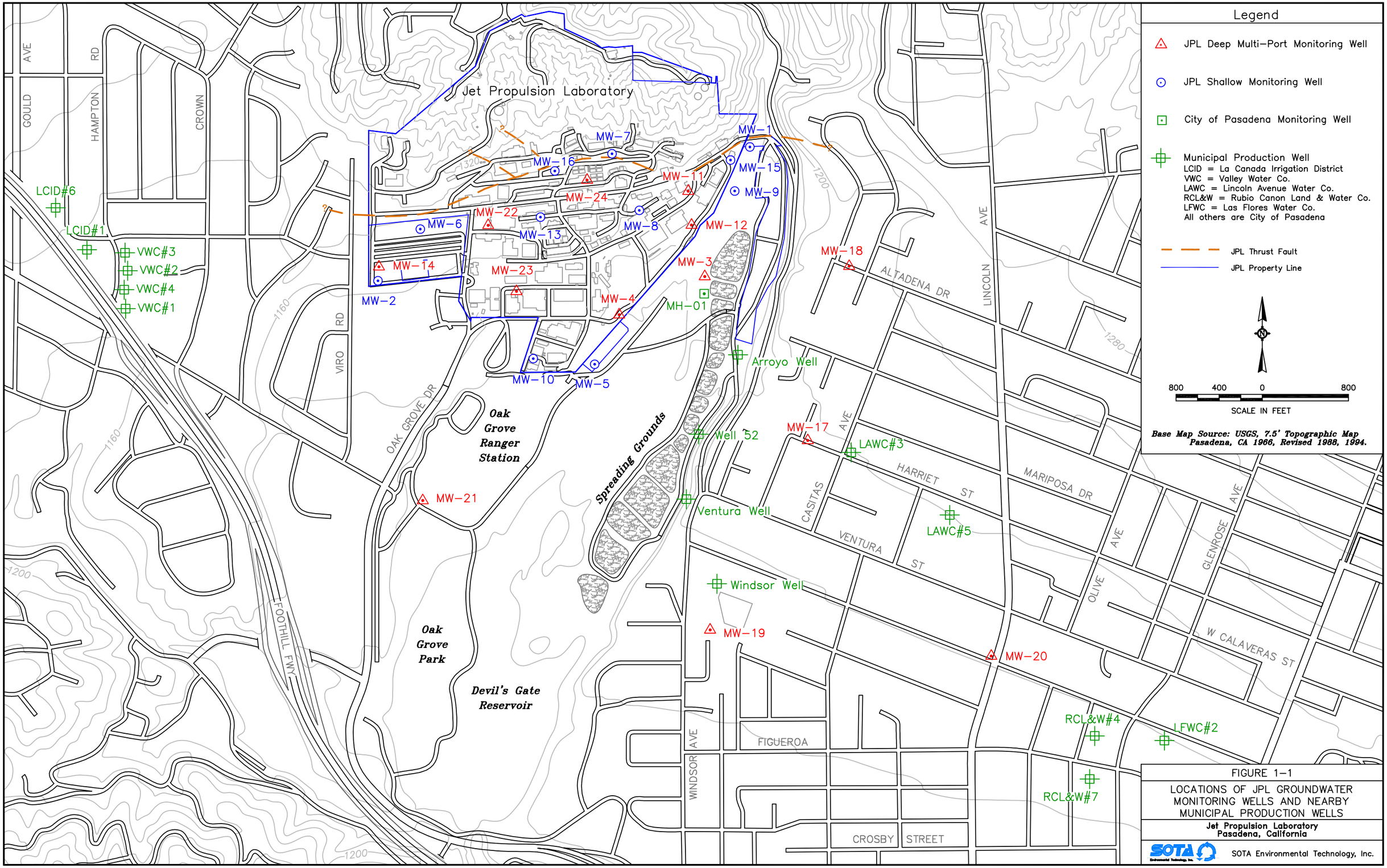
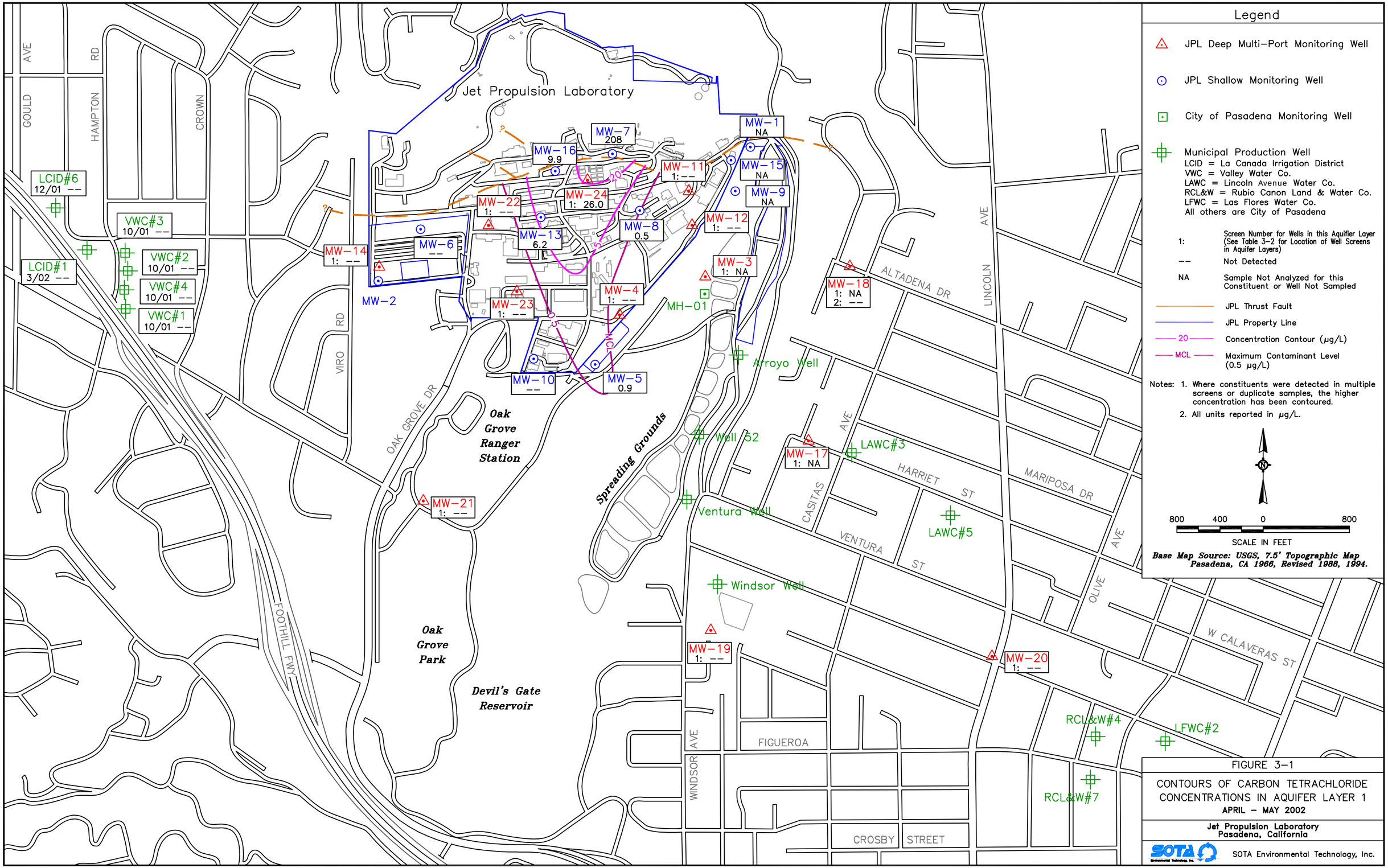

