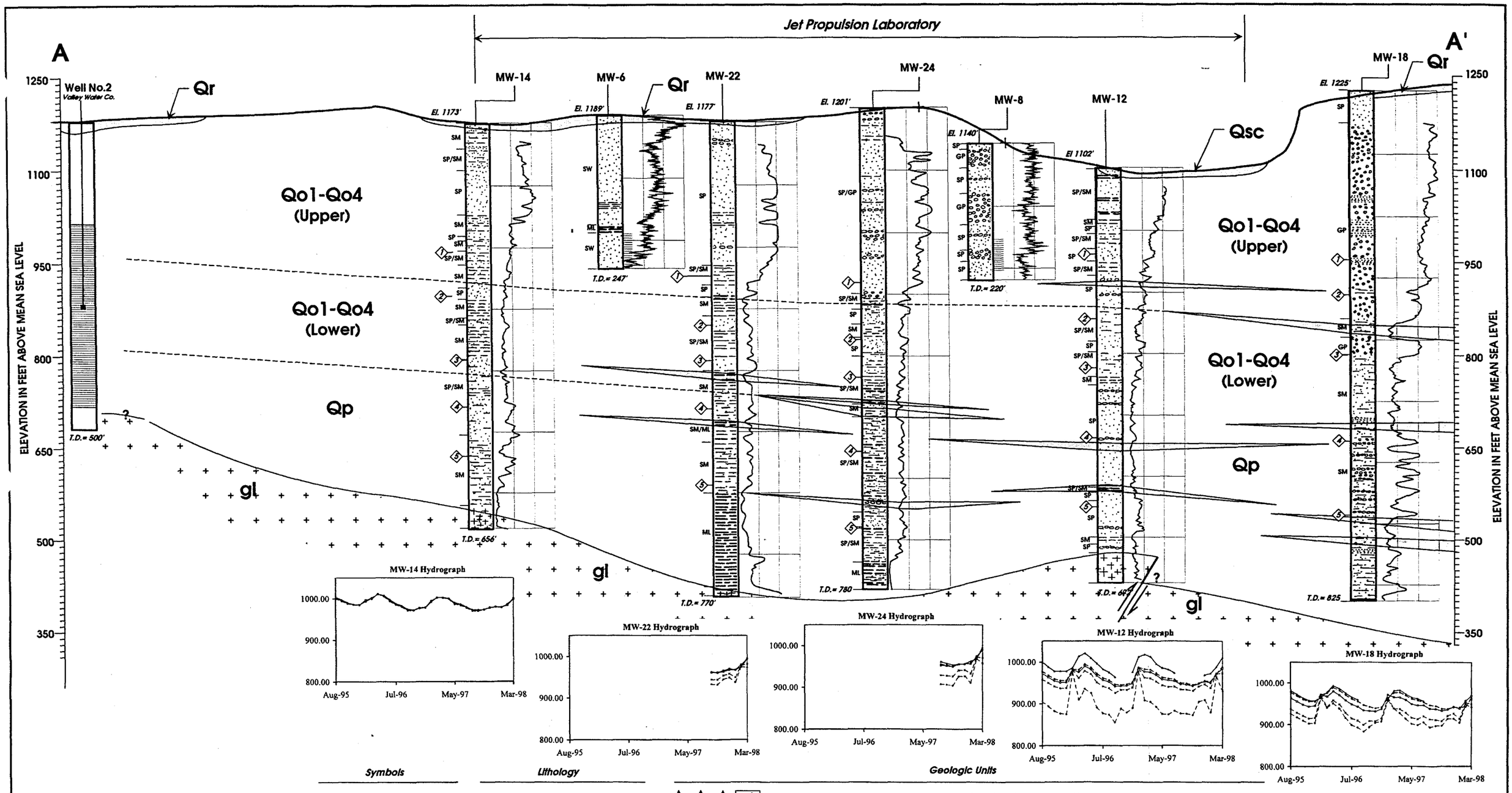
Previous



Revised: June 17, 1998

Figure 1-5

Geologic Cross Section A-A'

Jet Propulsion Laboratory

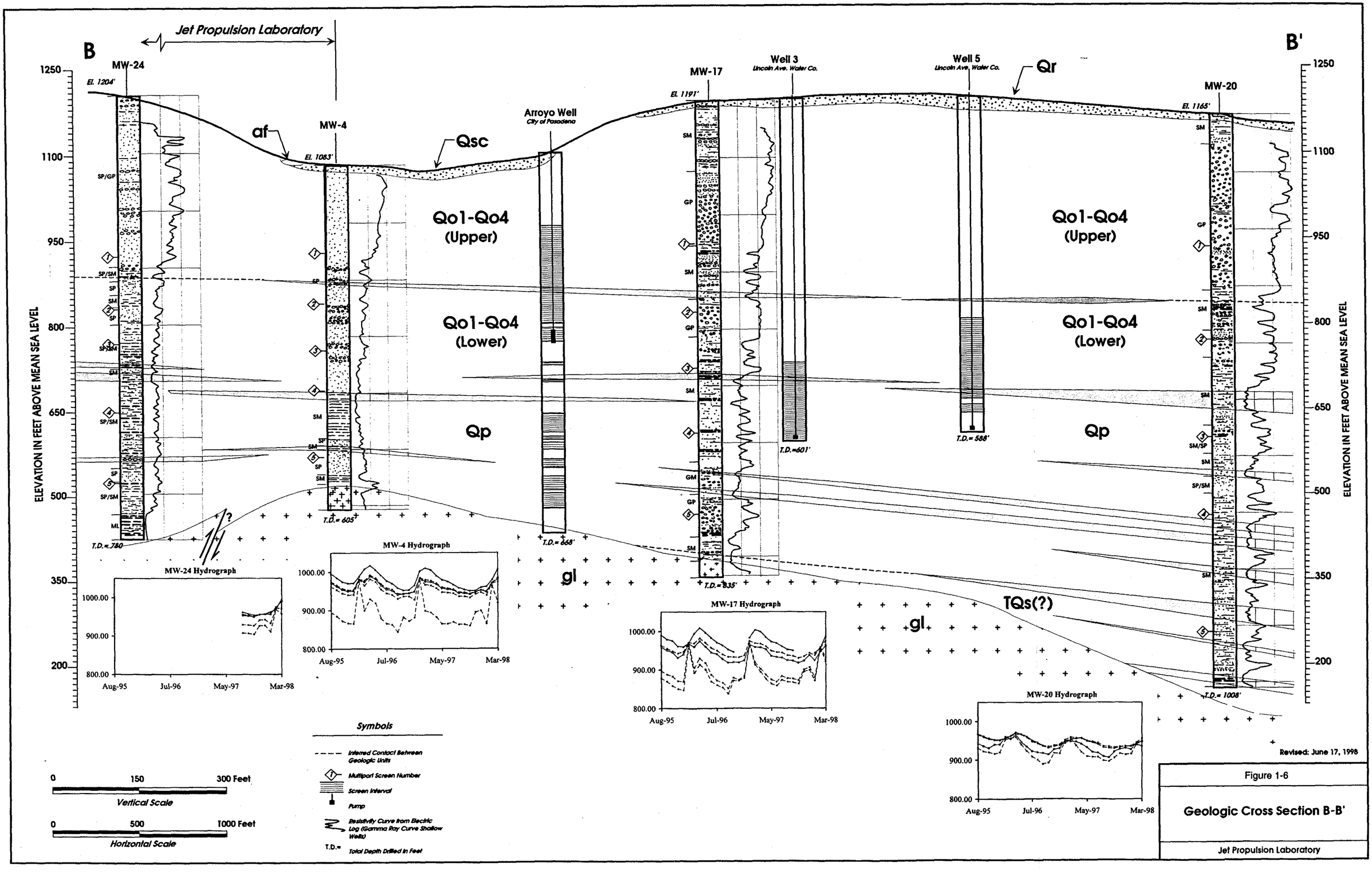


Figure 1-6

Geologic Cross Section B-B'

