2006
Site Monitoring Report

North
Indian Bend Wash
Superfund Site

Prepared for:

U.S. Environmental Protection Agency
Region IX

Prepared by:

NIBW Participating Companies

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CERTIFICATION

All geological information, conclusions, and recommendations in this document have been prepared under the supervision of and reviewed by a Registered Geologist.

REGISTERED GEOLOGIST
CERTIFICATE NO
26393
DENNIS H.
SHIRLEY
Date Signed 3-9-07
ARIZONA, U.S.A.

Dennis H. Shirley, R.G.
Registered Geologist (26393)

All engineering information, conclusions, and recommendations in this document have been prepared under the supervision of and reviewed by a Registered Professional Engineer.

James A. Lutton, P.E.
Registered Professional Engineer (40554)

CERTIFICATION

All geological information, conclusions, and recommendations in this document have been prepared under the supervision of and reviewed by a Registered Geologist.

Dennis H. Shirley, R.G.
Registered Geologist (26393)

All engineering information, conclusions, and recommendations in this document have been prepared under the supervision of and reviewed by a Registered Professional Engineer.

Registered Professional Engineer (Chemical)
CERTIFICATE NO.
40554
JAMES A.
LUTTON
Date Signed 3/9/07
ARIZONA, U.S.A.

James A. Lutton, P.E.
Registered Professional Engineer (40554)

North Indian Bend Wash Superfund Site

ANNUAL SITE MONITORING REPORT
January - December 2006

North Indian Bend Wash Superfund Site
Scottsdale, Arizona

The 2006 Site Monitoring Report summarizes remedial activities performed and data collected by the North Indian Bend Wash Participating Companies (Motorola, Siemens, and GlaxoSmithKline) and Salt River Project (SRP) pursuant to the Amended Consent Decree, CV-91-1835-PHX-FJM, entered by the U.S. District Court for the District of Arizona on June 5, 2003. A detailed summary of the components and work requirements of the remedial action program can be found in the Record of Decision Amendment – Final Operable Unit, Indian Bend Wash Area (Amended ROD), dated September 27, 2001 and Statement of Work (SOW), Appendix A to the Amended Consent Decree (Amended CD). An organizational chart identifying the key parties involved in the North Indian Bend Wash (NIBW) Superfund Site is provided in **Appendix A** along with current personnel having assigned roles and responsibilities for operations and emergency response.

Additional information describing remedial activities conducted at the North Indian Bend Wash Site in 2006 was provided in Quarterly Reports submitted to the U.S. Environmental Protection Agency (EPA) and Arizona Department of Environmental Quality (ADEQ) on May 11, August 28, and November 30, 2006. Consistent with requirements defined in the Amended CD and SOW, the 2006 Site Monitoring Report includes operational summaries and updates for fourth quarter 2006.

This 2006 Site Monitoring Report presents a tabulation and overview of compliance monitoring data acquired to ensure performance of the remedial action program. In conjunction with development of the 2006 Site Monitoring Report, the North Indian Bend Wash Participating Companies (NIBW PCs) and SRP have compiled compliance monitoring data and associated laboratory analytical reports and quality assurance reports required by the Amended CD, SOW, and governing work plans. The NIBW PCs are issuing two separate reports that transmit laboratory analytical reports and quality assurance information associated with the NIBW compliance data. The reports are submitted as read-only electronic files on compact disks and contain: 1) laboratory analytical reports and annual quality assurance report issued by Salt River Project for sampling and analysis conducted for the 2006 NIBW Groundwater Monitoring Program, and 2) laboratory analytical reports issued by Transwest Geochem, Inc. for analysis of process water samples obtained in 2006 at NIBW groundwater treatment systems.

1.0 GROUNDWATER MONITORING AND EVALUATION PROGRAM

Groundwater monitoring at the NIBW Superfund Site includes collection, analysis, and reporting of extensive water level, water quality, and production data from a network of groundwater monitor, extraction, and production water wells completed in the Upper Alluvium Unit (UAU), Middle Alluvium Unit (MAU), and Lower Alluvium Unit (LAU). Locations of wells in the vicinity of the NIBW Site are shown on **Figure 1**. Groundwater monitoring requirements for the NIBW Site are specified in the Groundwater Monitoring and Evaluate Plan (GMEP), approved by EPA on October 8, 2002. The GMEP was prepared by the NIBW PCs and defines the: 1) scope and frequency of monitoring activities; 2) requirements for data reporting and preparation of interpretive work products; 3) approach to conducting

groundwater model updates; and 4) performance criteria, achievement measures, contingency initiation criteria, and contingency response actions for evaluation of on-going effectiveness of remedial actions. SRP Environmental Laboratory and Field Services is the Supervising Contractor for NIBW Site groundwater monitoring program activities.

Property development in south Scottsdale impacted several groundwater monitoring wells. Existing monitor wells at the former K-Mart property were located within the planned development of a Lowe's Home Improvement Store on the property. EPA approved abandonment of M-10UA, M-10MA, and M-10LA in email correspondence dated April 13, 2006 and the wells were formally abandoned on April 26th. In summer 2006 replacement monitor wells designated as M-10MA2 and M-10LA2 were constructed for the MAU and LAU monitor wells. The UAU well was not replaced.

1.1 GROUNDWATER LEVEL MONITORING

Groundwater level monitoring was conducted semi-annually in a network of 142 NIBW monitor wells in 2006. Water level data collected and reported by SRP in April and October are summarized in **Tables 1 and 2**, respectively. April and October 2006 water level contour maps for the UAU, MAU, and LAU, are shown on **Figures 2 through 7**. In addition to periodic water level monitoring conducted at unit-specific monitor wells, continuous water level monitoring is conducted at a select group of LAU monitor, production, and extraction wells in the vicinity of the Arizona American Water Company (AAWC) wellfield as part of the enhanced northern LAU monitoring program. Hydrographs showing continuous water level data for wells in the northern LAU monitoring program are provided in **Appendix B**.

Based on the 2006 water level contour maps (**Figures 2 and 5**), direction of groundwater movement in the UAU is from east to west in the area south of McDowell Road and from northeast to southwest in the vicinity of Thomas Road. UAU groundwater migrates from all directions toward the southwest margin of the site, where it moves vertically into underlying units. Horizontal hydraulic gradients are generally consistent for the two time periods and range from about 0.009 in the vicinity of the southwest margin to about 0.002 in the north.

The complex pattern of groundwater movement observed in the MAU results from competing influences between various pumping centers and the southwest margin, where vertical movement into the LAU occurs. These pumping centers will be discussed further in Section 1.3. Based on 2006 water level contour maps depicted in **Figures 3 and 6**, groundwater movement in the south part of the area is generally convergent toward Area 12 extraction wells and the southwest margin. Groundwater movement in the northern part of the area is generally convergent toward the Area 7 extraction wells, Central Groundwater Treatment Facility (CGTF) extraction wells, and the Arcadia Water Company (AWC) wellfield. Horizontal hydraulic gradients are generally consistent for the two time periods and range from about 0.02 in the north part of the site, where groundwater migrates toward Area 7 extraction wells and Operable Unit 1 (OU-1) extraction wells COS-71 and COS-72, to about 0.003 in the central part of the site, in the vicinity of the groundwater divide between the Area 7 and Area 12 extraction centers.

Groundwater movement in the LAU is generally from recharge areas located in the south and southwest to points of discharge from groundwater extraction and production wells to the north. Numerous wells, including CGTF extraction wells, Miller Road Treatment Facility (MRTF) extraction wells, and production wells operated by SRP, AWC, AAWC, and the City of Scottsdale (COS) withdraw groundwater from the LAU throughout the NIBW Site. The cone of depression

created by pumping at MRTF extraction wells and nearby SRP and AAWC production wells represents a regional sink for LAU groundwater. These pumping centers will be discussed further in Section 1.3. Patterns of groundwater movement are generally consistent for both monitoring periods in 2006, although the horizontal hydraulic gradient increased somewhat to the south in October (**Figures 4 and 7**). Horizontal hydraulic gradients range from 0.02 in the area upgradient from OU-1 extraction well COS-75A to 0.001 in the area down-gradient from extraction well COS-75A and upgradient from MRTF extraction well PCX-1.

Change in groundwater level over time is evaluated using October 2005 to October 2006 groundwater level change and long-term water level data trends at UAU, MAU, and LAU monitor wells. **Table 3** summarizes the difference in water level between October 2005 and October 2006 for all monitor wells included in the 2006 water level monitoring program. Differences are illustrated using bar graphs on **Figures 8 through 10**. It should be noted that water level differences computed at individual wells using October 2005 and October 2006 data are representative of changes between two point measurements. Changes observed between these two points in time may not be reflective of long-term trends. In fact, water level changes on the order of 10 feet or more are observed in monitor wells adjacent to extraction wells and attributed to production well cycling rather than to water level conditions in the aquifer. Water level data trends are more accurately tracked by reviewing a larger set of water level data obtained over a longer time period. Hydrographs showing water level data from 1996 through 2006 for wells included in the monitoring program are provided in **Appendix C**.

Water levels increased at all UAU, MAU, and LAU monitor wells during the period October 2005 to October 2006, with the exception of what is considered an anomalous reading at a single MAU monitor well (**Figures 8 through 10**). The water level rise is presumed to be a regional trend likely associated with decreased

area-wide groundwater withdrawals. The net effect was increased water levels generally with the increase ranging from 5 to 10 feet in the UAU, from 10 to 20 feet in the MAU, and from 15 to 25 feet in the LAU when comparing October 2006 to October 2005 groundwater elevations.

1.2 GROUNDWATER QUALITY MONITORING

Groundwater quality monitoring of volatile organic compounds (VOCs) for NIBW contaminants of concern, including trichloroethene (TCE), tetrachloroethene (PCE), 1,1,1-trichloroethane (TCA), 1,1-dichloroethene (DCE), and chloroform CFM), was conducted in accordance with requirements of the GMEP. Water quality monitoring for the five NIBW VOCs for 2006 included the following components: monthly sampling at four CGTF and three MRTF extraction wells, quarterly sampling at three Area 7 and two Area 12 extraction wells and in a network of 24 MAU and LAU monitor wells, and annual sampling in a network of 95 monitor wells. Monthly and quarterly groundwater quality monitoring is initiated during the first week of the month, beginning in January. The annual groundwater quality monitoring program is conducted in October.

A summary of laboratory chemical results for VOCs for NIBW monitor wells for October 2006 is provided in **Table 4**. Production and extraction well VOC results are summarized in **Table 5**. TCE concentration contours for October 2006 for the UAU, MAU, and LAU are shown on **Figures 11, 12, and 13**, respectively. Long-term TCE concentrations are shown on individual monitor well hydrographs given in **Appendix D**. Changes in TCE concentrations over the 5-year time period between the baseline dataset, October 2001, and October 2006 for the UAU, MAU, and LAU are shown on **Figures 14, 15, and 16**, respectively.

TCE concentrations in UAU monitor wells are generally small, with a maximum concentration in October 2006 of 25 micrograms per liter (µg/L) detected at well PG-31UA, located downgradient from Area 7 **(Figure 11)**. The occurrence of TCE concentrations in UAU groundwater in excess of the Federal Maximum Contaminant Level (MCL) of 5 µg/L is limited to discreet zones associated with Areas 6, 7, and 12. The magnitude and aerial extent of the zones of contamination in UAU groundwater have shown substantial and fairly systematic decreases with time (**Appendix D**). Water quality data show generally small decreases in the magnitude and extent of TCE concentrations in UAU groundwater observed over the 5-year period between October 2001 and October 2006 (**Figure 14**).

TCE concentrations in MAU groundwater are larger than in the other two units, with a maximum concentration of 4,400 µg/L detected in October 2006 at well W-2MA, located downgradient from Area 7 (**Figure 12**). It should be noted the TCE concentration of 280 µg/L reported at well D-2MA in October 2006 is substantially less than previous quarterly data. Consequently, the TCE level shown for well D-2MA in **Figure 12** represents the average of all 2006 quarterly samples. The maximum concentration of TCE detected in October 2006 in the vicinity of Area 12 is 110 µg/L at well SRP23.6E-6N, also known as the Granite Reef extraction well. The third area of elevated TCE concentrations in MAU groundwater coincides with the vicinity of the southwest margin. TCE concentration at well PG-6MA, located in this area, was 96 µg/L in October 2006.

Changes in the magnitude and extent of TCE concentrations in MAU groundwater observed over the 5-year period between October 2001 and October 2006 are generally small **(Figure 15)**. TCE concentrations in most areas are relatively similar between the two time periods. An area of apparent change that occurs near Scottsdale Road between Thomas and McDowell Roads is attributable to the availability of updated data from well M-17MA/LA.

TCE concentrations in LAU groundwater are intermediate between the UAU and the MAU, with a maximum concentration of 240 µg/L detected in October 2006 at well PA-5LA (**Figure 13**). The largest concentrations of TCE in LAU groundwater occur in the central part of the site in an area associated with CGTF extraction well COS-75A. Changes in the magnitude and extent of TCE concentrations in LAU groundwater observed over the 5-year period between October 2001 and October 2006 are generally small **(Figure 16)**. Decreases observed in the south part of the site and along the centerline of the plume are likely attributable to mass removal at extraction wells and the influx over time of UAU groundwater with progressively smaller concentrations of TCE. Increases observed to the north are attributable to planned migration of LAU mass toward the MRTF extraction wells. As indicated above, apparent changes in the vicinity of well M-17MA/LA are attributable to the availability of new data at this well.

1.3 GROUNDWATER PRODUCTION DATA

Monthly data for total groundwater production were compiled for all wells that pump at rates in excess of 35 gallons per minute (gpm) and are located in the area bounded by Indian Bend Road on the north, 1 mile south of McKellips Road on the south, Dobson Road on the east, and Invergordon Road on the west. Monthly production data for 2006 are summarized in **Table 6**. Annual well production data for 2006 are summarized in **Table 7** and shown on **Figure 17**. Production data were obtained from municipal and private water providers, SRP, and Arizona Department of Water Resources (ADWR).

Review of monthly production data **(Table 6)** indicates seasonal trends in pumping in response to fluctuations in demand for groundwater. In general, maximum production for municipal demand corresponds to summer months while

minimum production for municipal demand corresponds to winter months. Combined monthly pumping for all wells at the NIBW Site ranged from 2,298 acre-feet (AF) in February 2006 to 3,013 AF in June 2006.

Review of the spatial distribution of groundwater production for 2006 **(Figure 17)** indicates the presence of several pumping centers. The most predominant pumping center is associated with the AAWC wellfield, located along the Arizona Canal in the area north and south of McDonald Road. Total production for 2006 at the six AAWC wells was 7,767 AF. SRP well 22.5E-9.3N (also known as well PCX-1) and SRP well 22.6E-10N pumped a total of 3,404 and 317 AF in 2006, respectively, and contribute to the pumping center in this area. Two of the AAWC wells (AAWC-14 and AAWC-15) and well PCX-1 (SRP 22.5E-9.3N) pump to the MRTF and serve as extraction wells for the northern LAU containment program. Total production for 2006 at the three MRTF extraction wells was 7,867 AF. Pumping at AAWC and SRP wells in this area results in a regional cone of depression that controls patterns of groundwater movement in the LAU.

The AWC wellfield comprises another important pumping center in the vicinity of the NIBW site. Located on the west side of the Arizona Canal between Indian School and Camelback Roads, total production for 2006 in the five active AWC production wells was 3,620 AF. Production at the four CGTF extraction wells (COS-31, COS-71, COS-72, and COS-75A) is the most significant pumping that occurs within the boundaries of the NIBW Site. Total production for 2006 at the CGTF extraction wells was 9,300 AF. Pumping associated with the Area 7 and Area 12 groundwater extraction and treatment programs is also fairly substantial, totaling 650 AF and 1,491 AF for 2006, respectively.

Table 7 summarizes annual groundwater production for wells in the vicinity of the NIBW site for the period 1991 through 2006. Review of temporal trends in

annual groundwater production indicates that water demand has generally increased over time. From 1991 through 1995, groundwater production in the vicinity of the NIBW site ranged from about 10,000 to about 20,000 AF. From 1996 through 2004, groundwater production in the vicinity of the NIBW Site steadily increased to a level of around 40,000 AF. In the past two years, groundwater production in this area has fallen off to about 30,000 AF. The increased groundwater withdrawals over time correlate to, among other factors, implementation of the NIBW groundwater remedy which allowed water providers to return wells to service. Additionally, groundwater pumping has increased since 1995 due to drought conditions in 10 of the last 11 years. The more recent decline in groundwater production is likely correlated to above normal precipitation and surface water runoff in 2005 and possibly implementation of the new arsenic maximum contaminant level in 2006.

2.0 GROUNDWATER REMEDIATION PROGRAM

As provided by the Amended CD, the NIBW remedy requires containment of the MAU/LAU zones of groundwater contamination and restoration of groundwater to drinking water standards. The groundwater remediation program consists of groundwater extraction and treatment at the CGTF, MRTF, Area 7, and Area 12. The location of the four groundwater extraction and treatment systems (GWETS) are shown on **Figure 18**. The NIBW PCs are responsible for the MRTF, Area 7, and Area 12 GWETS whereas the City of Scottsdale (COS) is responsible for CGTF operations.

On November 27 and 28, 2006, the NIBW PCs coordinated inspections of the CGTF, MRTF, Area 7, and Area 12 GWETS in accordance with Section VI.B.4.d of the SOW. The facilities were inspected for malfunctions, deterioration, operator

practices or errors, and discharges that may be causing or could result in a release of untreated groundwater. At each facility, the major system components were identified and examined for operability, condition of operating equipment, and management of untreated groundwater and residual materials. Additionally, operator practices related to system startup and shutdown, routine and non-routine maintenance, and sampling were reviewed with EPA. There were no deficiencies noted or hazards identified in the course of the inspections at any of the sites that would denote a problem achieving groundwater treatment performance standards or compliance with the Amended CD/SOW. Further details of the NIBW site inspections are described in the Inspection Report provided in **Appendix E**.

A monthly summary of groundwater production and estimated TCE mass removed from NIBW extraction wells is given in **Table 8**. It should be noted that estimates of mass removed by the individual extraction wells will not generally provide as accurate of an estimate as the overall mass removal reported by GWETS operators because there is typically more water quality data available for treatment systems than for individual extraction wells. This information is provided for comparison purposes.

To assure data quality and consistency associated with collection of compliance monitoring data at all four GWETS, the NIBW PCs and COS have contracted with Transwest Geochem, Incorporated of Phoenix, Arizona. Transwest Geochem is licensed by the Arizona Department of Health Services (ADHS) under analytical laboratory license number AZ0133. EPA approved the use of Transwest Geochem as part of the NIBW sampling program on March 20, 2003 following review and acceptance of Transwest Geochem's laboratory quality assurance plan. Transwest Geochem assures high quality data through internal and external system and analytical audits, participation in annual EPA approved water supply proficiency studies and internal method validation studies, multi-tiered data review, and detailed

standard operating procedures and training programs. To assure lab performance and data quality for CGTF-contracted analyses, the COS conducts annual audits of Transwest Geochem.

