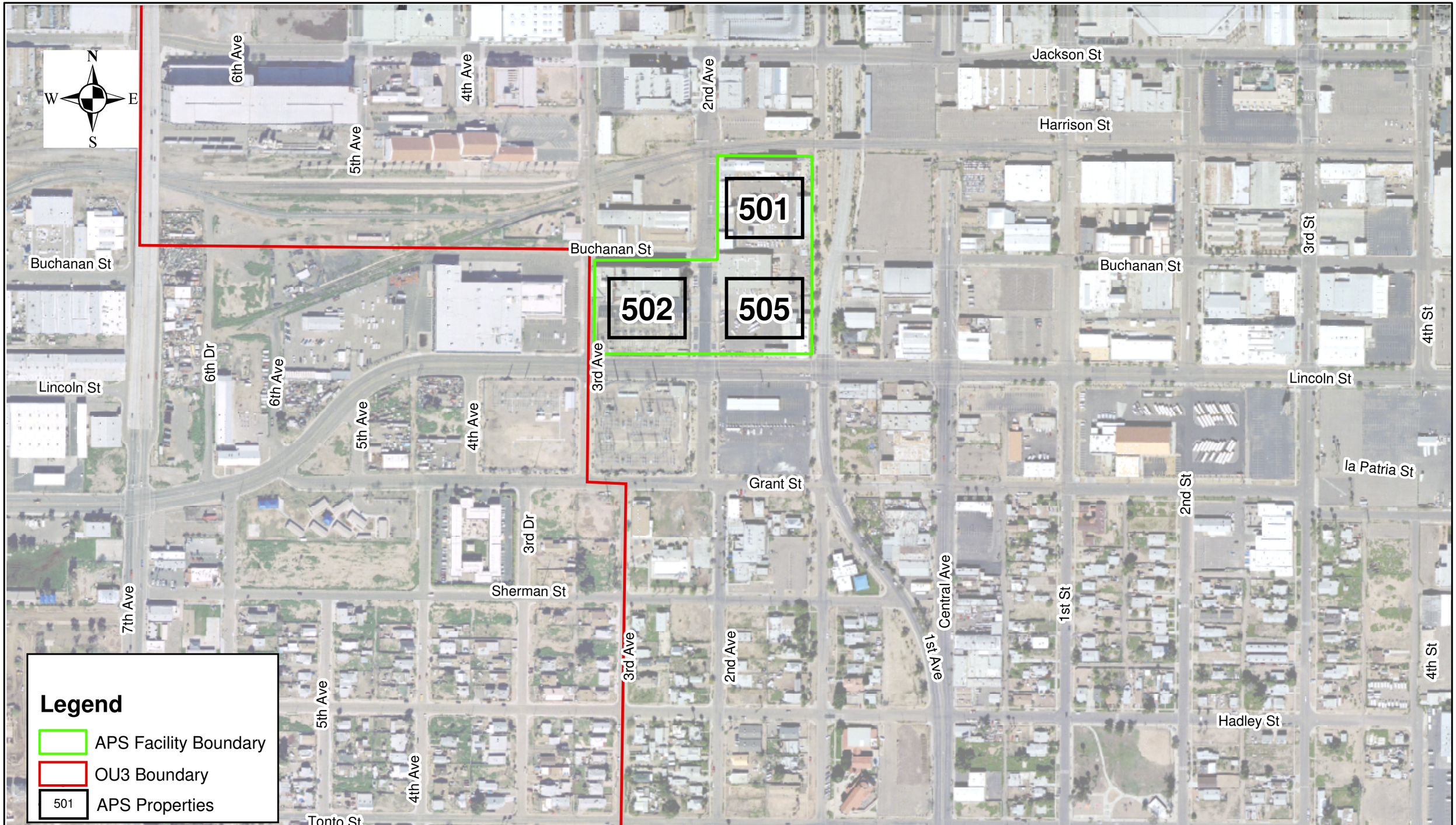


Aerial Photo from
Landiscor, Inc, Taken 01/04

0 0.05 0.1 0.2 Miles

JOB NO.:	6-115-005008
DESIGN:	MLD
DRAWN:	SLW
DATE:	1/2007
SCALE:	AS SHOWN

APS FACILITY
MOTOROLA 52ND STREET SUPERFUND SITE
OPERABLE UNIT 3

APS Facility
Location Map

FIGURE
1

amec

Map Document: (I:\Water Resources\Projects\2006 Projects\6-115-005008\AMEC Documents\GIS\GIS 10-18-06\MXD\Completeness Report\APS_Facility_Map.mxd)
02/13/2007 -- 11:30:26 AM

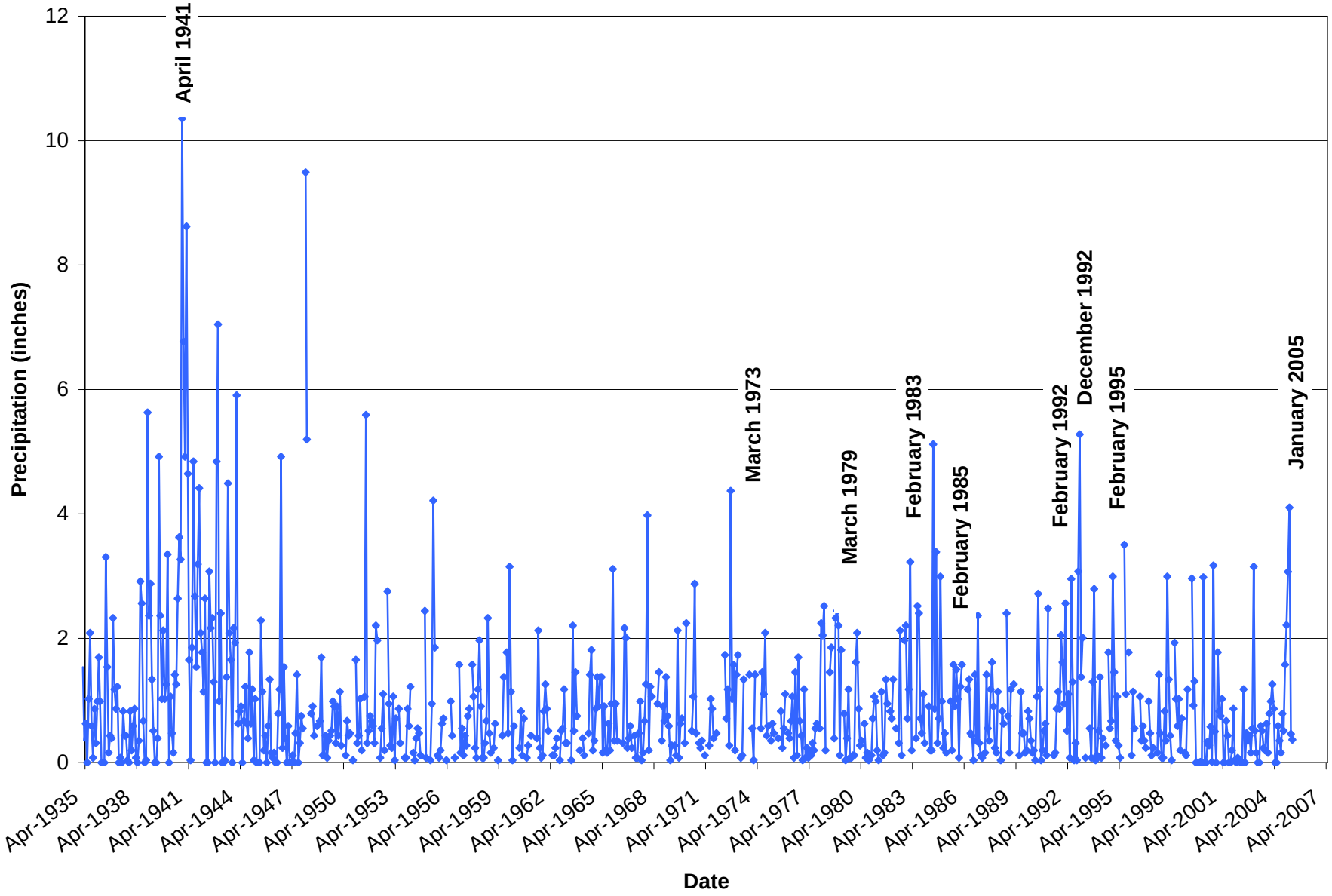


Figure 2

Historical Monthly Precipitation in the Salt River Valley (1935-2005)

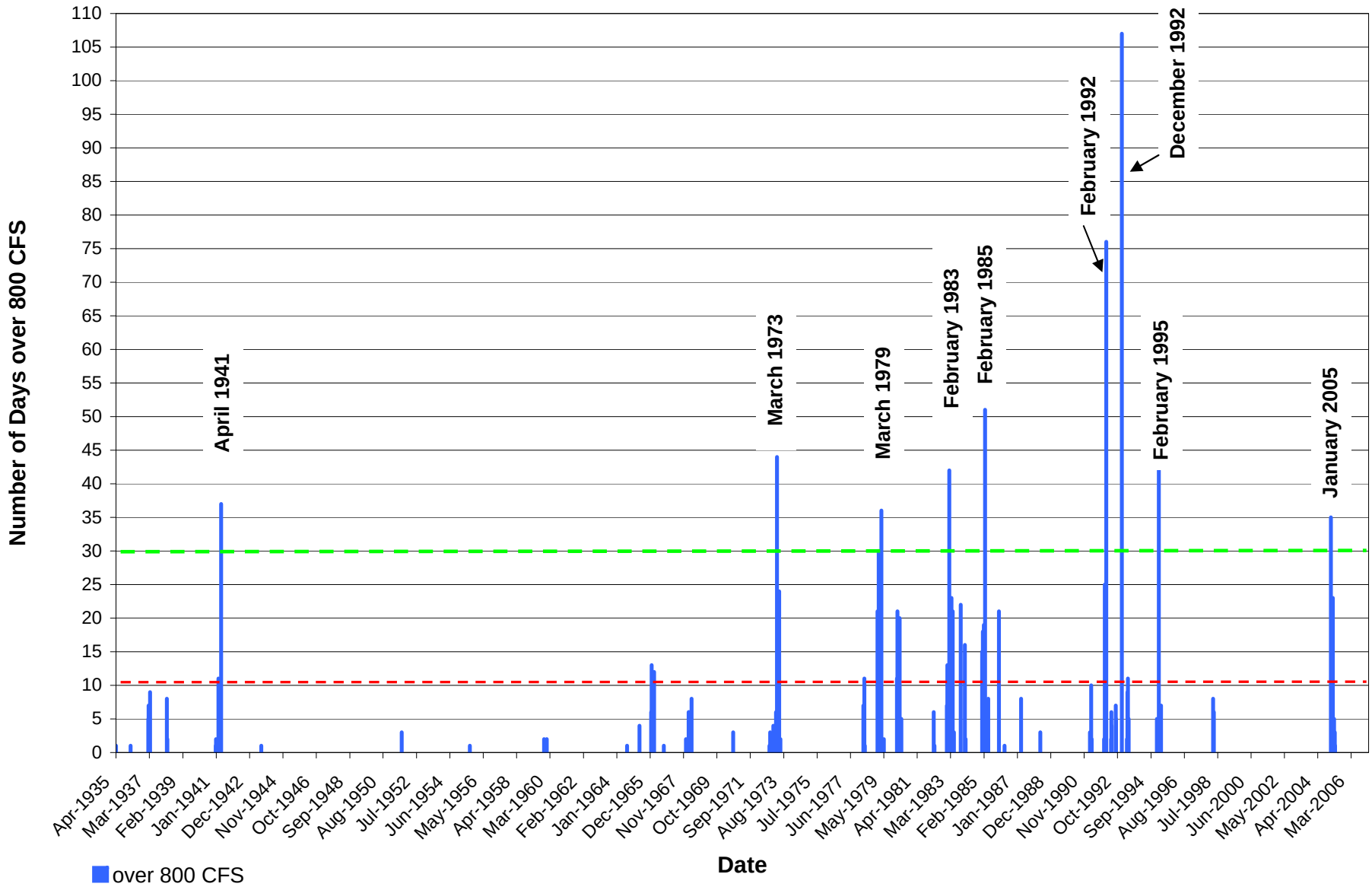
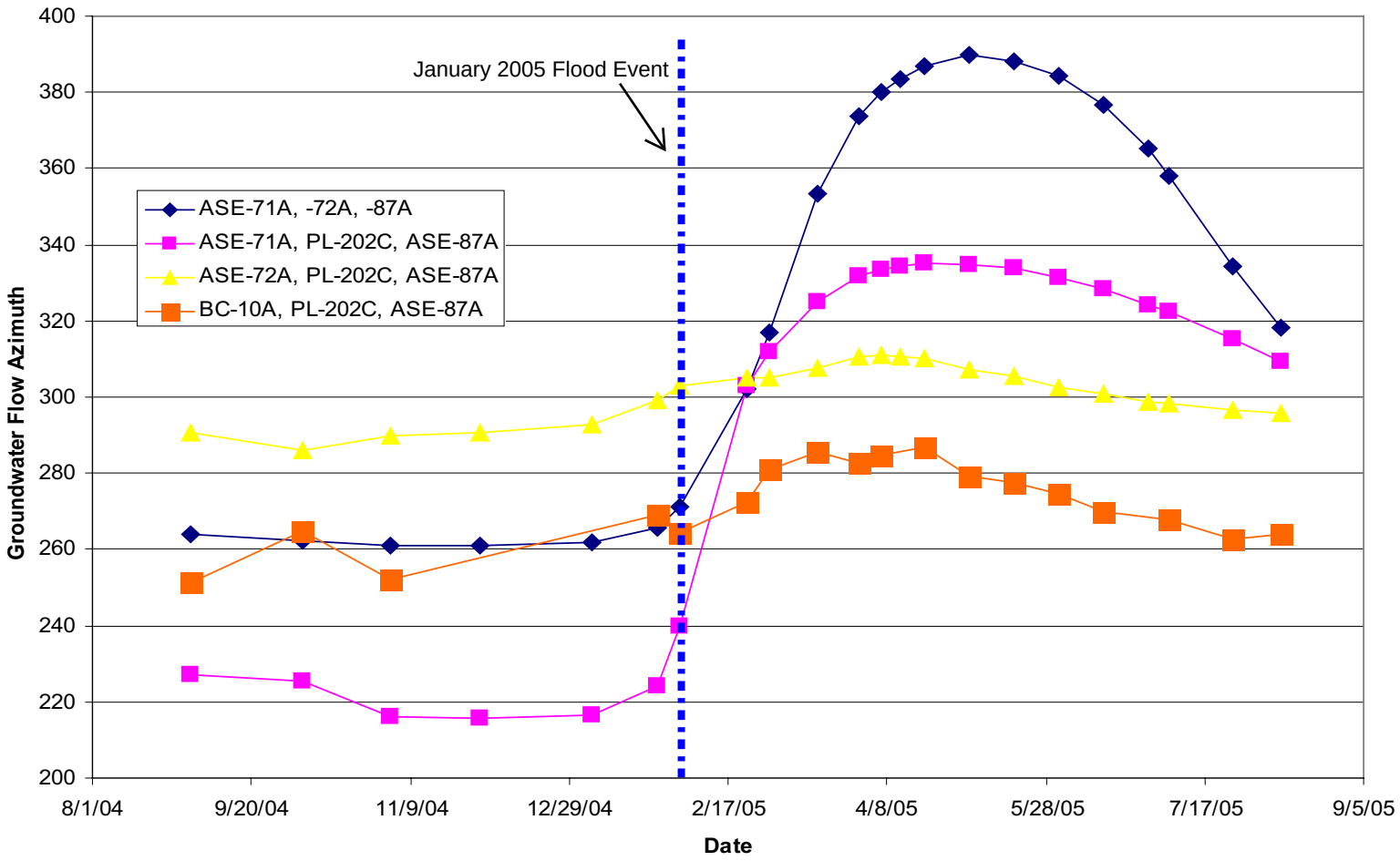


Figure 3

Occurrence of Historical Salt River Flood Events over Granite Reef Dam above 800 CFS (1935 to 2005)

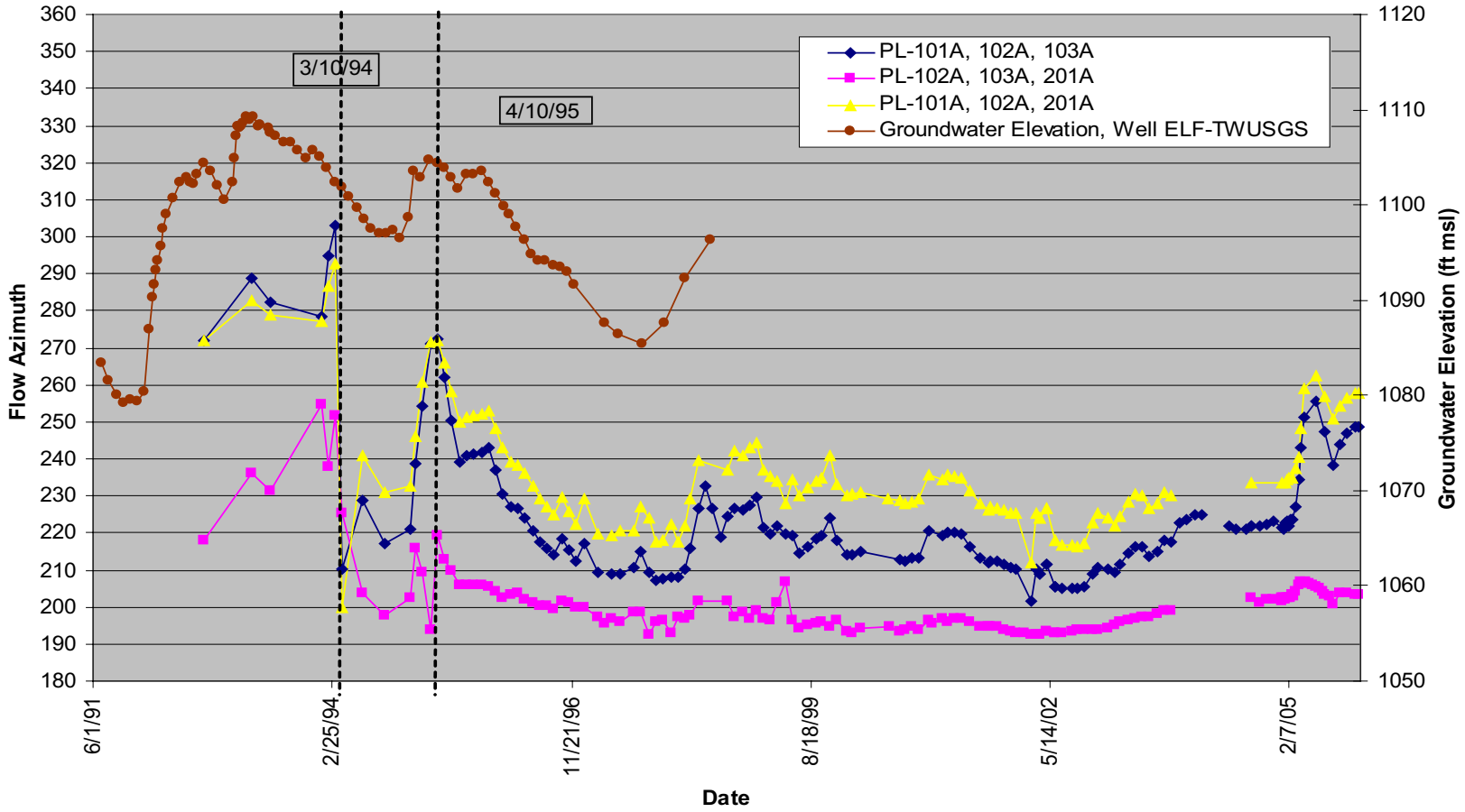
Note: Groundwater Flow Azimuth measured in degrees.