Jet Propulsion Laboratory

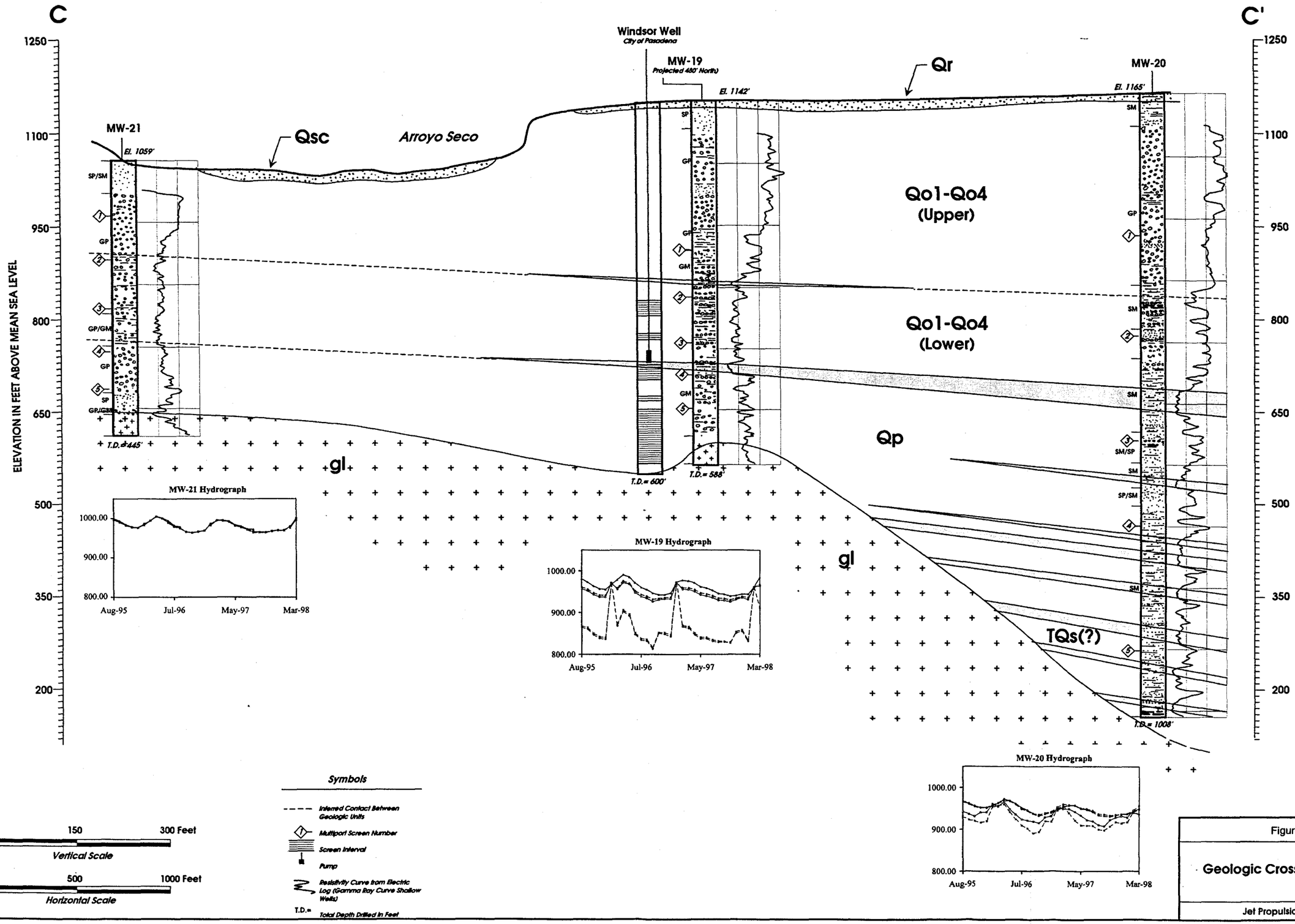
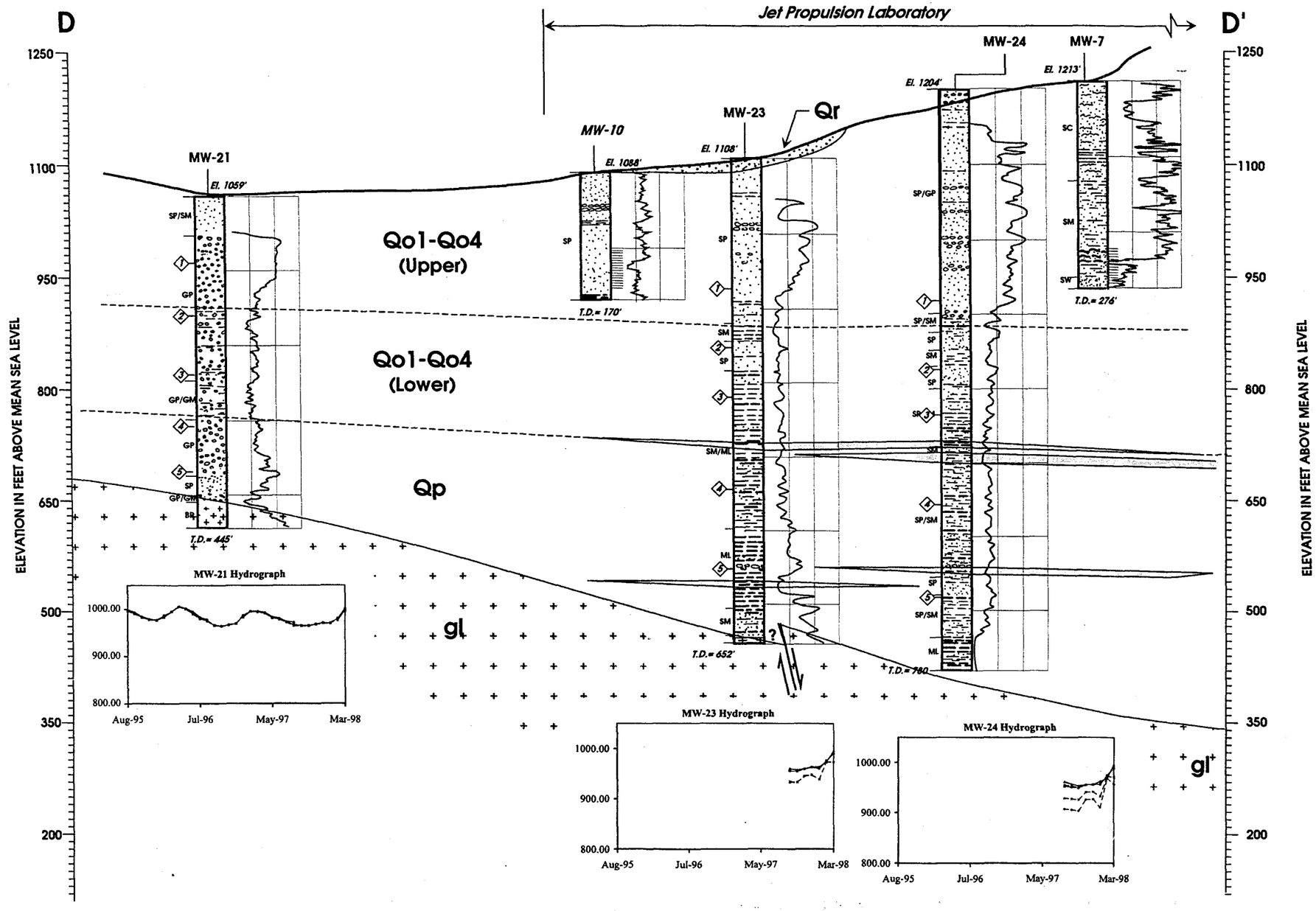