2.1 GROUNDWATER REMEDIATION AT THE CENTRAL GROUNDWATER TREATMENT FACILITY

The CGTF was the first GWETS constructed at the NIBW Site. The CGTF is located in Scottsdale, Arizona at 8650 East Thomas Road as shown on **Figure 18**. As required by the first NIBW consent decree, the NIBW PCs constructed the CGTF and transferred ownership to COS on March 18, 1994 at which time it came into service. The NIBW PCs and COS subsequently modified the CGTF and it has operated continuously since December 1995 to treat groundwater according to design specifications of the CGTF that were approved by EPA. Groundwater extraction is performed at four COS owned or contract supply wells designated as COS-31, COS-71, COS-72, and COS-75A. Extracted groundwater is pumped through approximately 18,000 feet of buried transmission pipelines to the CGTF where it is treated by air stripping. Treated groundwater from CGTF is either used as part of the COS drinking water supply or discharged to the SRP water distribution system in an irrigation lateral.

COS owns and operates the CGTF and reports results of laboratory testing and plant operations directly to ADEQ and EPA. A summary of the key operational results is as follows. Detailed reporting of the 2006 operational status, laboratory data, and system performance was provided by COS for the first three quarters of the year in CGTF Compliance Monitoring Reports submitted on May 30, August 22, and November 29, 2006. Fourth quarter 2006 CGTF operational data was reported on February 19, 2007.

2.1.1 2006 Overview

The CGTF was fully operational and functional in 2006 and operated continuously to meet COS water demands in south Scottsdale. The system was only off-line during periods of minor maintenance. Groundwater extraction tied into the CGTF contributed to capture and containment of the MAU/LAU zone of contamination (as discussed in Section 4.2.2) and treatment provided water for beneficial use that met groundwater treatment performance standards (as discussed in Section 4.3.1).

COS reported 3.030 billion gallons of groundwater (9,299 AF) were pumped and treated at the CGTF in 2006. Of the total, 925 million gallons were extracted from well COS-75A, 822 million gallons from well COS-71, 921 million gallons from well COS-72, and 560 million gallons from well COS-31. Groundwater production from the COS extraction wells decreased slightly in 2006 compared to the previous year, although more of the production was from the key extraction wells, COS-75A and COS-71. Based on extraction well data shown in **Table 8**, an estimated 2,201 pounds of TCE were removed at the CGTF during 2006. A tabulation of VOC concentrations for NIBW contaminants of concern (COCs) measured in CGTF extraction wells in 2006 is included in **Table 5**. Historical groundwater production and TCE concentrations at CGTF extraction wells are graphed in **Appendix F**. As demonstrated in CGTF operations reports and Compliance Monitoring Reports generated by COS, the CGTF consistently treated groundwater to levels that were safely below the drinking water standards for all NIBW COCs throughout 2006.

Beginning in early 2007, the CGTF will shut down for a major rehabilitation of the treatment plant. Planning and engineering design work for the rehabilitation project has been underway since mid-2006. The rehabilitation project is primarily preventative maintenance and consists of the following construction activities:

- remove and replace column packing,
- recoat the internal column concrete walls,
- install new blowers and add variable frequency drives,
- reroute the raw water line to remove from clearwell,
- install new hydropneumatic tank for surge protection,
- upgrade the acid cleaning system, and
- repaint the treatment plant and walls.

Construction work is scheduled to begin in February and will require the CGTF to remain off line for approximately 4 months. The COS will provide supplemental water to Reservoir 80 from the Chaparral Water Treatment Plant while the CGTF is off-line.

2.2 GROUNDWATER REMEDIATION AT THE MILLER ROAD TREATMENT FACILITY

The MRTF was constructed to capture and remove groundwater containing NIBW COCs in the northern LAU to prevent migration to peripheral production wells. The MRTF is located in Scottsdale, Arizona at 5975 North Miller Road as shown on **Figure 18**. Groundwater extraction is performed at two large capacity production wells designated as PCX-1 and AAWC-15 that are individually connected to MRTF by approximately 4,000 feet of buried piping. VOCs in groundwater are treated by air stripping. A third extraction well, AAWC-14, is also connected and available for treatment at MRTF should groundwater contamination from the NIBW Site reach this well. Treated groundwater from the MRTF is either used as part of the AAWC drinking water supply or discharged to the SRP water transmission system in the Arizona Canal. MRTF began operation in 1997 to treat groundwater from PCX-1.

2.2.1 2006 Overview

The MRTF was fully operational and functional in 2006 and operated continuously to meet AAWC water demands. Groundwater extraction tied into the MRTF contributed to capture and containment of the LAU zone of contamination (as discussed in Section 4.2.5) and treatment provided water for beneficial use that met groundwater treatment performance standards (as discussed in Section 4.3.2).

AAWC reported 2.156 billion gallons of groundwater (6,617 AF) were pumped and treated at the MRTF in 2006 including 1.100 billion gallons of groundwater extracted at PCX-1 and 1.056 billion gallons at AAWC-15. Based on these production amounts and reported TCE concentrations, an estimated 667 pounds of TCE were removed from groundwater at the MRTF throughout 2006.

Compliance monitoring is conducted pursuant to an EPA-approved MRTF Operations and Maintenance (O&M) Plan to verify removal of VOCs from the extracted groundwater and assure treatment standards are achieved. The MRTF O&M Plan was approved by EPA on June 8, 2006.

According to procedures developed in the MRTF O&M Plan, samples of treated groundwater were collected on a weekly basis by the MRTF Operator from the air stripping tower utilized for PCX-1 (A/S effluent) and from MRTF effluent. The treated groundwater samples were submitted to Transwest Geochem for analysis of NIBW COCs. Additionally, extraction well samples were collected the first week of each month by SRP at PCX-1, AAWC-15, and AAWC-14, when the wells were operating, and analyzed by SRP.

A tabulation of VOC concentrations for NIBW COCs measured in MRTF extraction wells in 2006 is included in **Table 5**. Historical groundwater production

and TCE concentrations at MRTF extraction wells are graphed in **Appendix F**. Results of analysis of treated MRTF groundwater conducted by Transwest Geochem are summarized in **Table 9**. The treated groundwater samples in the A/S effluent are used to evaluate compliance with groundwater treatment performance standards. All treated groundwater samples from the A/S tower treating well PCX-1 analyzed in 2006 were below the Method Reporting Limit (MRL) of 0.5 µg/L for TCE and below MRLs for all other NIBW COCs.

The MRTF discharges treated water to the AAWC distribution system and to the SRP Arizona Canal. Discharges to the Arizona Canal are further regulated by a National Pollutant Discharge Elimination System (NPDES) permit. Samples were collected monthly at the Arizona Canal outfall for testing required under the NPDES permit. The results of the sample analyses are summarized in monthly Discharge Monitoring Reports (DMRs) that are submitted directly to the EPA and ADEQ. All outfall samples analyzed and reported in 2006 DMRs were below the MRL of 0.5 µg/L for TCE. Chloroform was detected in some MRTF effluent water samples which is explained by the fact that AAWC occasionally adds a hypochlorite solution to the treated water to disinfect the water supply for municipal use.

2.2.2 Operational Summary for October through December 2006

The MRTF operated as designed during fourth quarter 2006 to produce treated water consistently at concentrations below MCLs for all NIBW COCs. In general, MRTF operated in a completely automated mode at full production capacity. The results of TCE analyses obtained by the NIBW PCs for MRTF extraction wells and treated groundwater during fourth quarter are as follows:

Miller Road Treatment Facility

TCE Concentrations in µg/L

Week of:	PCX-1	AAWC-15	AAWC-14	A/S Effluent	MRTF Effluent
October 2 – 8	**66**	**3.2**	**<0.5**	**<0.5**	**<0.5**
October 9 – 15	NS	NS	NS	**<0.5**	**<0.5**
October 16 – 22	NS	NS	NS	**<0.5**	**<0.5**
October 23 – 29	NS	NS	NS	**<0.5**	**<0.5**
October 30 – November 5	**64**	**3.3**	**<0.5**	**<0.5**	**<0.5**
November 6 – 12	NS	NS	NS	**<0.5**	**<0.5**
November 13 – 19	NS	NS	NS	**<0.5**	**<0.5**
November 20 – 26	NS	NS	NS	**<0.5**	**<0.5**
November 27 – December 3	NS	NS	NS	**<0.5**	**<0.5**
December 4 – 10	**70**	**2.9**	**<0.5**	**<0.5**	**<0.5**
December 11 – 17	NS	NS	NS	**<0.5**	**<0.5**
December 18 – 24	NS	NS	NS	**<0.5**	**<0.5**
December 25 – 31	NS	NS	NS	**<0.5**	**<0.5**

Notes: NS = Not Sampled

As evidenced in the data summary, all treated water samples from MRTF were below the MRL of 0.5 µg/L for TCE.

Routine operations, maintenance, and monitoring are expected to continue at MRTF in first quarter 2007.

2.3 GROUNDWATER REMEDIATION AT AREA 7

Area 7 is a former Siemens Corporation manufacturing site located at the southeast corner of 75th Street and 2nd Street in Scottsdale, Arizona as shown on **Figure 18**. Siemens installed the Area 7 GWETS to enhance the NIBW groundwater remedy by extracting and treating groundwater containing relatively

higher VOC concentrations at the source area, rather than allowing VOC mass to migrate to the CGTF extraction wells for removal and treatment. Groundwater extraction is performed using three MAU groundwater extraction wells designated as 7EX-3aMA, 7EX-4MA, and 7EX-5MA and one UAU groundwater extraction well designated as 7EX-1UA. The extracted groundwater is treated by ultraviolet oxidation (UV/OX) followed by air stripping. Treated water is discharged to the UAU using two remote groundwater reinjection wells (7IN-1UA and 7IN-2UA). The Area 7 MAU source control GWETS was implemented beginning in 1999 and became fully functional when 7EX-5MA was brought on-line in early 2002.

2.3.1 2006 Overview

During 2006, groundwater extraction tied into the Area 7 GWETS was effective in localized MAU source control (as discussed in Section 4.2.3) and groundwater treatment provided water for beneficial use that was safely below drinking water standards for all NIBW COCs (as discussed in Section 4.3.3).

A total of 212 million gallons of groundwater (650 AF) were pumped and treated at the Area 7 GWETS in 2006. Of the total, 19 million gallons were extracted from 7EX-1UA, 74 million gallons from 7EX-3aMA, 23 million gallons from 7EX-4MA, and 95 million gallons from 7EX-5MA. Performance data provided by the Area 7 GWETS operator indicates approximately 1,140 pounds of VOCs were removed from groundwater throughout 2006, with TCE accounting for approximately 99 percent of the mass.

Compliance monitoring is conducted pursuant to an EPA-approved Area 7 GWETS O&M Plan to verify removal of VOCs from the extracted groundwater and assure groundwater treatment standards are achieved. The Area 7 GWETS O&M Plan was approved by EPA on June 8, 2006.

In 2006, process samples including treated groundwater discharged from the Area 7 GWETS were collected monthly by the Area 7 GWETS Operator and submitted to Transwest Geochem for analysis of NIBW COCs. Samples from the Area 7 extraction wells were collected the first week of the quarter by SRP and analyzed by SRP. A tabulation of VOC concentrations for NIBW COCs measured in Area 7 extraction wells in 2006 is included in **Table 5**. Historical groundwater production and TCE concentrations at Area 7 extraction wells are graphed in **Appendix F**. Results of analysis of Area 7 process and treated groundwater conducted by Transwest Geochem are summarized in **Table 9**. All treated groundwater samples analyzed in 2006 from the Area 7 GWETS were below the MRL of 0.5 µg/L for TCE and all other NIBW COCs.

2.3.2 Operational Summary for October through December 2006

For the period of October to December 2006, the Area 7 GWETS operated as designed to remove VOCs in extracted groundwater to meet Arizona Aquifer Water Quality Standards for reinjection. The GWETS operated approximately 82 percent of the time during the fourth quarter of 2006. The system was periodically shut down for routine maintenance. Additionally, the pump and motor in well 7EX-5MA was replaced in October.

During the fourth quarter, process water samples were collected the first week of the month and include samples obtained from the combined influent to the GWETS at sample port SP-102, effluent from the UV/OX reactor at sample port SP-103, and effluent from the air stripper at sample port SP-105. Samples from the Area 7 extraction wells were collected the first week of the quarter by SRP at 7EX-1UA, 7EX-3aMA, 7EX-4MA, and 7EX-5MA and analyzed by SRP. The results of TCE analyses for extraction wells and treatment process water samples obtained during the fourth quarter are as follow:

Area 7 Groundwater Extraction System
TCE Concentrations in µg/L

Date	7EX-1UA	7EX-3aMA	7EX-4MA	7EX-5MA
10/2/2006	**8.6**	**600**	**1,500**	**390**

Area 7 Groundwater Treatment System
TCE Concentrations in µg/L

Date	GWETS Influent	UV/OX Effluent	A/S Effluent
10/2/2006	**500**	**150**	**<0.5**
11/7/2006	**320**	**170**	**<0.5**
12/8/2006	**590**	**94**	**<0.5**

In addition to testing for NIBW COCs, sampling for inorganic water quality is periodically conducted at the Area 7 GWETS. Inorganic water quality is monitored in treated groundwater and four UAU monitor wells in the vicinity of Area 7 to assure that there is no degradation of Aquifer Water Quality Standards (AWQS) caused by the reinjection of treated groundwater. Results of 2006 inorganic water quality analyses are provided in a report entitled, “Supplemental Data Collection, October 2006, NIBW Superfund Site” that will be submitted by the NIBW PCs concurrent with the 2006 Site Monitoring Report. The data indicate treated groundwater from the Area 7 GWETS has similar or slightly better inorganic water quality than that in UAU monitor wells in the vicinity of Area 7. As a case in point, treated groundwater from Area 7 had a nitrate concentration of 47.4 milligrams per liter (mg/L), total dissolved solids (TDS) concentration of 960 mg/L, and an arsenic concentration of 5 µg/L. In comparison, UAU groundwater monitor wells in the vicinity of Area 7 had nitrate concentrations ranging from 45.8 to 67.1 mg/L, TDS ranging from 850 to 1,200 mg/L, and arsenic levels ranging from < 5 to 19 µg/L. The inorganic data indicate

UAU and MAU groundwater at Area 7 are generally poor quality; however, the data verify that reinjection of treated groundwater from the Area 7 GWETS is not contributing to degradation of inorganic water quality in the UAU.

Routine operation, maintenance, and monitoring are expected to continue at the Area 7 GWETS throughout the first quarter 2007.

2.4 GROUNDWATER REMEDIATION AT AREA 12

The Area 12 GWETS is located at the former Motorola facility at 8201 East McDowell Road in Scottsdale, Arizona as shown on **Figure 18**. Motorola installed the Area 12 GWETS to enhance the NIBW groundwater remedy by extracting and treating groundwater containing relatively higher VOC concentrations at the source area, rather than allow VOC mass to migrate to CGTF extraction wells for removal and treatment. Groundwater extraction is performed using two MAU groundwater extraction wells designated as MEX-1MA and SRP well 23.6E-6.0N, also known as the Granite Reef well. The extracted groundwater is treated by air stripping and discharged to SRP for irrigation use. The Area 12 MAU source control GWETS was implemented beginning in early 1999 with start-up of MEX-1MA. The Area 12 GWETS was fully functional when the Granite Reef well came on-line in late 1999.

2.4.1 2006 Overview

During 2006, groundwater extraction tied into the Area 12 GWETS was effective in localized MAU source control (as discussed in Section 4.2.4) and groundwater treatment provided water for beneficial use that was safely below the water quality standards for all NIBW COCs (as discussed in Section 4.3.4).

A total of 486 million gallons of groundwater (1,491 AF) were pumped and treated at the Area 12 GWETS in 2006. Of the total, 312 million gallons were extracted from MEX-1MA and 174 million gallons from the Granite Reef well. Performance data provided by the Area 12 GWETS operator indicates a total of 395 pounds of VOCs were removed from groundwater throughout 2006, with TCE amounting to nearly 90 percent of the total.

Compliance monitoring is conducted pursuant to an EPA-approved Area 12 GWETS O&M Plan to verify removal of VOCs from the extracted groundwater and assure groundwater treatment standards are achieved. The Area 12 GWETS O&M Plan was approved by EPA on June 8, 2006.

In 2006, process samples including influent and treated groundwater were collected monthly by the Area 12 GWETS Operator and submitted to Transwest Geochem for analysis of NIBW COCs. Samples from the Area 12 extraction wells were collected the first week of the quarter by SRP and analyzed by SRP. A tabulation of VOC concentrations for NIBW COCs measured in Area 12 extraction wells in 2006 is included in **Table 5**. Historical groundwater production and TCE concentrations at Area 12 extraction wells are graphed in **Appendix F**. Results of analysis of Area 12 process and treated groundwater conducted by Transwest Geochem are summarized in **Table 9**. Although the Area 12 GWETS presently provides treated water for irrigation use, the treatment system is consistently operated to ensure that TCE in the extracted groundwater was below the drinking water MCL.

Treated groundwater from the Area 12 GWETS is discharged to an SRP irrigation lateral under a NPDES permit. Sampling and testing for limited inorganic water quality is conducted in accordance with the NPDES permit and the results are sent in monthly DMRs to the EPA and ADEQ.

2.4.2 Operational Summary for October through December 2006

The NIBW Area 12 GWETS operated as designed in the fourth quarter 2006. Extraction well MEX-1MA was operated through October but the motor on the submersible pump failed on October 31st. The pump was removed during the second week of November and a replacement ordered by SRP. The Granite Reef extraction well operated from November 3rd to December 22nd. The groundwater treatment system was operational throughout the quarter until the system was removed from service on December 22nd for the annual system shut down.

During the fourth quarter, process water samples were collected by the Area 12 GWETS Operator in the first week of the month and include samples of the combined influent to the GWETS at sample port WSP-1 and effluent from the air stripper at sample port WSP-2. Samples from the Area 12 extraction wells were collected by SRP at the beginning of the quarter when the wells were operational. The results of TCE analyses for extraction wells and treatment process water samples obtained for the fourth quarter are as follows:

Area 12 Groundwater Extraction and Treatment
TCE Concentrations in µg/L

Date	MEX-1MA	Granite Reef	GWETS Influent	GWETS Effluent
10/2/2006	**61**	NS	NS	NS
10/10/2006	**59**	**130**	**96**	**<0.5**
10/12/2006	NS	**110**	NS	NS
11/7/2006	NS	**140**	**140**	**<0.5**
12/5/2006	NS	**110**	**120**	**<0.5**

Notes: NS = Not Sampled

The Area 12 GWETS was taken out of service of December 22, 2006 for annual maintenance. The GWETS will remain off-line until approximately mid-February during the SRP north side canal dry-up period. The replacement pump at MEX-1MA will be installed in first quarter 2007, pending receipt of the submersible motor. Routine operation, maintenance, and monitoring are expected to continue at the Area 12 GWETS throughout the remainder of first quarter 2007.