Legend
JPL Deep Multi-Port Monitoring Well
JPL Shallow Monitoring Well
City of Pasadena Monitoring Well
Municipal Production Well
LCID = La Canada Irrigation District
VWC = Valley Water Co.
LAWC = Lincoln Avenue Water Co.
RCL&W = Rubio Canon Land & Water Co.
LFWC = Las Flores Water Co.
All others are City of Pasadena
JPL Thrust Fault
JPL Property Line
800 400 0 800
SCALE IN FEET
Base Map Source: USGS, 7.5' Topographic Map Pasadena, CA 1966, Revised 1988, 1994.
Jet Propulsion Laboratory
MW-1
MW-2
MW-3
MW-4
MW-5
MW-6
MW-7
MW-8
MW-9
MW-10
MW-11
MW-12
MW-13
MW-14
MW-15
MW-16
MW-17
MW-18
MW-19
MW-20
MW-21
MW-22
MW-23
MW-24
MH-01
Arroyo Well
Well 52
Ventura Well
Windsor Well
LCID#6
LCID#1
VWC#3
VWC#2
VWC#4
VWC#1
LAWC#3
LAWC#5
RCL&W#4
RCL&W#7
LFWC#2
Oak Grove Ranger Station
Spreading Grounds
Oak Grove Park
Devil's Gate Reservoir
GOULD AVE
HAMPTON RD
CROWN
VIRO RD
OAK GROVE DR
FOOTHILL FWY
ALTADENA DR
LINCOLN AVE
CASITAS AVE
HARRIET ST
MARIPOSA DR
VENTURA ST
OLIVE AVE
GLENROSE AVE
W CALAVERAS ST
FIGUEROA
WINDSOR AVE
CROSBY STREET
1160
1200
1280
1320
FIGURE 1-1
LOCATIONS OF JPL GROUNDWATER MONITORING WELLS AND NEARBY MUNICIPAL PRODUCTION WELLS
Jet Propulsion Laboratory
Pasadena, California
SOTA Environmental Technology, Inc.


Legend
JPL Deep Multi-Port Monitoring Well
JPL Shallow Monitoring Well
City of Pasadena Monitoring Well
Municipal Production Well
LCID = La Canada Irrigation District
VWC = Valley Water Co.
LAWC = Lincoln Avenue Water Co.
RCL&W = Rubio Canon Land & Water Co.
LFWC = Las Flores Water Co.
All others are City of Pasadena
1: Screen Number for Wells in this Aquifer Layer (See Table 3-2 for Location of Well Screens in Aquifer Layers)
-- Not Detected
NA Sample Not Analyzed for this Constituent or Well Not Sampled
JPL Thrust Fault
JPL Property Line
20 Concentration Contour (µg/L)
MCL Maximum Contaminant Level (0.5 µg/L)
Notes: 1. Where constituents were detected in multiple screens or duplicate samples, the higher concentration has been contoured.
2. All units reported in µg/L.
800 400 0 800
SCALE IN FEET
Base Map Source: USGS, 7.5' Topographic Map Pasadena, CA 1966, Revised 1988, 1994.
Jet Propulsion Laboratory
MW-1 NA
MW-2
MW-3 1: NA
MW-4 1: --
MW-5 0.9
MW-6 --
MW-7 208
MW-8 0.5
MW-9 NA
MW-10 --
MW-11 1: --
MW-12 1: --
MW-13 6.2
MW-14 1: --
MW-15 NA
MW-16 9.9
MW-17 1: NA
MW-18 1: NA 2: --
MW-19 1: --
MW-20 1: --
MW-21 1: --
MW-22 1: --
MW-23 1: --
MW-24 1: 26.0
MH-01
Arroyo Well
Well 52
Ventura Well
Windsor Well
LAWC#3
LAWC#5
LCID#6 12/01 --
LCID#1 3/02 --
VWC#3 10/01 --
VWC#2 10/01 --
VWC#4 10/01 --
VWC#1 10/01 --
RCL&W#4
RCL&W#7
LFWC#2
Oak Grove Ranger Station
Oak Grove Park
Devil's Gate Reservoir
Spreading Grounds
GOULD AVE
HAMPTON RD
CROWN
VIRO RD
OAK GROVE DR
FOOTHILL FWY
ALTADENA DR
LINCOLN AVE
HARRIET ST
MARIPOSA DR
CASITAS AVE
VENTURA ST
OLIVE AVE
W CALAVERAS ST
FIGUEROA
WINDSOR AVE
CROSBY STREET
FIGURE 3-1
CONTOURS OF CARBON TETRACHLORIDE CONCENTRATIONS IN AQUIFER LAYER 1
APRIL - MAY 2002
Jet Propulsion Laboratory
Pasadena, California
SOTA Environmental Technology, Inc.

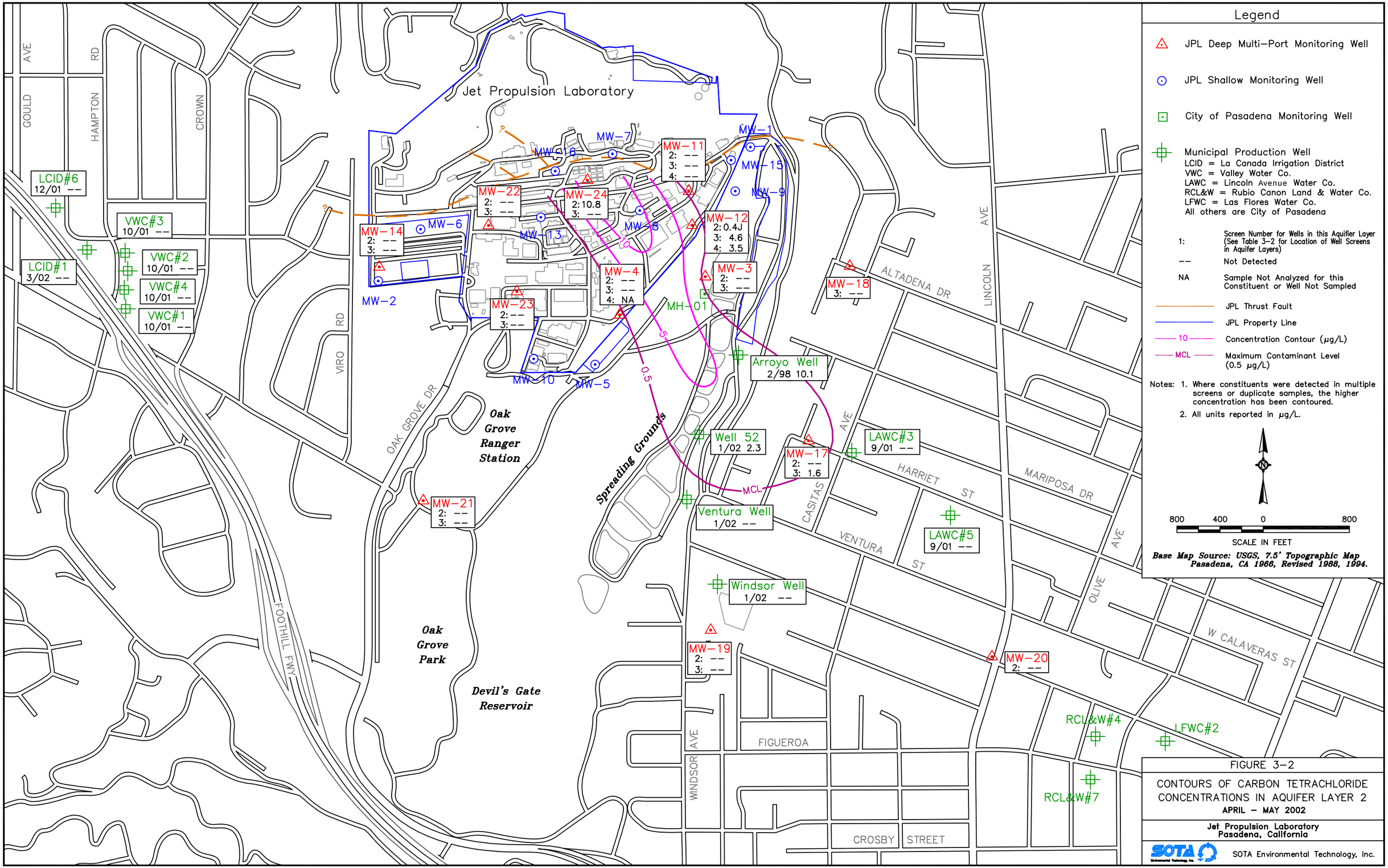


FIGURE 3-2

CONTOURS OF CARBON TETRACHLORIDE CONCENTRATIONS IN AQUIFER LAYER 2

APRIL – MAY 2002

Jet Propulsion Laboratory
Pasadena, California

SOTA Environmental Technology, Inc.