Figure 1-7

Geologic Cross Section C-C'

Jet Propulsion Laboratory



Symbols

- Inferred Contact Between Geologic Units
- Multiport Screen Number
- Screen Interval
- Pump
- Resistivity Curve from Electric Log (Gamma Ray Curve Shallow Wells)
- T.D.= Total Depth Drilled in Feet

0 150 300 Feet
Vertical Scale

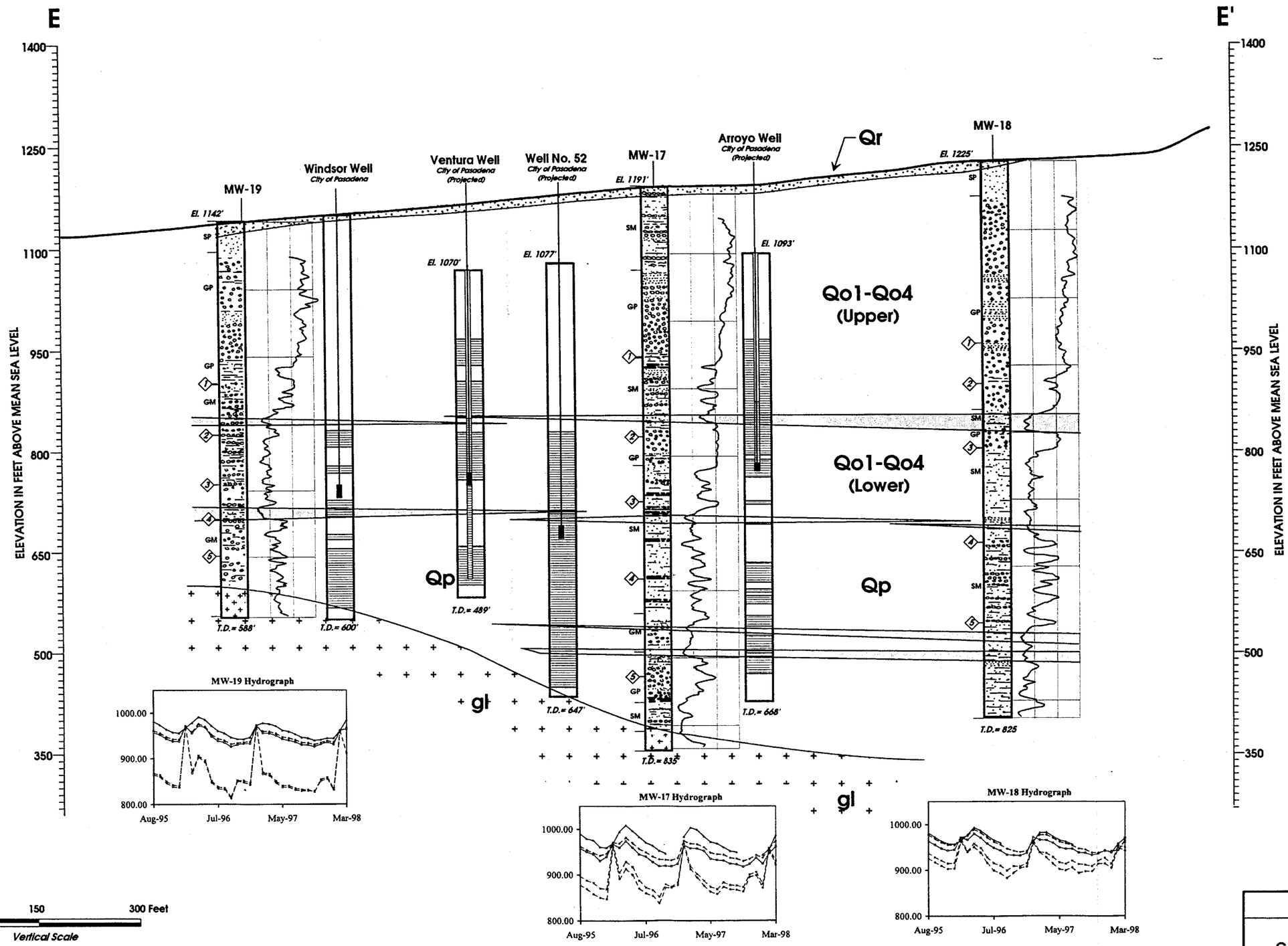
0 500 1000 Feet
Horizontal Scale

Revised: June 17, 1998

Figure 1-8

Geologic Cross Section D-D'

Jet Propulsion Laboratory



Revised: June 17, 1998

Figure 1-9

Geologic Cross Section E-E'