3.0 SOIL REMEDIATION PROGRAM

Soil remediation has been conducted at NIBW Areas 6, 7, 8, and 12. Remediation using soil vapor extraction and treatment (SVET) has been completed at Area 6, 8, and 12. At Area 7, SVET has resulted in removal of approximately 7,000 pounds of VOCs. The Area 7 SVET system was shut down in May 2000 to allow VOC concentrations in the soil to equilibrate and to begin long-term monitoring for potential rebound. After an 18-month rebound period, soil vapor monitoring was conducted to determine the level of residual soil VOC concentrations and calculate the threat to groundwater. The results of long-term vapor monitoring and calculation of groundwater threat were provided in a report dated May 21, 2002. Although the report indicated SVET had achieved performance standards for Area 7 soils, EPA and ADEQ believed the soil VOC levels had not reached asymptotic levels. Consequently, it was decided to monitor the 125-foot interval of SVM 7-209 on a semi-annual schedule to determine when TCE concentrations become asymptotic. Soil vapor monitoring of this zone continued for five more years until April 2006.

In April 2006, the NIBW PCs collected soil vapor samples at Area 7 to once again determine the level of residual soil VOC concentrations and calculate the threat to groundwater. The results of soil vapor monitoring were included in a report

dated June 14, 2006 and concluded that the residual TCE in Area 7 soils does not pose a significant threat to groundwater. EPA provided comments generated by ADEQ and CH2M Hill on the Area 7 soil remedy completion report to the NIBW PCs on July 18, 2006. The NIBW PCs responded to ADEQ and CH2M Hill comments in a letter dated October 27, 2006.

The NIBW PCs discussed the results of long-term Area 7 soil vapor monitoring and local UAU groundwater monitoring data at an NIBW Technical Committee meeting held November 28, 2006. Determination of further requirements, if any, for Area 7 soil remediation and remedy closure is pending.

4.0 EVALUATION OF NIBW REMEDIAL ACTION PERFORMANCE

Evaluation of the NIBW remedy is based on Performance Standards set forth in the SOW. Performance Standards are defined in the SOW for groundwater monitoring, groundwater containment, and groundwater treatment. In the following sections, monitoring data obtained during 2006 will be evaluated to assess achievement of performance criteria.

4.1 ASSESSMENT OF GROUNDWATER MONITORING PERFORMANCE STANDARDS

The scope and frequency of all components of the monitoring program were comprehensively evaluated as part of the GMEP development process. Monitoring program modifications established in the GMEP became effective in January 2003 and included: 1) reduction in the number of lower MAU wells included in the water level monitoring program; 2) reduction in the frequency of water level monitoring

from quarterly to semi-annual; 3) reduction in the number of wells included in the routine water quality monitoring program; 4) reduction in the frequency of routine water quality monitoring from semi-annual to annual; 5) increase in the scope of the indicator well monitoring programs for the northern LAU, Area 7, and Area 12; and 6) implementation of quarterly water quality monitoring for all indicator wells.

Based on a review of monitoring data obtained through 2006, the NIBW PCs continue to conclude that the monitoring network and monitoring frequency are sufficient to achieve all objectives of the monitoring program, providing data critical to the on-going evaluation of remedy performance.

4.2 ASSESSMENT OF GROUNDWATER CONTAINMENT PERFORMANCE STANDARDS

Performance of the NIBW remedy is evaluated based on a rigorous approach established in the GMEP. In the GMEP, monitoring program objectives are matched with specific performance criteria, a methodology for measuring achievement of performance criteria, a definition of when contingency evaluations or actions would be initiated, and alternative contingency response actions that may be taken. Based on review of 2006 monitoring data, five specific aspects of the remedy will be evaluated with respect to groundwater containment performance standards, in accordance with achievement measures established in the GMEP. Aspects of the remedy that will be evaluated include the: UAU zones of contamination, MAU/LAU zone of contamination, Area 7 MAU source area, Area 12 MAU source area, and northern LAU hydraulic capture.

4.2.1 Evaluation of UAU Mass Flux

The assessment of remedy performance for the UAU zones of contamination involves monitoring of VOC mass reduction over time. For the 2006 VOC mass flux analysis, total mass of VOCs present in UAU groundwater was computed using data for saturated thickness from the October 2006 water level monitoring round and VOC concentration data from the October 2006 water quality monitoring round. **Table 10** summarizes VOC mass estimates for the UAU zones of contamination for 2006. A total of about 43 gallons, or 521 pounds, of VOCs are estimated to remain in the saturated portion of the UAU. **Figure 19** illustrates the decline in total VOC mass in UAU groundwater over time.

Estimated total mass of VOCs present in the saturated portion of the UAU has decreased fairly systematically with time, declining from a high of over 11,000 pounds in 1993 to a low of 289 pounds in 2005. In 2006, the UAU mass estimate increased 232 pounds from the previous year's estimate to a total estimated VOC mass of 521 pounds. Nearly half of the increase is attributed to PG-4UA (where PCE concentrations increased from 17 to 56 µg/L over the past year). PCE concentrations at PG-4UA are likely due to a separate source of contamination, potentially a nearby dry cleaning facility. Although estimated VOC mass increased over the past year, the 5-year running average (as shown on **Figure 19)** represents a declining trend. Based on review of these data and analyses, the NIBW PCs conclude that the UAU mass flux achievement measure, which requires a decrease in UAU VOC mass using a 5-year running average, has been satisfied.

4.2.2 Evaluation of MAU/LAU Hydraulic Containment

The assessment of remedy performance for the MAU/LAU zone of contamination involves demonstrating that: 1) direction of groundwater movement along the periphery of the zone of contamination is toward extraction wells or the southwest margin; 2) location of the 5 µg/L contour for the zone of contamination does not shift outward more than 1,000 feet relative to plume interpretations for the baseline time period, October 2001; and 3) TCE concentrations at a specified set of MAU and LAU monitor wells are below specified levels. For 2006, compliance with all of these achievement measures was attained, as described below.

Figures 20 and 21 illustrate containment of the MAU and LAU zones of contamination, respectively, demonstrating that direction of groundwater movement for the periphery of all areas where concentrations of TCE are in excess of 5 µg/L is either toward extractions wells tied into treatment or toward the southwest margin. In each case, water level and TCE concentration data for October 2006 are shown, with arrows indicating direction of groundwater movement. For the MAU **(Figure 20)**, direction of groundwater movement along the periphery of the zone of contamination is toward the CGTF or Area 7 extraction wells in the north part of the site, and toward the Area 12 extraction wells or the southwest margin in the south part of the site. For the LAU **(Figure 21)**, direction of groundwater movement along the periphery of the zone of contamination is toward the either the CGTF or MRTF extraction wells.

Figures 15 and 16 illustrate locations of 5 µg/L contours for the October 2001 and October 2006 zones of contamination in MAU and LAU groundwater, respectively. The illustrations demonstrate that there has generally been very little change in the location of the 5 µg/L contour over the 5-year time period; outward shifts in the location of the 5 µg/L contour were all substantially less than the 1,000-

foot performance measure. Small inward and outward shifts in the location of the 5 µg/L contour that are interpreted between the two data sets are attributable to small changes in reported TCE concentrations. An area of apparent change located near Scottsdale Road between Thomas and McDowell Roads is attributable to the availability of new data at well M-17MA/LA beginning in 2002.

Compliance with the final achievement measure for the zone of MAU/LAU contamination, which relates to not exceeding specified TCE concentrations at selected MAU and LAU monitor wells, is summarized below.

Required and Observed TCE Concentrations in Selected NIBW Monitor Wells

	TCE Concentration (µg/L)	
Well Name	**Achievement Measure**	**October 2006 Results**
M-2MA	10	4.6
M-7MA	10	0.9
S-1MA	2	<0.5
S-2MA	3	<0.5
M-5LA	10	2.7
PA-2LA	3	<0.5
PA-15LA	10	1.8
PA-18LA	10	2.0
PG-1LA	15	2.2
PG-44LA	5	1.3
S-1LA	3	<0.5
S-2LA	15	3.0

4.2.3 Evaluation of Area 7 MAU Source Area Program

The assessment of remedy performance for the Area 7 MAU source area program involves demonstrating: 1) hydraulic capture such that direction of groundwater movement from the vicinity of monitor well PA-12MA is toward the cone of depression associated with Area 7 pumping, and 2) a decline in 5-year running average TCE concentrations for monitor wells located within the hydraulic capture zone associated with Area 7 pumping. The 5-year running average is calculated following full implementation of the Area 7 groundwater remedy at monitor wells located within the Area 7 hydraulic capture zone, including: D-2MA, E-10MA, PA-10MA,PA-12MA, W-1MA, and W-2MA. The groundwater remedy at Area 7 was fully operational in 2003 following start-up of extraction well 7EX-5MA in 2002.

The remedy for the Area 7 MAU source area has achieved hydraulic capture such that direction of groundwater movement from the vicinity of monitor well PA-12MA is toward the cone of depression associated with Area 7 pumping. **Figure 22** includes graphs summarizing 10 years of water level and TCE concentration data for indicator wells in the vicinity of Area 7. These data are helpful for evaluating long-term trends and verifying overall effectiveness of the Area 7 groundwater extraction and treatment system. Review of hydrographs indicates impacts on water levels and TCE concentrations from start-up of the Area 7 remedy in 1999 when extraction was initiated at 7EX-3MA and 7EX-4MA. Water levels generally stabilized at MAU monitor wells following full implementation of the Area 7 groundwater remedy in 2002 when extraction was added at 7EX-5MA. In recent years, water levels have risen in all MAU well consistent with regional trends. TCE concentrations in the MAU in the vicinity of Area 7 generally stabilized and began to decline once all three Area 7 extraction wells were operational. Concentration changes observed at some monitor wells are generally attributed to changes in local and regional pumping patterns, as described below.

Figure 22 also shows MAU TCE concentration contours for October 2006 and the estimated extent of hydraulic capture associated with MAU extraction in the vicinity of Area 7. MAU water level contours and the associated interpretation of hydraulic containment for the entire site for October 2006 are shown on **Figure 20**. Review of patterns of groundwater movement and the extent of hydraulic capture for the vicinity of Area 7 indicates that a cone of depression, centered approximately on Thomas Road, occurs as a result of MAU pumping at Area 7 and CGTF extraction wells. Consistent with the achievement measure, direction of groundwater movement from the vicinity of monitor well PA-12MA is to the northwest toward this cone of depression. Accordingly, the NIBW PCs conclude that compliance with the hydraulic capture component of the Area 7 remedy performance was achieved in 2006.

The second evaluation tool for the Area 7 MAU source area is a decline in the 5-year running average of TCE concentrations for the relevant monitoring wells following full implementation of the Area 7 groundwater remedy. Because the remedy was not fully implemented until the last extraction well (7EX-5MA) was installed and started in February 2002, there are insufficient data to calculate a 5-year running average at this time. A 5-year running average will be computed and used as a remedy evaluation tool beginning with the 2007 Annual Report. Average TCE concentrations in the Area 7 indicator wells over the period 1995-2006 are given in **Table 11** and shown graphically in **Figure 23.**

4.2.4 Evaluation of Area 12 MAU Source Area Program

The assessment of remedy performance for the Area 12 MAU source area program involves demonstrating: 1) hydraulic capture such that the direction of groundwater movement from the vicinity of Hayden Road is toward the cone of depression associated with Area 12 pumping, and 2) a decline in 5-year running average TCE concentrations for monitor wells located within the hydraulic capture zone associated with Area 12 pumping. The 5-year running average is to be calculated following full implementation of the Area 12 groundwater remedy at monitor wells located within the Area 12 hydraulic capture zone, including: E-1MA, M-4MA, M-5MA, M-6MA, M-7MA, M-9MA, M-15MA, and PA-21MA. The groundwater remedy at Area 12 was fully operational in 2000, once both extraction wells were brought on-line in 1999, and 2004 was the first year when 5 years of data are available to conduct the running average performance assessment.

Figure 24 includes graphs summarizing 10 years of water level and TCE concentration data for indicator wells in the vicinity of Area 12. These data are helpful for evaluating long-term trends and verifying overall effectiveness of the Area 12 groundwater extraction and treatment system. Review of hydrographs indicates substantial impacts on water levels and TCE concentrations from implementation of the Area 12 remedy in 1999. For 2006, water levels in the vicinity of Area 12 display seasonal patterns in response to pumping but are otherwise fairly stable with respect to long-term trends. TCE concentrations during 2006 also exhibit variability at most Area 12 monitor wells, attributed to local groundwater pumping influences. Increasing TCE concentrations previously observed at downgradient monitor well E-5MA now appear to be declining.

Figure 24 also shows MAU TCE concentration contours for October 2006 and the estimated extent of hydraulic capture associated with Area 12 MAU

extraction. MAU water level contours and the associated interpretation of hydraulic containment for the entire site for October 2006 are shown on **Figure 20**. Review of patterns of groundwater movement and the extent of hydraulic capture for the vicinity of Area 12 indicates that a cone of depression, centered approximately on the western edge of Area 12, occurs as a result of MAU pumping at Area 12 extraction wells. Consistent with the achievement measure, direction of groundwater movement from the vicinity of Hayden Road is to the east toward extraction well MEX-1MA. The NIBW PCs conclude that compliance with the hydraulic capture component of the Area 12 remedy performance was achieved in 2006.

Table 12 summarizes annual average TCE concentrations for the period 1994 through 2006 for the following MAU monitor wells located within the capture zone associated with MAU extraction at Area 12: E-1MA, M-4MA, M-5MA, M-6MA, M-7MA, M-9MA, M-15MA, and PA-21MA. Annual average TCE concentrations for each of the specified Area 12 MAU monitor wells were computed for the period 1994 through 2006. Next, the annual monitor well average TCE concentrations were averaged to arrive at a combined Area 12 average for each year. Using the annual average TCE values computed in this manner, the 5-year average was calculated to be 26 µg/L for the period 2002 through 2006. This value is the same as the 5-year average computed for the previous period (2001 to 2005). Based on review of these data and analyses, the NIBW PCs conclude that the Area 12 mass removal achievement measure, which requires demonstration of a non-increasing trend in TCE concentrations using a 5-year running average, has been satisfied.

Calculation of previous 5-year running averages of TCE concentrations in Area 12 monitor wells over the period 1995 through 2006 is given in **Table 12** and shown graphically in **Figure 25**. The data demonstrate there have been widespread and substantial declines of TCE concentrations in monitor wells within the Area 12

zone of hydraulic containment corresponding to implementation of the Area 12 groundwater remedy. It is evident from this data set that on-going groundwater extraction since 1999 has removed a substantial amount of TCE mass that was present in MAU groundwater in the vicinity of Area 12, and that the 5-year running average concentrations are becoming asymptotic with respect to time because remaining mass is relatively small.

4.2.5 Evaluation of Northern LAU Hydraulic Capture

The assessment of remedy performance for the northern LAU program involves demonstrating: 1) the consistent presence of a cone of depression in the vicinity of the northern LAU extraction wells that are tied into treatment (MRTF extraction wells); and 2) TCE concentrations at monitor wells PG-42LA and PG-43LA, and at extraction well AAWC-14 that are less than or equal to 2 µg/L. For 2006, the NIBW PCs conclude that compliance with these two achievement measures was attained in the northern LAU, as described below.

Figure 26 includes graphs summarizing 10 years of water level and TCE concentration data for indicator wells in the northern LAU. These data are helpful for evaluating long-term trends and verifying overall effectiveness of the northern LAU containment program. Review of hydrographs indicates substantial impacts on water levels and some flattening of increasing TCE concentration trends from implementation of the northern LAU remedy in 1997. For 2006, water levels have increased relative to previous years. TCE concentrations remained below the detection limit at monitor wells PG-42LA and PG-43LA, and at extraction well AAWC-14. Stable to decreasing TCE concentrations were observed in 2006 at well PG-1LA, PG-40LA, PA-6LA, PA-13LA, and S-2LA. Increasing TCE concentrations observed at well PG-2LA, located downgradient along the centerline of the LAU

plume, indicate capture of the northern LAU plume is occurring south of the AAWC well field.

Figure 26 also shows LAU TCE concentration contours for October 2006 and the estimated extent of hydraulic capture as predicted by the groundwater flow model developed as part of the Feasibility Study Addendum (FSA). LAU water level contours for the entire site for October 2006 are shown on **Figure 21**. Review of patterns of groundwater movement for the northern LAU indicates that a cone of depression, generally centered on extraction well PCX-1, occurs as a result of focused LAU pumping at the MRTF extraction wells. Consistent with the specified achievement measure, this cone of depression moves water from the LAU zone of contamination toward extraction wells tied into treatment.

Although a cone of depression in LAU groundwater occurred previously in the vicinity of the AAWC wellfield, the location of the lowest point in this cone has shifted to the south over time in response to planned changes in the distribution of pumping between the various wells. **Figure 27** is a stacked bar chart showing total annual pumping volume for AAWC wells and PCX-1 for the time period 1996 through 2006. Wells are stacked in order of their position from south to north in the wellfield, such that annual pumpage for well PCX-1 is on the bottom and annual pumpage for well AAWC-17 is on the top of each bar. Pumping volumes contributed by MRTF extraction wells are shown in shades of red, whereas pumping volumes for wells to the north, where treatment is not available, are shown in shades of blue. Review of **Figure 27** demonstrates that during the period prior to and during initial implementation of the MRTF extraction and treatment program (1996 and 1997), production in response to AAWC demand was weighted toward the northern extraction wells (AAWC-16 and AAWC-17). However, changes in the pumping strategy occurred following initiation of the MRTF extraction and treatment program. Beginning in 1998, pumping was focused more heavily on the southern extraction

wells (PCX-1, AAWC-15, and AAWC-14) that are tied into treatment at the MRTF. During 2006, MRTF extraction wells PCX-1, AAWC-15, and AAWC-14 contributed around 70 percent of the total volume of groundwater pumped in the wellfield. Management of groundwater pumping in this manner ensures effective capture and treatment of the northern LAU zone of contamination.

4.2.6 Evaluation of Need for Modeling Analyses

The remedy for the NIBW Site established in the Amended ROD includes periodic use of modeling analyses to "assess the accuracy over time of projections in the FSA". In the GMEP, the PCs presented, and EPA and ADEQ approved, a detailed approach to determining when modeling analyses would be conducted, what the scope of modeling analyses would comprise, and how results of modeling analyses would be used. Based on the approach described in the GMEP, modeling analyses would be conducted as part of the Five-Year Review process for the site. In addition, the need for modeling analyses would be considered under the following circumstances: 1) if large-scale changes in the magnitude or pattern of groundwater pumping are planned or have occurred subsequent to the most recent modeling effort, and 2) if contingency response actions are initiated due to a lack of compliance with specific achievement measures for any component of the remedy.

Over the past year there has been a decline in groundwater pumping in the vicinity of the NIBW Site, as shown in **Table 7**. Reduced groundwater pumpage of peripheral production wells and focusing of pumping at extraction wells tied into treatment is beneficial to hydraulic capture and containment of the NIBW zones of groundwater contamination and is not a condition that would necessitate modeling analyses.

The need for model updates and/or analyses will be evaluated in an on-going manner as data collection continues in 2007.