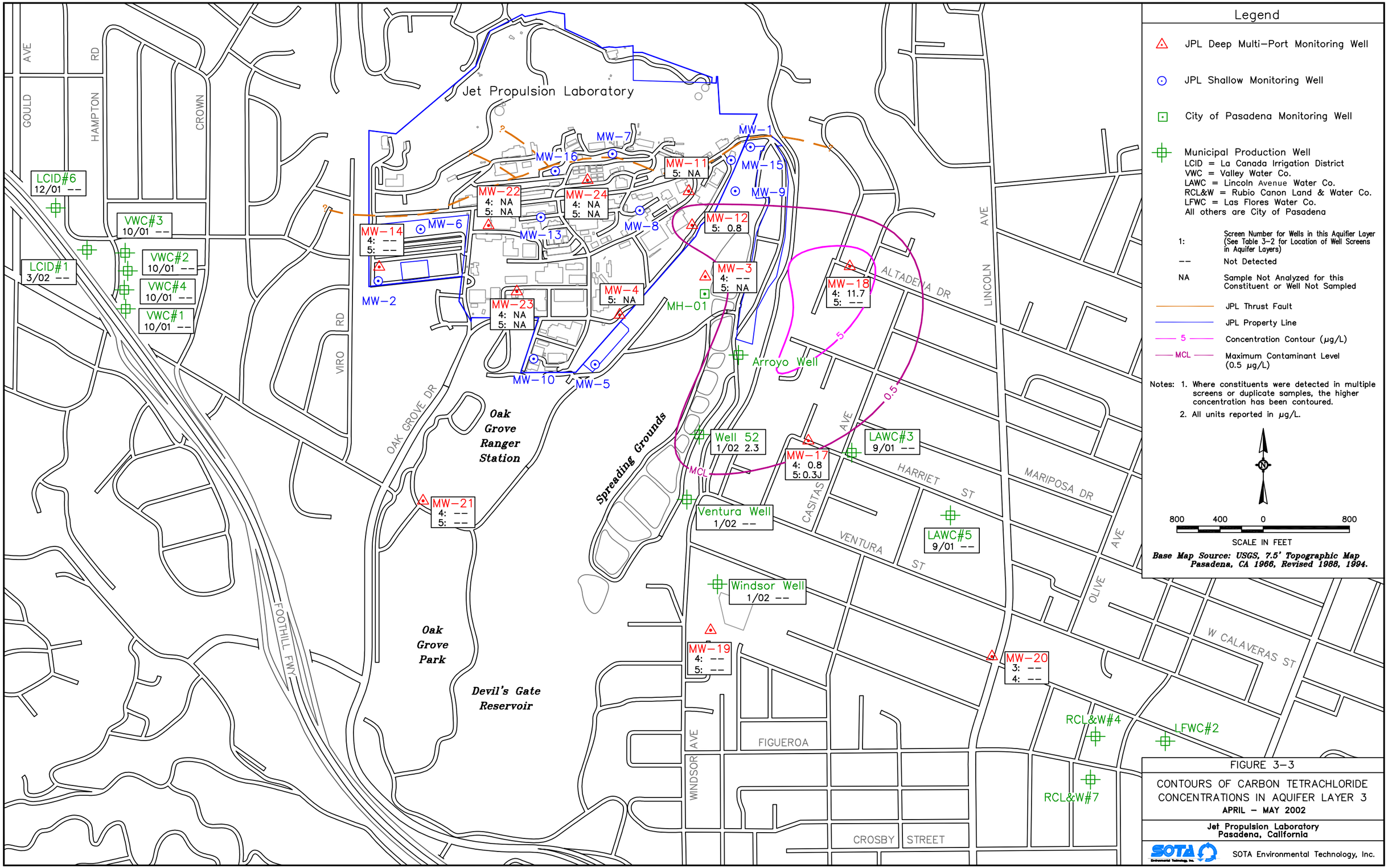


FIGURE 3-3

CONTOURS OF CARBON TETRACHLORIDE CONCENTRATIONS IN AQUIFER LAYER 3

APRIL – MAY 2002

Jet Propulsion Laboratory
Pasadena, California

SOTA Environmental Technology, Inc.

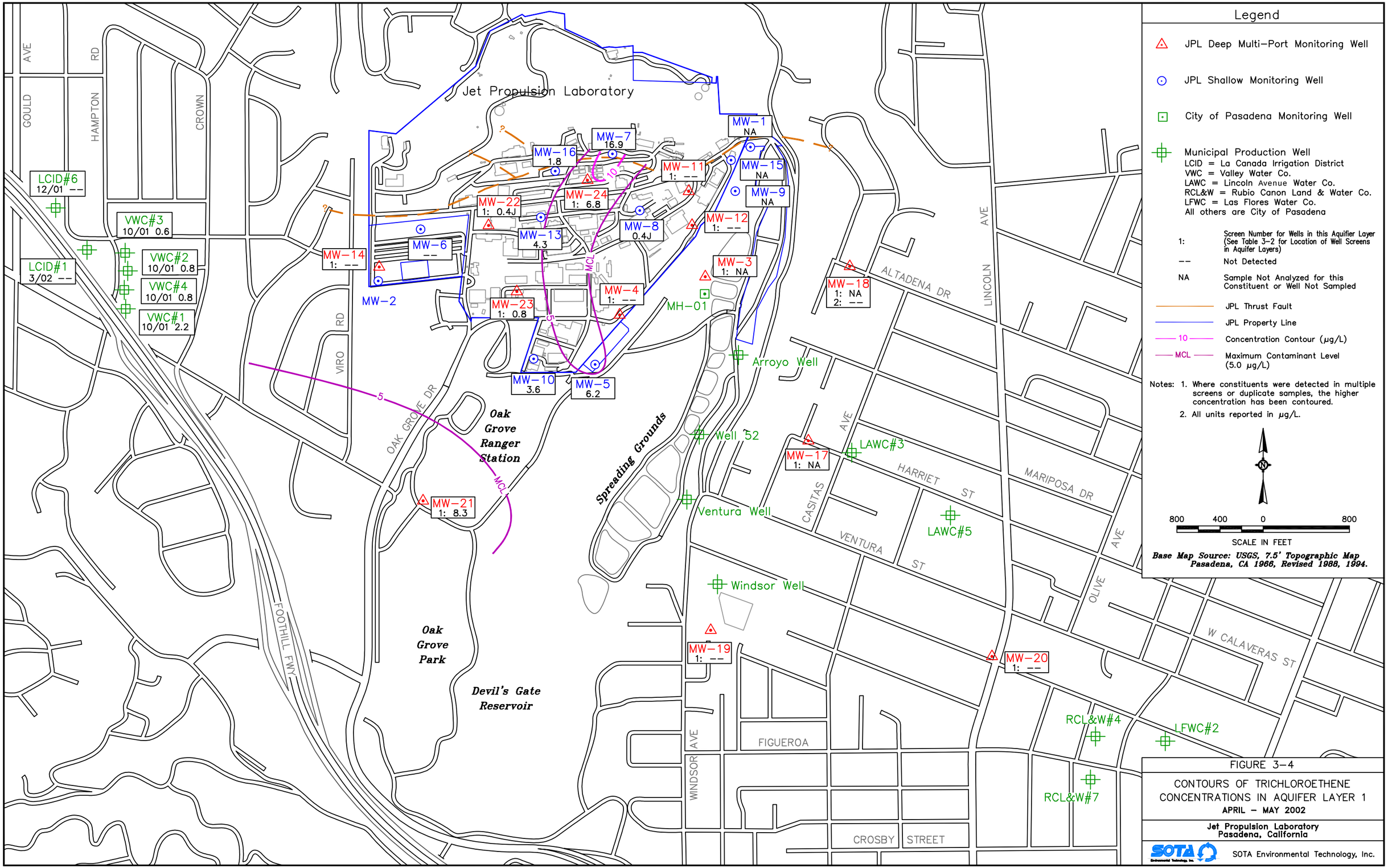


FIGURE 3-4

CONTOURS OF TRICHLOROETHENE CONCENTRATIONS IN AQUIFER LAYER 1

APRIL – MAY 2002

Jet Propulsion Laboratory
Pasadena, California

SOTA Environmental Technology, Inc.

