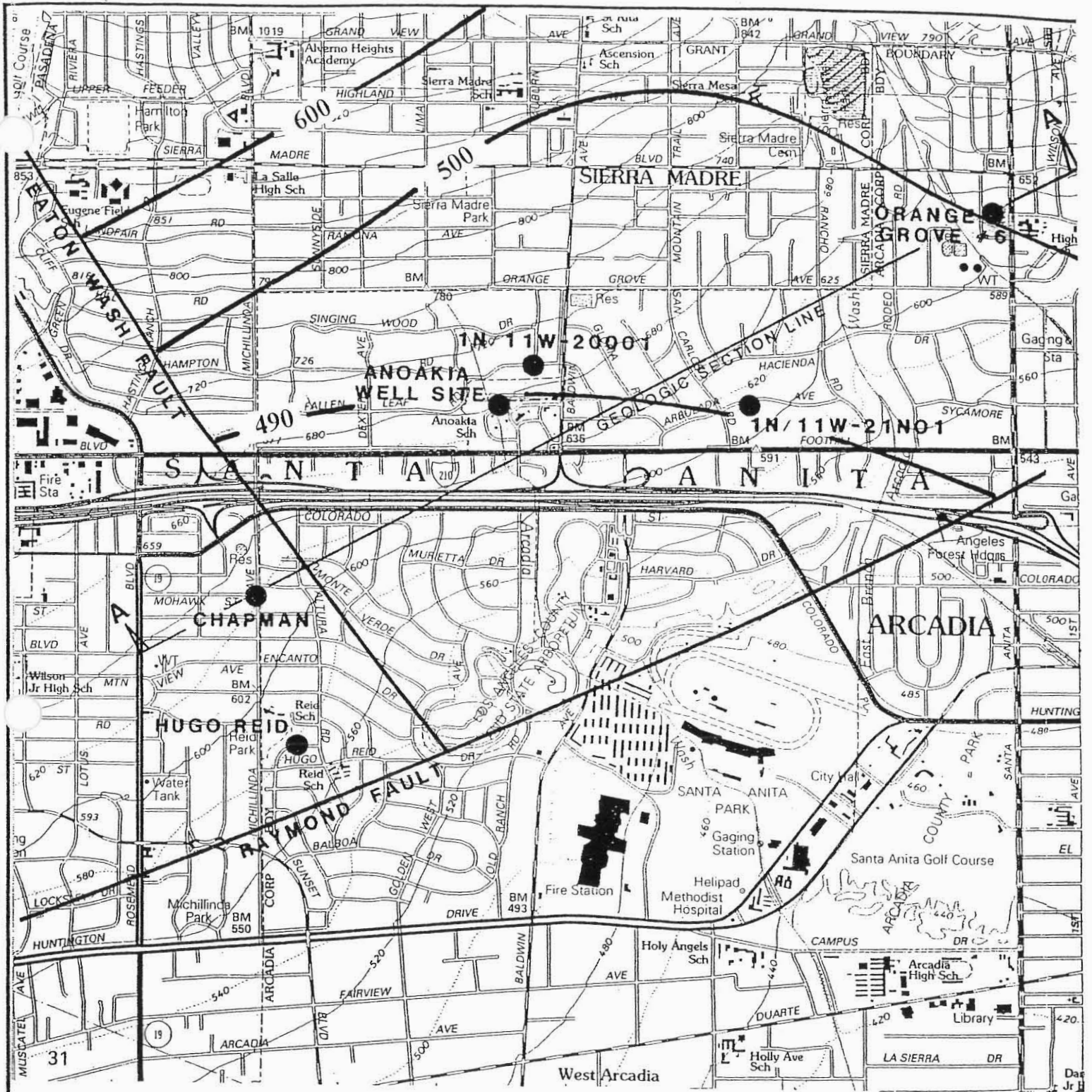
ICP - Inductively Coupled Plasma

ICPMS - Inductively Coupled Plasma/Mass Spectrometry

SPGFAA - Stabilized Platform Graphite Furnace Atomic Absorption (i.e., EPA 200.9)

DCP - Direct Current Plasma

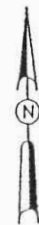
COLOR - Colorimetric



REFERENCE:  
 U.S.G.S. 7.5 MINUTE MOUNT WILSON, CA  
 QUADRANGLE, DATED 1995.

# WELL LOCATIONS

SCALE 1" = 2000'





ANOAKIA LANE

(CUL-DE-SAC)

To Baldwin Ave.  
(Approx. 1000 Ft.)

PROPERTY LINE

PROPOSED  
ANOAKIA WELL

B.M. FOR BOR. ELEV.  
TOP OF BRIDGE CROSSING  
AT WALL ASSUMED EL. = 100.0

ARCADIA WASH

P-6810  
A-23,185.2

REFERENCES:  
ROUGH GRADING PLAN (SHEET 2 OF 3), DATED 10/14/99,  
PREPARED BY THE KEITH COMPANIES AND MODIFIED  
BY PACIFIC SOILS ENGINEERING, INC., DATED 2/2/00.

SITE PLAN

SCALE 1" = 40'



LAW/CRANDALL



FIGURE 2