4.3 ASSESSMENT OF GROUNDWATER TREATMENT PERFORMANCE STANDARDS

Performance of the NIBW groundwater treatment systems is evaluated based on criteria established in the SOW and compliance with Groundwater Cleanup Standards specified in the Amended ROD. The following sections summarize monitoring data obtained during 2006 to demonstrate that groundwater treatment performance standards were achieved at the four GWETS.

4.3.1 Evaluation of the Central Groundwater Treatment Facility

Section III.C of the SOW, requires that treated groundwater from the CGTF meet cleanup standards for NIBW COCs, as set forth in Table 3 of the Amended ROD. Cleanup standards defined in Table 3 are equivalent to MCLs adopted by EPA pursuant to the Safe Drinking Water Act (42 U.S.C. §§ 300f-300j-11), as shown in the following table.

Contaminants of Concern	MCL (µg/l)
Trichloroethene (TCE)	5.0
Tetrachloroethene (PCE)	5.0
1,1-Dichloroethene (DCE)	7.0
1,1,1-Trichloroethane (TCA)	200
Chloroform (TCM)	6.0*

* Chloroform produced as a byproduct of municipal water supply disinfection is exempt from the treatment standard for chloroform identified in Table 3 of the Amended ROD.

Throughout 2006, samples of treated groundwater have been collected in the common sump at the CGTF and analyzed for the NIBW COCs on at least a weekly frequency. The results of sampling and analysis have been reported by the COS in their 2006 quarterly Compliance Monitoring Reports. As evidenced in the COS reports, all common sump samples were below the cleanup standards set forth in Table 3 of the Amended ROD. In fact, compliance monitoring data indicate all common sump samples were at or below the 0.5 µg/L MRL for TCE and other NIBW COCs.

4.3.2 Evaluation of the Miller Road Treatment Facility

Section III.C of the SOW, requires that treated groundwater from the MRTF meet the cleanup standards set forth in Table 3 of the Amended ROD. Further, treated groundwater from the MRTF that is discharged to the SRP water supply system at the Arizona Canal is required to meet NPDES permit limits.

Throughout 2006, samples of treated groundwater were collected on a weekly schedule from air stripper effluent of PCX-1 and within the MRTF clear well and analyzed for NIBW COCs. The results of sampling and analysis have been discussed in previous 2006 quarterly reports and included in **Table 9** of this report. As demonstrated in all quarterly reports and **Table 9**, all treated groundwater samples tested in 2006 were below the cleanup standards set forth in Table 3 of the Amended ROD. In fact, compliance monitoring data indicate all treated groundwater samples from the tower treating extraction well PCX-1 were below the 0.5 µg/L MRL for TCE and the MRLs for all other NIBW COCs.

Treated groundwater discharged to the SRP water supply system at the Arizona Canal outfall was tested monthly for select volatile organic compounds and physical and inorganic water quality parameters as required by NPDES permit. The

results of sampling and analyses were given in monthly DMRs submitted to EPA and ADEQ and confirm the discharge was within allowable limits for the NPDES permit throughout 2006.

4.3.3 Evaluation of the Area 7 Groundwater Treatment System

Section III.C of the SOW, requires that treated groundwater from the Area 7 GWETS meet cleanup standards set forth in Section XII.B.7.b of the Amended ROD. Specifically, in the case of Area 7, treated water used to recharge the aquifer must meet substantive requirements of the Underground Injection Control (UIC) Program.

Discharges of treated water to the aquifer via reinjection wells at Area 7 that are subject to the UIC Program are regulated in Arizona by ADEQ under the Aquifer Protection Permit (APP) Program. The APP Program requires that any discharges to the aquifer must not cause or contribute to a violation of AWQS. In Arizona, all groundwater is classified for drinking water protected use so AWQS are primary drinking water standards by rule. If an aquifer water quality standard is already exceeded at the point of compliance in groundwater then the discharge must not cause further degradation of the aquifer with respect to the parameter that exceeds the standard.

Throughout 2006, samples of treated groundwater have been collected from air stripper effluent at the Area 7 GWETS and analyzed for NIBW COCs on at least a monthly frequency while the system was in service. The results of sampling and analysis are included in **Table 9**. As evidenced from the data, all treated water samples from the Area 7 GWETS were below MCLs for NIBW COCs and therefore the discharge meets Arizona AWQS for these parameters.

Treated groundwater that is discharged to Area 7 reinjection wells recharges the UAU groundwater system. Inorganic water quality in the UAU is typically poorer than that of treated groundwater from the Area 7 GWETS, which is mostly derived from the MAU. As discussed in Section 2.3.2 of this report and evidenced by inorganic water quality data reported in the NIBW Supplemental Data Submittal for October 2006 (issued concurrently with this Site Monitoring Report), reinjection of treated water from the Area 7 GWETS is not causing or contributing to further degradation of inorganic water quality in UAU groundwater.

4.3.4 Evaluation of the Area 12 Groundwater Treatment System

Section III.C of the SOW, requires that treated groundwater from the Area 12 GWETS meet cleanup standards set forth in Section XII.B.7.b of the Amended ROD. Specifically, in the case of Area 12, treated water that is discharged to the SRP water supply system must meet substantive requirements of the governing NPDES permit.

Throughout 2006, samples of treated groundwater have been collected from air stripper effluent at the Area 12 GWETS and analyzed for NIBW COCs on at least a monthly frequency while the system was in service. The results of sampling and analysis are included in **Table 9**. As evidenced from the data, all treated water samples from the Area 12 GWETS were below MCLs for NIBW COCs and therefore meet the NPDES permit limits for discharge of VOCs to the SRP water supply system. Although groundwater at Area 12 is treated to achieve drinking water MCLs, it should be noted that the receiving water is currently used for irrigation water supply in the SRP Grand Canal. Additional sampling and analysis for physical and inorganic water quality parameters is reported in monthly DMRs submitted to EPA and ADEQ and confirm the discharge was within allowable limits for the NPDES permit throughout 2006.

4.4 PROGRESS TOWARD ACHIEVEMENT OF REMEDIAL ACTION OBJECTIVES

EPA established seven Remedial Action Objectives (RAOs) for the NIBW Site in the September 2001 Amended ROD. The following is a qualitative discussion of the progress achieved in satisfying RAOs, based on review of data through 2006.

Remedial Action Objective #1:

Restore the Upper, Middle, and Lower Aquifers to drinking water quality by decreasing the concentrations of the contaminants of concern to below the cleanup standards.

Significant progress has been made towards the removal of NIBW COCs and restoration of groundwater to drinking water quality with respect to these contaminants. In 2006, the NIBW remedial actions resulted in the extraction and treatment of over 5.8 billion gallons of groundwater and 4,200 pounds of TCE. From the inception of the NIBW groundwater remedy in 1994, approximately 62 billion gallons of groundwater have been extracted to remove an estimated 58,000 pounds of TCE. Furthermore, soil remedial actions (as discussed in RAO #6) have, for the most part, removed on-going sources of TCE to groundwater at EPA-identified source areas. As a consequence, TCE concentrations have measurably decreased in the UAU and portions of the MAU and LAU.

UAU groundwater has shown the most significant decline in TCE concentrations. According to UAU mass flux calculations prepared by the NIBW PCs, the estimated VOC mass in the UAU has declined from more than 11,000 pounds in 1993 to approximately 520 pounds in 2006, representing a decrease of over 95 percent in 14 years **(Figure 19)**. TCE concentrations in the UAU have fallen off correspondingly. Presently, the highest TCE concentration in the UAU is 25 µg/L compared to historical concentrations in the thousands of micrograms per liter.

Local declines in TCE concentrations continue to be evident in MAU and LAU groundwater. With the exception of groundwater in the vicinity of Area 7, TCE concentrations in groundwater in the MAU are generally declining. For example, Area 12 historical data indicate a systematic reduction in TCE concentrations at most Area 12 indicator wells **(Figure 24)**. Historical LAU water quality data demonstrate a clear trend of declining TCE concentrations in the southern portion of the zone of contamination and generally stable levels in the northern portion of the plume **(Figure 26)**. Review of more recent LAU water quality data indicates that previously increasing TCE concentration trends in the northern LAU are stable and possibly beginning to decline, while decreasing trends in the southern LAU continue. Graphs showing TCE concentrations for the period of record for MAU and LAU monitor wells are provided in **Appendix D**.

Remedial Action Objective #2:

Protect human health and the environment by eliminating exposure to contaminated groundwater.

The NIBW remedial action program has essentially eliminated any public exposure to contaminated groundwater. As discussed in Section 4.3, all groundwater that is extracted as part of the NIBW Site remedy is treated to meet the groundwater cleanup standards specified in the Amended ROD.

Remedial Action Objective #3:

Provide the City of Scottsdale with a water source that meets MCLs for NIBW contaminants of concern.

The CGTF was constructed to provide treatment of contaminated groundwater for COS beneficial use. Since the CGTF was conditionally certified in 1995, the CGTF has pumped and treated about 33 billion gallons of groundwater to

meet MCLs for the NIBW COCs. The treated groundwater is used as a supply to the COS potable water system.

Remedial Action Objective #4:

Achieve containment of the groundwater contamination plume by preventing any further lateral migration of contaminants in groundwater.

As discussed in Section 4.2, the combined groundwater extraction tied to treatment at the CGTF, MRTF, Area 7, and Area 12 has achieved hydraulic containment throughout the zone of MAU/LAU groundwater contamination. The most current water level data continue to demonstrate that the direction of groundwater movement within the zone of MAU/LAU contamination is toward the NIBW extraction wells. The most current water quality data further show that the MAU/LAU zone of contamination is within the region of hydraulic capture of the NIBW extraction wells and no substantive outward shift of the plumes has occurred. In fact, TCE concentrations in monitor wells located near the edge or along the periphery of the zone of MAU/LAU contamination show decreasing TCE concentration trends in many parts of the site.

Remedial Action Objective #5:

Reuse of the water treated at the Site to the extent possible in accordance with Arizona's Groundwater Management Act.

Treated water produced by all four NIBW groundwater remedial actions is beneficially reused. As previously mentioned, the CGTF provides treated groundwater as a supply to the COS potable water system. The MRTF treats groundwater for use in the AAWC and/or SRP potable water systems. At Area 7, treated groundwater is discharged to shallow injection wells to recharge the UAU

aquifer. At Area 12, treated groundwater is provided to the SRP water supply system for irrigation uses. All NIBW end uses are consistent with beneficial use designations of the ADWR and in accordance with the Groundwater Management Act. Furthermore, the NIBW remedy has incorporated COS, SRP, and AAWC as end users of treated groundwater in lieu of groundwater pumping they have historically done and would have otherwise relied upon in this area.

Remedial Action Objective #6:

Mitigate any soil contamination that continues to impact groundwater.

As explained in Section 3.0, the NIBW PCs have implemented soil cleanup at four EPA-identified source areas, including Areas 6, 7, 8, and 12. The collective soil remediation has resulted in the removal of nearly 10,000 pounds of TCE in the unsaturated zone and virtually eliminated these sources as an ongoing threat for groundwater contamination. At the present time the soil remediation is complete at Areas 6, 8, and 12; Area 7 is under review. The effectiveness of NIBW soil cleanup is demonstrated by the significant reduction of TCE concentrations and mass in UAU groundwater, as discussed above.

Remedial Action Objective #7:

Provide long-term management of contaminated groundwater to improve the regional aquifer's suitability for potable use.

The NIBW PCs have closely coordinated the planning and implementation of NIBW remedial actions with the key water providers, including the COS, SRP, and AAWC. The efforts have strongly focused on defining mutually beneficial objectives for all parties involved in the remedy. For example the NIBW PCs require consistent and reliable groundwater extraction in the areas most favorable for capture and

containment of the MAU/LAU groundwater contamination. The water providers have considerable, but variable water demands in the NIBW area and a system of existing wells and infrastructure available for groundwater production.

Through technical discussions and cooperation, the parties have taken a number of steps to focus groundwater extraction and end uses for optimum water resource management. For example, the NIBW PCs have installed and modified a number of the water provider wells to improve groundwater contaminant capture and mass removal. To assure the water providers can take the treated groundwater, the NIBW PCs have upgraded treatment systems to assure acceptable water quality and enhanced infrastructure and control systems for the water providers. The water companies have cooperated by prioritizing pumping to meet water demands using those wells most benefiting the remedy.

The extraction and treatment system for the northern LAU is a prime example of the collaboration developed for improved groundwater management. The MRTF links wells, water supplies, water demands, and end uses of SRP and AAWC. Through cooperation with the water providers and the versatility provided by the MRTF, the wells tied into the MRTF are operated nearly constantly to achieve containment of the northern LAU plume. The water providers have further implemented a water exchange linked to groundwater extraction at PCX-1 (installed for optimum plume capture by the NIBW PCs) in exchange for Colorado River water that substitutes for other AAWC groundwater pumping. The overall effect is to reduce the net groundwater withdrawal in the area while optimizing pumping in the AAWC wellfield for LAU plume containment.

4.5 MANAGEMENT OF UNTREATED GROUNDWATER

Section VI.B.4.n of the SOW requires COS, SRP, and the NIBW PCs to provide a report describing the creation and maintenance of records to document compliance with Section VI.B.4.a through VI.B.4.m of the SOW. Section VI.B.4 specifies provisions for managing untreated groundwater extracted from NIBW wells as part of the remedy and requires that groundwater be managed as if it were a hazardous waste by following the requirements set forth in Sections VI.B.4.a through VI.B.4.m. The NIBW PCs, SRP, and COS are submitting the following information to fulfill the requirements for annual reporting of compliance with Section VI.B.4 of the SOW. For ease of reference, information regarding COS, SRP, and the NIBW PCs management practices pertaining to applicable requirements of Section VI.B.4 are referenced in the order listed in the SOW.

Section VI.B.4.a – normal operation, maintenance, and monitoring activities:

The NIBW PCs have specified procedures for management of untreated groundwater associated with sampling activities at the MRTF, Area 7 GWETS, and Area 12 GWETS and well equipment maintenance in O&M Plans that were approved by EPA and ADEQ on June 8, 2006. SRP has developed and followed procedures for managing untreated groundwater during monitor well sampling in the Phase I Sampling and Analysis Plan (SAP). In accordance with the Phase I SAP, untreated groundwater resulting from purging and sampling of NIBW monitor wells was treated to MCLs using granular activated carbon during 2006. During well and well equipment maintenance activities conducted at SRP NIBW extraction wells in 2006, well access was restricted. There were no accidental releases of untreated groundwater at the Granite Reef well, PCX-1, or COS-31 during pump and well maintenance in 2006.

The COS has specified procedures for management of untreated groundwater associated with sampling activities at the CGTF and well equipment maintenance in an EPA-approved O&M Plan. In 2006, the City handled all untreated groundwater for the CGTF and its related pipelines and well sites in accordance with the O&M Plans and this section of the SOW. The City also conducts monthly routine safety check sheet inspections of the facility and all equipment related to the facility such as the air fans, pumps, heaters, well sites, raw water transmission lines, air relief valves, SCADA alarms, dialers and pagers, and conducts maintenance on a scheduled routine basis and as needed.

Section VI.B.4.d – annual treatment facility inspections:

Each NIBW groundwater treatment facility is inspected on a routine basis, as part of the normal operation and maintenance procedures, for equipment malfunction and deterioration that could result in the release of untreated groundwater.

As explained in Section 2 of this report, the NIBW PCs and COS coordinated facility tours for EPA inspection of the NIBW groundwater extraction and treatment systems on November 27 and 28, 2006. The facilities were inspected for malfunctions, deterioration, operator practices or errors, and discharges that may be causing or could result in a release of untreated groundwater. At each site, the major system components were identified and examined for operability, condition of operating equipment, and management of untreated groundwater and residual materials. Additionally, operator practices related to system startup and shutdown, routine and non-routine maintenance, and sampling were reviewed with EPA. There were no deficiencies noted or hazards identified in the course of the inspections at any of the sites that would denote a problem achieving groundwater treatment

performance standards or compliance with the Amended CD/SOW. No hazardous waste is generated, handled, or stored at the NIBW groundwater treatment plants.

A summary report documenting the site inspection and copies of the annual inspection checklist for each facility are provided in **Appendix E**.

Section VI.B.4.e – training for responding to releases of untreated groundwater:

The NIBW PCs submitted a plan for health and safety training of GWETS Operators and Emergency Coordinators to EPA as part of materials included in an August 1, 2003, "Submittal of Information Required, Section VI of the Statement of Work" provided to EPA and ADEQ. The plan specified steps to be conducted for personnel at MRTF, Area 7, and Area 12 to assure that they will have appropriate health and safety training to respond to releases of untreated groundwater in a manner to protect public health and the environment. In 2006, AAWC provided health and safety training to all personnel through weekly safety briefings and company sponsored instruction.

In 2006, City personnel along with Levine-Fricke LFR provided emergency response and incident management training sessions for an untreated groundwater release for both Area 7 and the CGTF raw water pipelines. The training sessions were conducted on December 12, 2006, and were attended by COS operations and distribution personnel. Documentation of the training handouts and sign in sheet are kept on file at the CGTF and the COS Water Campus.

The Contingency and Emergency Response Plan (CERP) for Accidental Releases of Untreated Groundwater from SRP North Indian Bend Wash Site Extraction Wells", prepared by SRP, dated January 2007 describes the training to be

conducted for personnel responding to an accidental release of untreated groundwater from an SRP facility.

Section VI.B.4.f and g – land disposal of untreated groundwater:

The NIBW PCs, SRP, and COS have not placed untreated groundwater in any salt dome formation, salt bed formation, underground mine or cave, surface impoundments, waste piles, land treatment units, incinerators, or landfills.

Section VI.B.4.h – emergency and contingency response plans:

The NIBW PCs prepared and submitted draft MRTF, Area 7, and Area 12 Emergency and Contingency Response Plans to the EPA on August 25, 2006. EPA provided comments on the draft CERPs in a letter dated November 20, 2006. ADEQ also provided comments on the draft CERPS that were forwarded to the NIBW PCs by EPA in a letter dated December 15, 2006. The NIBW PCs modified the MRTF, Area 7, and Area 12 CERPs and reissued to EPA on January 15, 2007.

The COS prepared and submitted a revised draft of the CGTF CERP to EPA on July 13, 2006. The plan describes procedures for handling an accidental release of untreated groundwater from the CGTF. EPA provided comments on the draft CGTF CERP in a letter dated November 20, 2006 and forwarded comments from ADEQ in a letter dated December 15, 2006. The City revised and resubmitted the CGTF CERP to EPA on January 24, 2007.

SRP submitted a draft CERP to EPA on August 23, 2006 describing the procedures for handling an accidental release of untreated groundwater from an SRP extraction well in the NIBW Site. EPA provided comments on the draft CERP in a letter dated November 20, 2006 and forwarded comments from ADEQ in a letter

dated December 15, 2006. SRP submitted a revised Extraction Well CERP to EPA on January 15, 2007.

All CERPs are currently being reviewed by EPA. Final CERPs will be issued pending resolution of any EPA and ADEQ comments.

Section VI.B.4.i – emergency coordinators:

The CERPS prepared by the NIBW PCs, COS, and SRP list designated emergency response coordinators for the four groundwater treatment facilities and the extraction well network. Currently identified personnel responsible for emergency response at the NIBW groundwater treatment facilities are listed in **Appendix A**.