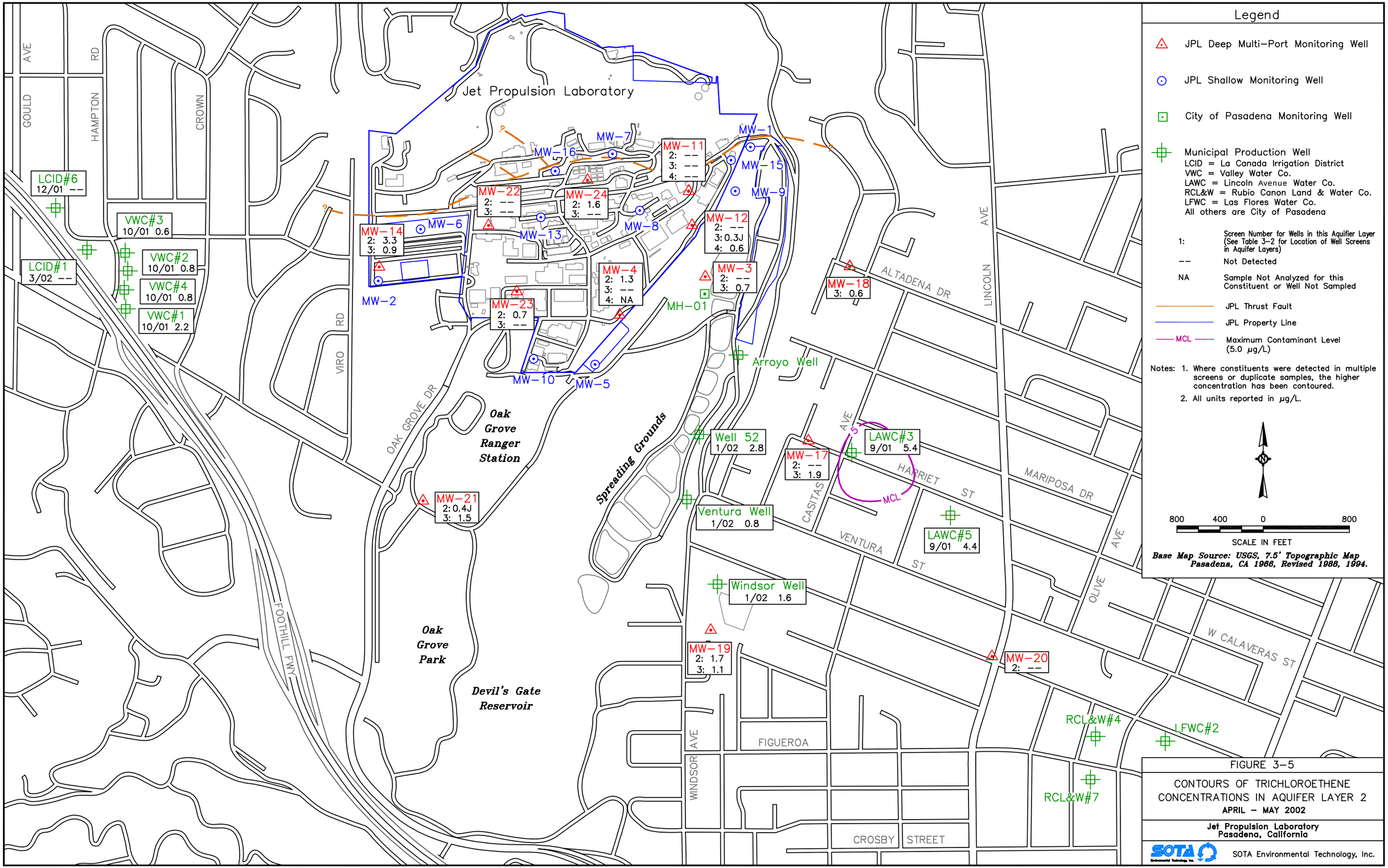


FIGURE 3-5

CONTOURS OF TRICHLOROETHENE CONCENTRATIONS IN AQUIFER LAYER 2

APRIL – MAY 2002

Jet Propulsion Laboratory
Pasadena, California

SOTA Environmental Technology, Inc.