Jet Propulsion Laboratory

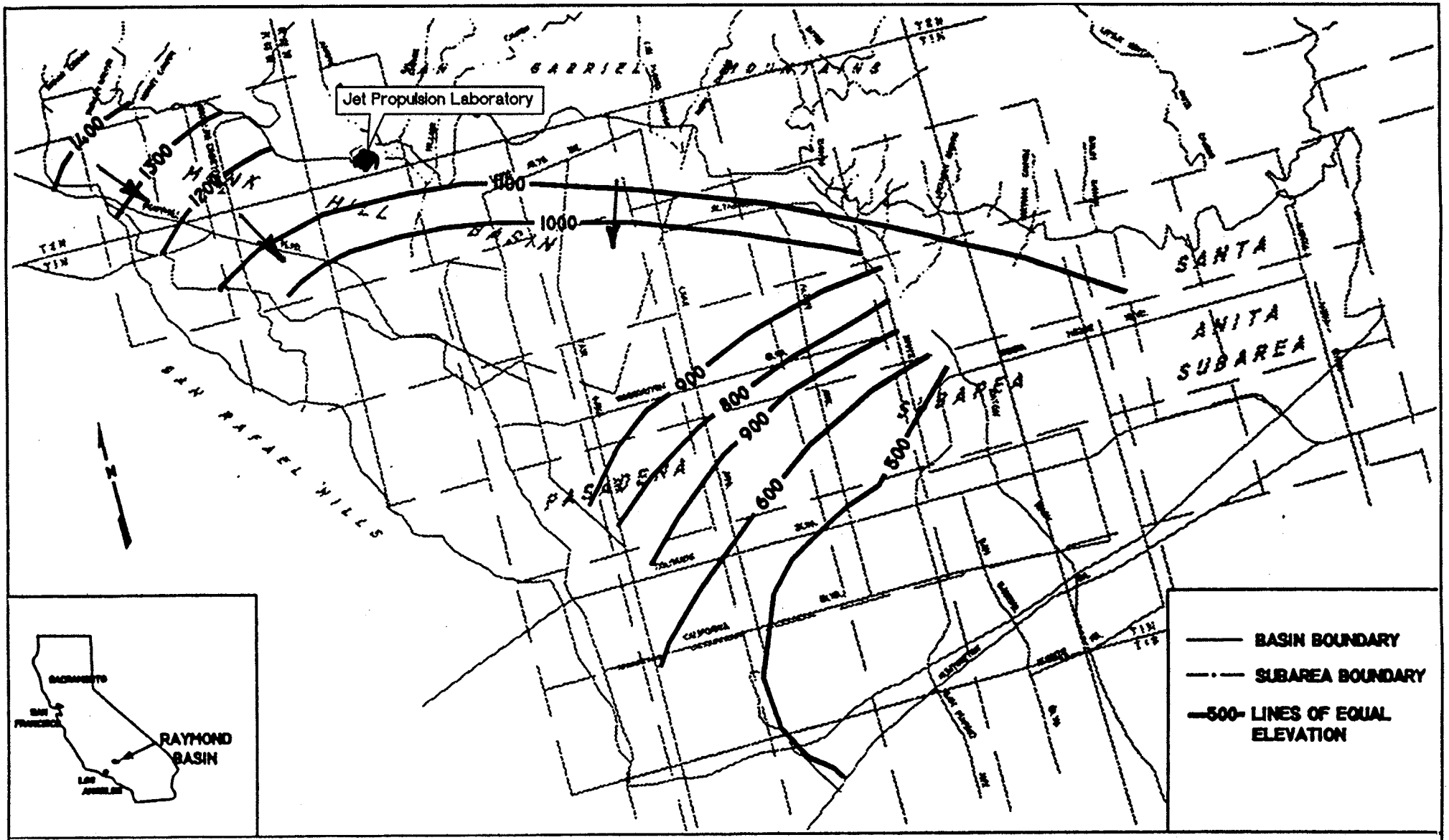


Figure 1-10

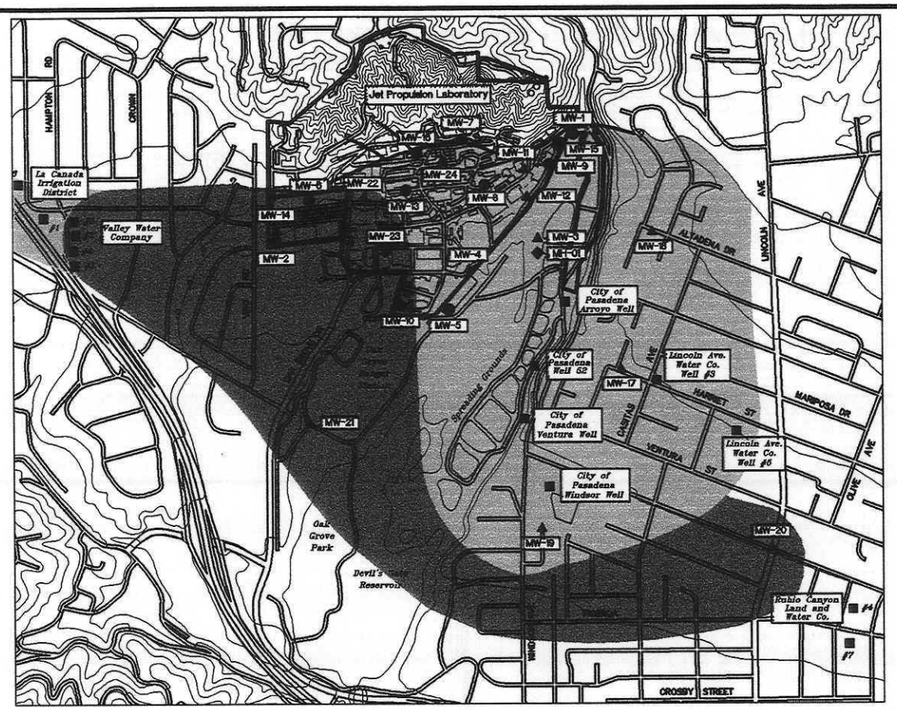
GROUNDWATER ELEVATION OF THE RAYMOND BASIN
Fall 1997

Jet Propulsion Laboratory
Pasadena, California

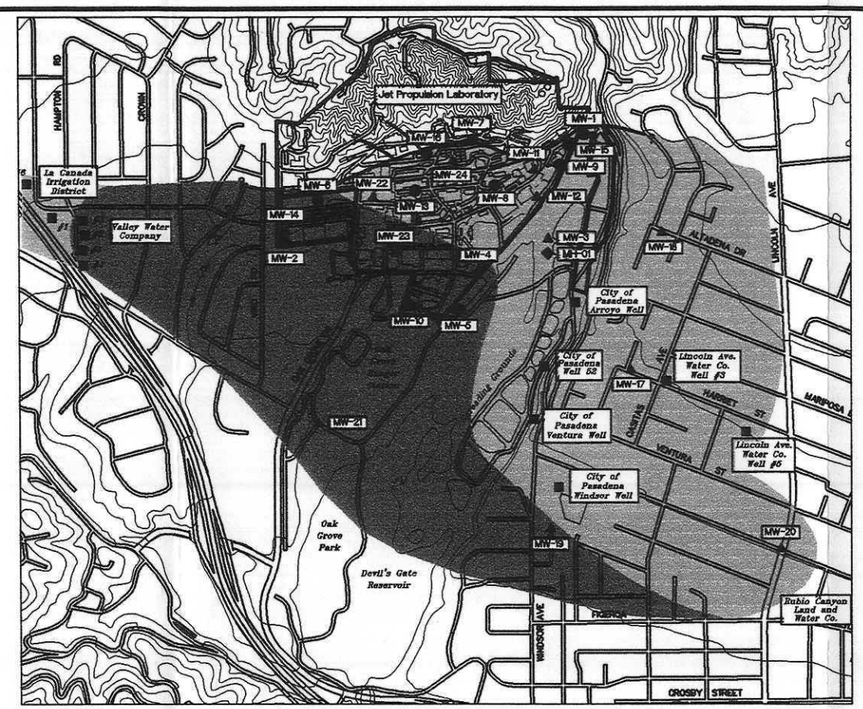
FOSTER WHEELER ENVIRONMENTAL CORPORATION

BLNK3-10.DWG

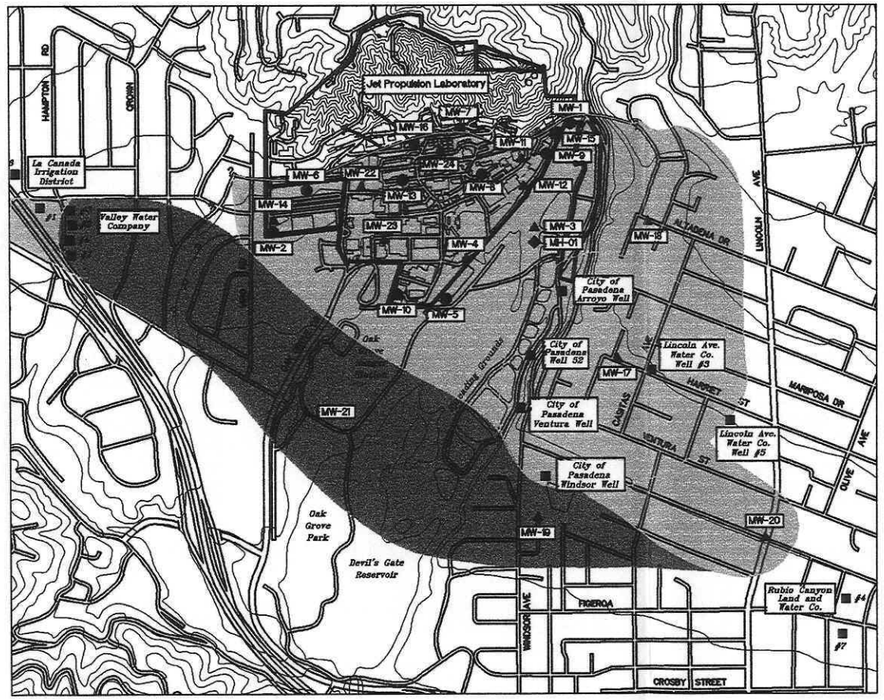
3-11-99



AQUIFER LAYER 1



AQUIFER LAYER 2



AQUIFER LAYER 3

Explanation

- JPL Shallow Monitoring Wells
- JPL Deep Multi-Port Monitoring Wells
- Municipal Production Wells
- City of Pasadena Monitoring Well
- Type 1 Waters, Including Mixtures of 1+2 and 1+3.
- Type 2 Waters, Including Mixtures of 2+1 and 2+3.
- Type 3 Waters, Including Mixtures of 3+1 and 3+2.

Note: Boundaries between water-types are not as sharp as represented. Mixing of adjacent water-types is commonly observed from 50 to 500 feet laterally around each boundary.

N

1750 875 0 1750

SCALE IN FEET

Source: USGS, 7.5 Minute Topographic Map Pasadena, CA 1966, Revised 1988, 1994.