AMEC Source: Honeywell Final FRI, Appendix N, Figure N-14, Dec. 2005

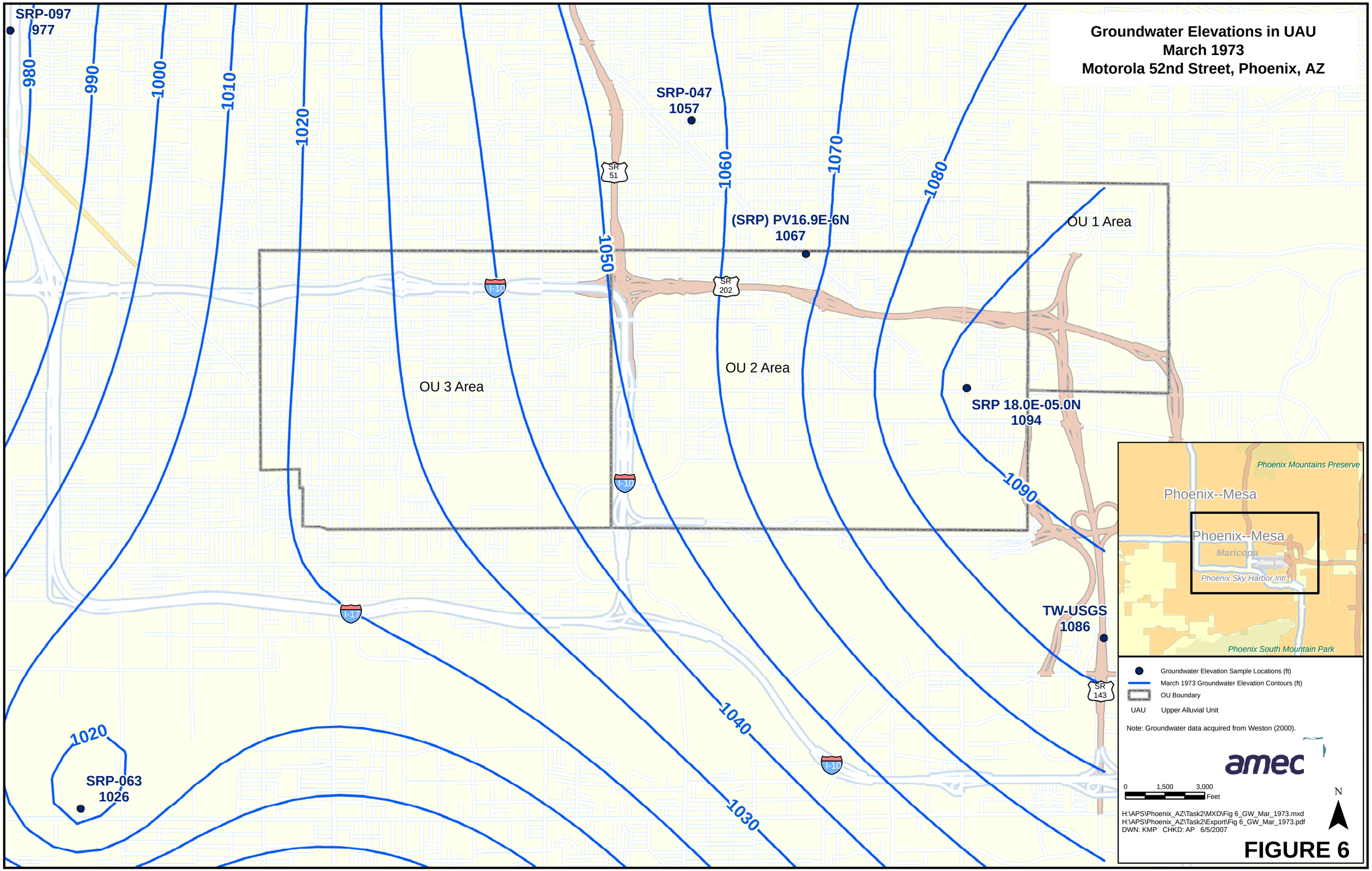
FIGURE 4
Groundwater Flow Azimuths for January 2005 Flood Event

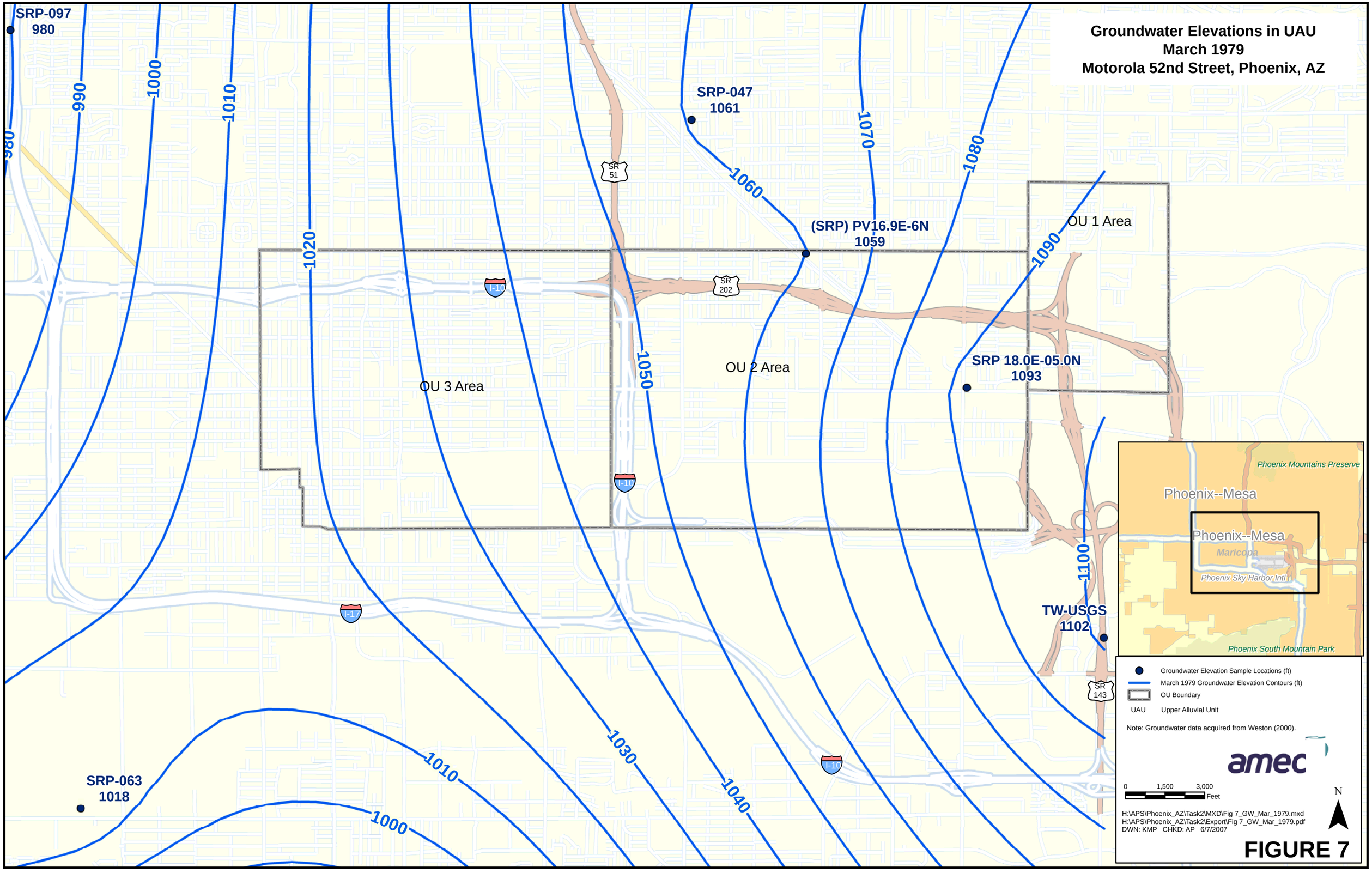
Note: Flow Azimuth measured in degrees.



AMEC Source: Honeywell Final FRI, Appendix N, Figure N-12, Dec. 2005

FIGURE 5
Groundwater Flow Azimuths 1991-2005


Groundwater Elevations in UAU
March 1973
Motorola 52nd Street, Phoenix, AZ
SRP-097
977
SRP-047
1057
(SRP) PV16.9E-6N
1067
SRP 18.0E-05.0N
1094
TW-USGS
1086
SRP-063
1026
980
990
1000
1010
1020
1050
1060
1070
1080
1090
1040
1030
OU 1 Area
OU 2 Area
OU 3 Area
SR 51
SR 202
SR 143
I-10
I-17
Phoenix Mountains Preserve
Phoenix--Mesa
Phoenix--Mesa
Maricopa
Phoenix Sky Harbor Intl
Phoenix South Mountain Park
Groundwater Elevation Sample Locations (ft)
March 1973 Groundwater Elevation Contours (ft)
OU Boundary
UAU Upper Alluvial Unit
Note: Groundwater data acquired from Weston (2000).
amec
0 1,500 3,000 Feet
N
H:\APS\Phoenix_AZ\Task2\MXD\Fig 6_GW_Mar_1973.mxd
H:\APS\Phoenix_AZ\Task2\Export\Fig 6_GW_Mar_1973.pdf
DWN: KMP CHKD: AP 6/5/2007
FIGURE 6


Groundwater Elevations in UAU
March 1979
Motorola 52nd Street, Phoenix, AZ
SRP-097
980
SRP-047
1061
(SRP) PV16.9E-6N
1059
SRP 18.0E-05.0N
1093
TW-USGS
1102
SRP-063
1018
980
990
1000
1010
1020
1030
1040
1050
1060
1070
1080
1090
1100
OU 1 Area
OU 2 Area
OU 3 Area
SR 51
SR 202
SR 143
I-10
I-17
Phoenix Mountains Preserve
Phoenix--Mesa
Phoenix--Mesa
Maricopa
Phoenix Sky Harbor Intl
Phoenix South Mountain Park
Groundwater Elevation Sample Locations (ft)
March 1979 Groundwater Elevation Contours (ft)
OU Boundary
UAU Upper Alluvial Unit
Note: Groundwater data acquired from Weston (2000).
amec
0 1,500 3,000 Feet
N
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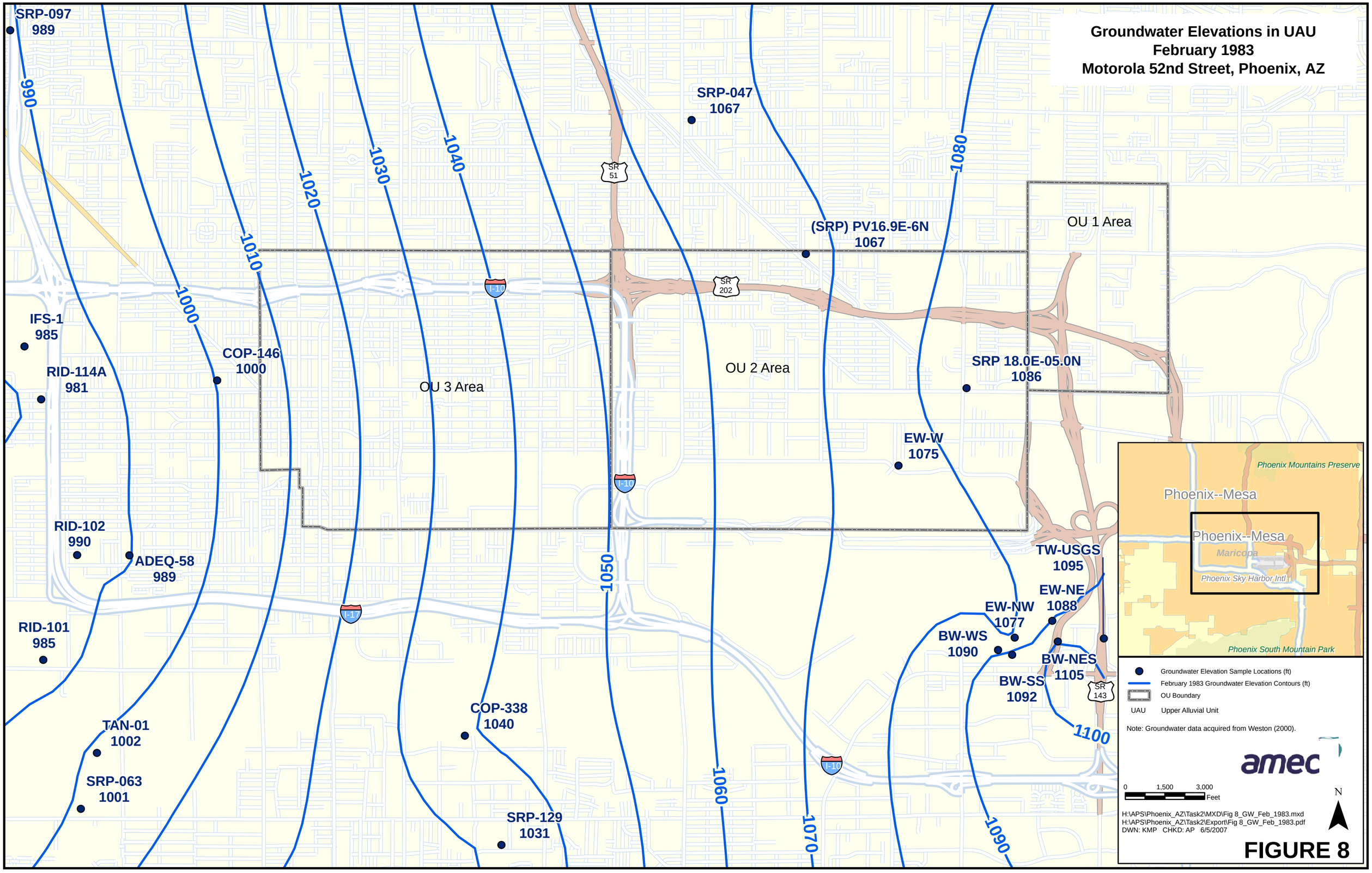
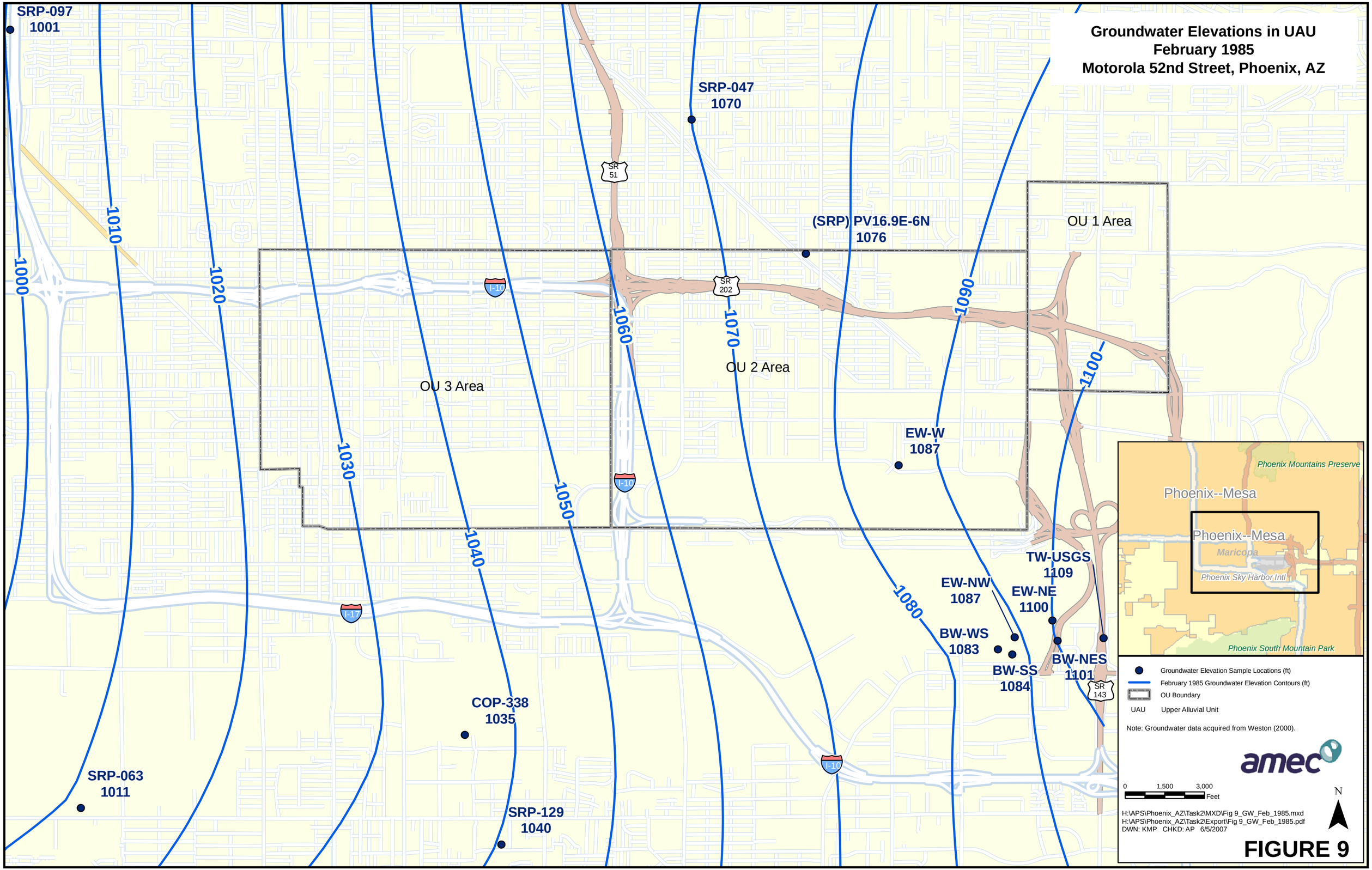
DWN: KMP CHKD: AP 6/7/2007
FIGURE 7