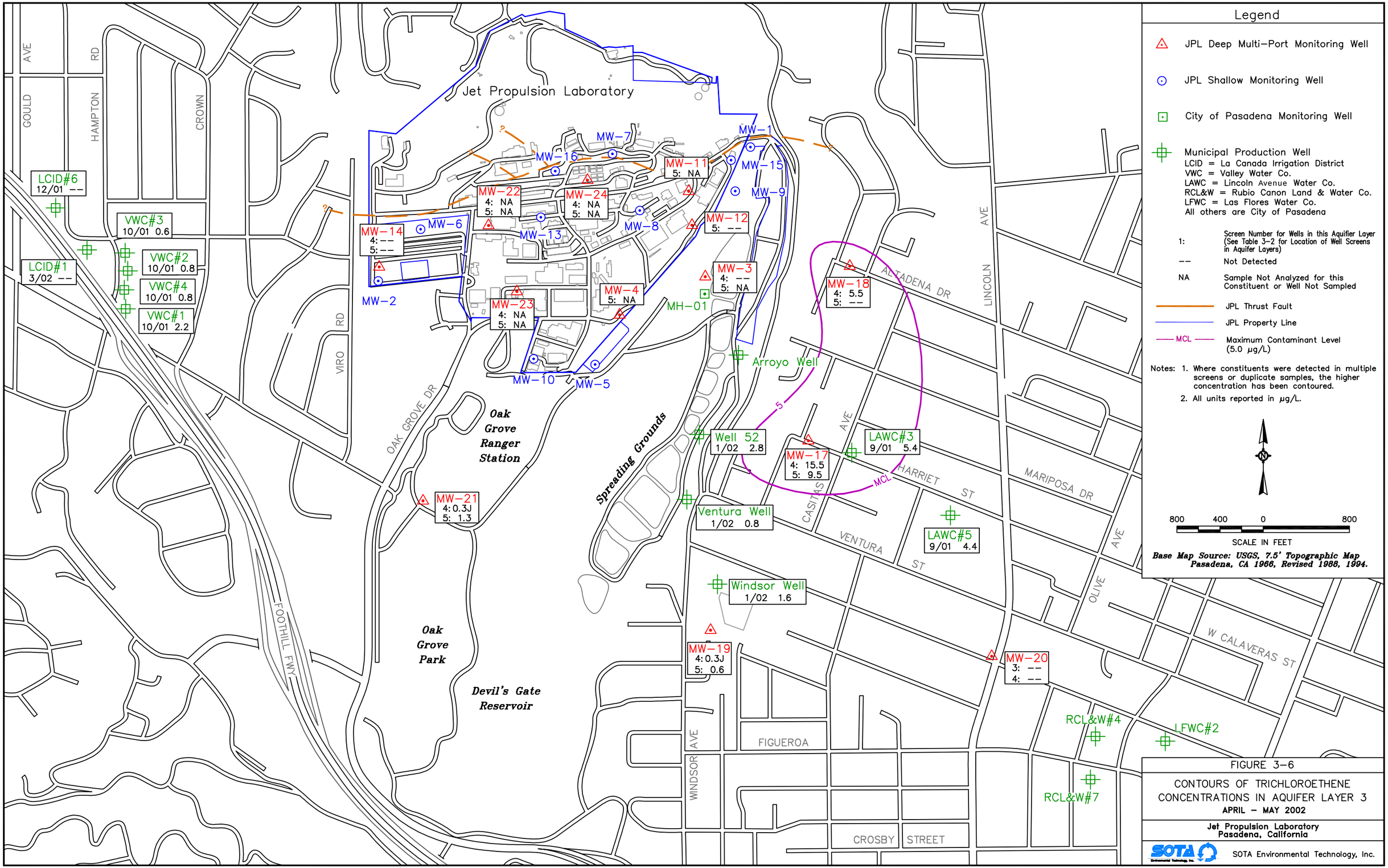


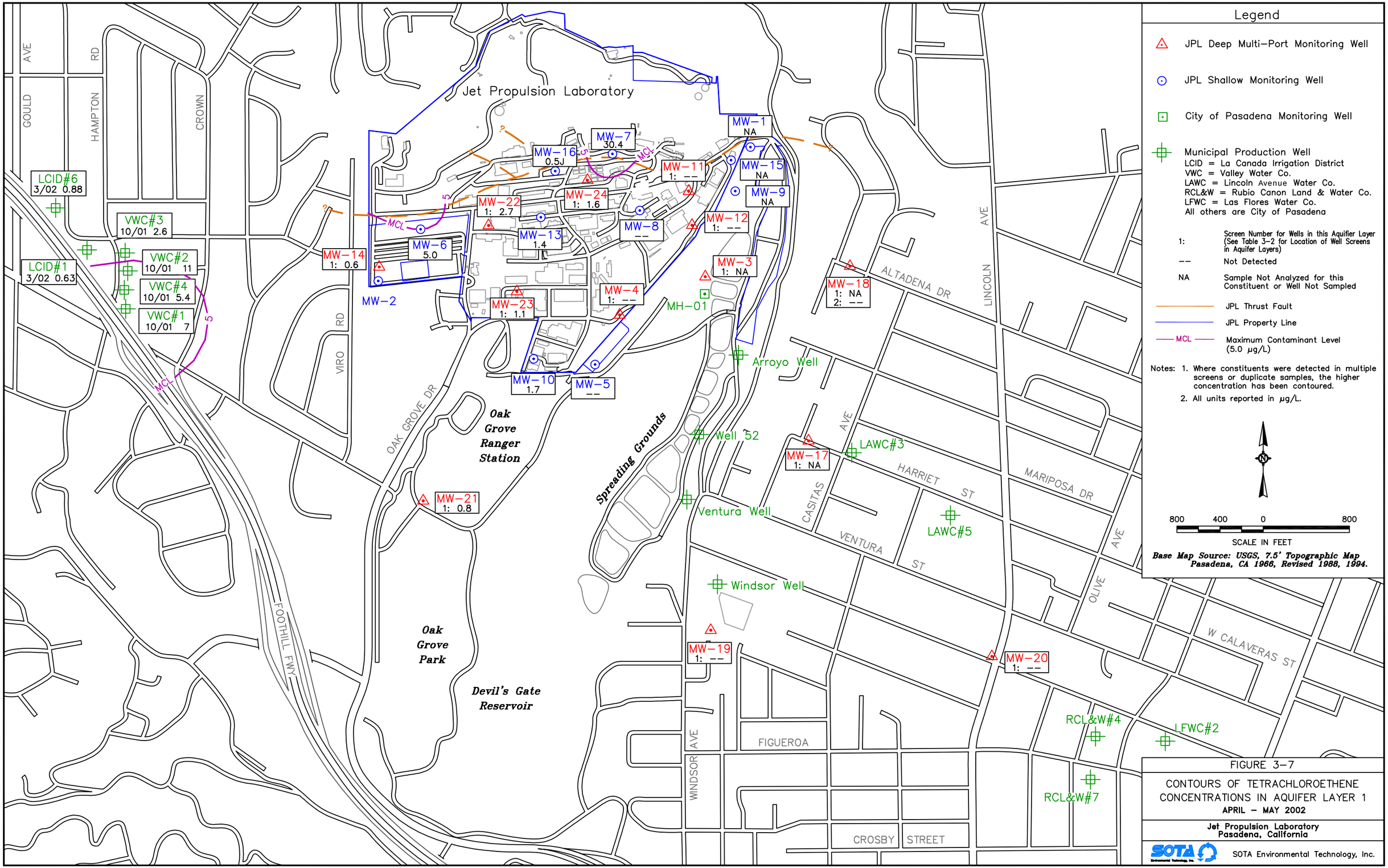
FIGURE 3-6

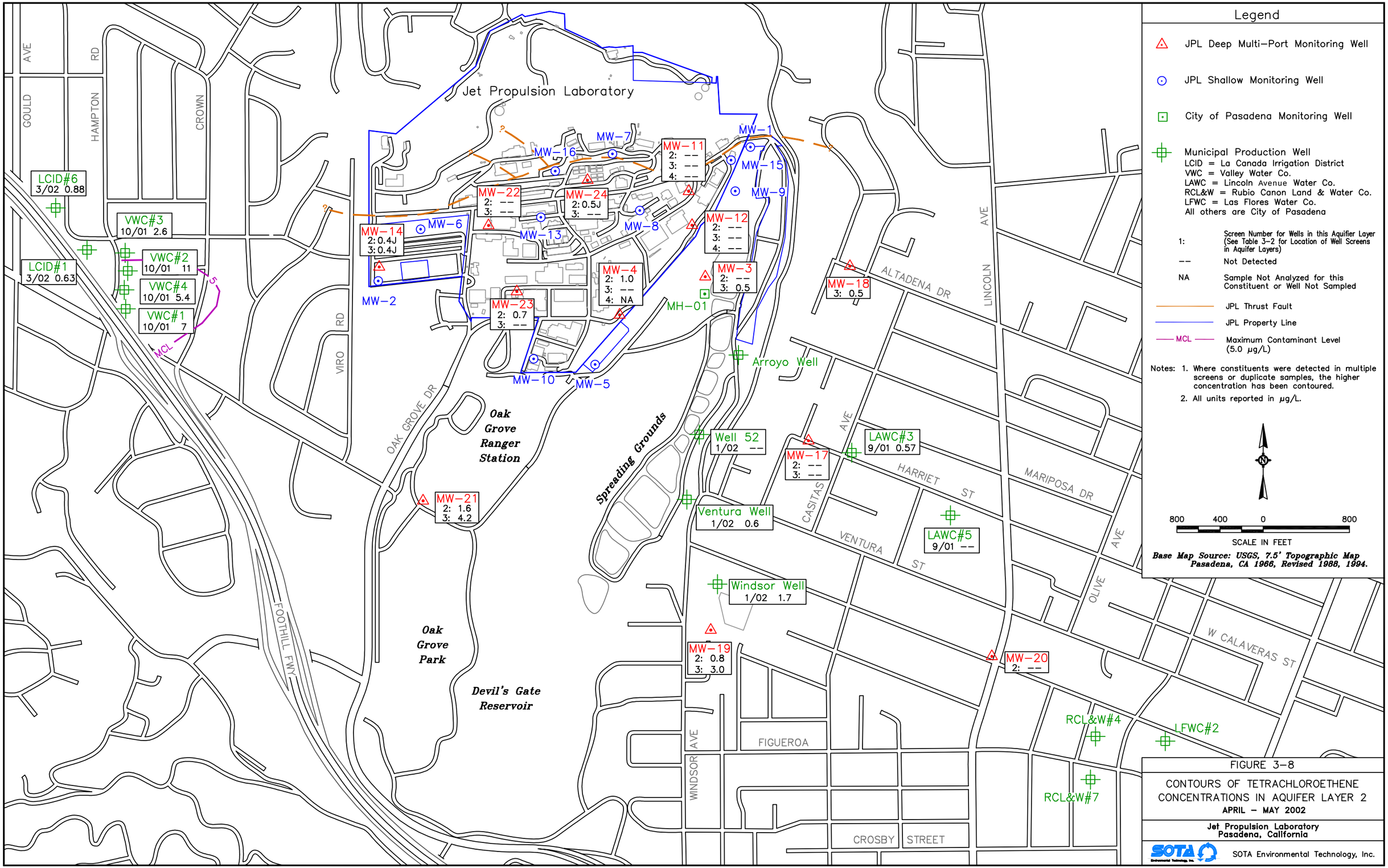
CONTOURS OF TRICHLOROETHENE CONCENTRATIONS IN AQUIFER LAYER 3

APRIL – MAY 2002

Jet Propulsion Laboratory
Pasadena, California

SOTA Environmental Technology, Inc.