FIGURE 1-11

GENERAL WATER TYPES
AQUIFER LAYERS 1, 2 AND 3
January - February 1998

Jet Propulsion Laboratory
Pasadena, California

FOSTER WHEELER ENVIRONMENTAL CORPORATION

I:\1572-JPL\DWG\OU1-OU3\FS\JPLF1-11.DWG
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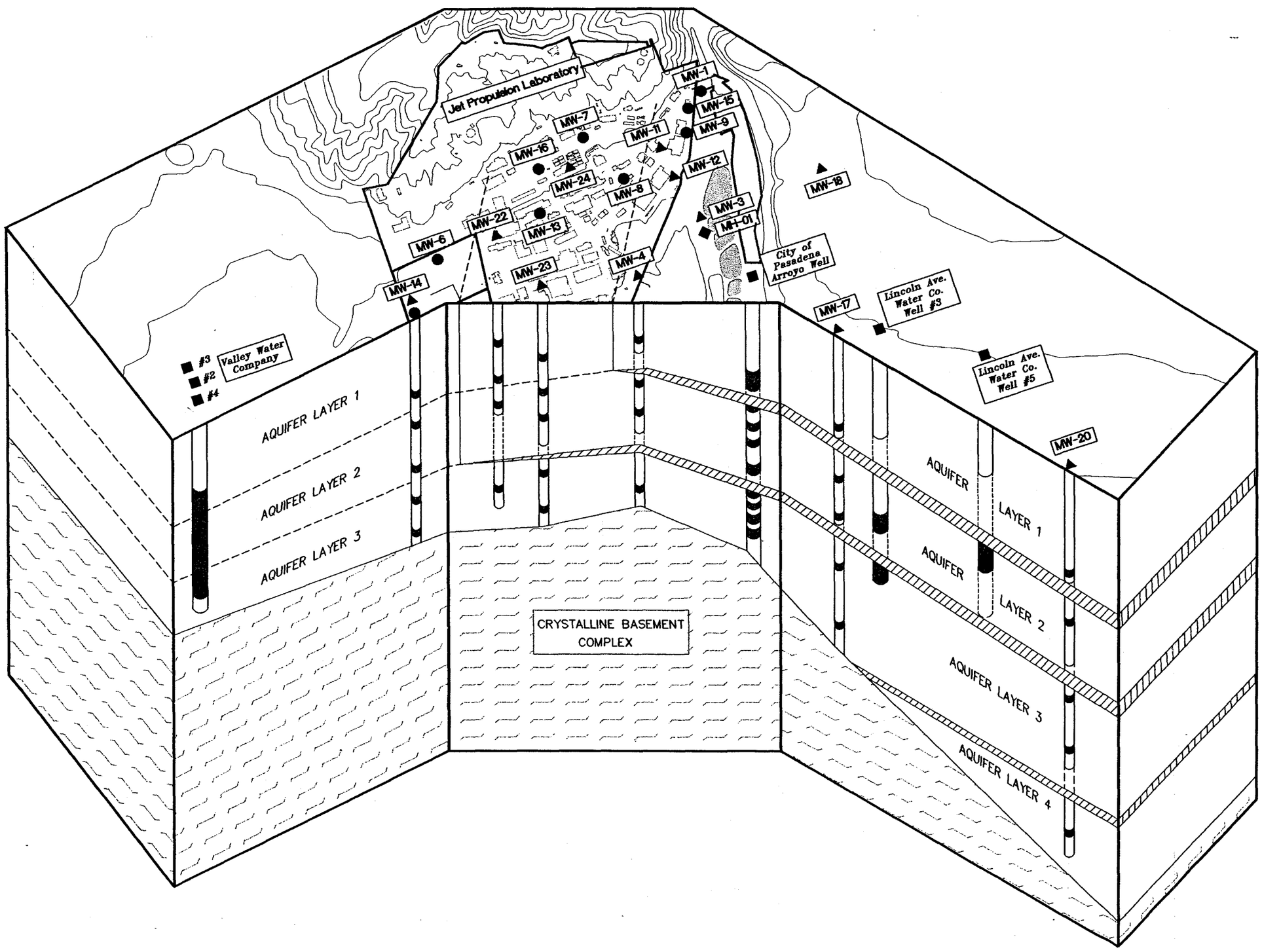

Explanation

- JPL Shallow Monitoring Wells
- JPL Deep Multi-Port Monitoring Wells
- Municipal Production Wells
- City of Pasadena Monitoring Well
- Silt-Rich Interval
- Screened Interval

N

1000 500 0 1000

200 100 0 200

HORIZONTAL SCALE: 1" = 1000'
VERTICAL SCALE: 1" = 200'

Source: USGS, 7.5 Minute Topographic Map Pasadena, CA 1966, Revised 1988, 1994.