Groundwater Elevations in UAU
February 1983
Motorola 52nd Street, Phoenix, AZ
SRP-097
989
SRP-047
1067
(SRP) PV16.9E-6N
1067
IFS-1
985
RID-114A
981
COP-146
1000
SRP 18.0E-05.0N
1086
EW-W
1075
RID-102
990
ADEQ-58
989
TW-USGS
1095
EW-NE
1088
EW-NW
1077
BW-WS
1090
BW-NES
1105
BW-SS
1092
RID-101
985
TAN-01
1002
SRP-063
1001
COP-338
1040
SRP-129
1031
990
1000
1010
1020
1030
1040
1050
1060
1070
1080
1090
1100
OU 1 Area
OU 2 Area
OU 3 Area
SR 51
SR 202
SR 143
I-10
I-17
Phoenix Mountains Preserve
Phoenix--Mesa
Phoenix--Mesa
Maricopa
Phoenix Sky Harbor Intl
Phoenix South Mountain Park
Groundwater Elevation Sample Locations (ft)
February 1983 Groundwater Elevation Contours (ft)
OU Boundary
UAU Upper Alluvial Unit
Note: Groundwater data acquired from Weston (2000).
amec
0 1,500 3,000
Feet
N
H:\APS\Phoenix_AZ\Task2\MXD\Fig 8_GW_Feb_1983.mxd
H:\APS\Phoenix_AZ\Task2\Export\Fig 8_GW_Feb_1983.pdf
DWN: KMP CHKD: AP 6/5/2007
FIGURE 8


Groundwater Elevations in UAU
February 1985
Motorola 52nd Street, Phoenix, AZ
SRP-097
1001
SRP-047
1070
(SRP) PV16.9E-6N
1076
OU 1 Area
OU 2 Area
OU 3 Area
EW-W
1087
EW-NW
1087
EW-NE
1100
TW-USGS
1109
BW-WS
1083
BW-SS
1084
BW-NES
1101
COP-338
1035
SRP-063
1011
SRP-129
1040
1000
1010
1020
1030
1040
1050
1060
1070
1080
1090
1100
SR 51
SR 202
SR 143
I-10
I-17
Phoenix Mountains Preserve
Phoenix--Mesa
Phoenix--Mesa
Maricopa
Phoenix Sky Harbor Intl
Phoenix South Mountain Park
Groundwater Elevation Sample Locations (ft)
February 1985 Groundwater Elevation Contours (ft)
OU Boundary
UAU Upper Alluvial Unit
Note: Groundwater data acquired from Weston (2000).
amec
0 1,500 3,000 Feet
N
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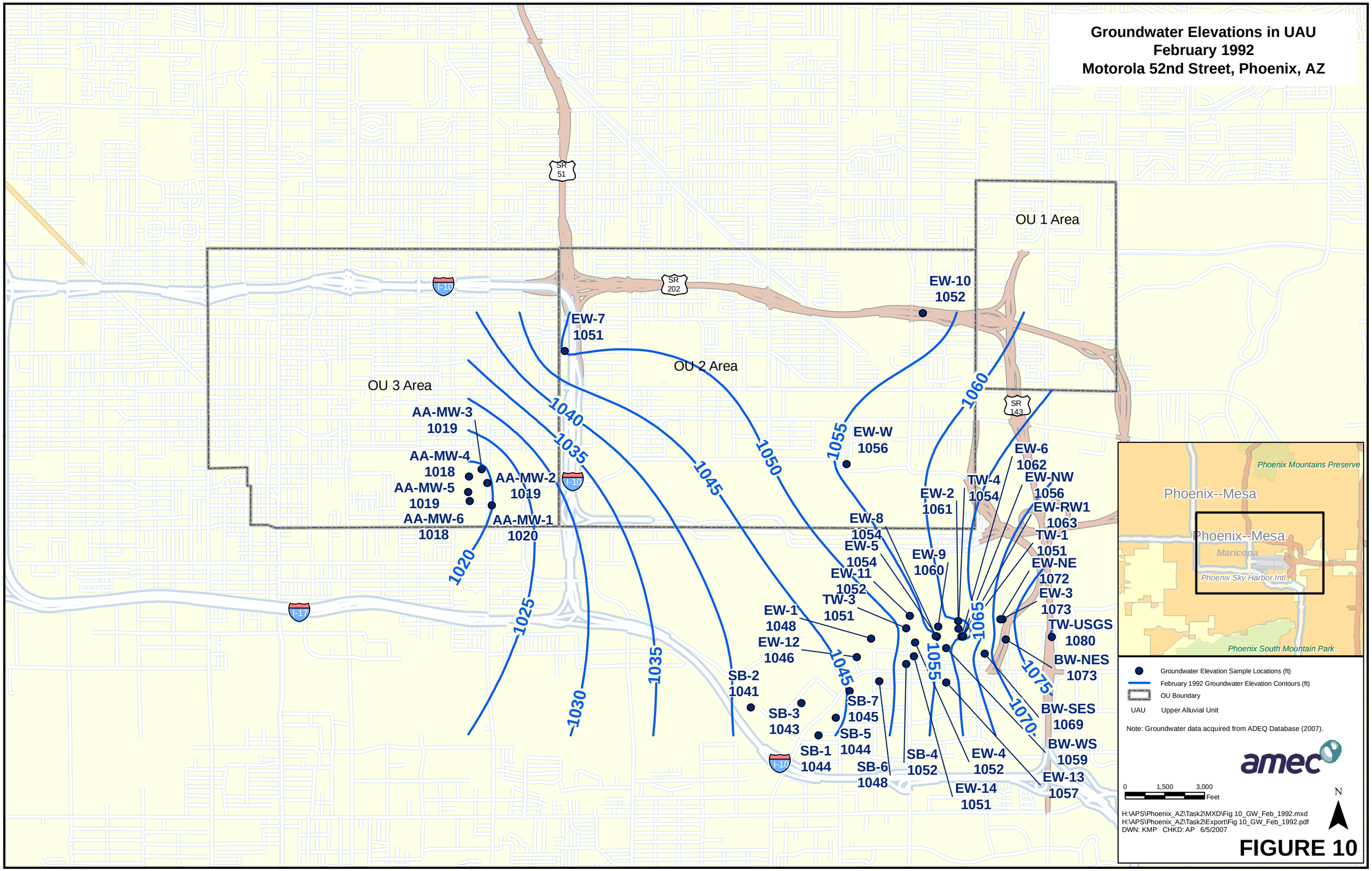
DWN: KMP CHKD: AP 6/5/2007
FIGURE 9


Groundwater Elevations in UAU
February 1992
Motorola 52nd Street, Phoenix, AZ
OU 1 Area
OU 2 Area
OU 3 Area
SR 51
SR 202
SR 143
I-10
I-17
EW-10
1052
EW-7
1051
AA-MW-3
1019
AA-MW-4
1018
AA-MW-5
1019
AA-MW-6
1018
AA-MW-2
1019
AA-MW-1
1020
EW-W
1056
EW-6
1062
EW-NW
1056
EW-RW1
1063
TW-1
1051
EW-NE
1072
EW-3
1073
TW-USGS
1080
BW-NES
1073
BW-SES
1069
BW-WS
1059
EW-13
1057
EW-4
1052
EW-14
1051
TW-4
1054
EW-2
1061
EW-9
1060
EW-8
1054
EW-5
1054
EW-11
1052
TW-3
1051
EW-1
1048
EW-12
1046
SB-2
1041
SB-3
1043
SB-1
1044
SB-7
1045
SB-5
1044
SB-6
1048
SB-4
1052
1020
1025
1030
1035
1040
1045
1050
1055
1060
1065
1070
1075
Phoenix Mountains Preserve
Phoenix--Mesa
Phoenix--Mesa
Maricopa
Phoenix Sky Harbor Intl
Phoenix South Mountain Park
Groundwater Elevation Sample Locations (ft)
February 1992 Groundwater Elevation Contours (ft)
OU Boundary
UAU Upper Alluvial Unit
Note: Groundwater data acquired from ADEQ Database (2007).
amec
0 1,500 3,000 Feet
N
H:\APS\Phoenix_AZ\Task2\MXD\Fig 10_GW_Feb_1992.mxd
H:\APS\Phoenix_AZ\Task2\Export\Fig 10_GW_Feb_1992.pdf
DWN: KMP CHKD: AP 6/5/2007
FIGURE 10