Legend
JPL Deep Multi-Port Monitoring Well
JPL Shallow Monitoring Well
City of Pasadena Monitoring Well
Municipal Production Well
LCID = La Canada Irrigation District
VWC = Valley Water Co.
LAWC = Lincoln Avenue Water Co.
RCL&W = Rubio Canon Land & Water Co.
LFWC = Las Flores Water Co.
All others are City of Pasadena
1: Screen Number for Wells in this Aquifer Layer (See Table 3-2 for Location of Well Screens in Aquifer Layers)
-- Not Detected
NA Sample Not Analyzed for this Constituent or Well Not Sampled
JPL Thrust Fault
JPL Property Line
MCL Maximum Contaminant Level (5.0 µg/L)
Notes: 1. Where constituents were detected in multiple screens or duplicate samples, the higher concentration has been contoured.
2. All units reported in µg/L.
800 400 0 800
SCALE IN FEET
Base Map Source: USGS, 7.5' Topographic Map Pasadena, CA 1966, Revised 1988, 1994.
Jet Propulsion Laboratory
MW-1 NA
MW-7 30.4
MW-16 0.5J
MW-11 1: --
MW-15 NA
MW-9 NA
MW-22 1: 2.7
MW-24 1: 1.6
MW-12 1: --
MW-13 1.4
MW-8 --
MW-6 5.0
MW-14 1: 0.6
MW-3 1: NA
MW-2
MW-4 1: --
MW-23 1: 1.1
MH-01
MW-18 1: NA 2: --
Arroyo Well
MW-10 1.7
MW-5 --
Oak Grove Ranger Station
Spreading Grounds
Well 52
MW-17 1: NA
LAWC#3
MW-21 1: 0.8
Ventura Well
LAWC#5
Windsor Well
Oak Grove Park
Devil's Gate Reservoir
MW-19 1: --
MW-20 1: --
RCL&W#4
LFWC#2
RCL&W#7
LCID#6 3/02 0.88
VWC#3 10/01 2.6
LCID#1 3/02 0.63
VWC#2 10/01 11
VWC#4 10/01 5.4
VWC#1 10/01 7
GOULD AVE
HAMPTON RD
CROWN
VIRO RD
OAK GROVE DR
FOOTHILL FWY
ALTADENA DR
LINCOLN AVE
HARRIET ST
MARIPOSA DR
CASITAS AVE
VENTURA ST
OLIVE AVE
W CALAVERAS ST
FIGUEROA
WINDSOR AVE
CROSBY STREET
MCL
FIGURE 3-7
CONTOURS OF TETRACHLOROETHENE CONCENTRATIONS IN AQUIFER LAYER 1
APRIL - MAY 2002
Jet Propulsion Laboratory
Pasadena, California
SOTA Environmental Technology, Inc.


Legend
JPL Deep Multi-Port Monitoring Well
JPL Shallow Monitoring Well
City of Pasadena Monitoring Well
Municipal Production Well
LCID = La Canada Irrigation District
VWC = Valley Water Co.
LAWC = Lincoln Avenue Water Co.
RCL&W = Rubio Canon Land & Water Co.
LFWC = Las Flores Water Co.
All others are City of Pasadena
1: Screen Number for Wells in this Aquifer Layer (See Table 3-2 for Location of Well Screens in Aquifer Layers)
-- Not Detected
NA Sample Not Analyzed for this Constituent or Well Not Sampled
JPL Thrust Fault
JPL Property Line
MCL Maximum Contaminant Level (5.0 µg/L)
Notes: 1. Where constituents were detected in multiple screens or duplicate samples, the higher concentration has been contoured.
2. All units reported in µg/L.
800 400 0 800
SCALE IN FEET
Base Map Source: USGS, 7.5' Topographic Map Pasadena, CA 1966, Revised 1988, 1994.
Jet Propulsion Laboratory
MW-1
MW-2
MW-3 2: -- 3: 0.5
MW-4 2: 1.0 3: -- 4: NA
MW-5
MW-6
MW-7
MW-8
MW-9
MW-10
MW-11 2: -- 3: -- 4: --
MW-12 2: -- 3: -- 4: --
MW-13
MW-14 2: 0.4J 3: 0.4J
MW-15
MW-16
MW-17 2: -- 3: --
MW-18 3: 0.5
MW-19 2: 0.8 3: 3.0
MW-20 2: --
MW-21 2: 1.6 3: 4.2
MW-22 2: -- 3: --
MW-23 2: 0.7 3: --
MW-24 2: 0.5J 3: --
MH-01
LCID#6 3/02 0.88
LCID#1 3/02 0.63
VWC#3 10/01 2.6
VWC#2 10/01 11
VWC#4 10/01 5.4
VWC#1 10/01 7
Arroyo Well
Well 52 1/02 --
Ventura Well 1/02 0.6
Windsor Well 1/02 1.7
LAWC#3 9/01 0.57
LAWC#5 9/01 --
RCL&W#4
RCL&W#7
LFWC#2
MCL
Oak Grove Ranger Station
Oak Grove Park
Devil's Gate Reservoir
Spreading Grounds
GOULD AVE
HAMPTON RD
CROWN
VIRO RD
OAK GROVE DR
FOOTHILL FWY
ALTADENA DR
LINCOLN AVE
HARRIET ST
MARIPOSA DR
CASITAS AVE
VENTURA ST
OLIVE AVE
W CALAVERAS ST
FIGUEROA
WINDSOR AVE
CROSBY STREET
FIGURE 3-8
CONTOURS OF TETRACHLOROETHENE CONCENTRATIONS IN AQUIFER LAYER 2
APRIL - MAY 2002
Jet Propulsion Laboratory
Pasadena, California
SOTA Environmental Technology, Inc.