Section VI.B.4.j – evidence of Holocene faults:

The NIBW PCs and SRP provided written verification in submittals dated August 1, 2003 and September 3, 2003, respectively, to EPA and ADEQ that none of the existing NIBW extraction wells and treatment systems are located within 200 feet of a fault, which has exhibited displacement in Holocene time. There are no recognized Holocene faults in the metropolitan Phoenix area. COS also provided this verification in July 2003.

Section VI.B.4.k – floodplains:

The COS, NIBW PCs, and SRP provided information in submittals dated July, August, and September, 2003, respectively, to EPA and ADEQ to confirm that four NIBW extraction wells are in locations that would be inundated by a 100-year flood. The NIBW PCs described measures for operating the wells in the draft Groundwater

Extraction Well Network O&M Plan to ensure that there will not be a release of untreated groundwater during a 100-year storm.

Section VI.B.4.l – closure:

In 2006, three NIBW groundwater monitoring wells designated as M-10UA, M-10MA, and M-10LA were abandoned at the NIBW Site. The M-10 monitor wells were abandoned due to physical construction impacts from Lowe's Home Improvement Store in south Scottsdale. Replacements for the MAU and LAU monitor wells were drilled at a new location on this property. The City and SRP did not abandon any wells associated with the NIBW project. There were no facility closure activities in 2006.

5.0 SUMMARY AND CONCLUSIONS

The NIBW remedial action program is performing satisfactorily to meet all objectives and obligations defined for the NIBW Superfund Site. The NIBW PCs believe the data and interpretation presented in this report demonstrate the NIBW remedy has met performance standards specified in the SOW for groundwater monitoring, containment, and treatment:

- **Groundwater monitoring conducted in 2006 provides necessary data to evaluate on-going remedy performance.** Based on review of monitoring data in this report, the monitoring network and frequency are sufficient to achieve all objectives of the monitoring program established in the EPA-approved GMEP. No additional monitor wells are needed at this time.

- **Groundwater monitoring data continue to show the remedy meets groundwater containment performance standards.** Within the UAU, groundwater VOC mass has decreased substantially across the site and very little mass remains to impact underlying MAU/LAU groundwater. Within the MAU and LAU, the combined pumping of the NIBW groundwater extraction well network during 2006 has resulted in on-going containment of the zones of contamination and achieved measurable reduction of VOC concentration and mass in the aquifer. MAU source area programs have hydraulically contained groundwater contamination in the vicinity of Area 7 and Area 12 from migrating toward the southwest margin, while reducing VOC mass.

- **Compliance monitoring data demonstrate all four GWETS are consistently meeting groundwater treatment performance standards**. Throughout 2006, all samples of treated groundwater were safely below MCLs for NIBW COCs. Operation of the GWETS resulted in extraction of over 5.8 billion gallons of groundwater to remove around 4,200 pounds of TCE. All groundwater extracted and treated for the remedy was put to beneficial use.

In summary, the NIBW Superfund Site remedial actions conducted by the NIBW PC, in collaboration with the major water providers, COS, AAWC, and SRP, have resulted in a functional and effective groundwater remedy. The collective remediation efforts through 2006 have achieved significant progress toward the long-term goal of aquifer restoration while providing beneficial use of vital groundwater resources. Continued progress is anticipated through ongoing operation, maintenance, and monitoring of the NIBW remedial action program in 2006.

6.0 DOCUMENTS SUBMITTED IN 2006

During the period January through December 2006, the NIBW PCs and SRP provided the following documents to EPA and ADEQ:

"NIBW Technical Committee Meeting, November 17, 2005", meeting notes submitted to EPA and ADEQ on January 24, 2006.

"Achievement Measure for Area 7 Mass Reduction, North Indian Bend Wash Superfund Site", NIBW PCs submittal to EPA and ADEQ on February 13, 2006.

"*2005 Site Monitoring Report, North Indian Bend Wash Superfund Site"*, consisting of Volumes I and II, NIBW PCs submittal to EPA and ADEQ on February 28, 2006.

"2005 Groundwater Monitoring Program Data and Quality Assurance Report, North Indian Bend Wash Superfund Site", NIBW PCs submittal to EPA and ADEQ on February 28, 2006.

"2005 Groundwater Treatment System Program Data Report, North Indian Bend Wash Superfund Site", NIBW PCs submittal to EPA and ADEQ on February 28, 2006.

"Supplemental Data Collection, October 2005, NIBW Superfund Site", NIBW PCs submittal to EPA and ADEQ on March 1, 2006

"Work Plan for Determination of Threat to Groundwater, Area 7 Soil Remedial Action, North Indian Bend Wash Superfund Site", NIBW PCs submittal to EPA and ADEQ on March 7, 2006.

"Proposal for Alternative Discharge Stack, Central Groundwater Treatment Facility, North Indian Bend Wash Superfund Site", NIBW PCs submittal to EPA and ADEQ on April 14, 2006.

"Abandonment of Groundwater Monitor Wells, North Indian Bend Wash Superfund Site", NIBW PCs submittal to Arizona Department of Water Resources (ADWR) on April 20, 2006.

"Abandonment of Groundwater Monitor Wells, North Indian Bend Wash Superfund Site", NIBW PCs submittal of well owner's Notice of Abandonment to ADWR on May 5, 2006.

"January through March 2006 Quarterly Report, North Indian Bend Wash Superfund Site", NIBW PCs submittal to EPA and ADEQ on May 11, 2006

"Abandonment of M-10 Monitor Wells", NIBW PCs submittal to EPA and ADEQ on May 10, 2006.

"Replacement of M-10 Monitor Wells", NIBW PCs submittal to EPA and ADEQ on May 17, 2006.

"Demonstration of Financial Ability, North Indian Bend Wash Superfund Site", NIBW PCs submittal to EPA and ADEQ on May June 1, 2006.

"Sitewide Operations and Maintenance Plan, North Indian Bend Wash Superfund Site", NIBW PCs, COS, and SRP submittal to EPA and ADEQ on June 5, 2006.

"Consumer Confidence Report, Arizona-American Water Company", NIBW PCs submittal to EPA and ADEQ on June 12, 2006.

"Review of Request for Determination of Soil Remedy Completion, North Indian Bend Wash (NIBW) - Area 7 Soil Vapor Extraction and Treatment System", NIBW PCs submittal to EPA and ADEQ on June 5, 2006 with revised report submitted June 14, 2006.

"Abandonment of Upper Alluvial Unit Monitor Wells M-12UA and PG-35UA", NIBW PCs submittal to EPA and ADEQ on August 4, 2006.

"Draft Phase 2 Sampling and Analysis Plan, North Indian Bend Wash Superfund Site, Scottsdale, Arizona", NIBW PCs and COS submittal to EPA and ADEQ on August 10, 2006.

"Performance Measurement Tracking Log, 1st and 2nd Quarter 2006", NIBW PC submittal to ADEQ on August 18, 2006.

"Extraction Well Contingency and Emergency Response Plan", SRP submittal to EPA and ADEQ on August 23, 2006.

"Draft Contingency and Emergency Response Plan, Miller Road Treatment Facility", NIBW PCs submittal to EPA and ADEQ on August 25, 2006.

"Draft Contingency and Emergency Response Plan, Area 7 Groundwater Extraction and Treatment System", NIBW PCs submittal to EPA and ADEQ on August 25, 2006.

"Draft Contingency and Emergency Response Plan, Area 12 Groundwater Extraction and Treatment System", NIBW PCs submittal to EPA and ADEQ on August 25, 2006.

"Quarterly Report, April through June 2006", NIBW PCs submittal to EPA and ADEQ on August 28, 2006.

"Draft Remedial Design/Remedial Action Work Plan", NIBW PCs submittal to EPA and ADEQ on September 25, 2006.

"Phase 2 Health and Safety Plan for Activities Related to the Operation and Maintenance of Groundwater Treatment Systems at the North Indian Bend Wash Superfund Site, Scottsdale, Arizona", NIBW PC submittal to EPA and ADEQ on September 25, 2006.

"Responses to ADEQ and CH2M Hill Comments to Request for Determination of Soil Remedy Completion, Area 7 Soil Vapor Extraction and Treatment", NIBW PCs submittal to EPA and ADEQ on October 27, 2006.

"EPA Approved Phase 2 Sampling and Analysis Plan", NIBW PCs submittal to EPA and ADEQ on November 17, 2006.

"Quarterly Report, April through June 2006", NIBW PCs submittal to EPA and ADEQ on November 30, 2006.

"Abandonment of Eleven Groundwater Monitor Wells, North Indian Bend Wash Superfund Site", NIBW PCs submittal to ADWR on November 30, 2006.

"Abandonment and Replacement of Monitor Wells M-12MA and PA-8LA, North Indian Bend Wash Superfund Site", NIBW PCs submittal to EPA and ADEQ on December 15, 2006.

"Modification of Monitor Wells PA-11LA and PA-12MA and Drilling of Nested Piezometer for Monitoring of MAU and LAU Water Levels, North Indian Bend Wash Superfund Site", NIBW PCs submittal to EPA and ADEQ on December 15, 2006.

TABLES

TABLE 1. SUMMARY OF GROUNDWATER LEVEL MEASUREMENTS BY SALT RIVER PROJECT, NORTH INDIAN BEND WASH AREA, SCOTTSDALE, ARIZONA, APRIL 2006

Well No	Date & Time of Measurement	Depth to Water (ft)	Groundwater Elevation (ft)
B-1MA	4/5/2006 10:14	101.87	1089.5
B-1UA	4/5/2006 10:11	63.25	1128.2
B-3UA	4/5/2006 10:17	65.30	1126.4
B-J	4/5/2006 10:41	71.38	1120.1
D-1UA	4/4/2006 10:19	89.67	1136.1
D-2MA	4/4/2006 9:22	133.19	1106.4
E-1LA	4/6/2006 6:58	180.47	1033.8
E-1MA	4/6/2006 6:56	139.70	1074.0
E-1UA	4/6/2006 6:59	82.40	1132.3
E-2UA	4/5/2006 7:09	101.54	1122.9
E-3UA	4/4/2006 10:00	106.22	1117.5
E-4UA	4/4/2006 10:26	95.71	1133.1
E-5MA	4/5/2006 10:30	126.47	1072.5
E-5UA	4/5/2006 10:29	78.84	1120.2
E-6UA	4/4/2006 13:15	112.08	1108.9
E-7LA	4/5/2006 10:36	152.45	1045.0
E-7UA	4/5/2006 10:34	83.35	1116.9
E-8MA	4/5/2006 10:43	116.75	1076.0
E-9UA	4/5/2006 8:41	100.95	1108.8
E-10MA	4/4/2006 6:52	171.82	1074.1
E-12UA	4/6/2006 6:50	75.56	1127.8
E-13UA	4/5/2006 10:49	80.84	1127.3
E-14LA	4/5/2006 7:08	224.44	1029.2
M-1MA	4/6/2006 8:08	130.53	1081.0
M-2LA	4/6/2006 8:24	167.31	1043.1
M-2MA	4/6/2006 8:27	129.61	1080.7
M-2UA	4/6/2006 8:26	83.97	1127.2
M-3MA	4/6/2006 8:34	113.80	1091.9
M-3UA	4/6/2006 8:32	75.22	1132.0
M-4MA	4/6/2006 8:14	136.04	1078.8
M-4UA	4/6/2006 8:12	87.20	1129.1
M-5LA	4/6/2006 7:41	183.57	1034.3
M-5MA	4/6/2006 7:39	154.72	1063.1
M-5UA	4/6/2006 7:37	91.66	1127.1
M-6MA	4/6/2006 7:46	144.64	1074.0
M-7MA	4/6/2006 7:57	133.82	1079.2
M-8UA	4/6/2006 8:43	Well Inaccessible	
M-9LA	4/4/2006 13:54	199.29	1020.6
M-9MA	4/4/2006 14:05	Pump pulled - no SWL	
M-9UA	4/4/2006 13:55	85.55	1134.2
M-10LA	4/5/2006 7:20	184.24	1033.4
M-10MA	4/5/2006 7:20	144.76	1072.8
M-10UA	4/5/2006 7:20	95.89	1121.2
M-11MA	4/4/2006 12:10	133.31	1077.5
M-11UA	4/4/2006 12:08	91.33	1119.5
M-12MA	4/4/2006 11:11	175.08	1051.2
M-12UA	4/4/2006 11:10	104.12	1122.3

TABLE 1. SUMMARY OF GROUNDWATER LEVEL MEASUREMENTS BY SALT RIVER PROJECT, NORTH INDIAN BEND WASH AREA, SCOTTSDALE, ARIZONA, APRIL 2006

Well No	Date & Time of Measurement	Depth to Water (ft)	Groundwater Elevation (ft)
M-13UA	4/6/2006 8:17	90.72	1125.4
M-14LA	4/5/2006 7:05	200.42	1024.3
M-14MA	4/5/2006 7:06	140.56	1084.0
M-15MA	4/4/2006 13:38	140.71	1078.0
M-15UA	4/4/2006 13:34	89.99	1128.5
M-16LA	4/4/2006 10:57	214.99	1012.7
M-16MA	4/4/2006 10:59	136.67	1091.0
M-16UA	4/4/2006 10:55	100.99	1126.4
M-17MA/LA	4/4/2006 12:26	205.49	1032.2
PA-1MA	4/4/2006 10:17	119.24	1105.8
PA-2LA	4/5/2006 6:52	309.86	943.4
PA-3MA	4/4/2006 8:13	129.79	1123.1
PA-4MA	4/4/2006 8:45	120.82	1109.6
PA-5LA	4/4/2006 8:43	288.69	940.3
PA-6LA	4/4/2006 8:04	316.25	936.4
PA-7MA	4/4/2006 8:03	137.06	1115.6
PA-8LA	4/4/2006 11:07	233.03	994.4
PA-9LA	4/4/2006 9:35	242.59	992.2
PA-10MA	4/4/2006 9:37	174.84	1060.1
PA-11LA	4/5/2006 9:52	Well Buried	
PA-12MA	4/4/2006 12:18	172.55	1051.8
PA-13LA	4/4/2006 7:01	303.70	945.0
PA-14MA	4/4/2006 7:01	153.31	1095.4
PA-15LA	4/5/2006 8:28	142.37	1061.6
PA-16MA	4/5/2006 8:30	132.16	1071.8
PA-17MA	4/4/2006 8:24	130.05	1108.3
PA-18LA	4/4/2006 8:26	262.80	975.6
PA-19LA	4/5/2006 7:33	172.73	1049.0
PA-20MA	4/5/2006 7:34	169.63	1051.8
PA-21MA	4/4/2006 10:34	123.99	1100.8
PA-22LA	4/5/2006 10:03	119.56	1064.0
PA-23MA	4/5/2006 10:01	94.01	1090.0
PG-1LA	4/4/2006 7:55	318.14	931.2
PG-2LA	4/4/2006 7:11	352.91	917.8
PG-3UA	4/5/2006 8:25	92.22	1111.7
PG-4MA	4/5/2006 7:47	173.65	1053.5
PG-4UA	4/5/2006 7:48	130.52	1096.8
PG-5MA	4/5/2006 8:02	155.12	1058.7
PG-5UA	4/5/2006 8:01	106.20	1107.7
PG-6MA	4/5/2006 8:16	131.94	1080.6
PG-6UA	4/5/2006 8:17	107.59	1105.0
PG-7MA	4/5/2006 9:47	121.75	1075.6
PG-7UA	4/5/2006 9:52	84.97	1112.0
PG-8UA	4/5/2006 7:31	117.19	1104.8
PG-9UA	4/4/2006 9:44	130.59	1121.2
PG-10UA	4/4/2006 9:12	116.18	1124.2
PG-11UA	4/4/2006 9:57	114.90	1115.0

TABLE 1. SUMMARY OF GROUNDWATER LEVEL MEASUREMENTS BY SALT RIVER PROJECT, NORTH INDIAN BEND WASH AREA, SCOTTSDALE, ARIZONA, APRIL 2006

Well No	Date & Time of Measurement	Depth to Water (ft)	Groundwater Elevation (ft)
PG-12UA	4/4/2006 10:13	105.43	1125.1
PG-13UA	4/4/2006 12:04	103.19	1122.9
PG-14UA	4/4/2006 10:50	99.50	1127.5
PG-15UA	4/4/2006 10:41	97.64	1131.4
PG-16UA	4/4/2006 9:28	122.85	1118.8
PG-17UA	4/4/2006 10:22	88.54	1136.8
PG-18UA	4/5/2006 9:42	85.00	1116.7
PG-19UA	4/5/2006 9:38	89.11	1114.9
PG-20UA	4/4/2006 13:27	107.00	1109.5
PG-21UA	4/4/2006 13:22	90.55	1117.1
PG-22UA	4/5/2006 9:04	89.30	1120.6
PG-23MA/LA	4/5/2006 7:52	157.48	1064.5
PG-23UA	4/5/2006 7:55	123.39	1099.2
PG-24UA	4/5/2006 8:23	104.34	1107.5
PG-25UA	4/6/2006 8:42	92.15	1113.9
PG-26UA	4/5/2006 10:52	75.21	1130.3
PG-27UA	4/5/2006 9:56	67.49	1121.7
PG-28UA	4/4/2006 9:03	113.50	1121.0
PG-29UA	4/4/2006 8:52	109.40	1123.0
PG-30UA	4/4/2006 9:51	106.61	1119.2
PG-31UA	4/4/2006 9:31	117.94	1117.2
PG-32UA	4/4/2006 13:45	94.97	1129.6
PG-33UA	4/4/2006 10:38	90.73	1134.7
PG-34UA	4/4/2006 10:47	96.62	1130.7
PG-35UA	4/5/2006 9:51	Well Buried	
PG-36UA	4/6/2006 6:31	123.19	1121.4
PG-37UA	4/4/2006 12:36	Wellsite Dry	
PG-38MA/LA	4/4/2006 12:40	184.49	1052.4
PG-38UA	4/4/2006 12:42	137.21	1100.0
PG-39LA	4/4/2006 12:32	196.06	1036.1
PG-39UA	4/4/2006 12:30	133.34	1098.8
PG-40LA	4/4/2006 7:29	351.82	923.5
PG-42LA	4/4/2006 7:37	367.84	924.5
PG-43LA	4/4/2006 7:23	340.24	924.8
PG-44LA	4/4/2006 7:45	374.50	923.1
PG-47MA	4/6/2006 7:48	134.60	1083.2
PG-48MA	4/6/2006 7:49	145.48	1072.4
PG-50MA	4/4/2006 9:17	176.41	1064.3
PG-51MA	4/4/2006 9:15	183.50	1057.2
PG-57MA	4/5/2006 8:53	119.76	1107.0
S-1LA	4/5/2006 9:20	298.31	961.3
S-1MA	4/5/2006 9:23	165.52	1093.9
S-2LA	4/6/2006 6:37	323.05	936.4
S-2MA	4/5/2006 9:15	171.45	1088.6
ST-1UA	4/6/2006 8:06	80.69	1131.3
W-1MA	4/4/2006 8:55	138.35	1091.1
W-2MA	4/4/2006 9:05	169.62	1064.7
W-3UA	4/4/2006 10:09	107.69	1124.2