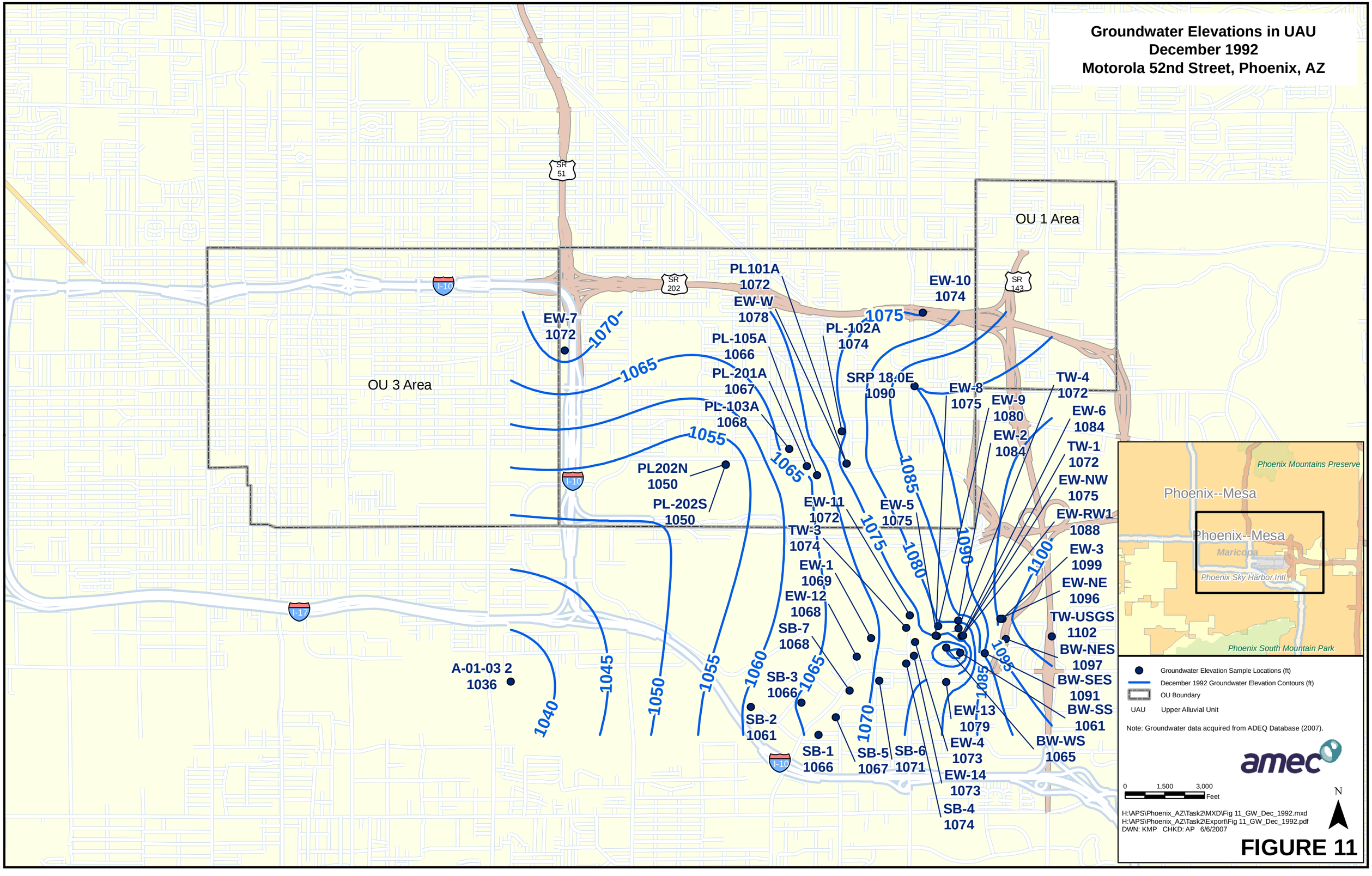

Groundwater Elevations in UAU
December 1992
Motorola 52nd Street, Phoenix, AZ
OU 1 Area
OU 3 Area
SR 51
SR 202
SR 143
I-10
I-17
PL101A 1072
EW-W 1078
EW-10 1074
EW-7 1072
PL-102A 1074
PL-105A 1066
PL-201A 1067
PL-103A 1068
SRP 18.0E 1090
EW-8 1075
EW-9 1080
EW-2 1084
TW-4 1072
EW-6 1084
TW-1 1072
EW-NW 1075
EW-RW1 1088
EW-3 1099
EW-NE 1096
TW-USGS 1102
BW-NES 1097
BW-SES 1091
BW-SS 1061
BW-WS 1065
PL202N 1050
PL-202S 1050
EW-11 1072
EW-5 1075
TW-3 1074
EW-1 1069
EW-12 1068
SB-7 1068
SB-3 1066
SB-2 1061
SB-1 1066
SB-5 1067
SB-6 1071
EW-13 1079
EW-4 1073
EW-14 1073
SB-4 1074
A-01-03 2 1036
1040
1045
1050
1055
1060
1065
1070
1075
1080
1085
1090
1095
1100
Phoenix Mountains Preserve
Phoenix--Mesa
Phoenix--Mesa
Maricopa
Phoenix Sky Harbor Intl
Phoenix South Mountain Park
Groundwater Elevation Sample Locations (ft)
December 1992 Groundwater Elevation Contours (ft)
OU Boundary
UAU Upper Alluvial Unit
Note: Groundwater data acquired from ADEQ Database (2007).
amec
0 1,500 3,000 Feet
N
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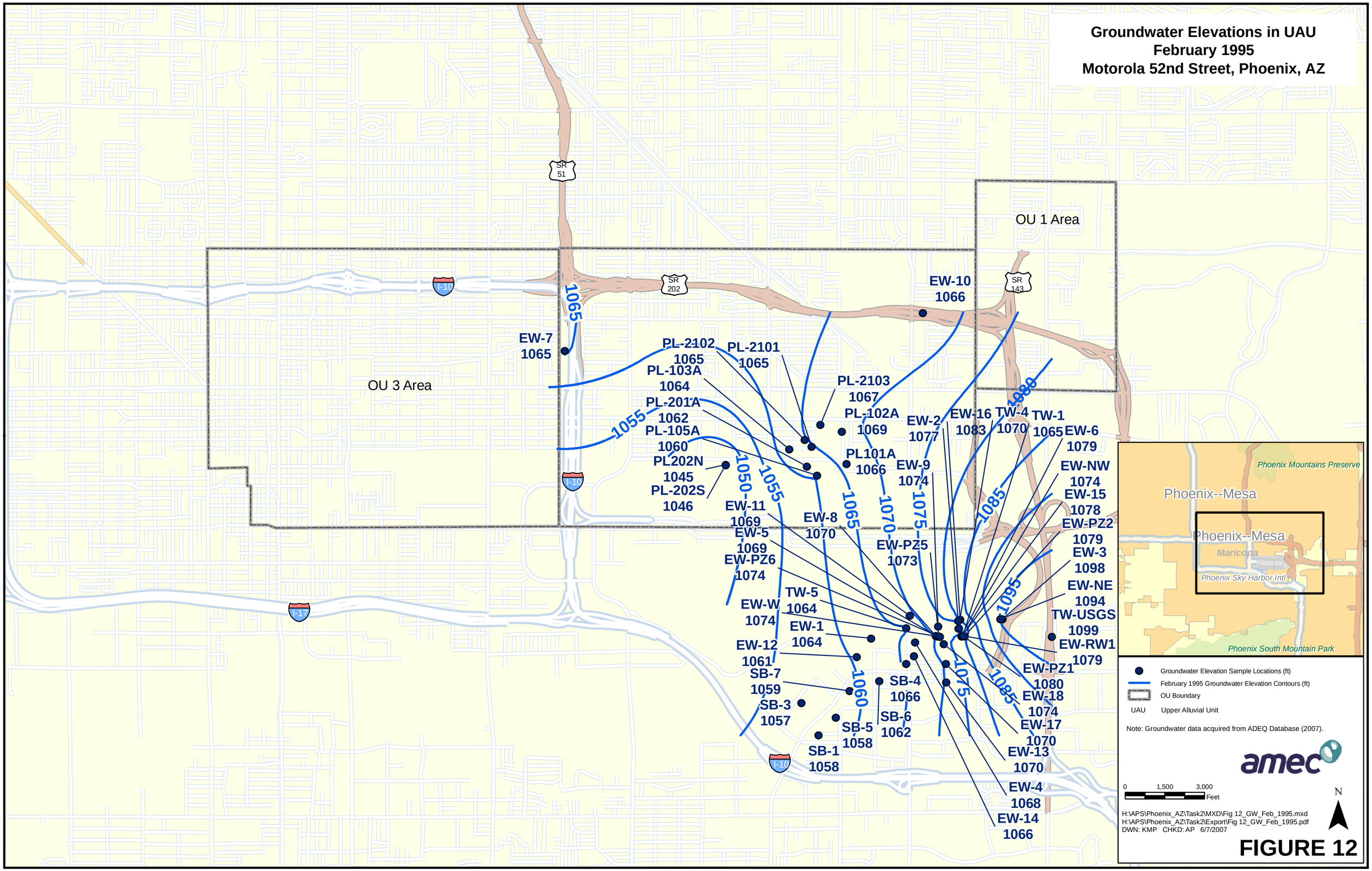
FIGURE 11


Groundwater Elevations in UAU
February 1995
Motorola 52nd Street, Phoenix, AZ
OU 1 Area
OU 3 Area
SR 51
SR 202
SR 143
I-10
I-17
1065
1055
1050
1060
1070
1075
1080
1085
1095
EW-10
1066
EW-7
1065
PL-2102
1065
PL-2101
1065
PL-103A
1064
PL-201A
1062
PL-105A
1060
PL202N
1045
PL-202S
1046
PL-2103
1067
PL-102A
1069
PL101A
1066
EW-2
1077
EW-16
1083
TW-4
1070
TW-1
1065
EW-6
1079
EW-9
1074
EW-NW
1074
EW-15
1078
EW-PZ2
1079
EW-3
1098
EW-NE
1094
TW-USGS
1099
EW-RW1
1079
EW-PZ1
1080
EW-18
1074
EW-17
1070
EW-13
1070
EW-4
1068
EW-14
1066
EW-11
1069
EW-5
1069
EW-PZ6
1074
EW-8
1070
EW-PZ5
1073
TW-5
1064
EW-W
1074
EW-1
1064
EW-12
1061
SB-7
1059
SB-3
1057
SB-1
1058
SB-5
1058
SB-6
1062
SB-4
1066
Phoenix Mountains Preserve
Phoenix--Mesa
Phoenix--Mesa
Maricopa
Phoenix Sky Harbor Intl
Phoenix South Mountain Park
Groundwater Elevation Sample Locations (ft)
February 1995 Groundwater Elevation Contours (ft)
OU Boundary
UAU Upper Alluvial Unit
Note: Groundwater data acquired from ADEQ Database (2007).
amec
0 1,500 3,000 Feet
N
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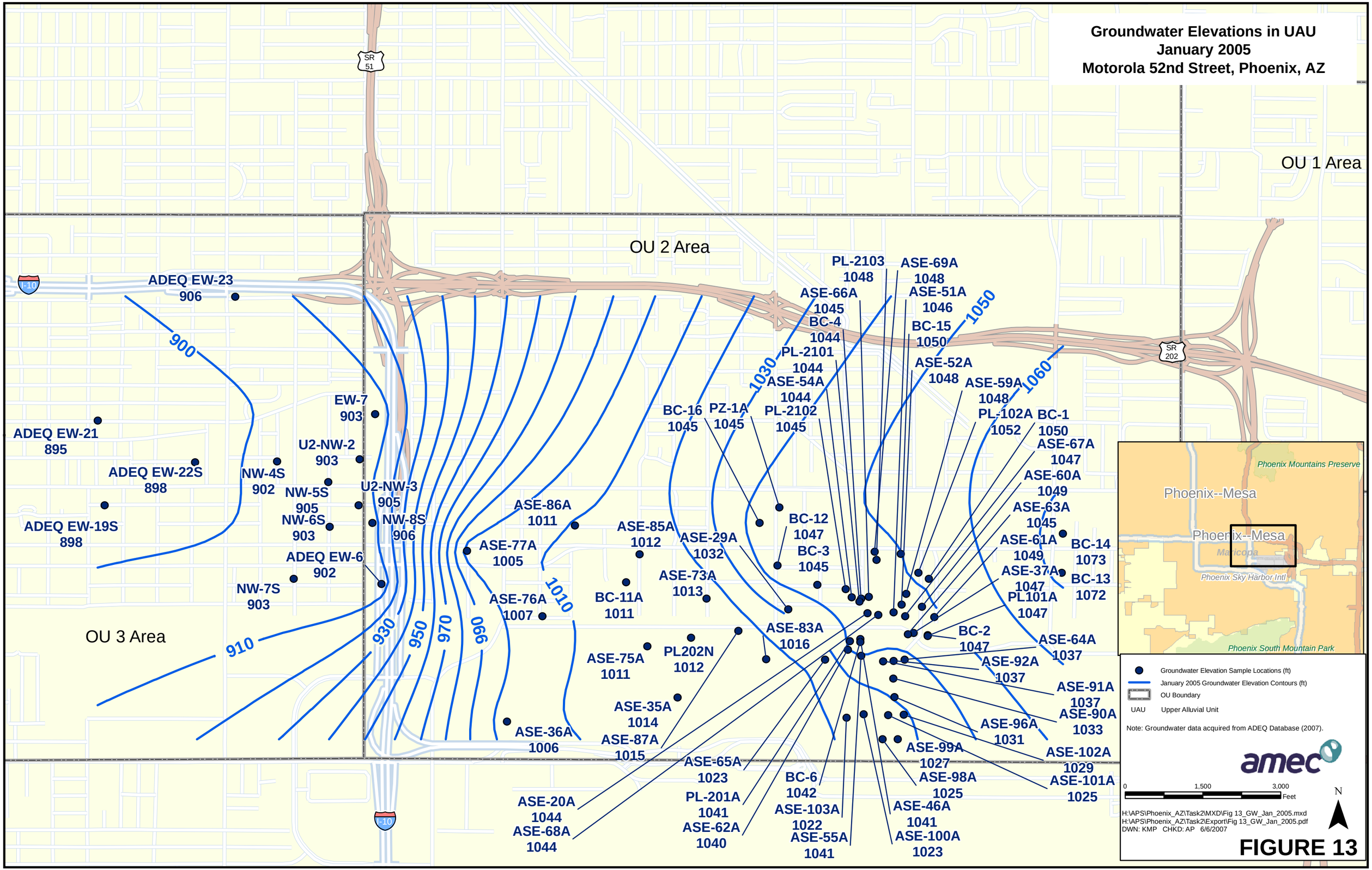
DWN: KMP CHKD: AP 6/7/2007
FIGURE 12


Groundwater Elevations in UAU
January 2005
Motorola 52nd Street, Phoenix, AZ
OU 1 Area
OU 2 Area
OU 3 Area
SR 51
SR 202
I-10
ADEQ EW-23
906
ADEQ EW-21
895
ADEQ EW-22S
898
ADEQ EW-19S
898
NW-4S
902
NW-5S
905
NW-6S
903
NW-7S
903
NW-8S
906
U2-NW-2
903
U2-NW-3
905
EW-7
903
ADEQ EW-6
902
900
910
930
950
970
990
1010
1030
1050
1060
PL-2103
1048
ASE-69A
1048
ASE-66A
1045
ASE-51A
1046
BC-4
1044
BC-15
1050
PL-2101
1044
ASE-52A
1048
ASE-54A
1044
ASE-59A
1048
PL-2102
1045
PL-102A
1052
BC-16
1045
PZ-1A
1045
BC-1
1050
ASE-67A
1047
ASE-60A
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ASE-63A
1045
ASE-61A
1049
BC-14
1073
ASE-37A
1047
BC-13
1072
PL101A
1047
BC-12
1047
BC-3
1045
ASE-29A
1032
ASE-86A
1011
ASE-85A
1012
ASE-77A
1005
ASE-73A
1013
ASE-76A
1007
BC-11A
1011
ASE-83A
1016
BC-2
1047
ASE-64A
1037
ASE-92A
1037
ASE-91A
1037
ASE-90A
1033
ASE-96A
1031
ASE-102A
1029
ASE-101A
1025
ASE-75A
1011
PL202N
1012
ASE-35A
1014
ASE-87A
1015
ASE-36A
1006
ASE-99A
1027
ASE-98A
1025
ASE-65A
1023
BC-6
1042
ASE-103A
1022
ASE-55A
1041
ASE-46A
1041
ASE-100A
1023
PL-201A
1041
ASE-62A
1040
ASE-20A
1044
ASE-68A
1044
Phoenix Mountains Preserve
Phoenix--Mesa
Phoenix--Mesa
Maricopa
Phoenix Sky Harbor Intl
Phoenix South Mountain Park
Groundwater Elevation Sample Locations (ft)
January 2005 Groundwater Elevation Contours (ft)
OU Boundary
UAU Upper Alluvial Unit
Note: Groundwater data acquired from ADEQ Database (2007).
amec
0
1,500
3,000
Feet
N
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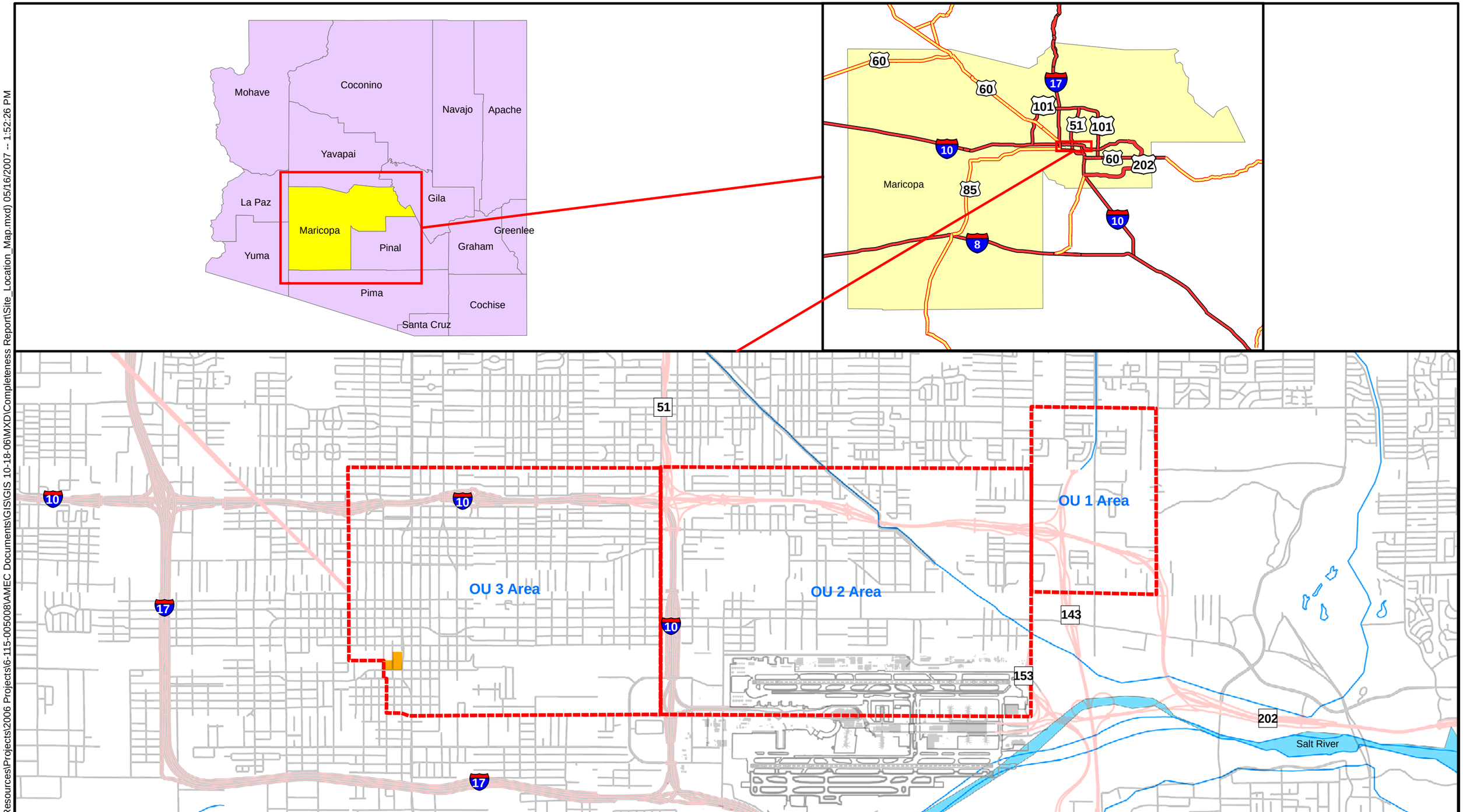
DWN: KMP CHKD: AP 6/6/2007
FIGURE 13



N
W E
S

0 0.5 1 2 Miles

1 inch equals 0.71 miles

Figure 14
Site Location Map

Legend

Operable Unit Boundaries

APS Property Boundary

amec

Map Document: (I:\Water Resources\Projects\2006 Projects\6-115-005008\AMEC Documents\GIS\GIS 10-18-06\MXD\Completeness Report\Site_Location_Map.mxd) 05/16/2007 -- 1:52:26 PM

PCE in Groundwater - February 1994
UAU Shallow Zone OU3
Motorola 52nd Street, Phoenix, AZ

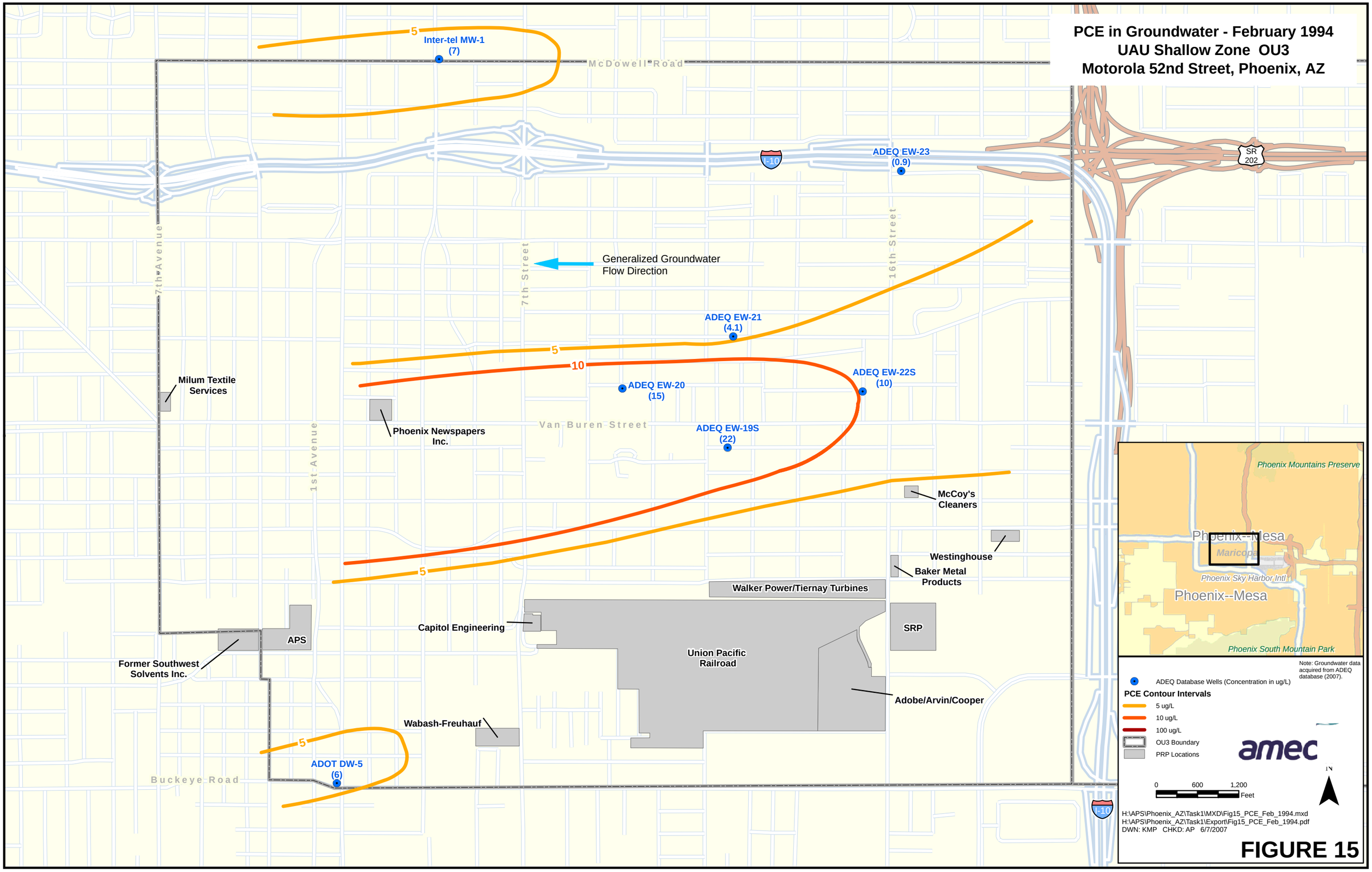


FIGURE 15

PCE in Groundwater - November 1994
UAU Shallow Zone OU3
Motorola 52nd Street, Phoenix, AZ