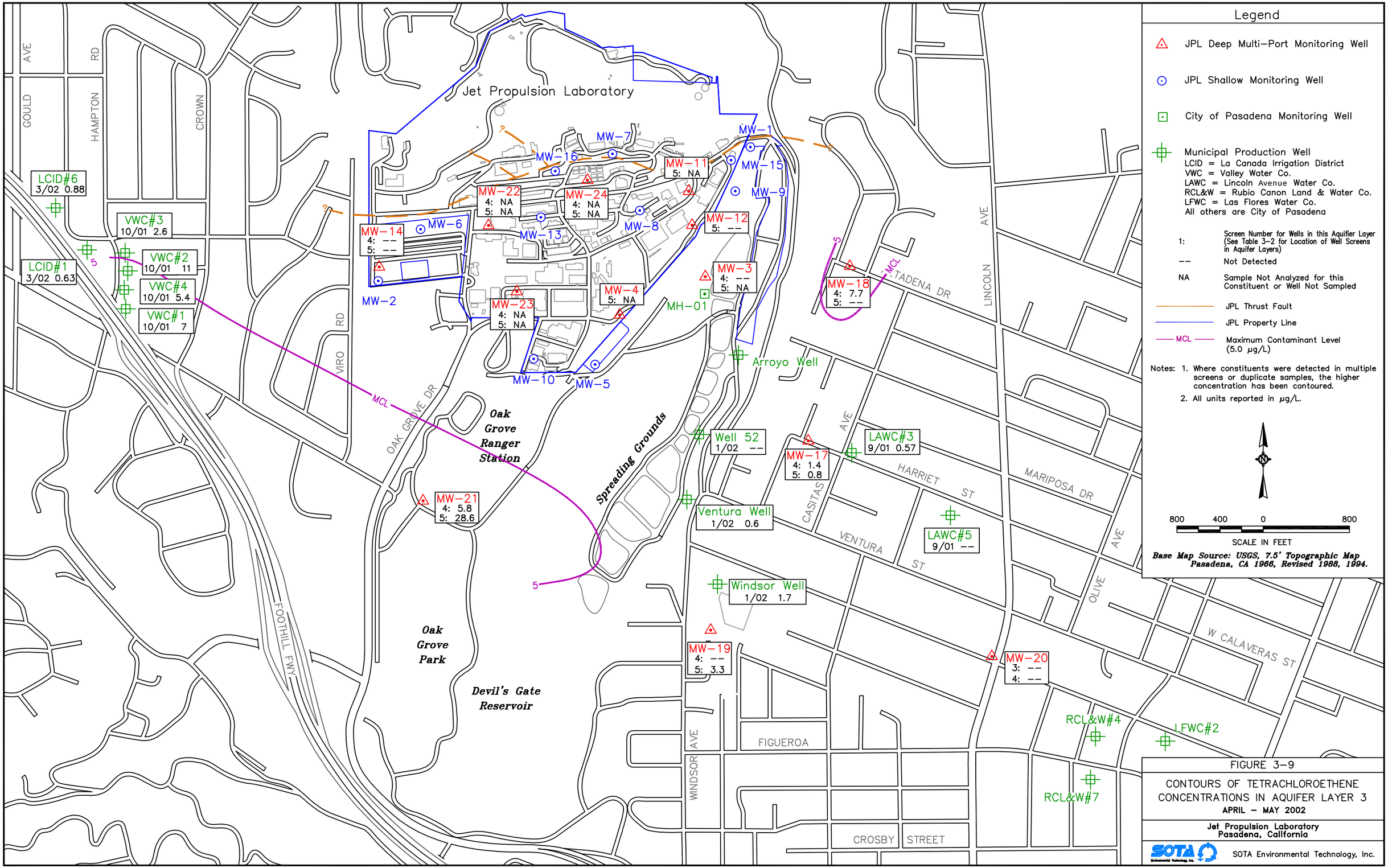


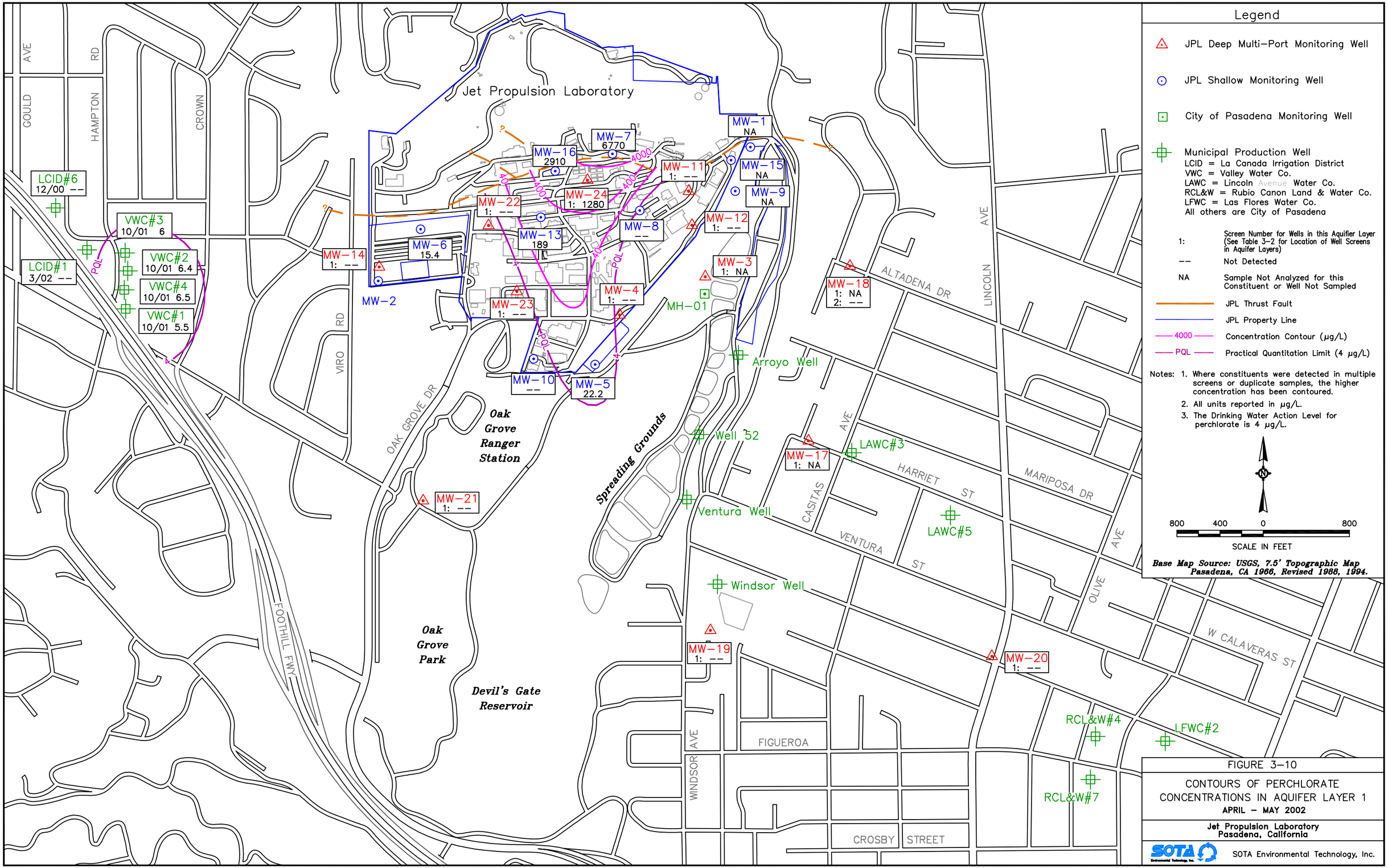
FIGURE 3-9

CONTOURS OF TETRACHLOROETHENE CONCENTRATIONS IN AQUIFER LAYER 3

APRIL – MAY 2002

Jet Propulsion Laboratory
Pasadena, California

SOTA Environmental Technology, Inc.


Legend
JPL Deep Multi-Port Monitoring Well
JPL Shallow Monitoring Well
City of Pasadena Monitoring Well
Municipal Production Well
LCID = La Canada Irrigation District
VWC = Valley Water Co.
LAWC = Lincoln Avenue Water Co.
RCL&W = Rubio Canon Land & Water Co.
LFWC = Las Flores Water Co.
All others are City of Pasadena
1: Screen Number for Wells in this Aquifer Layer (See Table 3-2 for Location of Well Screens in Aquifer Layers)
-- Not Detected
NA Sample Not Analyzed for this Constituent or Well Not Sampled
JPL Thrust Fault
JPL Property Line
4000 Concentration Contour (µg/L)
PQL Practical Quantitation Limit (4 µg/L)
Notes: 1. Where constituents were detected in multiple screens or duplicate samples, the higher concentration has been contoured.
2. All units reported in µg/L.
3. The Drinking Water Action Level for perchlorate is 4 µg/L.
800 400 0 800
SCALE IN FEET
Base Map Source: USGS, 7.5' Topographic Map Pasadena, CA 1966, Revised 1988, 1994.
Jet Propulsion Laboratory
MW-1 NA
MW-2
MW-3 1: NA
MW-4 1: --
MW-5 22.2
MW-6 15.4
MW-7 6770
MW-8 --
MW-9 NA
MW-10 --
MW-11 1: --
MW-12 1: --
MW-13 189
MW-14 1: --
MW-15 NA
MW-16 2910
MW-17 1: NA
MW-18 1: NA 2: --
MW-19 1: --
MW-20 1: --
MW-21 1: --
MW-22 1: --
MW-23 1: --
MW-24 1: 1280
LCID#6 12/00 --
LCID#1 3/02 --
VWC#3 10/01 6
VWC#2 10/01 6.4
VWC#4 10/01 6.5
VWC#1 10/01 5.5
MH-01
Arroyo Well
Well 52
Ventura Well
Windsor Well
LAWC#3
LAWC#5
RCL&W#4
RCL&W#7
LFWC#2
Oak Grove Ranger Station
Spreading Grounds
Oak Grove Park
Devil's Gate Reservoir
GOULD AVE
HAMPTON RD
CROWN
VIRO RD
OAK GROVE DR
FOOTHILL FWY
ALTADENA DR
LINCOLN AVE
HARRIET ST
MARIPOSA DR
CASITAS AVE
VENTURA ST
OLIVE AVE
W CALAVERAS ST
FIGUEROA
WINDSOR AVE
CROSBY STREET
FIGURE 3-10
CONTOURS OF PERCHLORATE CONCENTRATIONS IN AQUIFER LAYER 1
APRIL - MAY 2002
Jet Propulsion Laboratory
Pasadena, California
SOTA Environmental Technology, Inc.