TABLE 2. SUMMARY OF GROUNDWATER LEVEL MEASUREMENTS BY SALT RIVER PROJECT, NORTH INDIAN BEND WASH AREA, SCOTTSDALE, ARIZONA, OCTOBER 2006

Well No	Date & Time of Measurement	Depth to Water (ft)	Groundwater Elevation (ft)
B-1MA	10/4/2006 13:05	94.60	1096.8
B-1UA	10/4/2006 13:02	56.87	1134.5
B-3UA	10/4/2006 13:09	58.87	1132.8
B-J	10/4/2006 13:49	65.20	1126.3
D-1UA	10/3/2006 12:19	82.91	1142.9
D-2MA	10/3/2006 8:58	126.60	1113.0
E-1LA	10/5/2006 7:47	171.28	1043.0
E-1MA	10/5/2006 7:47	132.29	1081.4
E-1UA	10/5/2006 7:48	76.54	1138.2
E-2UA	10/4/2006 8:44	97.35	1127.1
E-3UA	10/3/2006 11:56	102.69	1121.0
E-4UA	10/3/2006 12:11	89.53	1139.3
E-5MA	10/4/2006 13:38	119.39	1079.6
E-5UA	10/4/2006 13:40	73.31	1125.7
E-6UA	10/3/2006 13:59	107.77	1113.2
E-7LA	10/4/2006 13:31	141.15	1056.3
E-7UA	10/4/2006 13:33	78.66	1121.5
E-8MA	10/4/2006 13:57	109.25	1083.5
E-9UA	10/4/2006 10:14	94.84	1114.9
E-10MA	10/3/2006 8:50	164.05	1081.9
E-12UA	10/4/2006 13:23	69.03	1134.4
E-13UA	10/4/2006 13:15	74.86	1133.2
E-14LA	10/4/2006 9:27	211.85	1041.8
M-1MA	10/5/2006 8:18	123.92	1087.6
M-2LA	10/5/2006 8:50	159.16	1051.2
M-2MA	10/5/2006 8:53	122.95	1087.4
M-2UA	10/5/2006 8:52	77.88	1133.3
M-3MA	10/5/2006 8:58	107.92	1097.8
M-3UA	10/5/2006 8:59	68.92	1138.3
M-4MA	10/5/2006 8:23	129.41	1085.4
M-4UA	10/5/2006 8:21	81.34	1135.0
M-5LA	10/5/2006 8:41	175.25	1042.7
M-5MA	10/5/2006 8:39	146.94	1070.9
M-5UA	10/5/2006 8:36	Well Obstructed	
M-6MA	10/5/2006 7:57	136.85	1081.8
M-7MA	10/5/2006 8:06	127.52	1085.5
M-8UA	10/4/2006 13:58	Well Inaccessible	
M-9LA	10/4/2006 8:17	185.89	1034.0
M-9MA	10/4/2006 8:21	119.85	1099.9
M-9UA	10/4/2006 8:19	80.52	1139.2
M-10LA	10/4/2006 13:59	Well Removed	
M-10MA	10/4/2006 13:59	Well Removed	
M-10UA	10/4/2006 13:59	Well Removed	
M-11MA	10/3/2006 13:26	125.40	1085.4
M-11UA	10/3/2006 13:24	87.37	1123.4
M-12MA	10/4/2006 9:01	161.62	1064.7
M-12UA	10/4/2006 8:59	92.95	1133.5
M-13UA	10/5/2006 8:26	84.85	1131.3
M-14LA	10/4/2006 8:48	190.08	1034.6

TABLE 2. SUMMARY OF GROUNDWATER LEVEL MEASUREMENTS BY SALT RIVER PROJECT, NORTH INDIAN BEND WASH AREA, SCOTTSDALE, ARIZONA, OCTOBER 2006

Well No	Date & Time of Measurement	Depth to Water (ft)	Groundwater Elevation (ft)
M-14MA	10/4/2006 8:45	132.93	1091.7
M-15MA	10/3/2006 13:04	132.15	1086.6
M-15UA	10/3/2006 13:00	84.69	1133.8
M-16LA	10/4/2006 8:30	199.86	1027.8
M-16MA	10/4/2006 8:31	129.85	1097.9
M-16UA	10/4/2006 8:28	96.70	1130.7
M-17MA/LA	10/3/2006 14:46	193.12	1044.6
PA-1MA	10/3/2006 12:14	111.31	1113.7
PA-2LA	10/4/2006 7:36	313.43	939.9
PA-3MA	10/4/2006 7:32	152.53	1100.4
PA-4MA	10/3/2006 7:57	115.56	1114.8
PA-5LA	10/3/2006 7:55	291.15	937.9
PA-6LA	10/3/2006 7:32	319.45	933.2
PA-7MA	10/3/2006 7:34	133.71	1119.0
PA-8LA	10/4/2006 8:56	216.79	1010.6
PA-9LA	10/3/2006 14:35	232.53	1002.3
PA-10MA	10/3/2006 14:37	164.51	1070.4
PA-11LA	10/3/2006 13:46	196.01	1028.3
PA-12MA	10/3/2006 13:42	161.97	1062.3
PA-13LA	10/3/2006 8:05	305.03	943.7
PA-14MA	10/3/2006 8:09	148.14	1100.6
PA-15LA	10/4/2006 12:15	132.32	1071.7
PA-16MA	10/4/2006 12:18	123.24	1080.8
PA-17MA	10/4/2006 7:47	122.63	1115.7
PA-18LA	10/4/2006 7:45	253.33	985.1
PA-19LA	10/4/2006 10:04	No Access to Well	
PA-20MA	10/4/2006 10:05	No Access to Well	
PA-21MA	10/3/2006 12:29	116.91	1107.9
PA-22LA	10/4/2006 12:54	110.99	1072.6
PA-23MA	10/4/2006 12:52	87.67	1096.3
PG-1LA	10/3/2006 7:19	322.77	926.5
PG-2LA	10/3/2006 7:08	356.60	914.1
PG-3UA	10/4/2006 12:11	85.98	1117.9
PG-4MA	10/4/2006 12:55	163.12	1064.0
PG-4UA	10/4/2006 12:55	123.74	1103.6
PG-5MA	10/4/2006 10:43	145.14	1068.7
PG-5UA	10/4/2006 10:41	100.54	1113.4
PG-6MA	10/4/2006 10:51	123.21	1089.3
PG-6UA	10/4/2006 10:48	101.06	1111.5
PG-7MA	10/4/2006 12:38	113.00	1084.3
PG-7UA	10/4/2006 12:39	77.97	1119.0
PG-8UA	10/4/2006 10:03	111.14	1110.9
PG-9UA	10/3/2006 8:39	129.33	1122.5
PG-10UA	10/3/2006 9:02	114.32	1126.1
PG-11UA	10/4/2006 8:02	111.95	1118.0
PG-12UA	10/3/2006 12:01	101.19	1129.3
PG-13UA	10/4/2006 8:36	99.22	1126.9
PG-14UA	10/3/2006 12:51	95.17	1131.8
PG-15UA	10/3/2006 12:40	92.40	1136.6

TABLE 2. SUMMARY OF GROUNDWATER LEVEL MEASUREMENTS BY SALT RIVER PROJECT, NORTH INDIAN BEND WASH AREA, SCOTTSDALE, ARIZONA, OCTOBER 2006

Well No	Date & Time of Measurement	Depth to Water (ft)	Groundwater Elevation (ft)
PG-16UA	10/3/2006 14:27	120.66	1120.9
PG-17UA	10/3/2006 12:24	81.67	1143.6
PG-18UA	10/4/2006 12:24	79.02	1122.7
PG-19UA	10/4/2006 12:29	83.47	1120.5
PG-20UA	10/3/2006 14:03	102.40	1114.1
PG-21UA	10/3/2006 14:08	86.32	1121.3
PG-22UA	10/4/2006 10:33	84.03	1125.9
PG-23MA/LA	10/4/2006 11:59	146.97	1075.0
PG-23UA	10/4/2006 12:02	116.55	1106.1
PG-24UA	10/4/2006 12:08	98.30	1113.5
PG-25UA	10/5/2006 9:26	Well Inaccessible	
PG-26UA	10/4/2006 13:18	68.98	1136.5
PG-27UA	10/4/2006 12:43	60.88	1128.3
PG-28UA	10/3/2006 14:22	110.58	1123.9
PG-29UA	10/4/2006 9:10	106.44	1126.0
PG-30UA	10/3/2006 14:17	103.54	1122.3
PG-31UA	10/3/2006 14:31	115.25	1119.9
PG-32UA	10/3/2006 12:55	91.65	1133.0
PG-33UA	10/3/2006 12:36	85.35	1140.1
PG-34UA	10/3/2006 12:45	91.76	1135.5
PG-35UA	10/3/2006 13:49	107.89	1116.2
PG-36UA	10/3/2006 8:45	121.51	1123.1
PG-37UA	10/4/2006 9:46	Dry Well	
PG-38MA/LA	10/4/2006 9:46	173.56	1063.3
PG-38UA	10/4/2006 9:43	Dry Well	
PG-39LA	10/3/2006 14:53	184.02	1048.2
PG-39UA	10/3/2006 14:51	128.68	1103.4
PG-40LA	10/3/2006 6:40	357.23	918.1
PG-42LA	10/3/2006 6:49	375.06	917.2
PG-43LA	10/3/2006 6:30	346.99	918.0
PG-44LA	10/3/2006 6:58	378.06	919.5
PG-47MA	10/5/2006 7:56	127.22	1090.6
PG-48MA	10/5/2006 7:53	138.55	1079.4
PG-49MA	10/3/2002 9:34	230.00	980.2
PG-50MA	10/3/2006 9:06	166.14	1074.6
PG-51MA	10/3/2006 9:08	172.20	1068.5
PG-54MA	10/2/2002 13:50	184.53	1040.1
PG-55MA	10/3/2002 9:01	219.40	1006.0
PG-56MA	10/3/2002 8:55	205.29	1026.1
PG-57MA	10/4/2006 10:25	113.11	1113.7
S-1LA	10/3/2006 8:29	297.19	962.4
S-1MA	10/3/2006 8:33	161.75	1097.7
S-2LA	10/4/2006 7:20	327.55	931.9
S-2MA	10/3/2006 8:21	166.76	1093.2
ST-1UA	10/5/2006 8:16	74.52	1137.5
W-1MA	10/4/2006 9:14	131.44	1098.0
W-2MA	10/3/2006 14:21	157.74	1076.6
W-3UA	10/3/2006 12:06	101.51	1130.4

TABLE 3. SUMMARY OF WATER LEVEL DIFFERENCE BETWEEN OCTOBER 2005 AND OCTOBER 2006 NORTH INDIAN BEND WASH AREA, SCOTTSDALE, ARIZONA

Monitor Well Identifier	Alluvium Unit	October 2005 Depth to Groundwater Level (feet)	October 2006 Depth to Groundwater Level (feet)	Change in Depth to Groundwater Level (feet)
PG-10	U	119.22	114.32	4.90
PG-36	U	126.05	121.51	4.54
PG-29	U	112.46	106.44	6.02
PG-16	U	125.87	120.66	5.21
PG-28	U	116.40	110.58	5.82
PG-31	U	120.96	115.25	5.71
M-12	U	106.74	92.95	13.79
E-4	U	92.53	89.53	3.00
PG-30	U	109.46	103.54	5.92
W-3	U	108.65	101.51	7.14
PG-17	U	83.24	81.67	1.57
D-1	U	85.07	82.91	2.16
PG-12	U	106.59	101.19	5.40
PG-11	U	117.88	111.95	5.93
E-3	U	108.64	102.69	5.95
PG-15	U	95.65	92.40	3.25
PG-33	U	87.24	85.35	1.89
PG-35	U	114.00	107.89	6.11
PG-34	U	95.30	91.76	3.54
PG-13	U	104.54	99.22	5.32
M-16	U	101.07	96.70	4.37
PG-14	U	99.01	95.17	3.84
M-9	U	81.79	80.52	1.27
E-2	U	102.37	97.35	5.02
PG-32	U	96.51	91.65	4.86
M-11	U	92.76	87.37	5.39
E-6	U	114.99	107.77	7.22
PG-39	U	136.55	128.68	7.87
PG-21	U	91.98	86.32	5.66
PG-20	U	109.82	102.40	7.42
M-15	U	87.67	84.69	2.98
M-10	U	96.17	Well Removed	---
E-1	U	78.31	76.54	1.77
PG-8	U	120.10	111.14	8.96
M-5	U	(1)	Well Obstructed	---
E-7	U	84.57	78.66	5.91
PG-22	U	88.98	84.03	4.95
E-9	U	103.23	94.84	8.39
ST-1	U	76.52	74.52	2.00
PG-4	U	161.99	123.74	38.25
M-4	U	83.96	81.34	2.62
M-13	U	88.85	84.85	4.00
PG-25	U	93.46	Well Inaccessible	---
PG-5	U	108.38	100.54	7.84
E-5	U	78.53	73.31	5.22
M-8	U	(1)	Well Inaccessible	---
M-2	U	81.11	77.88	3.23
M-3	U	71.13	68.92	2.21
PG-23	U	126.72	116.55	10.17
PG-19	U	90.00	83.47	6.53
E-13	U	78.17	74.86	3.31
PG-24	U	(1)	98.30	---
B-J	U	71.92	65.20	6.72
PG-26	U	71.60	68.98	2.62
E-12	U	73.64	69.03	4.61
PG-6	U	109.53	101.06	8.47
PG-18	U	85.22	79.02	6.20
PG-3	U	93.40	85.98	7.42
B-3	U	62.74	58.87	3.87
B-1	U	60.29	56.87	3.42
PG-27	U	66.30	60.88	5.42

TABLE 3. SUMMARY OF WATER LEVEL DIFFERENCE BETWEEN OCTOBER 2005 AND OCTOBER 2006 NORTH INDIAN BEND WASH AREA, SCOTTSDALE, ARIZONA

Monitor Well Identifier	Alluvium Unit	October 2005 Depth to Groundwater Level (feet)	October 2006 Depth to Groundwater Level (feet)	Change in Depth to Groundwater Level (feet)
PG-7	U	85.98	77.97	8.01
PA-7	M	142.55	133.71	8.84
PA-3	M	134.69	152.53	-17.84
S-2	M	177.10	166.76	10.34
PA-4	M	125.75	115.56	10.19
PA-14	M	158.85	148.14	10.71
S-1	M	170.51	161.75	8.76
D-2	M	137.78	126.60	11.18
PG-50	M	187.30	166.14	21.16
PG-51	M	191.00	172.20	18.80
PA-17	M	134.62	122.63	11.99
W-1	M	143.20	131.44	11.76
E-10	M	177.46	164.05	13.41
W-2	M	170.29	157.74	12.55
M-12	M	178.64	161.62	17.02
PA-10	M	179.72	164.51	15.21
PA-1	M	122.19	111.31	10.88
PA-12	M	177.53	161.97	15.56
M-16	M	140.35	129.85	10.50
PA-21	M	126.33	116.91	9.42
PG-57	M	120.90	113.11	7.79
M-9	M	129.77	119.85	9.92
M-14	M	144.20	132.93	11.27
M-11	M	137.44	125.40	12.04
M-15	M	144.45	132.15	12.30
M-10	M	148.68	Well Removed	---
M-6	M	146.33	136.85	9.48
PG-47	M	140.40	127.22	13.18
PG-48	M	148.42	138.55	9.87
E-1	M	141.10	132.29	8.81
PA-20	M	177.55	No Access to Well	---
M-5	M	159.52	146.94	12.58
M-7	M	135.97	127.52	8.45
PG-4	M	181.51	163.12	18.39
M-1	M	132.17	123.92	8.25
M-4	M	139.27	129.41	9.86
PG-5	M	162.45	145.14	17.31
E-5	M	133.18	119.39	13.79
M-2	M	133.74	122.95	10.79
M-3	M	117.12	107.92	9.20
PG-23	M	164.18	146.97	17.21
E-8	M	122.73	109.25	13.48
PG-6	M	137.21	123.21	14.00
PA-16	M	138.33	123.24	15.09
B-1	M	105.42	94.60	10.82
PG-7	M	127.89	113.00	14.89
PA-23	M	98.28	87.67	10.61
PG-43	L	373.70	346.99	26.71
PG-42	L	401.75	375.06	26.69
PG-40	L	383.36	357.23	26.13
PG-44	L	406.39	378.06	28.33
PG-1	L	349.20	322.77	26.43
PG-2	L	382.20	356.60	25.60
PA-6	L	345.63	319.45	26.18
PA-2	L	339.35	313.43	25.92
S-2	L	352.19	327.55	24.64
PA-5	L	317.10	291.15	25.95
PA-13	L	330.91	305.03	25.88
S-1	L	320.92	297.19	23.73
PA-18	L	281.98	253.33	28.65
PA-8	L	244.58	216.79	27.79

TABLE 3. SUMMARY OF WATER LEVEL DIFFERENCE BETWEEN OCTOBER 2005 AND OCTOBER 2006 NORTH INDIAN BEND WASH AREA, SCOTTSDALE, ARIZONA

Monitor Well Identifier	Alluvium Unit	October 2005 Depth to Groundwater Level (feet)	October 2006 Depth to Groundwater Level (feet)	Change in Depth to Groundwater Level (feet)
PA-9	L	254.10	232.53	21.57
E-14	L	233.10	211.85	21.25
M-17MA/LA	L	214.45	193.12	21.33
PA-11	L	216.52	196.01	20.51
M-16	L	225.55	199.86	25.69
M-9	L	210.18	185.89	24.29
M-14	L	213.88	190.08	23.80
M-10	L	195.33	Well Removed	---
E-1	L	192.61	171.28	21.33
PA-19	L	181.20	No Access to Well	---
M-5	L	196.62	175.25	21.37
E-7	L	163.97	141.15	22.82
PG-39	L	204.00	184.02	19.98
PG-38	L	192.39	173.56	18.83
M-2	L	178.69	159.16	19.53
PA-15	L	150.23	132.32	17.91
PA-22	L	128.94	110.99	17.95

Notes:

U = Upper Alluvium Unit monitor well
M = Middle Alluvium Unit monitor well
L = Lower Alluvium Unit monitor well

TABLE 4. 2006 LABORATORY RESULTS FOR VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER MONITORING WELLS NORTH INDIAN BEND WASH AREA, SCOTTSDALE, ARIZONA
(results presented in µg/L)