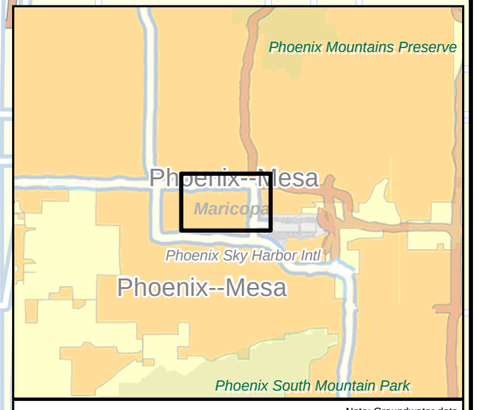
McDowell Road
I-10
SR 202
7th Avenue
7th Street
16th Street
1st Avenue
Van Buren Street
Buckeye Road

Generalized Groundwater Flow Direction

5
10
100

ADEQ EW-21 (3.6)
ADEQ EW-20 (12)
ADEQ EW-22S (9)
ADEQ EW-19S (15)
ADEQ EW-24 (24)
AVB42-03 (1000)
AVB42-01 (130)

Milum Textile Services
Phoenix Newspapers Inc.
McCoy's Cleaners
Westinghouse
Baker Metal Products
Walker Power/Tiernay Turbines
Capitol Engineering
Union Pacific Railroad
SRP
APS
Former Southwest Solvents Inc.
Adobe/Arvin/Cooper
Wabash-Freuhauf



Note: Groundwater data acquired from ADEQ database (2007).

ADEQ Database Wells (Concentration in ug/L)

PCE Contour Intervals

- 5 ug/L
- 10 ug/L
- 100 ug/L
- OU3 Boundary
- PRP Locations

amec

0 600 1,200 Feet

N

H:\APS\Phoenix_AZ\Task1\MXD\Fig16_PCE_Nov_1994.mxd
H:\APS\Phoenix_AZ\Task1\Export\Fig16_PCE_Nov_1994.pdf
DWN: KMP CHKD: AP 6/7/2007

FIGURE 16

PCE in Groundwater - December 1995
UAU Shallow Zone OU3
Motorola 52nd Street, Phoenix, AZ

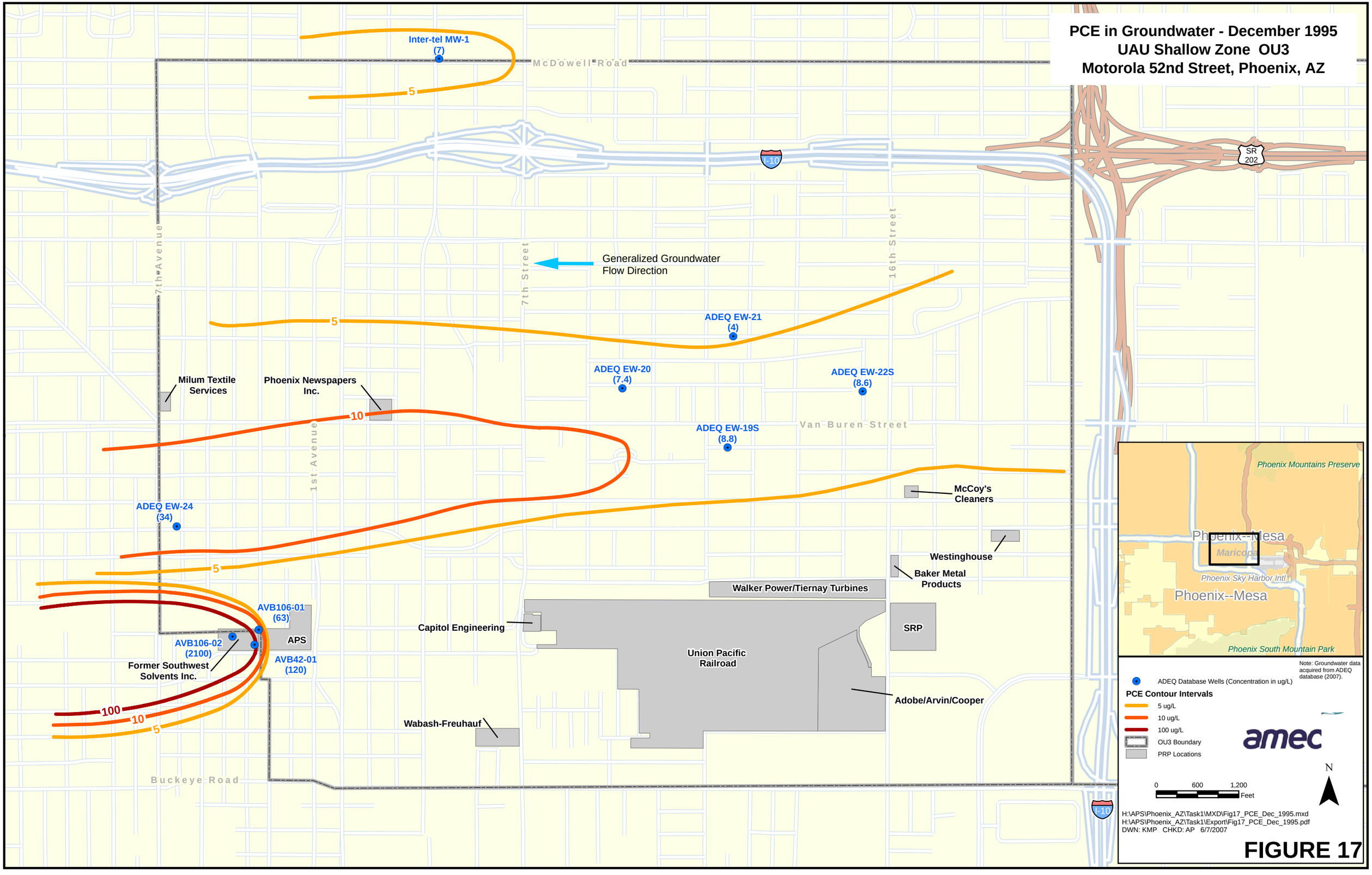


FIGURE 17

PCE in Groundwater - April 1996
UAU Shallow Zone OU3
Motorola 52nd Street, Phoenix, AZ

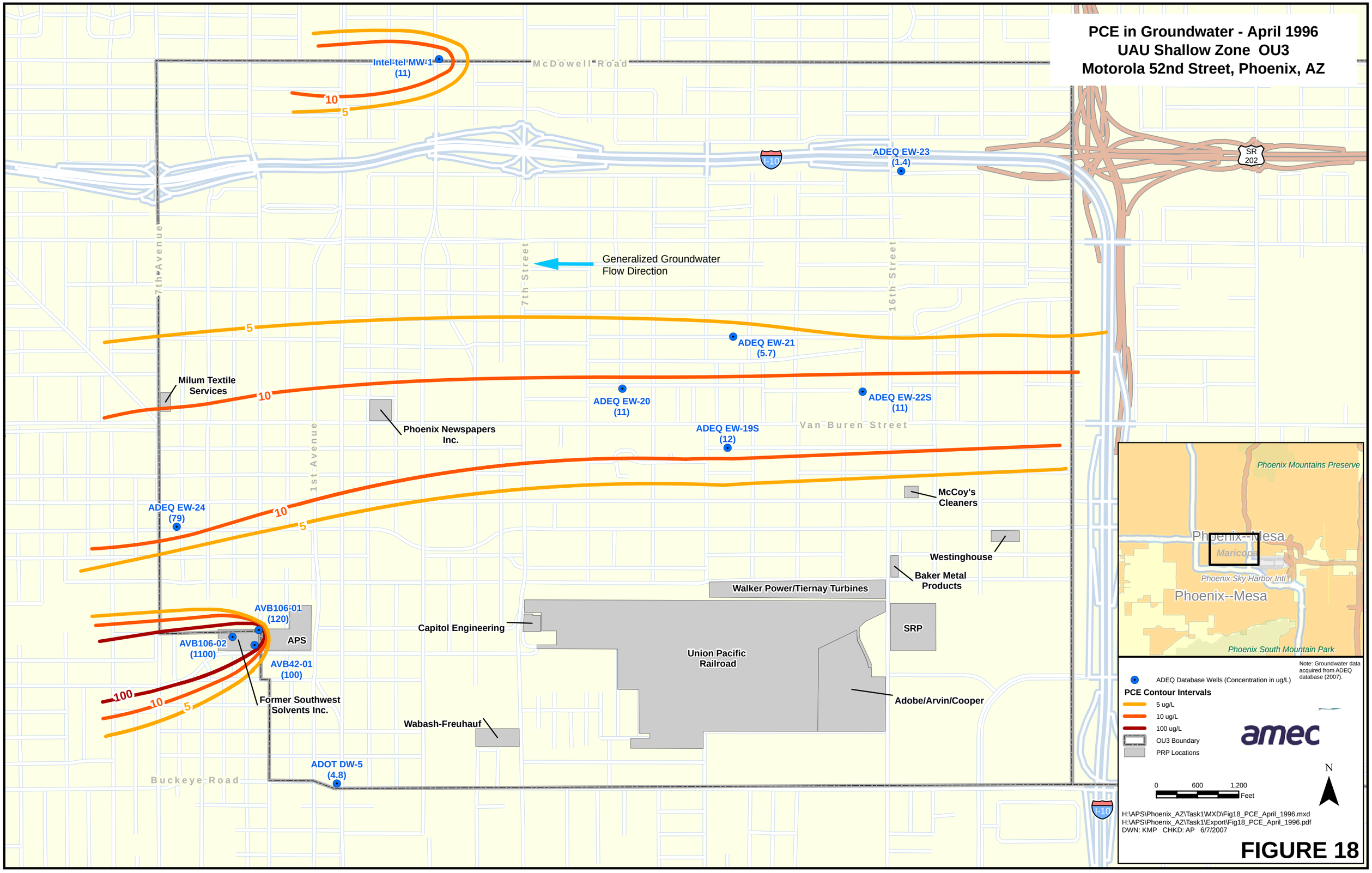


FIGURE 18

PCE in Groundwater - October 1996
UAU Shallow Zone OU3
Motorola 52nd Street, Phoenix, AZ

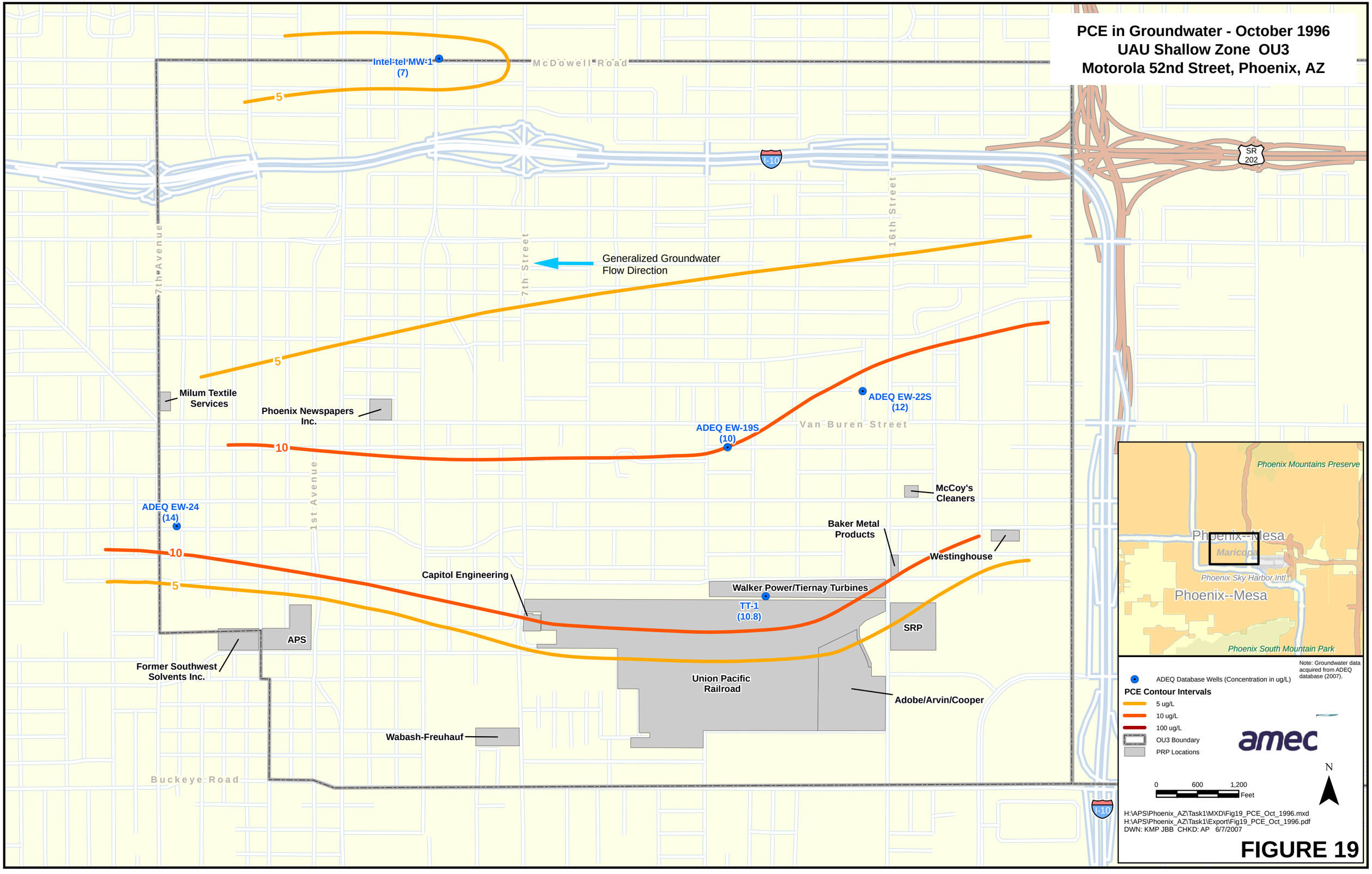


FIGURE 19

PCE in Groundwater - April 1997
UAU Shallow Zone OU3
Motorola 52nd Street, Phoenix, AZ