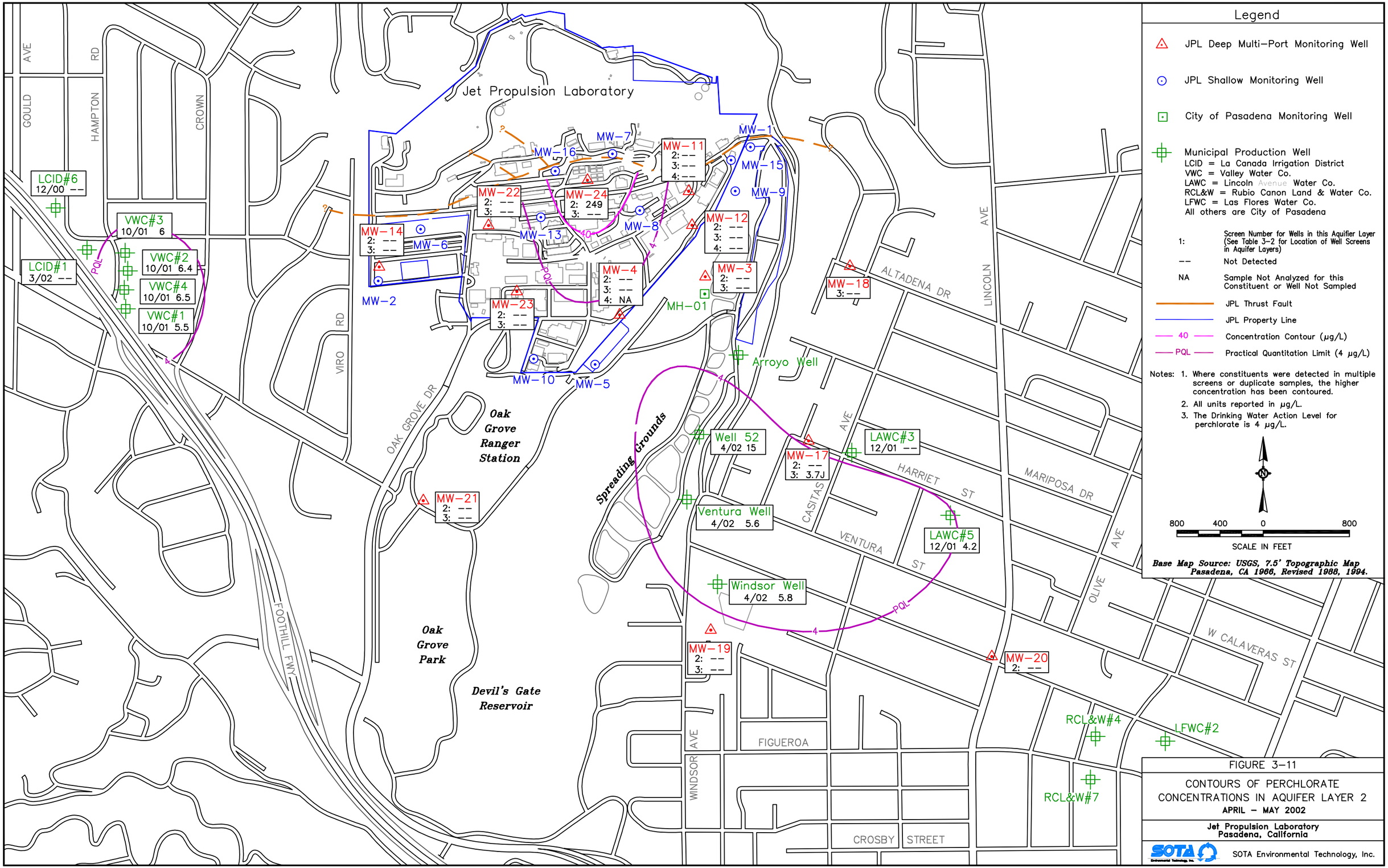


FIGURE 3-11

CONTOURS OF PERCHLORATE CONCENTRATIONS IN AQUIFER LAYER 2

APRIL – MAY 2002

Jet Propulsion Laboratory
Pasadena, California

SOTA Environmental Technology, Inc.

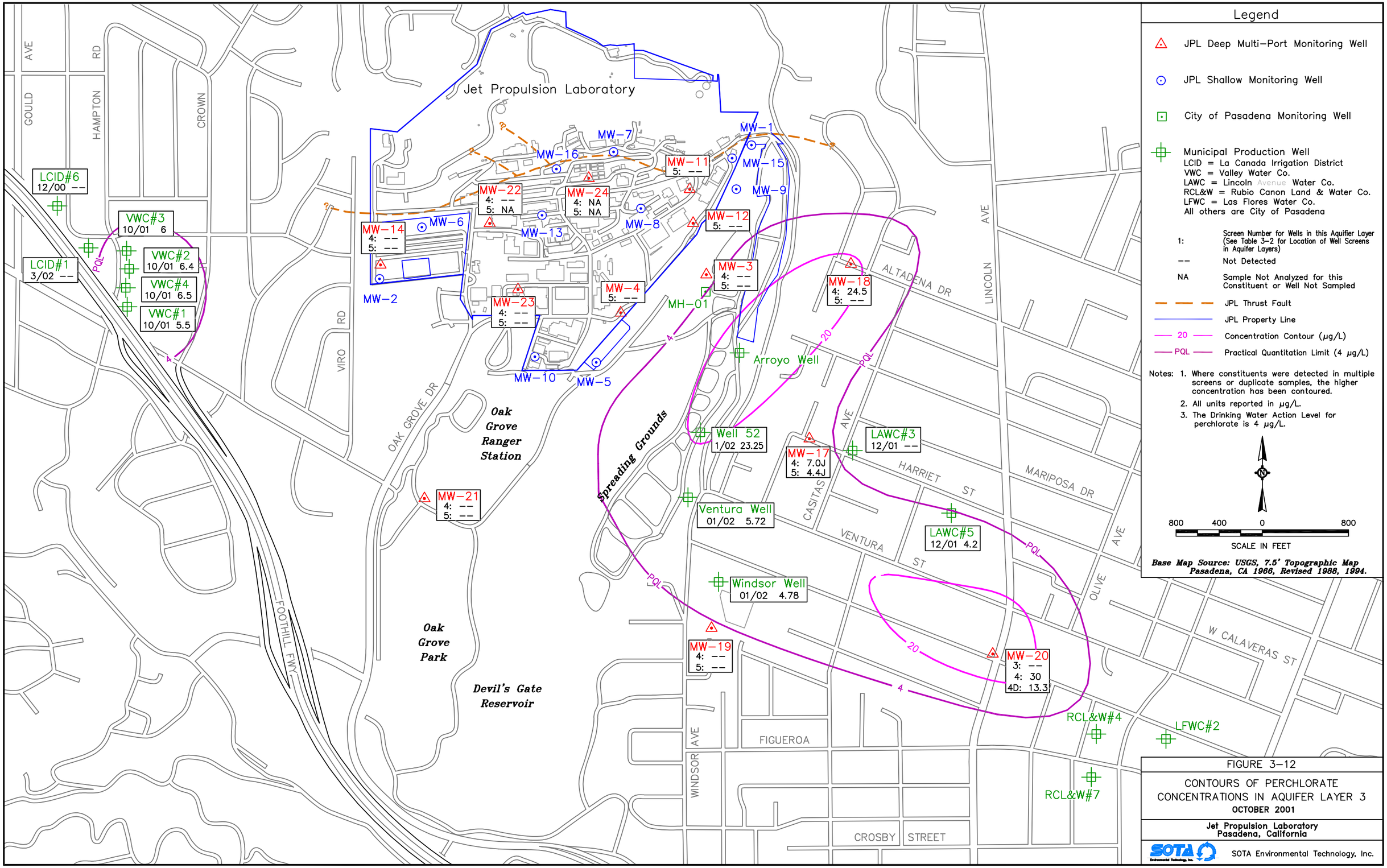


FIGURE 3-12

CONTOURS OF PERCHLORATE CONCENTRATIONS IN AQUIFER LAYER 3

OCTOBER 2001

Jet Propulsion Laboratory
Pasadena, California

SOTA Environmental Technology, Inc.