Figure 1-12

CONCEPTUAL MODEL OF JPL AQUIFER LAYERS

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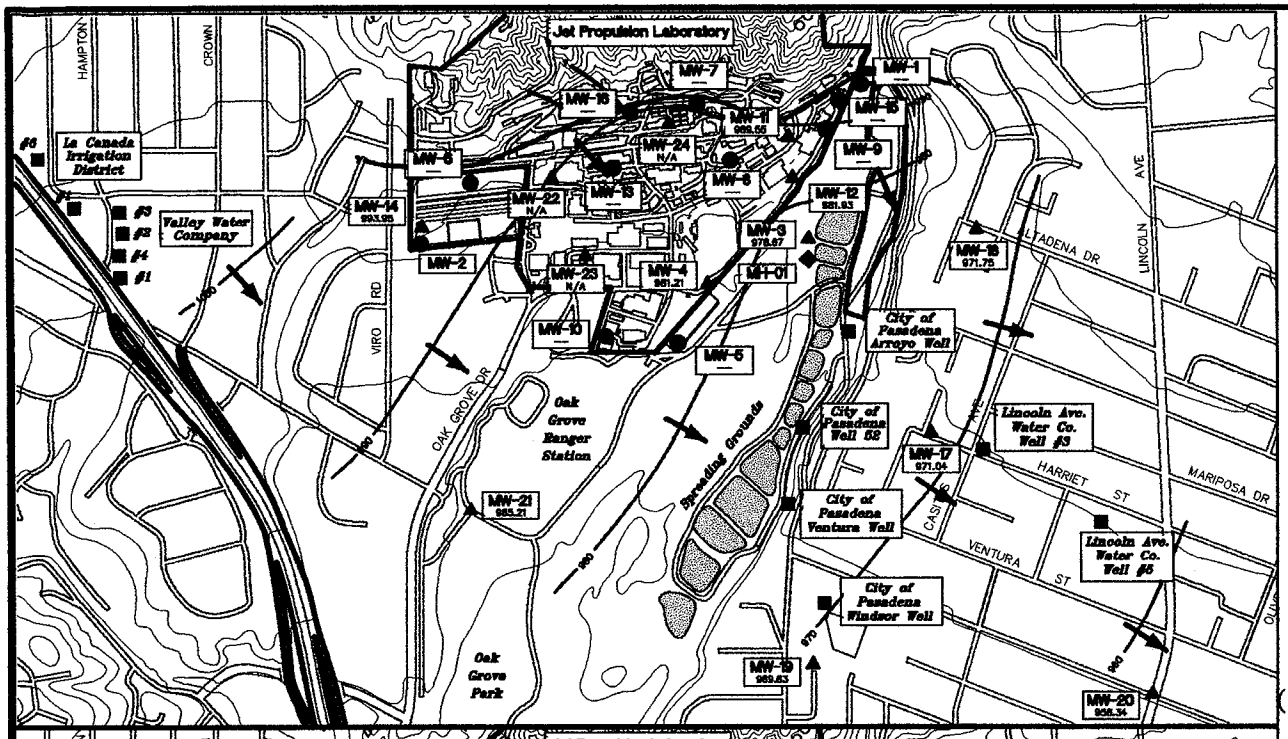
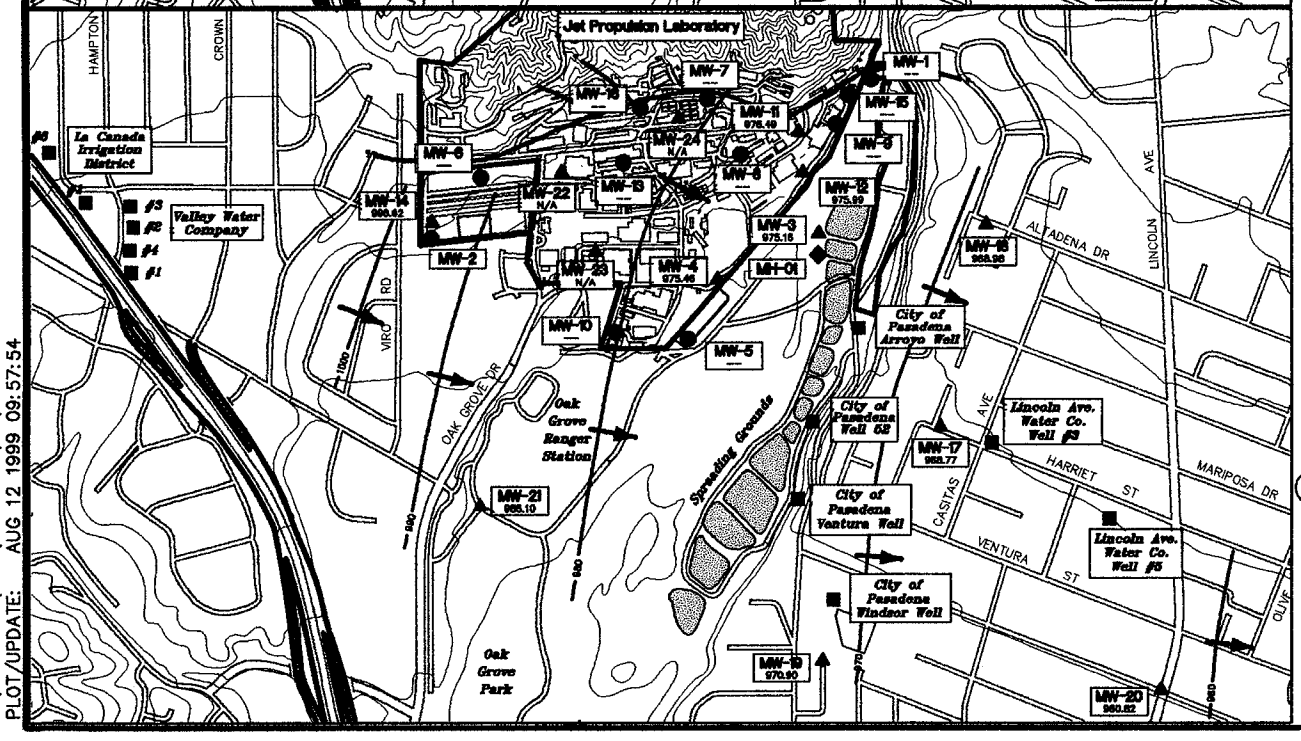
9-9-98



AQUIFER LAYER 2
(FEBRUARY 1998)



AQUIFER LAYER 3
(FEBRUARY 1996)

Explanation

- JPL Shallow Monitoring Wells
- JPL Deep Multi-Port Monitoring Wells
- Municipal Production Wells
- City of Pasadena Monitoring Well
- N/A — Well not Installed
- -- — Well not in Aquifer Layer
- Direction of Groundwater Flow
- JPL Thrust Fault
- JPL Property Line
- 1000 — Contour

Note: Contour Interval : 10 feet (Contours Represent Feet Above Mean Sea Level.)

N

1500 750 0 1500

SCALE IN FEET

Source: USGS, 7.5 Minute Topographic Map Pasadena, CA 1966, Revised 1966, 1994.

FIGURE 1-13

GROUNDWATER ELEVATION CONTOUR MAPS FOR AQUIFER LAYERS 2 AND 3 WHEN NEARBY MUNICIPAL PRODUCTION WELLS ARE NOT OPERATING

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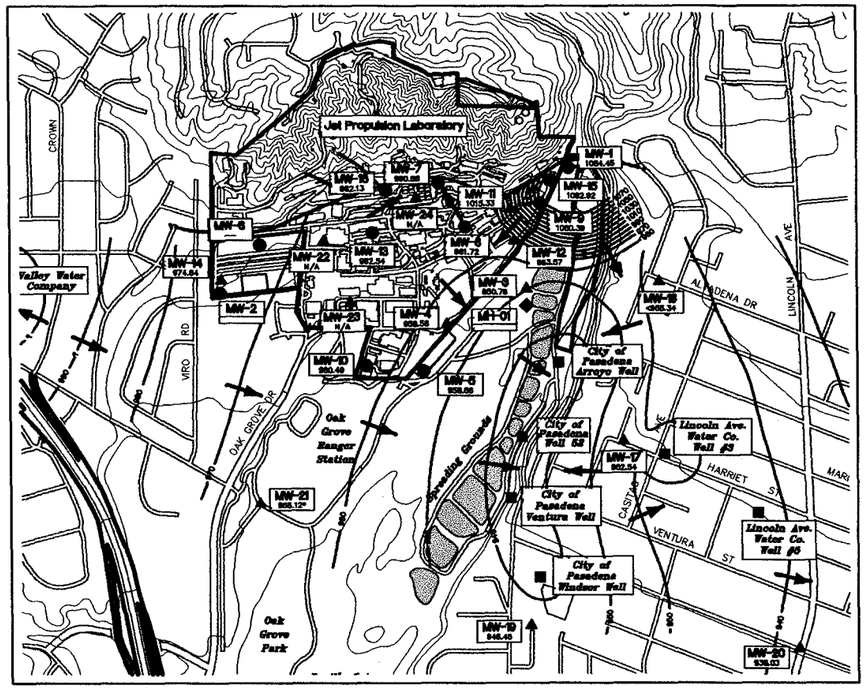
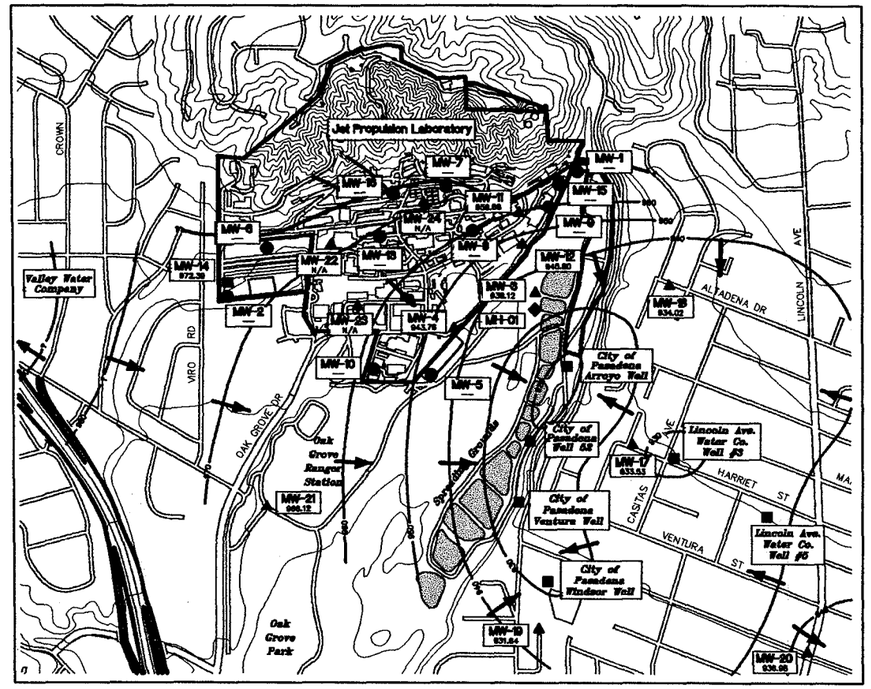
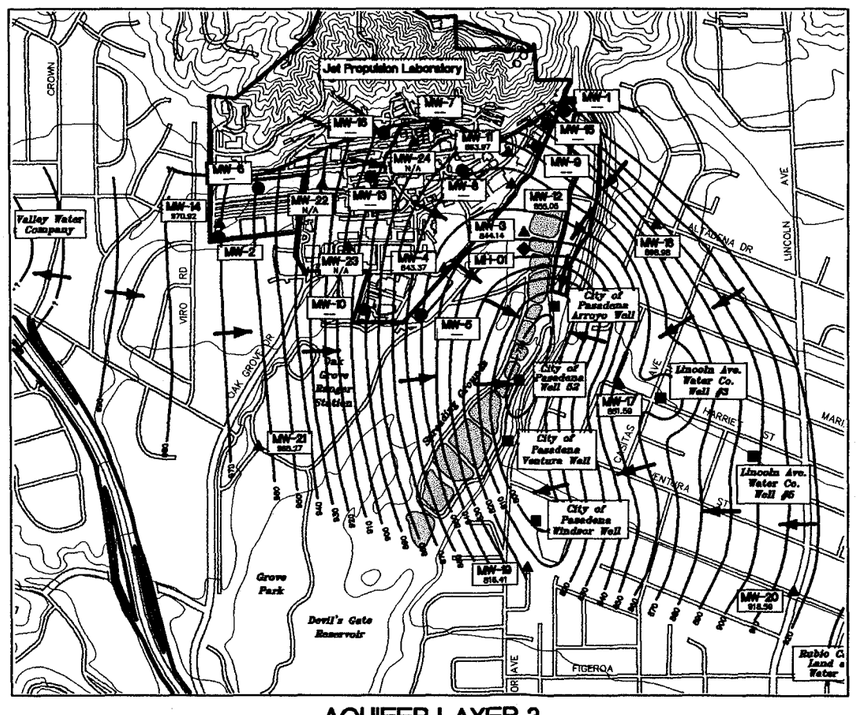