Location Type	Sample Location	Field Sample ID	Sample Date	Sample Time	Sample Type	Lab	1,1,1-TCA	1,1-DCE	TCM	PCE	TCE
MW	B-J	B-J	11/1/2006	12:29	PRI	SRP	<0.5	<0.5	**1.2**	<0.5	**1.9**
MW	B-J	PT-B-J	11/1/2006	12:31	PTS	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
MW	D-1UA	D-1UA	10/11/2006	13:22	PRI	SRP	<0.5	<0.5	<0.5	<0.5	**12**
MW	D-2MA	D-2MA	1/6/2006	8:21	PRI	SRP	<0.5	**0.5**	**2.0**	**9.4**	**1500**
MW	D-2MA	D-2MA	4/13/2006	10:19	PRI	SRP	<0.5	**0.6**	**2.4**	**10**	**1600**
MW	D-2MA	D-2MA	7/21/2006	10:00	PRI	SRP	<0.5	<0.5	**1.6**	**6.8**	**1200**
MW	D-2MA	D-2MA	10/13/2006	9:36	PRI	SRP	<0.5	<0.5	**0.8**	**3.6**	**280**
MW	E-10MA	E-10MA	1/6/2006	7:04	PRI	SRP	<0.5	<0.5	<0.5	**2.4**	**5.5**
MW	E-10MA	Duplicate "D"	1/6/2006	0:00	DUP	SRP	<0.5	<0.5	<0.5	**2.4**	**5.4**
MW	E-10MA	E-10MA	4/14/2006	6:46	PRI	SRP	<0.5	<0.5	<0.5	**3.0**	**6.0**
MW	E-10MA	Duplicate "F"	4/14/2006	0:00	DUP	SRP	<0.5	<0.5	<0.5	**3.0**	**6.1**
MW	E-10MA	E-10MA	7/26/2006	6:48	PRI	SRP	<0.5	<0.5	**0.5**	**2.7**	**6.3**
MW	E-10MA	Duplicate "E"	7/26/2006	0:00	DUP	SRP	<0.5	<0.5	**0.5**	**2.7**	**6.0**
MW	E-10MA	E-10MA	10/17/2006	6:49	PRI	SRP	<0.5	<0.5	**0.5**	**2.7**	**6.4**
MW	E-10MA	Duplicate "H"	10/17/2006	0:00	DUP	SRP	<0.5	<0.5	**0.5**	**2.6**	**6.2**
MW	E-12UA	E-12UA	10/20/2006	10:14	PRI	SRP	<0.5	<0.5	**1**	<0.5	**2.7**
MW	E-13UA	E-13UA	11/16/2006	7:02	PRI	SRP	<0.5	<0.5	**0.6**	<0.5	**1.8**
MW	E-13UA	Duplicate "P"	11/16/2006	0:00	DUP	SRP	<0.5	<0.5	**0.5**	<0.5	**1.9**
MW	E-1MA	E-1MA	1/10/2006	6:56	PRI	SRP	<0.5	**0.6**	**3.0**	**2.1**	**60**
MW	E-1MA	Duplicate "E"	1/10/2006	0:00	DUP	SRP	<0.5	**0.7**	**3.1**	**2.2**	**66**
MW	E-1MA	E-1MA	4/14/2006	7:29	PRI	SRP	<0.5	**0.6**	**2.7**	**2.0**	**56**
MW	E-1MA	E-1MA	7/26/2006	7:41	PRI	SRP	<0.5	<0.5	**1.2**	**0.9**	**27**
MW	E-1MA	E-1MA	10/12/2006	8:13	PRI	SRP	<0.5	<0.5	**1.1**	**0.8**	**23**
MW	E-1MA	Duplicate "F"	10/12/2006	0:00	DUP	SRP	<0.5	<0.5	**1.1**	**0.8**	**23**
MW	E-3UA	E-3UA	10/13/2006	10:57	PRI	SRP	<0.5	<0.5	**0.9**	<0.5	<0.5
MW	E-5MA	E-5MA	1/6/2006	10:43	PRI	SRP	<0.5	**0.5**	**2.0**	**1.3**	**49**
MW	E-5MA	E-5MA	4/13/2006	13:23	PRI	SRP	<0.5	<0.5	**1.7**	**1.1**	**40**
MW	E-5MA	E-5MA	7/21/2006	10:58	PRI	SRP	<0.5	**0.5**	**1.7**	**1.0**	**40**
MW	E-5MA	E-5MA	10/25/2006	8:44	PRI	SRP	<0.5	<0.5	**1.6**	**0.9**	**36**
MW	E-5UA	E-5UA	10/25/2006	9:06	PRI	SRP	<0.5	<0.5	**1**	**0.8**	**10**
MW	E-5UA	Duplicate "M"	10/25/2006	0:00	DUP	SRP	<0.5	<0.5	**1.1**	**0.8**	**10**
MW	E-7LA	E-7LA	10/25/2006	12:57	PRI	SRP	<0.5	<0.5	**2.4**	**1.5**	**28**
MW	E-7UA	E-7UA	10/19/2006	13:54	PRI	SRP	<0.5	<0.5	**0.9**	**1.1**	**4.6**
MW	E-7UA	PT-E-7UA	10/19/2006	13:57	PTS	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
MW	E-8MA	E-8MA	10/19/2006	13:26	PRI	SRP	<0.5	<0.5	**0.6**	<0.5	**13**
MW	E-9UA	E-9UA	10/20/2006	9:46	PRI	SRP	<0.5	<0.5	**0.8**	**1.8**	**4.6**
MW	M-10LA	M-10LA	4/7/2006	8:00	PRI	SRP	<0.5	<0.5	**2.2**	**1.0**	**15**
MW	M-10LA	Duplicate "C"	4/7/2006	0:00	DUP	SRP	<0.5	<0.5	**2.4**	**1.2**	**16**
MW	M-10LA	M-10LA	11/1/2006	10:32	PRI	SRP	<0.5	<0.5	**2.6**	**0.8**	**5.7**
MW	M-10MA	M-10MA	1/4/2006	12:34	PRI	SRP	<0.5	<0.5	<0.5	<0.5	**12**
MW	M-10MA	M-10MA	4/7/2006	8:34	PRI	SRP	<0.5	<0.5	**1.3**	<0.5	**48**
MW	M-10MA	M-10MA	11/1/2006	9:46	PRI	SRP	<0.5	<0.5	<0.5	<0.5	**7.2**
MW	M-10UA	M-10UA	4/7/2006	8:53	PRI	SRP	<0.5	<0.5	**1.0**	<0.5	**0.8**
MW	M-11MA	M-11MA	10/18/2006	9:02	PRI	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
MW	M-12MA	M-12MA	10/6/2006	14:26	PRI	SRP	<0.5	<0.5	<0.5	<0.5	**14**
MW	M-12MA	PT-M-12MA	10/6/2006	14:30	PTS	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
MW	M-13UA	M-13UA	10/25/2006	10:47	PRI	SRP	<0.5	<0.5	**0.6**	**1.1**	**4.9**
MW	M-14LA	M-14LA	10/10/2006	13:52	PRI	SRP	<0.5	<0.5	**2.5**	**1.6**	**35**
MW	M-14LA	Duplicate "D"	10/10/2006	0:00	DUP	SRP	<0.5	<0.5	**2.2**	**1.5**	**36**
MW	M-14LA	PT-M-14LA	10/10/2006	13:55	PTS	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
MW	M-15MA	M-15MA	1/6/2006	10:03	PRI	SRP	<0.5	<0.5	<0.5	<0.5	**11**
MW	M-15MA	M-15MA	4/13/2006	11:53	PRI	SRP	<0.5	<0.5	<0.5	**0.5**	**13**
MW	M-15MA	M-15MA	7/20/2006	13:42	PRI	SRP	<0.5	<0.5	<0.5	<0.5	**12**
MW	M-15MA	PT-M-15MA	7/20/2006	13:45	PTS	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
MW	M-15MA	M-15MA	10/19/2006	12:51	PRI	SRP	<0.5	<0.5	**0.5**	**0.5**	**13**
MW	M-16LA	M-16LA	10/17/2006	10:04	PRI	SRP	<0.5	<0.5	**1.7**	**0.5**	**3.9**
MW	M-16MA	M-16MA	10/11/2006	14:26	PRI	SRP	<0.5	**0.5**	<0.5	**0.8**	**17**
MW	M-16MA	PT-M-16MA	10/11/2006	14:30	PTS	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
MW	M-17MA/LA	M-17MA/LA	1/6/2006	9:27	PRI	SRP	<0.5	<0.5	**1.0**	**0.5**	**15**
MW	M-17MA/LA	M-17MA/LA	4/7/2006	13:46	PRI	SRP	<0.5	<0.5	**1.2**	**0.8**	**21**
MW	M-17MA/LA	PT-M-17MA/LA	4/7/2006	13:50	PTS	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
MW	M-17MA/LA	M-17MA/LA	7/20/2006	11:43	PRI	SRP	<0.5	<0.5	**1.1**	**0.7**	**24**
MW	M-17MA/LA	Duplicate "C"	7/20/2006	0:00	DUP	SRP	<0.5	<0.5	**1.2**	**0.7**	**25**
MW	M-17MA/LA	M-17MA/LA	10/17/2006	10:54	PRI	SRP	<0.5	<0.5	**1.3**	**0.7**	**27**
MW	M-2MA	M-2MA	10/25/2006	13:38	PRI	SRP	<0.5	<0.5	<0.5	<0.5	**4.6**
MW	M-2UA	M-2UA	11/1/2006	8:17	PRI	SRP	<0.5	<0.5	**0.5**	<0.5	**3**
MW	M-4MA	M-4MA	1/6/2006	13:01	PRI	SRP	<0.5	<0.5	**1.1**	**0.7**	**20**
MW	M-4MA	PT-M-4MA	1/6/2006	13:04	PTS	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
MW	M-4MA	M-4MA	4/13/2006	13:59	PRI	SRP	<0.5	<0.5	**1.0**	**0.6**	**18**
MW	M-4MA	PT-M-4MA	4/13/2006	14:02	PTS	SRP	<0.5	<0.5	<0.5	<0.5	<0.5

TABLE 4. 2006 LABORATORY RESULTS FOR VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER MONITORING WELLS NORTH INDIAN BEND WASH AREA, SCOTTSDALE, ARIZONA
(results presented in µg/L)

Location Type	Sample Location	Field Sample ID	Sample Date	Sample Time	Sample Type	Lab	1,1,1-TCA	1,1-DCE	TCM	PCE	TCE
MW	M-4MA	M-4MA	7/21/2006	11:51	PRI	SRP	<0.5	<0.5	**1.1**	**0.7**	**22**
MW	M-4MA	PT-M-4MA	7/21/2006	11:54	PTS	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
MW	M-4MA	M-4MA	10/20/2006	13:16	PRI	SRP	<0.5	<0.5	**1.2**	**0.7**	**20**
MW	M-4MA	PT-M-4MA	10/20/2006	13:20	PTS	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
MW	M-5LA	M-5LA	10/12/2006	10:54	PRI	SRP	<0.5	<0.5	**1.5**	<0.5	**2.7**
MW	M-5MA	M-5MA	1/6/2006	12:14	PRI	SRP	<0.5	**1.7**	**1.9**	**3.9**	**47**
MW	M-5MA	M-5MA	4/14/2006	8:01	PRI	SRP	<0.5	**0.5**	**1.8**	**1.4**	**41**
MW	M-5MA	M-5MA	7/26/2006	9:58	PRI	SRP	<0.5	**1.4**	**5.5**	**4.5**	**130**
MW	M-5MA	PT-M-5MA	7/26/2006	10:00	PTS	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
MW	M-5MA	M-5MA	10/12/2006	9:48	PRI	SRP	<0.5	**0.7**	**2.5**	**1.7**	**53**
MW	M-6MA	M-6MA	1/10/2006	9:48	PRI	SRP	<0.5	**0.7**	**2.9**	**2.0**	**58**
MW	M-6MA	PT-M-6MA	1/10/2006	9:51	PTS	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
MW	M-6MA	M-6MA	4/14/2006	9:31	PRI	SRP	<0.5	**0.5**	**2.5**	**1.7**	**49**
MW	M-6MA	PT-M-6MA	4/14/2006	9:33	PTS	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
MW	M-6MA	M-6MA	7/26/2006	9:21	PRI	SRP	<0.5	<0.5	**1.3**	**0.7**	**25**
MW	M-6MA	M-6MA	10/12/2006	13:09	PRI	SRP	<0.5	**0.6**	**2**	**1.2**	**38**
MW	M-7MA	M-7MA	10/26/2006	8:17	PRI	SRP	<0.5	<0.5	<0.5	<0.5	**0.9**
MW	M-7MA	Duplicate "N"	10/26/2006	0:00	DUP	SRP	<0.5	<0.5	<0.5	<0.5	**1**
MW	M-9MA	M-9MA	11/1/2006	7:19	PRI	SRP	<0.5	<0.5	<0.5	<0.5	**4**
MW	M-9MA	Duplicate "O"	11/1/2006	0:00	DUP	SRP	<0.5	<0.5	<0.5	<0.5	**4.2**
MW	PA-10MA	PA-10MA	1/10/2006	8:06	PRI	SRP	<0.5	<0.5	<0.5	**0.6**	**32**
MW	PA-10MA	PA-10MA	4/13/2006	11:10	PRI	SRP	<0.5	<0.5	<0.5	**0.6**	**41**
MW	PA-10MA	PA-10MA	7/21/2006	7:53	PRI	SRP	<0.5	<0.5	<0.5	**0.6**	**43**
MW	PA-10MA	PA-10MA	10/13/2006	8:09	PRI	SRP	<0.5	<0.5	<0.5	<0.5	**27**
MW	PA-11LA	PA-11LA	10/12/2006	14:26	PRI	SRP	<0.5	**1.2**	**1.5**	**3.5**	**42**
MW	PA-11LA	PT-PA-11LA	10/12/2006	14:29	PTS	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
MW	PA-12MA	PA-12MA	1/4/2006	14:03	PRI	SRP	<0.5	<0.5	**0.6**	**3.2**	**380**
MW	PA-12MA	PT-PA-12MA	1/4/2006	14:05	PTS	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
MW	PA-12MA	PA-12MA	7/20/2006	13:04	PRI	SRP	<0.5	<0.5	**0.5**	**3.5**	**420**
MW	PA-12MA	PA-12MA	10/12/2006	13:48	PRI	SRP	<0.5	<0.5	**0.6**	**3.2**	**400**
MW	PA-13LA	PA-13LA	4/13/2006	9:36	PRI	SRP	<0.5	<0.5	**0.8**	**1.9**	**44**
MW	PA-13LA	Duplicate "E"	4/13/2006	0:00	DUP	SRP	<0.5	<0.5	**0.8**	**1.7**	**38**
MW	PA-13LA	PA-13LA	10/18/2006	7:59	PRI	SRP	<0.5	<0.5	**0.8**	**1.8**	**36**
MW	PA-13LA	Duplicate "I"	10/18/2006	0:00	DUP	SRP	<0.5	<0.5	**0.9**	**1.8**	**37**
MW	PA-15LA	PA-15LA	10/17/2006	13:01	PRI	SRP	<0.5	<0.5	**0.9**	<0.5	**1.8**
MW	PA-16MA	PA-16MA	10/17/2006	13:22	PRI	SRP	<0.5	<0.5	**0.9**	**0.6**	**17**
MW	PA-16MA	PT-PA-16MA	10/17/2006	13:26	PTS	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
MW	PA-18LA	PA-18LA	10/11/2006	10:21	PRI	SRP	<0.5	<0.5	**6.2**	<0.5	**2**
MW	PA-19LA	PA-19LA	11/1/2006	11:27	PRI	SRP	<0.5	**2.1**	**3.4**	**6.1**	**110**
MW	PA-20MA	PA-20MA	10/20/2006	8:48	PRI	SRP	<0.5	**1.3**	**2.4**	**3.3**	**75**
MW	PA-21MA	PA-21MA	10/11/2006	13:54	PRI	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
MW	PA-2LA	PA-2LA	10/5/2006	12:15	PRI	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
MW	PA-5LA	PA-5LA	10/6/2006	11:31	PRI	SRP	<0.5	**4.2**	**6.2**	**14**	**240**
MW	PA-6LA	PA-6LA	4/7/2006	11:03	PRI	SRP	<0.5	**1.6**	**4.2**	**7.6**	**160**
MW	PA-6LA	PA-6LA	10/6/2006	9:41	PRI	SRP	<0.5	**1.9**	**4**	**8**	**160**
MW	PA-6LA	Duplicate "C"	10/6/2006	0:00	DUP	SRP	<0.5	**1.9**	**3.8**	**7.4**	**160**
MW	PA-8LA	PA-8LA	10/6/2006	13:31	PRI	SRP	<0.5	**0.6**	**2.1**	**2.6**	**56**
MW	PA-9LA	PA-9LA	10/13/2006	7:49	PRI	SRP	<0.5	<0.5	**1.2**	**1.1**	**44**
MW	PA-9LA	Duplicate "G"	10/13/2006	0:00	DUP	SRP	<0.5	<0.5	**1.3**	**1.3**	**42**
MW	PG-10UA	PG-10UA	10/17/2006	8:07	PRI	SRP	<0.5	<0.5	<0.5	<0.5	**1.6**
MW	PG-11UA	PG-11UA	10/13/2006	10:33	PRI	SRP	<0.5	<0.5	**2.7**	<0.5	**2.3**
MW	PG-15UA	PG-15UA	10/18/2006	10:24	PRI	SRP	<0.5	<0.5	<0.5	<0.5	**0.5**
MW	PG-16UA	PG-16UA	10/17/2006	7:26	PRI	SRP	<0.5	<0.5	<0.5	<0.5	**3**
MW	PG-18UA	PG-18UA	10/25/2006	8:01	PRI	SRP	<0.5	<0.5	**0.9**	<0.5	**1.3**
MW	PG-19UA	PG-19UA	10/20/2006	11:19	PRI	SRP	<0.5	<0.5	**1**	<0.5	**6.1**
MW	PG-1LA	PG-1LA	1/4/2006	9:21	PRI	SRP	<0.5	<0.5	<0.5	<0.5	**1.8**
MW	PG-1LA	PG-1LA	4/6/2006	14:00	PRI	SRP	<0.5	<0.5	<0.5	<0.5	**1.8**
MW	PG-1LA	PG-1LA	7/20/2006	10:27	PRI	SRP	<0.5	<0.5	<0.5	<0.5	**1.9**
MW	PG-1LA	PG-1LA	10/6/2006	8:22	PRI	SRP	<0.5	<0.5	<0.5	<0.5	**2.2**
MW	PG-22UA	PG-22UA	10/19/2006	8:11	PRI	SRP	<0.5	**0.6**	**0.8**	**3.2**	**8.9**
MW	PG-22UA	Duplicate "J"	10/19/2006	0:00	DUP	SRP	<0.5	**0.7**	**0.8**	**3.2**	**8.9**
MW	PG-23MA/LA	PG-23MA/LA	10/25/2006	9:46	PRI	SRP	<0.5	<0.5	**1.8**	**2.8**	**21**
MW	PG-23UA	PG-23UA	10/25/2006	10:17	PRI	SRP	<0.5	<0.5	**1.1**	<0.5	**4.5**
MW	PG-24UA	PG-24UA	10/13/2006	13:04	PRI	SRP	<0.5	<0.5	**0.8**	<0.5	**8**
MW	PG-24UA	PT-PG-24UA	10/13/2006	13:07	PTS	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
MW	PG-25UA	PG-25UA	10/11/2006	7:42	PRI	SRP	<0.5	<0.5	**1**	**1.4**	**8.6**
MW	PG-25UA	Duplicate "E"	10/11/2006	0:00	DUP	SRP	<0.5	<0.5	**0.9**	**1.4**	**8.6**
MW	PG-28UA	PG-28UA	10/17/2006	8:34	PRI	SRP	<0.5	<0.5	**2.2**	<0.5	**8.1**
MW	PG-29UA	PG-29UA	10/17/2006	9:04	PRI	SRP	<0.5	<0.5	**0.5**	<0.5	**2.4**
MW	PG-2LA	PG-2LA	4/6/2006	11:36	PRI	SRP	<0.5	<0.5	**1.2**	**3.4**	**65**