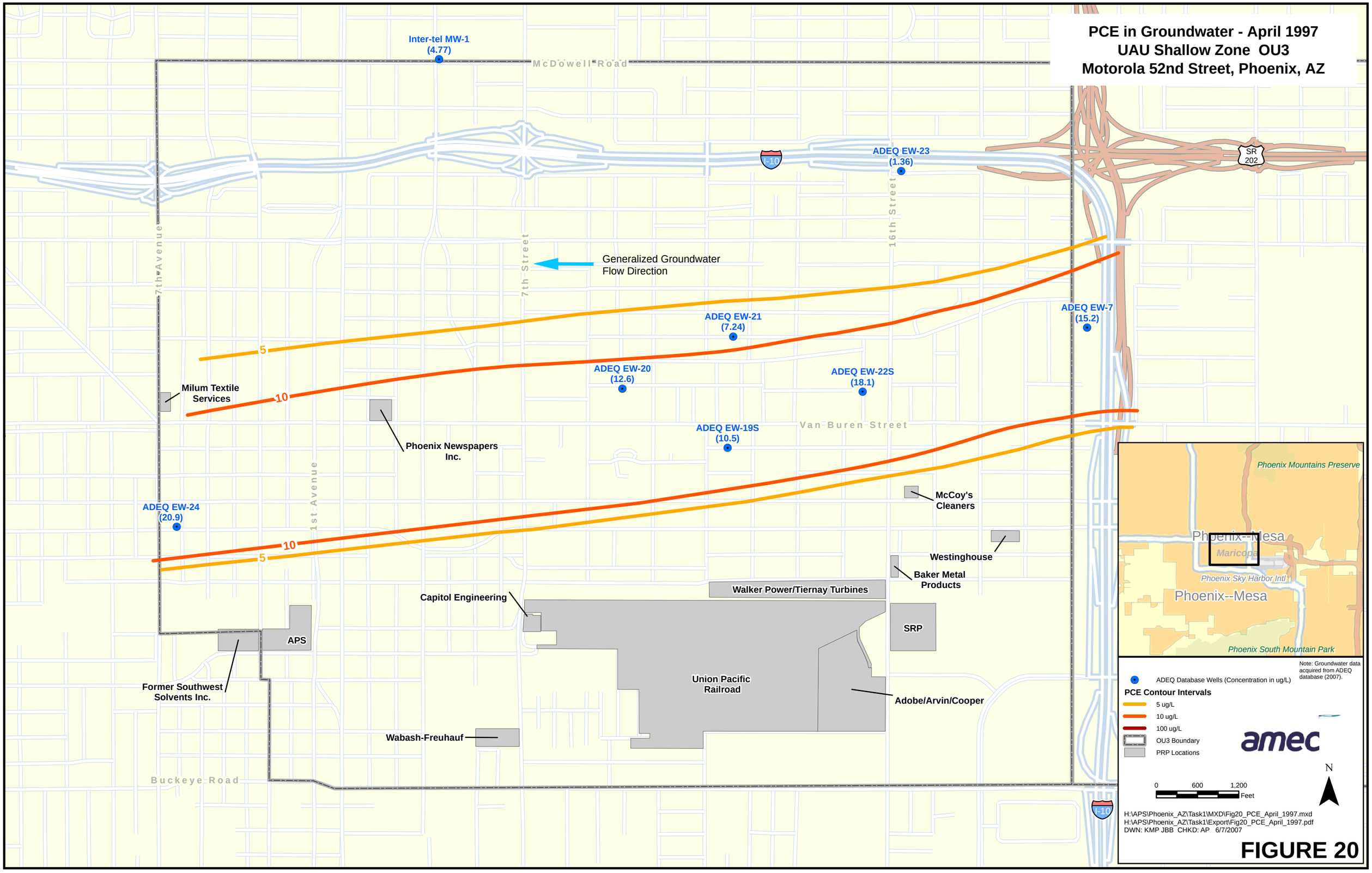


FIGURE 20

PCE in Groundwater - March 2003
UAU Shallow Zone OU3
Motorola 52nd Street, Phoenix, AZ

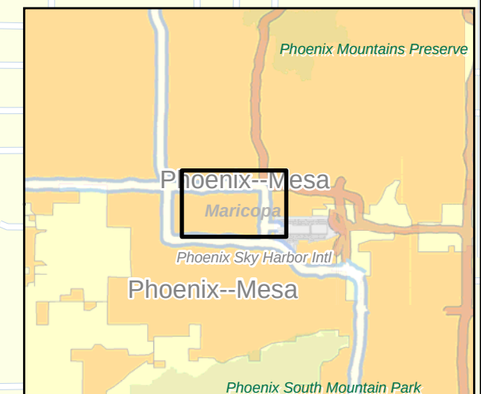
McDowell Road
Van Buren Street
Buckeye Road
7th Avenue
1st Avenue
7th Street
16th Street
I-10
SR 51
SR 202

Generalized Groundwater Flow Direction

OU3-8S (1)
OU3-5S (2)
ADEQ EW-21 (0.5)
ADEQ EW-20 (5)
ADEQ EW-22S (9)
U2-NW-2 (2.1)
ADEQ EW-19S (19)
U2-NW-3 (6.4)
SC-MW-5 (2.7)
GH-MW-11 (5)
AEW01-24R (8)
AVB14-01 (3.5)
AVB18-01 (2.3)
AVB 42-03 (16)
AVB12-01 (19)
AVB106-01 (8.9)
AVB85-01 (69)
AVB77-01 (3.5)
AVB26-01 (10)
AVB103-02 (0.8)
AVB99-01 (0.7)
16ST-04 (0.5)
16ST-02 (0.5)

Milum Textile Services
Phoenix Newspapers Inc.
McCoy's Cleaners
OU Remediation Facility
Baker Metal Products
Westinghouse
Walker Power/Tiernay Turbines
Capitol Engineering
APS
SRP
Former Southwest Solvents Inc.
Union Pacific Railroad
Adobe/Arvin/Cooper
Wabash-Freuhauf

5
10
50



Note: Groundwater data acquired from ADEQ database (2007).

ADEQ Database Wells (Concentration in ug/L)

PCE Contour Intervals
- 5 ug/L
- 10 ug/L
- 50 ug/L
- OU3 Boundary
- OU2 Remediation Facility
- PRP Locations

amec

0 700 1,400 Feet

N

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DWN: KMP JBB CHKD: AP 6/7/2007

FIGURE 21

PCE in Groundwater - September 2003
UAU Shallow Zone OU3
Motorola 52nd Street, Phoenix, AZ

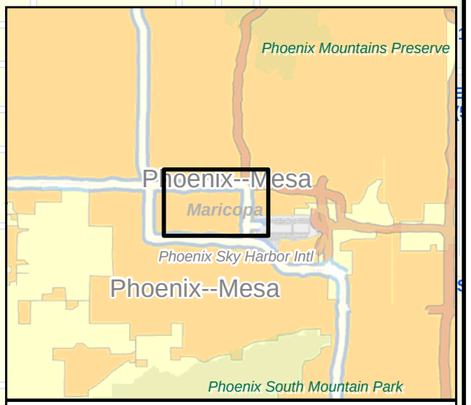
McDowell Road
Van Buren Street
Buckeye Road
7th Avenue
7th Street
1st Avenue
16th Street
I-10
SR 51
SR 202

Generalized Groundwater Flow Direction

OU3-8S (0.5)
AVB115-01 (6.2)
AVB14-01 (37)
ADEQ MW-3 (20)
AVB18-01 (7)
AVB85-01 (1.7)
AVB77-01 (8.1)
AVB12-01 (15)
AVB42-03 (20)
AVB106-01 (2)
OU3-11S (2.4)
AVB99-01 (4)
ADEQ EW-20 (19)
ADEQ EW-21 (2.7)
ADEQ EW-19S (0.5)
ADEQ EW-22S (0.6)
NW-4S (1.8)
U2-NW-2 (1.6)
NW-5S (5.4)
EW-7 (18)
EW-N (0.6)
U2-NW-3 (4.2)
NW-6S (1.8)
NW-8S (3)
ADEQ EW-6 (4.9)
16ST-04 (0.5)

5
10

Milum Textile Services
Phoenix Newspapers Inc.
McCoy's Cleaners
OU2 Remediation Facility
Westinghouse
Baker Metal Products
Walker Power/Tiernay Turbines
APS
Capitol Engineering
Union Pacific Railroad
SRP
Adobe/Arvin/Cooper
Former Southwest Solvents Inc.
Wabash-Freuhauf



Note: Groundwater data acquired from ADEQ database (2007).

ADEQ Database Wells (Concentration in ug/L)

PCE Contour Intervals
- 5 ug/L
- 10 ug/L
- OU2 Remediation Facility
- OU3 Boundary
- PRP Locations

amec

0 700 1,400 Feet

N

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DWN: KMP JBB CHKD: AP 6/7/2007

FIGURE 22

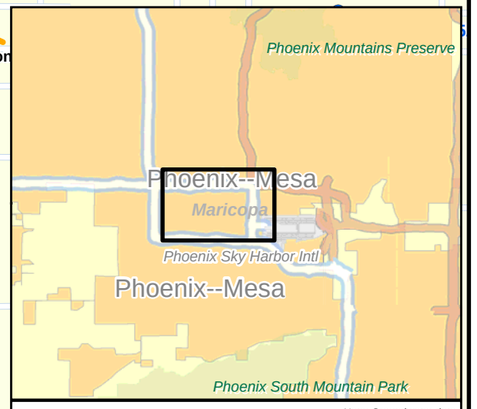
PCE in Groundwater - March 2005
UAU Shallow Zone OU3
Motorola 52nd Street, Phoenix, AZ

McDowell Road
Van Buren Street
Buckeye Road
7th Avenue
1st Avenue
7th Street
16th Street
I-10
SR 51
SR 202

Generalized Groundwater Flow Direction

AVB123-01 (1.4)
OU3-8S (0.8)
AVB115-01 (6.7)
AVB124-01 (3.3)
Milum Textile Services
Phoenix Newspapers Inc.
OU3-5SR (2.5)
ADEQ EW-21 (0.8)
ADEQ EW-20 (1.5)
ADEQ EW-22S (1.6)
U2-NW-2 (1.6)
NW-5S (2.1)
ADEQ EW-19S (13)
U2-NW-3 (6.3)
McCoy's Cleaners
NW-8S (7.4)
NW-6S (3.1)
OU2 Remediation Facility
GH-MW-11 (130)
AEW01-24R (4.2)
AVB14-01 (7)
(A-1-3)7BCA (3.7)
ADEQ MW-3 (25)
AVB18-01 (4.6)
AVB42-03 (5.8)
EW-13-118 (0.5)
Baker Metal Products
TT-2 (0.5)
Walker Power/Tiernay Turbines
ADEQ EW-6 (1.4)
Westinghouse
16ST-04 (0.5)
16ST-02 (0.5)
SRP
AVB106-01 (3.6)
APS
Capitol Engineering
AVB85-01 (61)
AVB12-01 (5.5)
ADEQ MW-1 (15)
AVB40-08 (12)
Former Southwest Solvents Inc.
Union Pacific Railroad
Adobe/Arvin/Cooper
Wabash-Freuhauf
AVB103-02 (0.9)
ADEQ MW-2 (24)
AVB125-01 (7.3)
AVB47-01 (190)

5
10
100



Note: Groundwater data acquired from ADEQ database (2007).

ADEQ Database Wells (Concentration in ug/L)

PCE Contour Intervals

- 5 ug/L
- 10 ug/L
- 100 ug/L
- OU2 Remediation Facility
- OU3 Boundary
- PRP Locations

amec

0 750 1,500 Feet

N

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DWN: KMP JBB CHKD: AP 6/7/2007

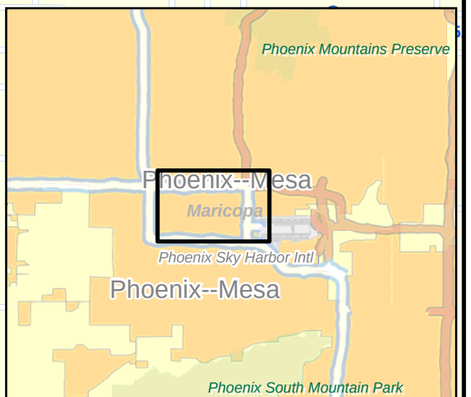
FIGURE 23

PCE in Groundwater - September 2005
UAU Shallow Zone OU3
Motorola 52nd Street, Phoenix, AZ

McDowell Road
Van Buren Street
Buckeye Road
7th Avenue
1st Avenue
7th Street
16th Street
I-10
SR 51
SR 202

Generalized Groundwater Flow Direction

AVB123-01 (2.6)
OU3-8S (0.6)
Phoenix Newspapers Inc.
Milum Textile Services
AVB115-01 (7)
AVB124-01 (5.7)
AVB14-01 (5.4)
OU3-5SR (3.6)
ADEQ EW-20 (3.2)
ADEQ EW-21 (0.78)
ADEQ EW-19S (6.3)
GH-MW-11 (2.5)
U2-NW-2 (1.4)
NW-5S (1.2)
U2-NW-3 (3.4)
NW-6S (1.1)
NW-8S (2.2)
McCoy's Cleaners
OU2 Remediation Facility
Westinghouse
Baker Metal Products
TT-2 (0.5)
TT-1 (0.5)
Walker Power/Tiernay Turbines
16ST-02 (0.5)
SRP
16ST-04 (0.5)
Capitol Engineering
OU3-11S (1.6)
AVB42-03 (2.4)
APS
AVB77-01 (3.4)
AVB12-01 (7.1)
AVB85-01 (49)
ADEQ MW-1 (17)
AVB26-01 (2.2)
Union Pacific Railroad
Adobe/Arvin/Cooper
Former Southwest Solvents Inc.
Wabash-Freuhauf
ADOT DW-5 (0.5)
ADEQ MW-2 (32)
AVB125-01 (3.6)
5
10



Note: Groundwater data acquired from ADEQ database (2007).

ADEQ Database Wells (Concentration in ug/L)

PCE Contour Intervals

- 5
- 10
- OU2 Remediation Facility
- OU3 Boundary
- PRP Locations

amec

N

0 750 1,500 Feet

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DWN: KMP JBB CHKD: AP 6/7/2007

FIGURE 24

TCE in Groundwater - February 1994
UAU Shallow Zone OU3
Motorola 52nd Street, Phoenix, AZ

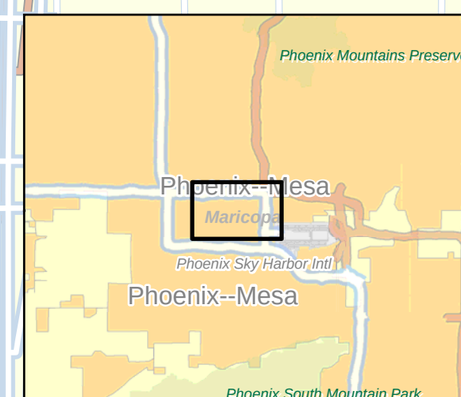
McDowell Road
Van Buren Street
Buckeye Road
7th Avenue
1st Avenue
7th Street
16th Street
I-10
SR 202

Inter-tel MW-1 (12)
ADEQ EW-23 (4)
ADEQ EW-21 (200)
ADEQ EW-20 (180)
ADEQ EW-22S (450)
ADEQ EW-19S (270)
ADOT DW-5 (32)

Generalized Groundwater Flow Direction

5
10
100
200
300
400

Milum Textile Services
Phoenix Newspapers Inc.
McCoy's Cleaners
Baker Metal Products
Westinghouse
Walker Power/Tiernay Turbines
Capitol Engineering
APS
SRP
Union Pacific Railroad
Former Southwest Solvents Inc.
Adobe/Arvin/Cooper
Wabash-Freuhauf



Note: Groundwater data acquired from ADEQ database (2007).

<all other values>

TCE Contour Intervals

- 5 ug/L
- 10 ug/L
- 50 ug/L
- 100 ug/L
- 200 ug/L
- 300 ug/L
- 400 ug/L
- 500 ug/L
- OU3 Boundary
- PRP Locations

amec

N

0 750 1,500 Feet

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DWN: KMP JBB CHKD: AP 6/6/2007

FIGURE 25

TCE in Groundwater - November 1994
UAU Shallow Zone OU3
Motorola 52nd Street, Phoenix, AZ

McDowell Road
16th Street
I-10
SR 202
7th Avenue
Generalized Groundwater Flow Direction
5
10
100
200
300
400
ADEQ EW-21
210
EW-7
290
ADEQ EW-20
290
ADEQ EW-22S
490
7th Street
Milum Textile Services
Phoenix Newspapers Inc.
Van Buren Street
ADEQ EW-19S
370
1st Avenue
McCoy's Cleaners
ADEQ EW-24
4.8
Westinghouse
Baker Metal Products
Walker Power/Tiernay Turbines
AVB42-03
590
APS
Capitol Engineering
SRP
Union Pacific Railroad
Former Southwest Solvents Inc.
Adobe/Arvin/Cooper
Wabash-Freuhauf
Buckeye Road

Note: Groundwater data acquired from ADEQ database (2007).