AQUIFER LAYER 2



AQUIFER LAYER 3



AQUIFER LAYER 3

Explanation

- JPL Shallow Monitoring Wells
- JPL Deep Multi-Port Monitoring Wells
- Municipal Production Wells
- City of Pasadena Monitoring Well
- N/A — Well not Installed
- -- — No Data
- Direction of Groundwater Flow
- JPL Thrust Fault
- JPL Property Line
- 1000 — Contour
- * — DUE TO LOW WATER TABLE, DATA FROM SCREEN 2 USED.

Note: Contour Interval : 10 feet (Contours Represent Feet Above Mean Sea Level.)

1500 750 0 1500

SCALE IN FEET

Source: USGS, 7.5 Minute Topographic Map Pasadena, CA 1966, Revised 1988, 1994.

FIGURE 1-14

GROUNDWATER ELEVATION CONTOUR MAPS FOR AQUIFER LAYERS 1,2 AND 3 WHEN NEARBY MUNICIPAL PRODUCTION WELLS ARE OPERATING

September 1996

Jet Propulsion Laboratory
Pasadena, California

FOSTER WHEELER ENVIRONMENTAL CORPORATION

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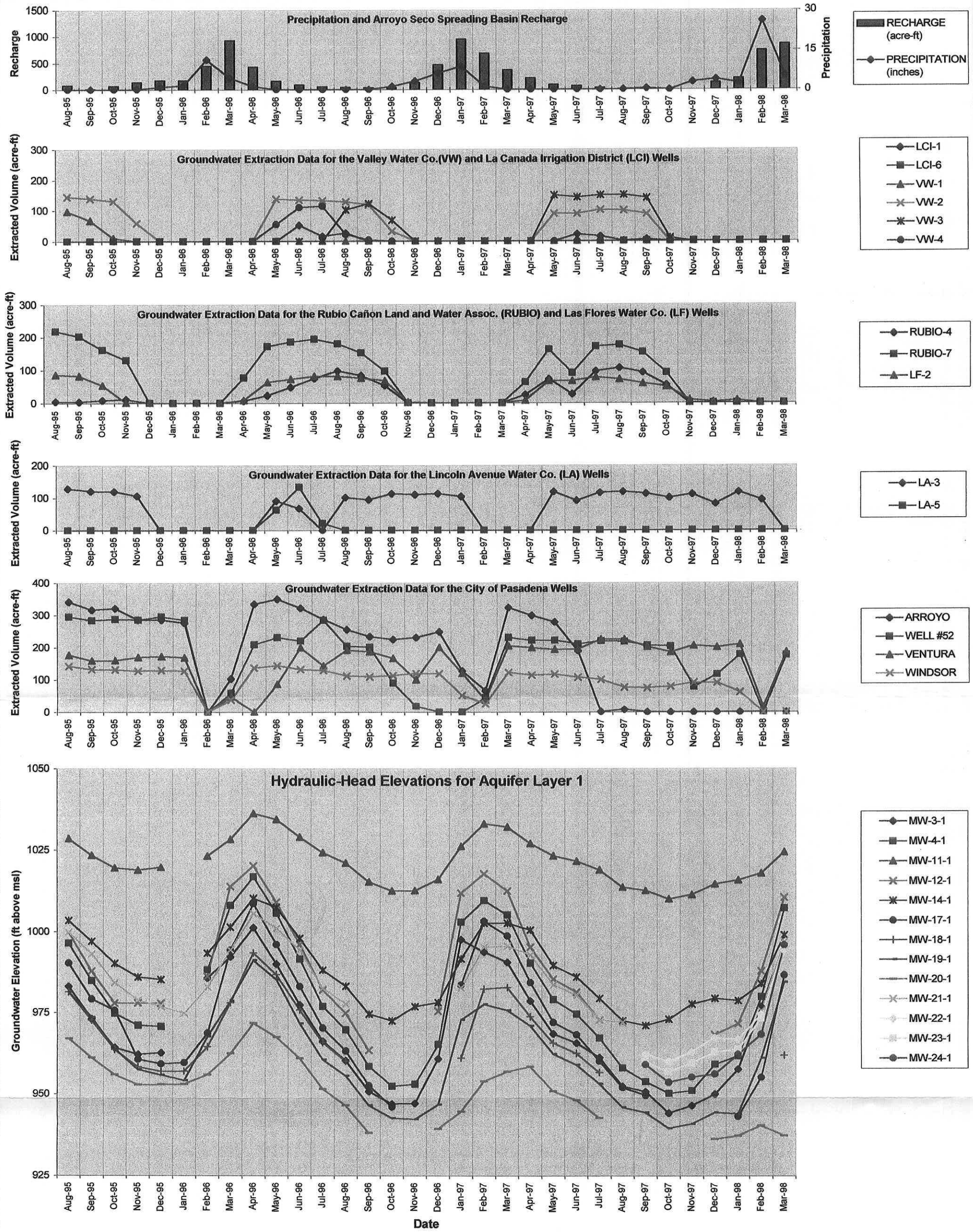

FIGURE 1–15

MUNICIPAL WELL PUMPING VOLUMES PRECIPITATION DATA, SPREADING BASIN RECHARGE DATA AND WATER-LEVEL ELEVATIONS FROM MULTI-PORT WELLS IN AQUIFER LAYER 1

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Pasadena, California

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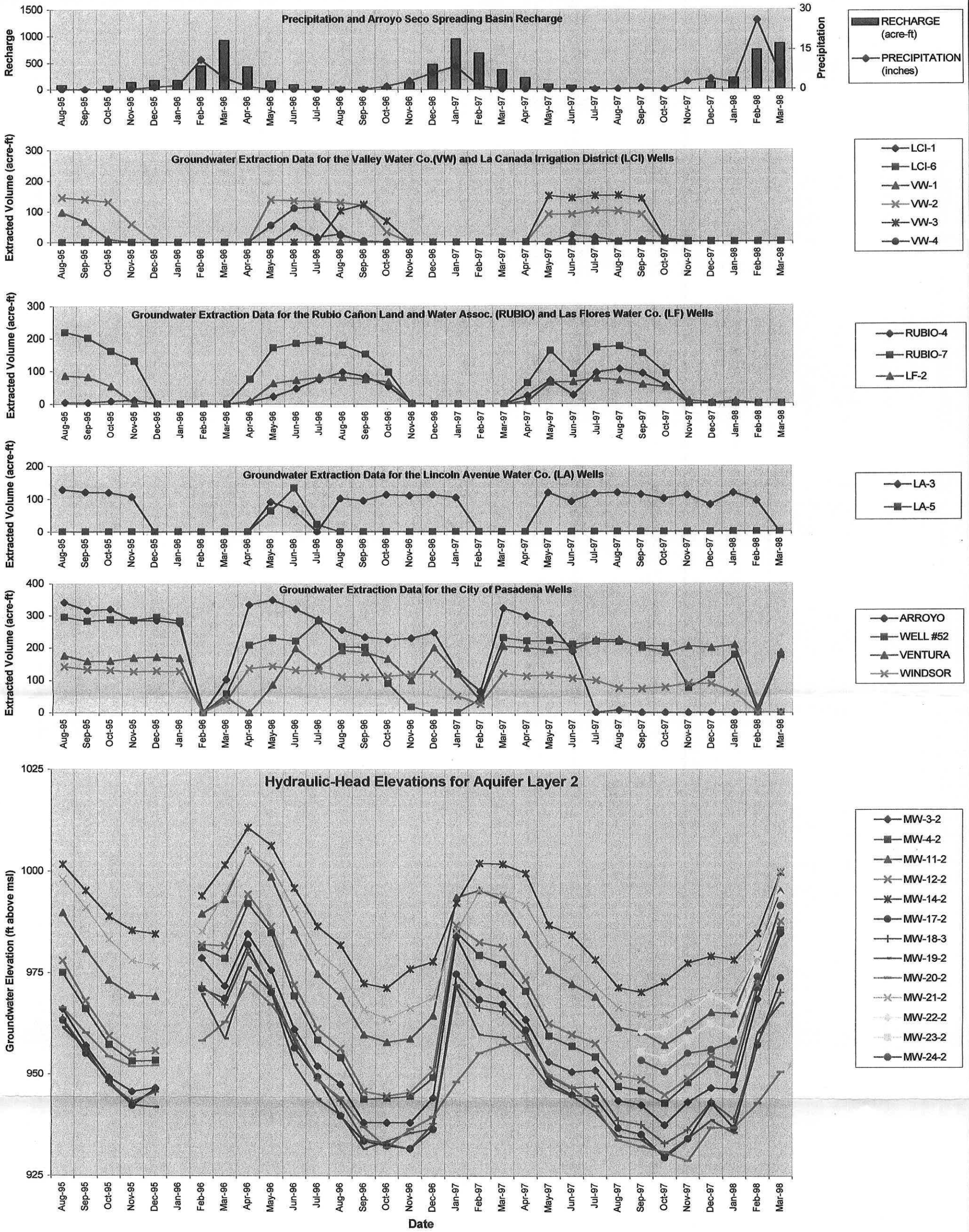

FIGURE 1–16

MUNICIPAL WELL PUMPING VOLUMES PRECIPITATION DATA, SPREADING BASIN RECHARGE DATA AND HYDRAULIC-HEAD ELEVATIONS FOR AQUIFER LAYER 2

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Continue

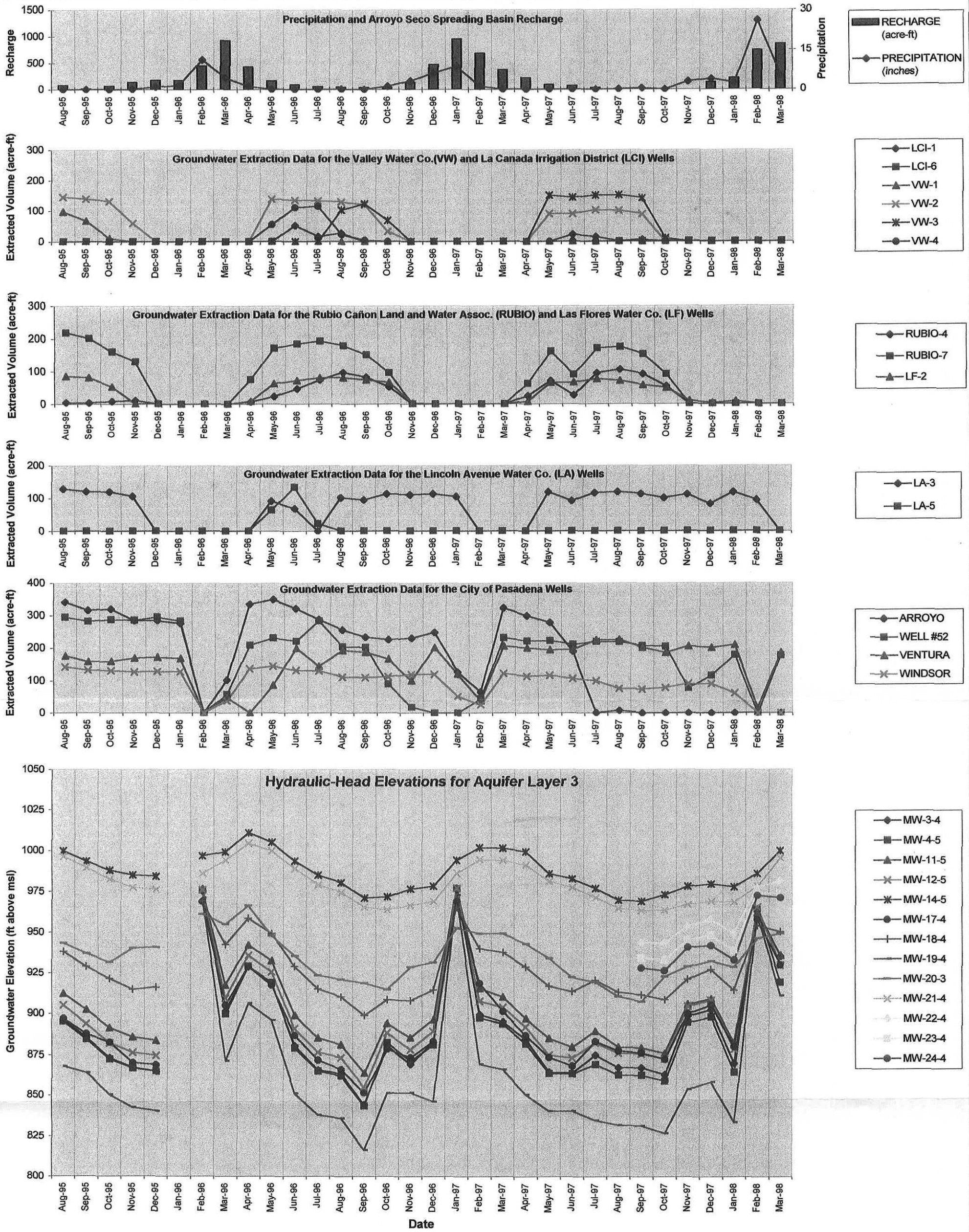

FIGURE 1–17

MUNICIPAL WELL PUMPING VOLUMES PRECIPITATION DATA, SPREADING BASIN RECHARGE DATA AND HYDRAULIC-HEAD ELEVATIONS FOR AQUIFER LAYER 3

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