<all other values>

TCE Contour Intervals
- 5 ug/L
- 10 ug/L
- 50 ug/L
- 100 ug/L
- 200 ug/L
- 300 ug/L
- 400 ug/L
- 500 ug/L
- OU3 Boundary
- PRP Locations

amec

N

0 750 1,500 Feet

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DWN: KMP JBB CHKD: AP 6/6/2007

FIGURE 26

TCE in Groundwater - December 1995
UAU Shallow Zone OU3
Motorola 52nd Street, Phoenix, AZ

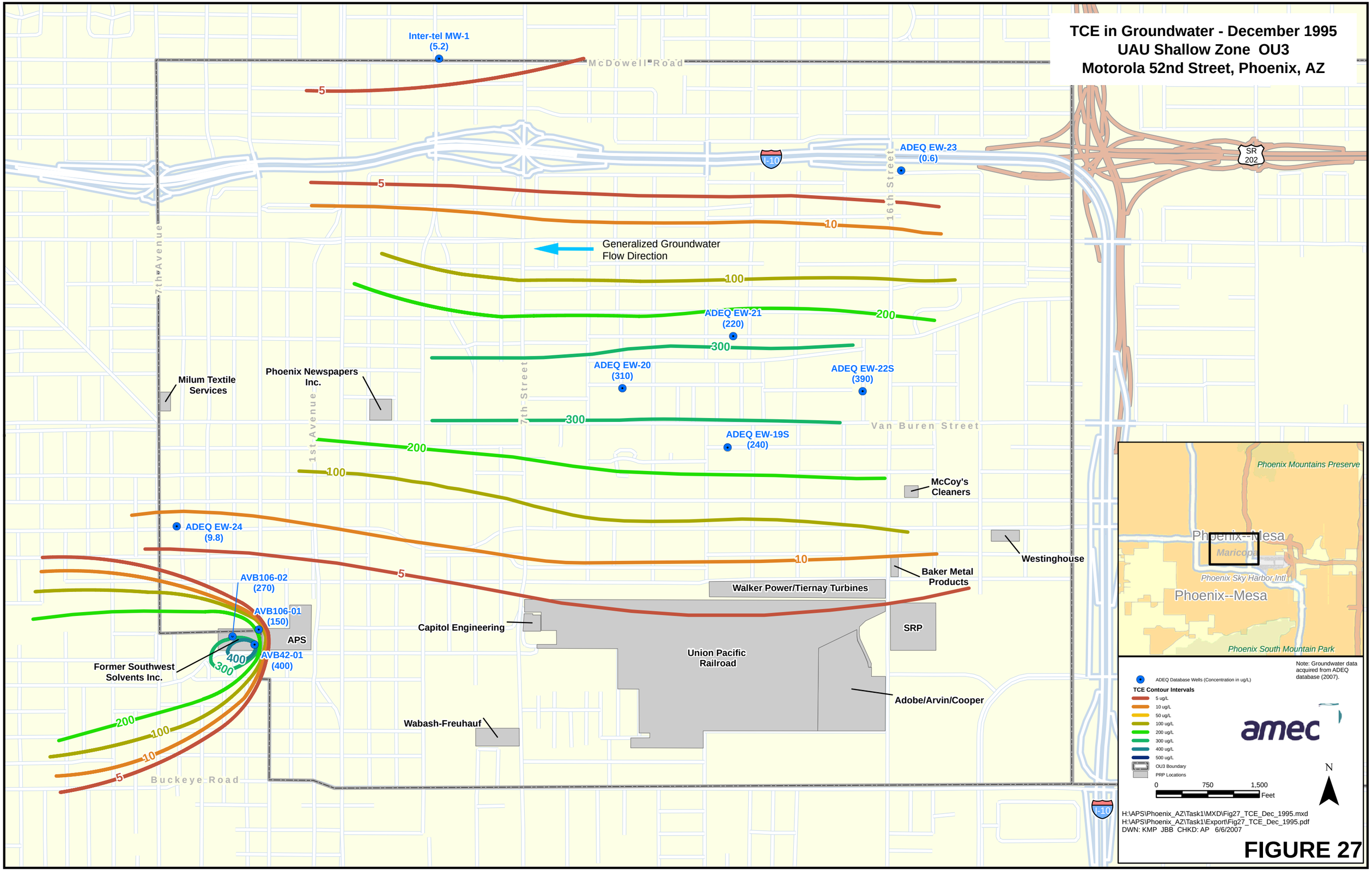


FIGURE 27

TCE in Groundwater - April 1996
UAU Shallow Zone OU3
Motorola 52nd Street, Phoenix, AZ

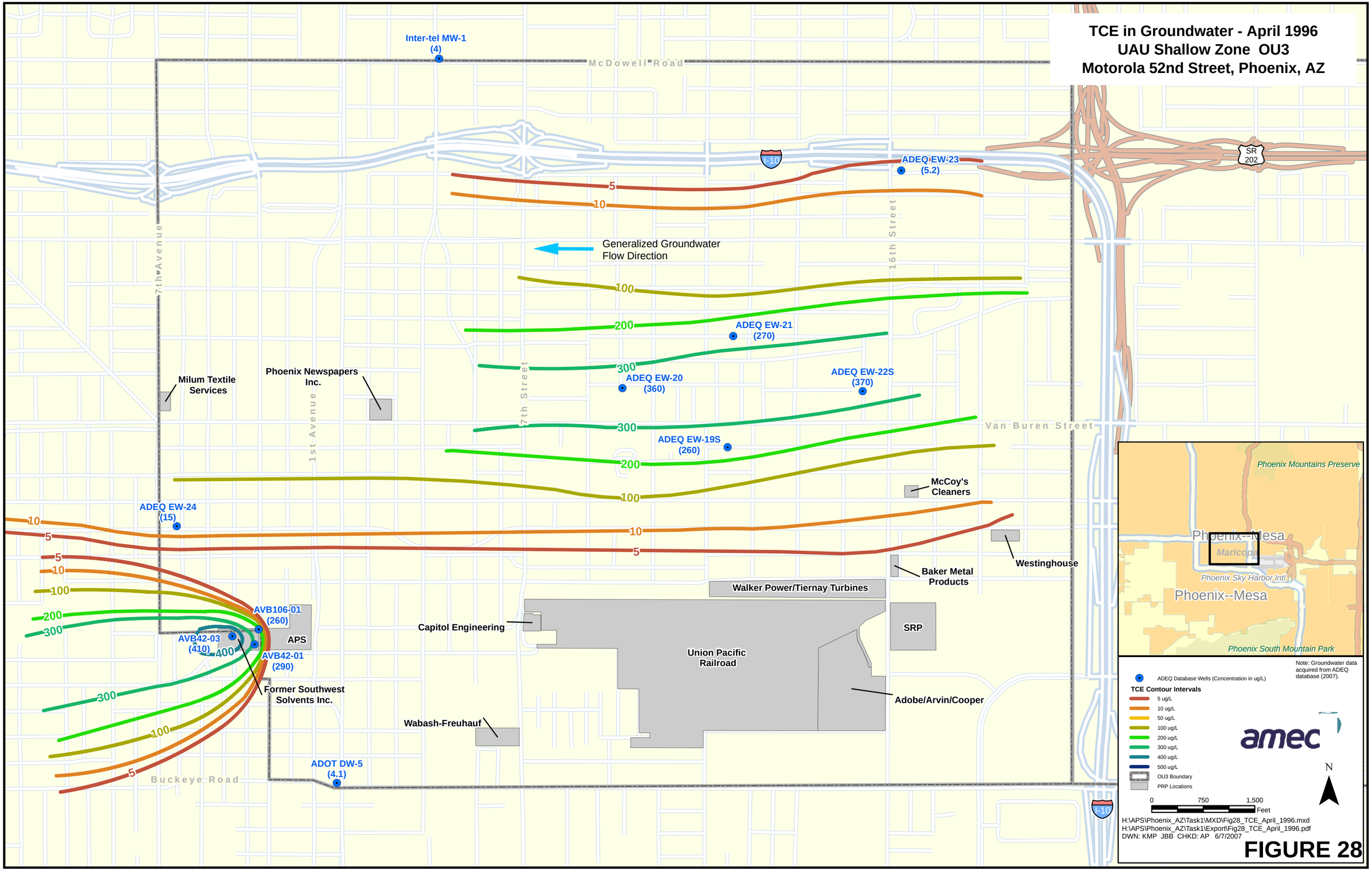


FIGURE 28

TCE in Groundwater - October 1996
UAU Shallow Zone OU3
Motorola 52nd Street, Phoenix, AZ

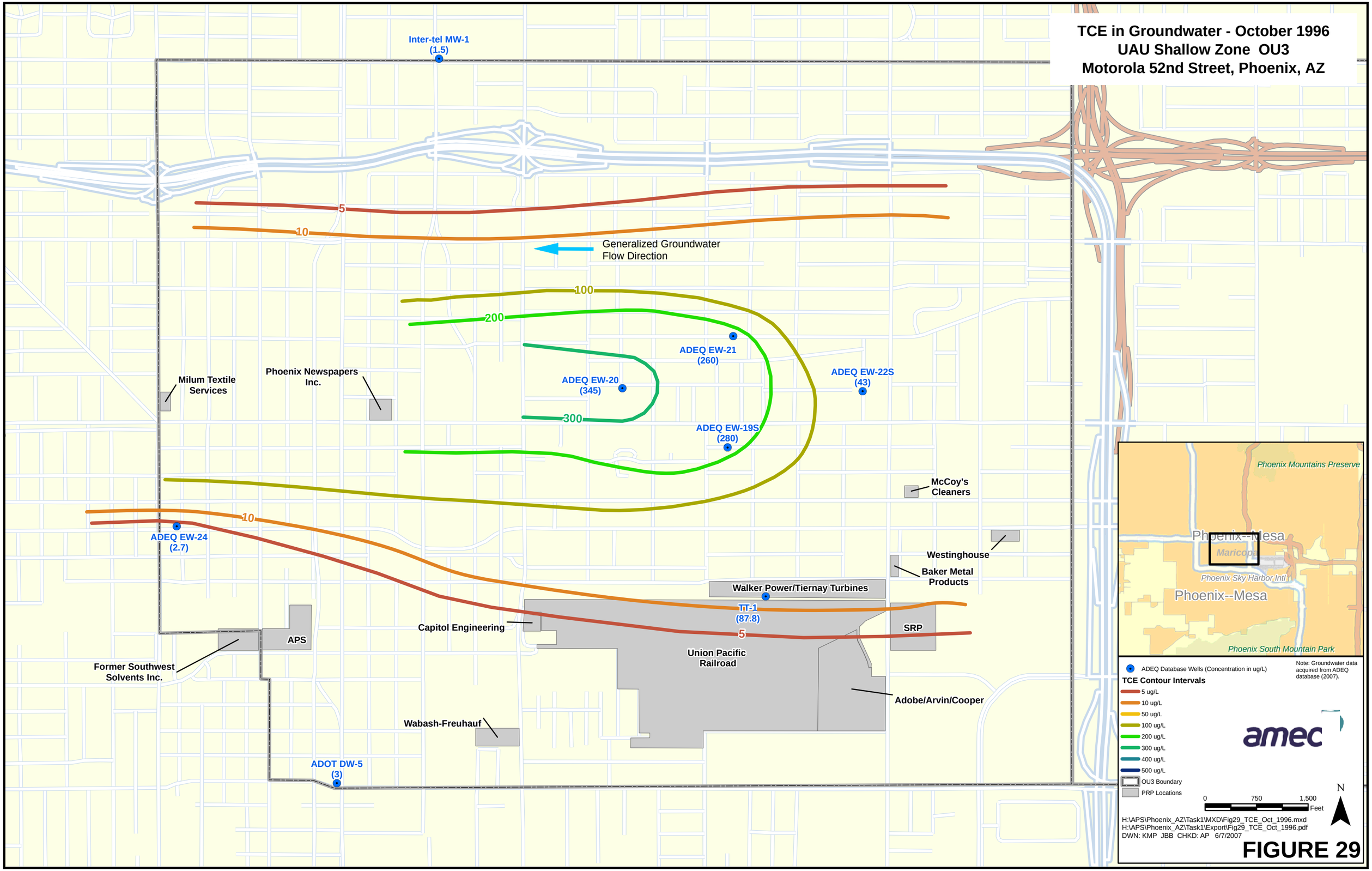


FIGURE 29

TCE in Groundwater - April 1997
UAU Shallow Zone OU3
Motorola 52nd Street, Phoenix, AZ

Inter-tel MW-1
(3.56)

ADEQ EW-23
(10.7)

Generalized Groundwater
Flow Direction

ADEQ EW-21
(144)

EW-7
(233)

ADEQ EW-22S
(497)

ADEQ EW-20
(409)

ADEQ EW-19S
(271)

ADEQ EW-24
(5.04)

ADOT DW-5
(4.94)

Milum Textile
Services

Phoenix Newspapers
Inc.

McCoy's
Cleaners

Baker Metal
Products

Westinghouse

Walker Power/Tiernay Turbines

TT-1
(30.3)

Capitol Engineering

APS

SRP

Union Pacific
Railroad

Former Southwest
Solvents Inc.

Adobe/Arvin/Cooper

Wabash-Freuhauf

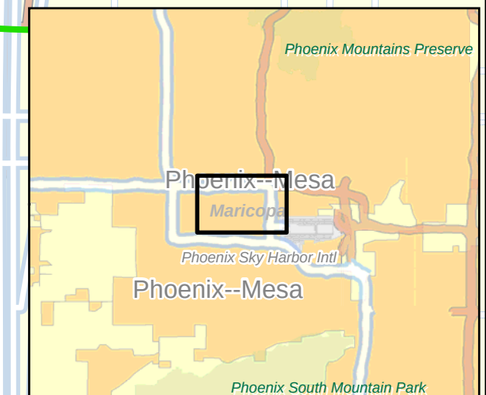
5

10

100

200

300



ADEQ Database Wells (Concentration in ug/L)

TCE Contour Intervals

- 5 ug/L
- 10 ug/L
- 50 ug/L
- 100 ug/L
- 200 ug/L
- 300 ug/L
- 400 ug/L
- 500 ug/L
- OU3 Boundary
- PRP Locations

Note: Groundwater data acquired from ADEQ database (2007).

amec

0 750 1,500 Feet

N

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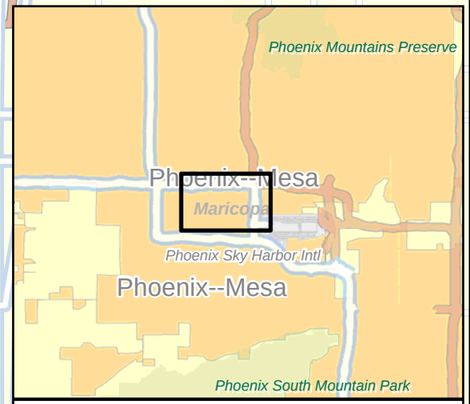
DWN: KMP CHKD: AP 6/7/2007

FIGURE 30

TCE in Groundwater - March 2003
UAU Shallow Zone OU3
Motorola 52nd Street, Phoenix, AZ

Generalized Groundwater Flow Direction

ADEQ EW-21 (11)
OU3-8S (26)
OU3-5S (37)
ADEQ EW-20 (100)
ADEQ EW-22S (260)
U2-NW-2 (60)
U2-NW-3 (120)
ADEQ EW-19S (700)
500
100
AVB14-01 (87)
AEW01-24R (200)
GH-MW-11 (120)
SC-MW-5 (68)
McCoy's Cleaners
OU2 Remediation Facility
Milum Textile Services
Phoenix Newspapers Inc.
Westinghouse
ADEQ EW-6 (8.1)
TT-2 (2)
Baker Metal Products
Walker Power/Tiernay Turbines
AVB18-01 (6.7)
TT-1 (20)
16ST-04 (0.5)
16ST-02 (0.5)
AVB106-01 (27)
AVB42-03 (11)
50
AVB77-01 (11)
AVB12-01 (53)
APS
SRP
Capitol Engineering
Union Pacific Railroad
Former Southwest Solvents Inc.
10
Adobe/Arvin/Cooper
Wabash-Freuhauf
ADOT DW-5 (1)
AVB99-01 (2.3)



Note: Groundwater data acquired from ADEQ database (2007).

ADEQ Database Wells (Concentration in ug/L)

TCE Contour Intervals
- 5 ug/L
- 10 ug/L
- 50 ug/L
- 100 ug/L
- 200 ug/L
- 300 ug/L
- 400 ug/L
- 500 ug/L
- OU2 Remediation Facility
- OU3 Boundary
- PRP Locations

amec

0 750 1,500 Feet

N

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DWN: KMP CHKD: AP 6/7/2007

FIGURE 31

TCE in Groundwater - September 2003
UAU Shallow Zone OU3
Motorola 52nd Street, Phoenix, AZ

Generalized Groundwater Flow Direction

ADEQ EW-21 (4.3)
OU3-8S (15)
ADEQ EW-20 (72)
ADEQ EW-22S (130)
NW-4S (40)
U2-NW-2 (47)
EW-N (20)
NW-5S (130)
U2-NW-3 (73)
ADEQ EW-19S (440)
AVB115-01 (150)
AVB14-01 (170)
GH-MW-11 (19)
NW-6S (26)
NW-8S (49)
NW-7S (3.5)
ADEQ EW-6 (7.7)
TT-2 (0.8)
AVB18-01 (6.8)
AVB77-04 (16)
AVB12-01 (14)
AVB106-01 (3.3)
OU3-11S (15)
AVB42-03 (12)
16ST-04 (0.5)
16ST-02 (0.5)
AVB99-01 (2.1)

Milum Textile Services
Phoenix Newspapers Inc.
McCoy's Cleaners
Baker Metal Products
Westinghouse
Walker Power/Tiernay Turbines
APS
Former Southwest Solvents Inc.
Capitol Engineering
Union Pacific Railroad
SRP
Adobe/Arvin/Cooper
Wabash-Freuhauf

5
10
50
100
200

ADEQ Database Wells (Concentration in ug/L)

Note: Groundwater data acquired from ADEQ database (2007).

TCE Contour Intervals

- 5 ug/L
- 10 ug/L
- 50 ug/L
- 100 ug/L
- 200 ug/L
- 300 ug/L
- 400 ug/L
- 500 ug/L
- OU2 Remediation Facility
- OU3 Boundary
- PRP Locations

amec

0 750 1,500 Feet

N

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DWN: KMP CHKD: AP 6/7/2007

FIGURE 32

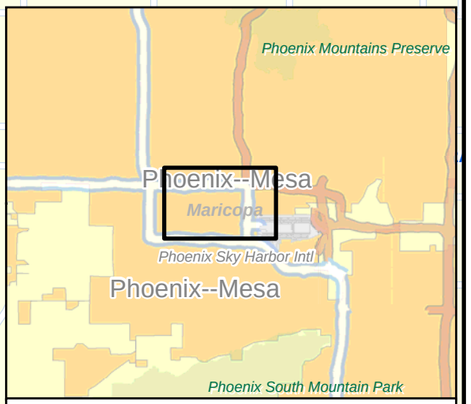
TCE in Groundwater - March 2005
UAU Shallow Zone OU3
Motorola 52nd Street, Phoenix, AZ

Generalized Groundwater Flow Direction

AVB123-01 (13)
OU3-8S (14)
ADEQ EW-21 (5)
ADEQ EW-20 (38)
ADEQ EW-22S (39)
NW-4S (15)
U2-NW-2 (40)
NW-5S (62)
OU3-5SR (66)
ADEQ EW-19S (310)
U2-NW-3 (140)
NW-8S (160)
NW-6S (54)
ASE-77A (140)
AVB115-01 (120)
AVB14-01 (130)
AEW01-24R (110)
GH-MW-11 (125)
(A-1-3)7BCA (85)
ADEQ MW-3 (28)
AVB18-01 (7)
AVB40-08 (38)
AVB12-01 (9)
AVB106-01 (9)
AVB85-01 (32)
AVB77-01 (2)
AVB42-03 (50)
NW-7S (3)
ADEQ EW-6 (9)
ADOT DW-5 (1)
AVB103-02 (2)
AVB99-01 (1)

5
10
50
100

Milum Textile Services
Phoenix Newspapers Inc.
McCoy's Cleaners
OU2 Remediation Facility
Westinghouse
Baker Metal Products
Walker Power/Tiernay Turbines
Capitol Engineering
APS
SRP
Union Pacific Railroad
Former Southwest Solvents Inc.
Adobe/Arvin/Cooper
Wabash-Freuhauf



ADEQ Database Wells (Concentration in ug/L)

Note: Groundwater data acquired from ADEQ database (2007).

TCE Contour Intervals

- 5 ug/L
- 10 ug/L
- 50 ug/L
- 100 ug/L
- 200 ug/L
- 300 ug/L
- 400 ug/L
- 500 ug/L
- OU2 Remediation Facility
- OU3 Boundary
- PRP Locations

0 750 1,500 Feet

N

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DWN: KMP CHKD: AP 6/7/2007

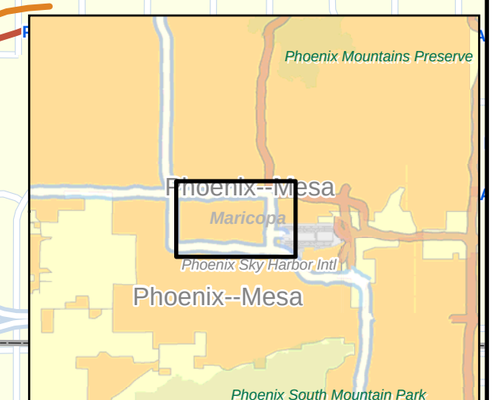
FIGURE 33

TCE in Groundwater - September 2005
UAU Shallow Zone OU3
Motorola 52nd Street, Phoenix, AZ

Generalized Groundwater Flow Direction

5
10
50
100

OU3-8S (11)
AVB123-01 (10)
ADEQ EW-21 (5)
Milum Textile Services
Phoenix Newspapers Inc.
OU3-5SR (78)
ADEQ EW-20 (73)
ADEQ EW-22S (35)
NW-4S (12)
NW-5S (41)
U2-NW-2 (50)
AVB124-01 (87)
AVB115-01 (150)
ADEQ EW-19S (140)
U2-NW-3 (83)
OU2 Remediation Facility
ASE-86A (130)
NW-6S (25)
NW-8S (41)
ASE-77A (43)
AVB14-01 (120)
McCoy's Cleaners
GH-MW-11 (5.3)
ADEQ EW-6 (22)
ADEQ MW-3 (7.1)
Walker Power/Tiernay Turbines
EW-13-118 (0.5)
Baker Metal Products
NW-7S (1.6)
Westinghouse
TT-2 (0.5)
TT-1 (1.5)
OU3-11S (0.73)
AVB77-01 (3.7)
AVB85-01 (28)
AVB26-01 (0.54)
AVB12-01 (9.7)
APS
Union Pacific Railroad
16ST-04 (0.5)
SRP
16ST-02 (0.5)
Capitol Engineering
ADEQ MW-1 (12)
AVB42-03 (1.6)
Former Southwest Solvents Inc.
Adobe/Arvin/Cooper
Wabash-Freuhauf
ADOT DW-5 (1)
AVB99-01 (1.8)



ADEQ Database Wells (Concentration in ug/L)

Note: Groundwater data acquired from ADEQ database (2007).

TCE Contour Intervals

- 5 ug/L
- 10 ug/L
- 50 ug/L
- 100 ug/L
- 200 ug/L
- 300 ug/L
- 400 ug/L
- 500 ug/L
- OU2 Remediation Facility
- OU3 Boundary
- PRP Locations

amec

0 800 1,600 Feet

N

H:\APS\Phoenix_AZ\Task1\MXD\Fig34_TCE_Sept_2005.mxd
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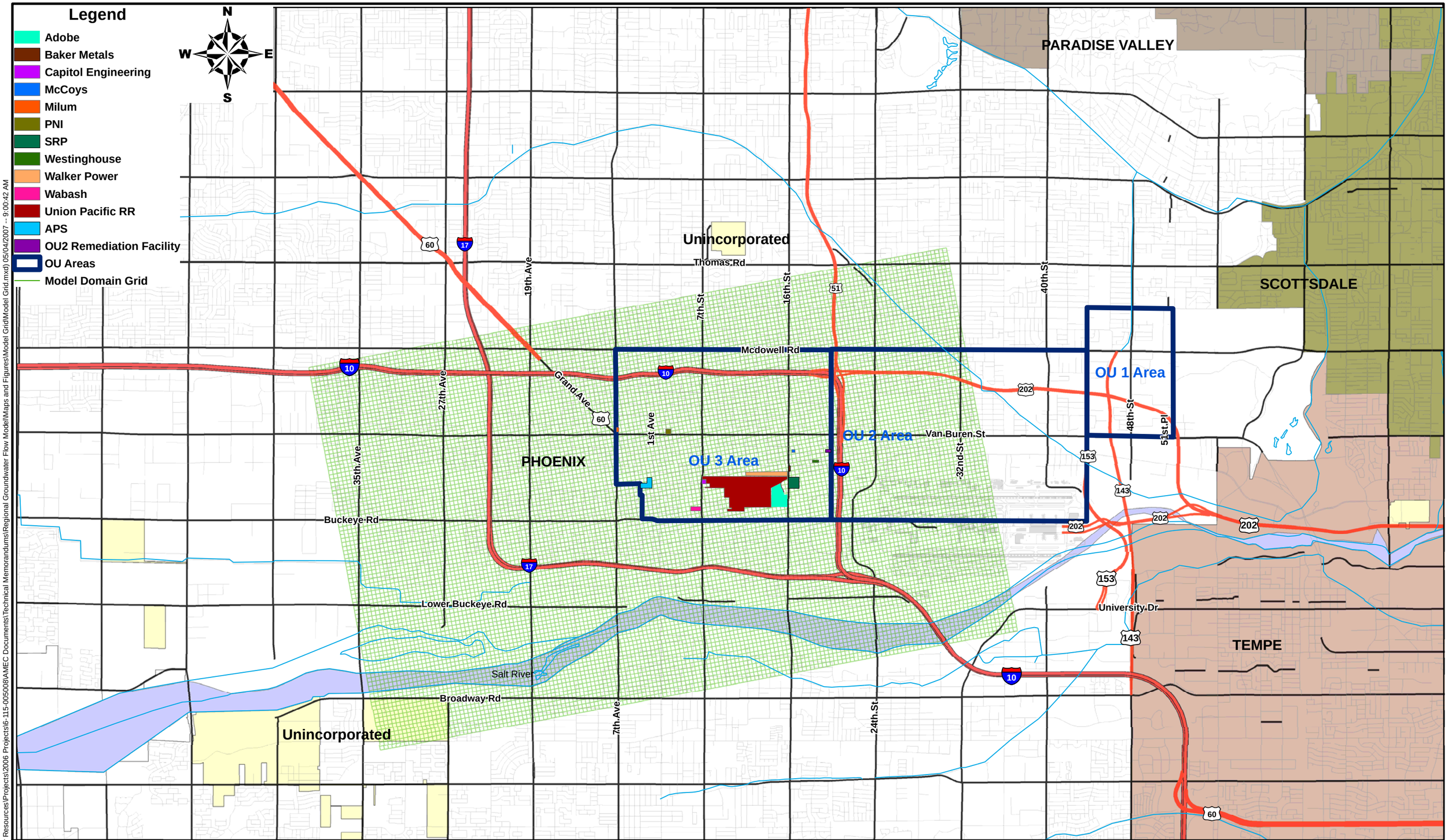
DWN: KMP CHKD: AP 6/7/2007

FIGURE 34



JOB NO.:	7-115-005007
DESIGN:	LM
DRAWN:	MLD
DATE:	5/2007
SCALE:	1"=1 Mile

1 inch equals 1 miles

0 0.5 1 1.5 2 Miles

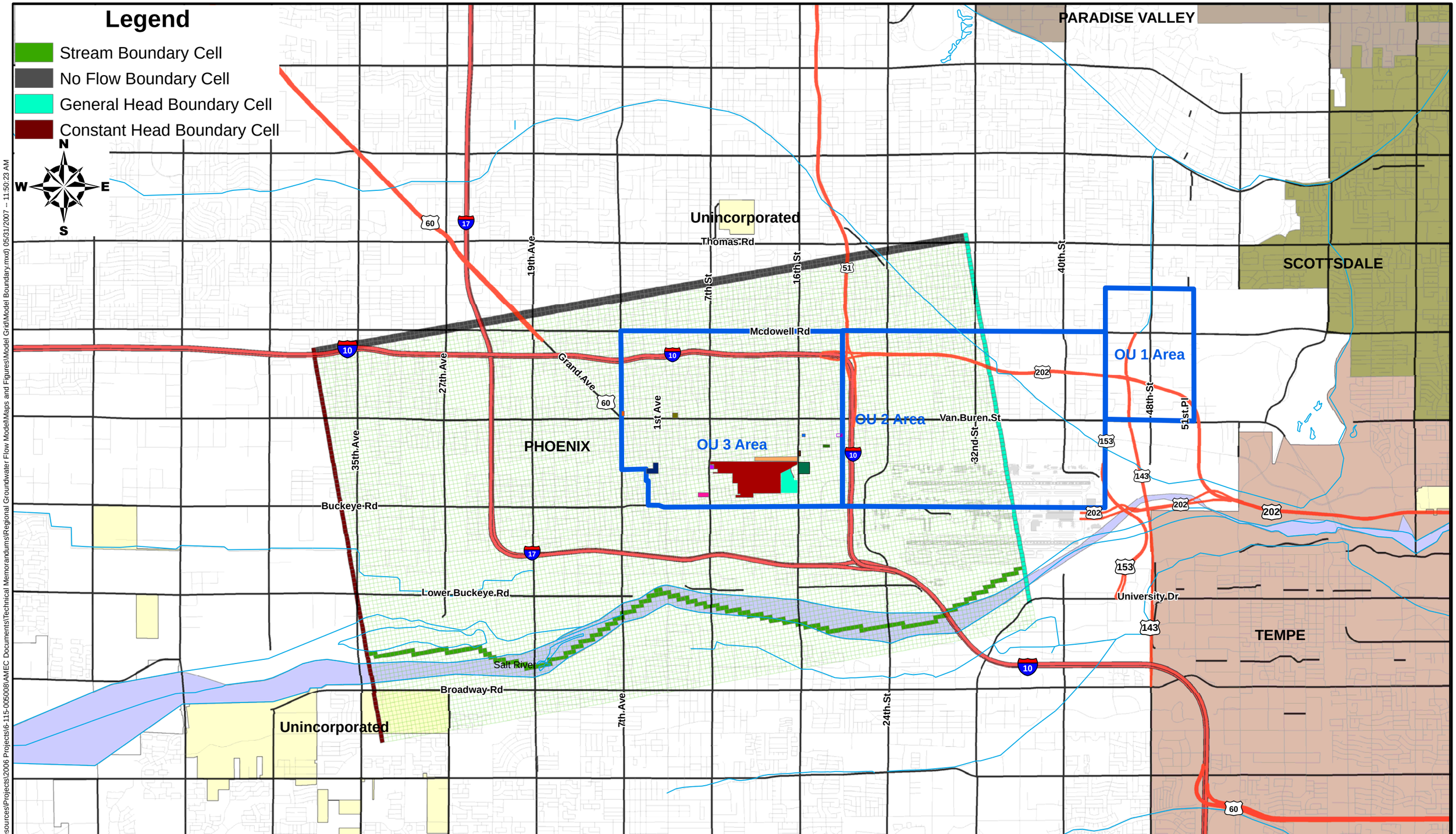
APS 501, 502, 505 Properties, OU3 Motorola 52nd Street Superfund Study Area, Phoenix, Arizona

PROPOSED MODEL DOMAIN GRID AND ORIENTATION

FIGURE 35

amec

Map Document: (I:\Water Resources\Projects\2006 Projects\6-115-005008\AMEC Documents\Technical Memorandums\Regional Groundwater Flow Model\Maps and Figures\Model Grid\Model Grid.mxd) 05/04/2007 -- 9:00:42 AM



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DATE:	5/2007
SCALE:	1"=1 Mile

1 inch equals 1 miles

0 0.5 1 1.5 2 Miles

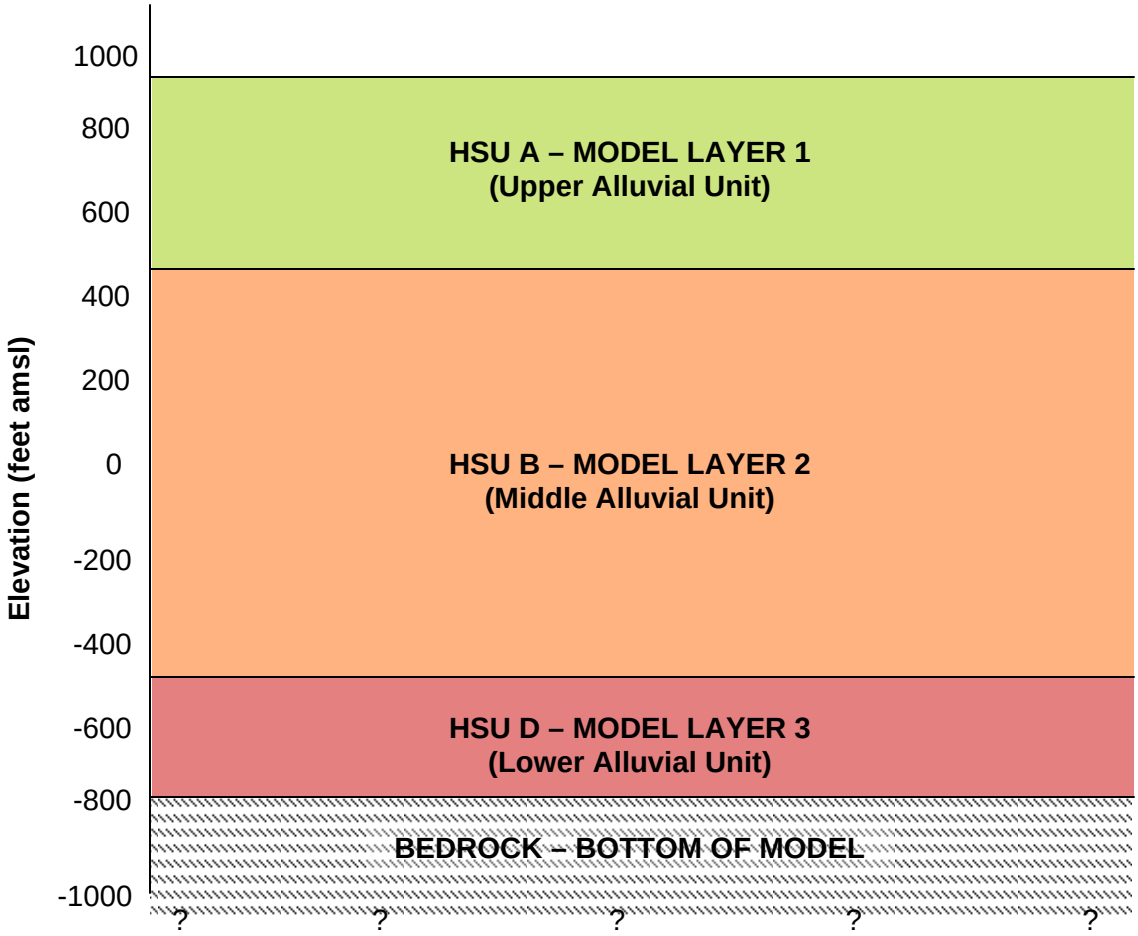
APS 501, 502, 505 Properties, OU3 Motorola 52nd Street Superfund Study Area, Phoenix, Arizona

PROPOSED GROUNDWATER FLOW MODEL BOUNDARIES

FIGURE 36

amec

Map Document: (I:\Water Resources\Projects\2006 Projects\6-115-005008\AMEC Documents\Technical Memorandums\Regional Groundwater Flow Model\Maps and Figures\Model Grid\Model Boundary.mxd) 05/31/2007 -- 11:50:23 AM



NOTE:
Stratigraphic layers and model layer elevations are approximate.

JOB NO: 7-115-005007	**PROPOSED HYDROSTRATIGRAPHIC MODEL LAYERS**	amec
DESIGN: LLJM		
DRAWN: LLJM	APS FACILITY MOTOROLA 52ND STREET SUPERFUND SITE OPERABLE UNIT 3	FIGURE **37**
DATE: 06/11/2007		
NOT TO SCALE		