TABLE 4. 2006 LABORATORY RESULTS FOR VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER MONITORING WELLS NORTH INDIAN BEND WASH AREA, SCOTTSDALE, ARIZONA
(results presented in µg/L)

Location Type	Sample Location	Field Sample ID	Sample Date	Sample Time	Sample Type	Lab	1,1,1-TCA	1,1-DCE	TCM	PCE	TCE
MW	PG-2LA	Duplicate "B"	4/6/2006	0:00	DUP	SRP	<0.5	<0.5	**1.2**	**3.3**	**69**
MW	PG-2LA	PT-PG-2LA	4/6/2006	11:40	PTS	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
MW	PG-2LA	PG-2LA	10/5/2006	14:22	PRI	SRP	<0.5	**0.8**	**1.3**	**3.6**	**79**
MW	PG-2LA	Duplicate "B"	10/5/2006	0:00	DUP	SRP	<0.5	**0.7**	**1.2**	**3.6**	**76**
MW	PG-2LA	PT-PG-2LA	10/5/2006	14:25	PTS	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
MW	PG-31UA	PG-31UA	10/19/2006	12:09	PRI	SRP	<0.5	<0.5	**0.6**	<0.5	**25**
MW	PG-35UA	PG-35UA	9/5/2006	11:25	PRI	SRP	<0.5	<0.5	**1.8**	<0.5	<0.5
MW	PG-36UA	PG-36UA	10/26/2006	6:53	PRI	SRP	<0.5	**3.9**	**5.4**	**9.6**	**20**
MW	PG-38MA/LA	PG-38MA/LA	10/19/2006	10:54	PRI	SRP	<0.5	<0.5	**0.9**	**61**	**6.7**
MW	PG-39LA	PG-39LA	10/19/2006	10:19	PRI	SRP	<0.5	**1.6**	**1.4**	**9.2**	**18**
MW	PG-3UA	PG-3UA	10/17/2006	12:26	PRI	SRP	<0.5	<0.5	**0.7**	<0.5	**0.7**
MW	PG-40LA	PG-40LA	1/5/2006	12:02	PRI	SRP	<0.5	<0.5	<0.5	<0.5	**5.6**
MW	PG-40LA	Duplicate "C"	1/5/2006	0:00	DUP	SRP	<0.5	<0.5	<0.5	<0.5	**5.8**
MW	PG-40LA	PT-PG-40LA	1/5/2006	12:05	PTS	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
MW	PG-40LA	PG-40LA	4/11/2006	12:02	PRI	SRP	<0.5	<0.5	<0.5	<0.5	**6.1**
MW	PG-40LA	Duplicate "D"	4/11/2006	0:00	DUP	SRP	<0.5	<0.5	<0.5	<0.5	**6.1**
MW	PG-40LA	PT-PG-40LA	4/11/2006	12:05	PTS	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
MW	PG-40LA	PG-40LA	7/19/2006	11:37	PRI	SRP	<0.5	<0.5	<0.5	<0.5	**7.6**
MW	PG-40LA	Duplicate "B"	7/19/2006	0:00	DUP	SRP	<0.5	<0.5	<0.5	<0.5	**7.1**
MW	PG-40LA	PT-PG-40LA	7/19/2006	11:40	PTS	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
MW	PG-40LA	PG-40LA	10/24/2006	12:04	PRI	SRP	<0.5	<0.5	<0.5	<0.5	**5.4**
MW	PG-40LA	Duplicate "L"	10/24/2006	0:00	DUP	SRP	<0.5	<0.5	<0.5	<0.5	**5.5**
MW	PG-40LA	PT-PG-40LA	10/24/2006	12:07	PTS	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
MW	PG-42LA	PG-42LA	1/5/2006	13:27	PRI	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
MW	PG-42LA	PG-42LA	4/11/2006	12:27	PRI	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
MW	PG-42LA	PG-42LA	7/19/2006	12:15	PRI	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
MW	PG-42LA	PG-42LA	10/24/2006	15:18	PRI	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
MW	PG-43LA	PG-43LA	1/5/2006	8:16	PRI	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
MW	PG-43LA	PG-43LA	10/24/2006	7:44	PRI	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
MW	PG-44LA	PG-44LA	1/5/2006	14:01	PRI	SRP	<0.5	<0.5	**0.6**	<0.5	**2.4**
MW	PG-44LA	PG-44LA	4/11/2006	13:00	PRI	SRP	<0.5	<0.5	**0.6**	<0.5	**2.6**
MW	PG-44LA	PG-44LA	7/19/2006	13:08	PRI	SRP	<0.5	<0.5	**0.5**	<0.5	**1.5**
MW	PG-44LA	PG-44LA	10/24/2006	15:47	PRI	SRP	<0.5	<0.5	**0.5**	<0.5	**1.3**
MW	PG-48MA	PG-48MA	1/10/2006	9:03	PRI	SRP	<0.5	**0.6**	**3.2**	**1.9**	**66**
MW	PG-48MA	PG-48MA	4/14/2006	8:41	PRI	SRP	<0.5	**1.1**	**3.8**	**2.3**	**74**
MW	PG-48MA	PG-48MA	7/26/2006	8:31	PRI	SRP	<0.5	**0.7**	**3.2**	**2.1**	**72**
MW	PG-48MA	PG-48MA	10/12/2006	12:29	PRI	SRP	<0.5	**0.5**	**2.7**	**1.6**	**53**
MW	PG-49MA	PG-49MA	10/18/2006	9:47	PRI	SRP	<0.5	<0.5	<0.5	<0.5	**1.8**
MW	PG-4MA	PG-4MA	11/16/2006	8:19	PRI	SRP	<0.5	<0.5	<0.5	<0.5	**9.6**
MW	PG-4UA	PG-4UA	10/18/2006	13:24	PRI	SRP	<0.5	<0.5	**1**	**56**	**6.9**
MW	PG-4UA	PT-PG-4UA	10/18/2006	13:28	PTS	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
MW	PG-50MA	PG-50MA	10/13/2006	8:54	PRI	SRP	<0.5	<0.5	<0.5	<0.5	**8.4**
MW	PG-54MA	PG-54MA	10/18/2006	10:57	PRI	SRP	<0.5	<0.5	<0.5	<0.5	**6.5**
MW	PG-55MA	PG-55MA	10/19/2006	8:59	PRI	SRP	<0.5	<0.5	<0.5	<0.5	**9.5**
MW	PG-56MA	PG-56MA	10/19/2006	9:44	PRI	SRP	<0.5	<0.5	<0.5	<0.5	**7.5**
MW	PG-5MA	PG-5MA	10/18/2006	12:17	PRI	SRP	<0.5	<0.5	**1**	**0.7**	**23**
MW	PG-5UA	PG-5UA	11/16/2006	9:04	PRI	SRP	<0.5	<0.5	**1**	**0.5**	**8.2**
MW	PG-6MA	PG-6MA	10/18/2006	12:53	PRI	SRP	<0.5	**1**	**3**	**3.4**	**96**
MW	PG-6UA	PG-6UA	11/16/2006	9:41	PRI	SRP	<0.5	<0.5	**2.4**	**0.7**	**0.7**
MW	PG-6UA	PT-PG-6UA	11/16/2006	9:43	PTS	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
MW	PG-7MA	PG-7MA	10/25/2006	14:14	PRI	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
MW	PG-7MA	PT-PG-7MA	10/25/2006	14:17	PTS	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
MW	PG-8UA	PG-8UA	10/20/2006	7:49	PRI	SRP	<0.5	<0.5	**0.9**	**2.1**	**4**
MW	PG-8UA	Duplicate "K"	10/20/2006	0:00	DUP	SRP	<0.5	<0.5	**0.9**	**2.1**	**3.9**
MW	S-1LA	S-1LA	10/10/2006	10:17	PRI	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
MW	S-1MA	S-1MA	10/10/2006	10:43	PRI	SRP	<0.5	<0.5	<0.5	**4.9**	<0.5
MW	S-2LA	S-2LA	1/4/2006	10:50	PRI	SRP	<0.5	<0.5	**0.8**	<0.5	**1.7**
MW	S-2LA	S-2LA	4/13/2006	8:29	PRI	SRP	<0.5	<0.5	**0.9**	<0.5	**2.0**
MW	S-2LA	S-2LA	7/20/2006	8:46	PRI	SRP	<0.5	<0.5	**0.7**	<0.5	**2.2**
MW	S-2LA	S-2LA	10/10/2006	8:21	PRI	SRP	<0.5	<0.5	**0.6**	<0.5	**3**
MW	S-2MA	S-2MA	10/10/2006	9:01	PRI	SRP	<0.5	<0.5	**0.8**	<0.5	<0.5
MW	W-1MA	W-1MA	1/4/2006	13:33	PRI	SRP	<0.5	<0.5	<0.5	**1.3**	**190**
MW	W-1MA	W-1MA	4/7/2006	12:53	PRI	SRP	<0.5	<0.5	<0.5	**1.5**	**210**
MW	W-1MA	W-1MA	7/21/2006	9:04	PRI	SRP	<0.5	<0.5	<0.5	**0.6**	**110**
MW	W-1MA	W-1MA	10/10/2006	11:36	PRI	SRP	<0.5	<0.5	<0.5	<0.5	**92**
MW	W-2MA	W-2MA	1/6/2006	7:36	PRI	SRP	<0.5	**0.9**	**1.3**	**15**	**4400**
MW	W-2MA	W-2MA	4/13/2006	10:49	PRI	SRP	<0.5	**0.6**	**1.5**	**16**	**4600**
MW	W-2MA	W-2MA	7/21/2006	7:29	PRI	SRP	<0.5	**0.7**	**1.1**	**14**	**3900**
MW	W-2MA	Duplicate "D"	7/21/2006	0:00	DUP	SRP	<0.5	**0.6**	**1.2**	**13**	**3600**
MW	W-2MA	W-2MA	10/10/2006	12:44	PRI	SRP	<0.5	**1**	**1.5**	**16**	**4400**
MW	W-3UA	W-3UA	11/1/2006	9:01	PRI	SRP	<0.5	<0.5	**6.8**	<0.5	<0.5

TABLE 4. 2006 LABORATORY RESULTS FOR VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER MONITORING WELLS NORTH INDIAN BEND WASH AREA, SCOTTSDALE, ARIZONA
(results presented in µg/L)

Location Type	Sample Location	Field Sample ID	Sample Date	Sample Time	Sample Type	Lab	1,1,1-TCA	1,1-DCE	TCM	PCE	TCE
Trip/Field Blanks											
	Trip Blank	FRB	1/3/2006	9:23	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	1/4/2006	6:37	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	1/5/2006	5:34	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	1/6/2006	6:08	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	1/10/2006	5:55	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	2/1/2006	6:08	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	2/27/2006	4:55	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	4/3/2006	5:03	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	4/6/2006	9:21	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	4/7/2006	6:27	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	4/11/2006	6:34	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	4/13/2006	6:10	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	4/14/2006	5:30	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	5/1/2006	5:45	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	6/5/2006	6:00	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	7/3/2006	5:45	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	7/19/2006	5:57	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	7/20/2006	5:41	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	7/21/2006	5:43	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	7/26/2006	5:45	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	8/1/2006	5:25	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	9/5/2006	5:45	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	10/2/2006	5:40	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	10/5/2006	10:10	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	10/6/2006	6:35	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	10/10/2006	6:15	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	10/11/2006	6:01	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	10/12/2006	5:51	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	10/13/2006	6:00	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	10/17/2006	5:30	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	10/18/2006	5:30	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	10/19/2006	6:20	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	10/20/2006	6:30	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	10/24/2006	6:05	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	10/25/2006	5:31	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	10/26/2006	6:04	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	11/1/2006	4:55	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	11/1/2006	5:47	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	11/16/2006	6:04	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	12/4/2006	5:18	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	12/7/2006	5:30	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5

Note:
<# Below detection limit
PRI Primary
DUP Duplicate
PTS Post Treatment Sample
TRA Travel or Trip Blank
EX Extraction Well
MW Montoring Well
SRP Salt River Project Laboratories

1,1,1-TCA = 1,1,1-Trichloroethane
1,1-DCE = 1,1-Dichloroethene
TCM = Chloroform
PCE = Tetrachloroethene
TCE = Trichloroethene

TABLE 5. 2006 LABORATORY RESULTS FOR VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER EXTRACTION WELLS NORTH INDIAN BEND WASH AREA, SCOTTSDALE, ARIZONA
(results presented in µg/L)

Location Type	Sample Location	Field Sample ID	Sample Date	Sample Time	Sample Type	Lab	1,1,1-TCA	1,1-DCE	TCM	PCE	TCE
EX	7EX-1UA	7EX-1UA	1/3/2006	13:08	PRI	SRP	<0.5	<0.5	<0.5	**1.3**	**16**
EX	7EX-1UA	7EX-1UA	4/3/2006	13:14	PRI	SRP	<0.5	<0.5	<0.5	**0.9**	**11**
EX	7EX-1UA	7EX-1UA	7/3/2006	8:41	PRI	SRP	<0.5	<0.5	<0.5	**1.2**	**12**
EX	7EX-1UA	7EX-1UA	10/2/2006	8:50	PRI	SRP	<0.5	<0.5	<0.5	**1**	**8.6**
EX	7EX-3aMA	7EX-3aMA	1/3/2006	13:10	PRI	SRP	<0.5	<0.5	<0.5	**3.7**	**640**
EX	7EX-3aMA	7EX-3aMA	4/3/2006	13:17	PRI	SRP	<0.5	<0.5	<0.5	**4.0**	**680**
EX	7EX-3aMA	7EX-3aMA	7/3/2006	8:44	PRI	SRP	<0.5	<0.5	<0.5	**3.7**	**670**
EX	7EX-3aMA	7EX-3aMA	10/2/2006	9:00	PRI	SRP	<0.5	<0.5	<0.5	**3.6**	**600**
EX	7EX-4MA	7EX-4MA	1/3/2006	13:47	PRI	SRP	<0.5	**0.5**	**0.9**	**7.7**	**1500**
EX	7EX-4MA	7EX-4MA	4/3/2006	13:31	PRI	SRP	<0.5	<0.5	**0.9**	**7.2**	**1600**
EX	7EX-4MA	7EX-4MA	7/3/2006	8:57	PRI	SRP	<0.5	**0.5**	**0.8**	**7.1**	**1600**
EX	7EX-4MA	7EX-4MA	10/2/2006	9:35	PRI	SRP	<0.5	**0.5**	**0.8**	**7**	**1500**
EX	7EX-5MA	7EX-5MA	1/3/2006	13:29	PRI	SRP	<0.5	<0.5	**0.8**	**2.8**	**480**
EX	7EX-5MA	7EX-5MA	4/3/2006	13:45	PRI	SRP	<0.5	<0.5	**0.8**	**3.0**	**500**
EX	7EX-5MA	7EX-5MA	7/3/2006	9:07	PRI	SRP	<0.5	<0.5	**0.7**	**2.2**	**300**
EX	7EX-5MA	7EX-5MA	10/2/2006	9:48	PRI	SRP	<0.5	<0.5	**0.7**	**2.4**	**390**
EX	AAWC-14	AAWC-14	1/3/2006	12:28	PRI	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
EX	AAWC-14	AAWC-14	2/1/2006	8:49	PRI	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
EX	AAWC-14	AAWC-14	2/27/2006	8:47	PRI	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
EX	AAWC-14	AAWC-14	4/3/2006	12:25	PRI	SRP	<0.5	<0.5	**0.5**	<0.5	<0.5
EX	AAWC-14	AAWC-14	5/1/2006	7:18	PRI	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
EX	AAWC-14	AAWC-14	6/5/2006	8:18	PRI	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
EX	AAWC-14	AAWC-14	7/3/2006	7:46	PRI	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
EX	AAWC-14	AAWC-14	8/1/2006	8:49	PRI	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
EX	AAWC-14	AAWC-14	9/5/2006	8:20	PRI	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
EX	AAWC-15	AAWC-15	1/3/2006	12:36	PRI	SRP	<0.5	<0.5	<0.5	<0.5	**3.1**
EX	AAWC-15	AAWC-15	2/1/2006	9:01	PRI	SRP	<0.5	<0.5	<0.5	<0.5	**3.0**
EX	AAWC-15	AAWC-15	2/27/2006	8:56	PRI	SRP	<0.5	<0.5	<0.5	<0.5	**3**
EX	AAWC-15	AAWC-15	4/3/2006	12:34	PRI	SRP	<0.5	<0.5	<0.5	<0.5	**2.8**
EX	AAWC-15	AAWC-15	5/1/2006	7:28	PRI	SRP	<0.5	<0.5	<0.5	<0.5	**2.8**
EX	AAWC-15	Duplicate "A"	5/1/2006	0:00	DUP	SRP	<0.5	<0.5	<0.5	<0.5	**2.9**
EX	AAWC-15	AAWC-15	6/5/2006	8:28	PRI	SRP	<0.5	<0.5	<0.5	<0.5	**3.3**
EX	AAWC-15	AAWC-15	7/3/2006	7:56	PRI	SRP	<0.5	<0.5	<0.5	<0.5	**3.7**
EX	AAWC-15	AAWC-15	8/1/2006	8:04	PRI	SRP	<0.5	<0.5	<0.5	<0.5	**3.8**
EX	AAWC-15	Duplicate "A"	8/1/2006	0:00	DUP	SRP	<0.5	<0.5	<0.5	<0.5	**3.6**
EX	AAWC-15	AAWC-15	9/5/2006	8:33	PRI	SRP	<0.5	<0.5	<0.5	<0.5	**3.4**
EX	AAWC-15	AAWC-15	10/2/2006	8:10	PRI	SRP	<0.5	<0.5	<0.5	<0.5	**3.2**
EX	AAWC-15	AAWC-15	11/1/2006	7:35	PRI	SRP	<0.5	<0.5	<0.5	<0.5	**3.3**
EX	AAWC-15	AAWC-15	12/4/2006	8:43	PRI	SRP	<0.5	<0.5	<0.5	<0.5	**2.9**
EX	COS-31	COS-31	1/4/2006	11:00	PRI	SRP	<0.5	<0.5	<0.5	<0.5	**11**
EX	COS-31	Duplicate "B"	1/4/2006	0:00	DUP	SRP	<0.5	<0.5	<0.5	<0.5	**11**
EX	COS-31	COS-31	2/1/2006	8:06	PRI	SRP	<0.5	<0.5	**1.2**	**1.0**	**19**
EX	COS-31	Duplicate "A"	2/1/2006	0:00	DUP	SRP	<0.5	<0.5	**1.2**	**0.9**	**19**
EX	COS-31	COS-31	2/27/2006	8:03	PRI	SRP	<0.5	<0.5	**1.3**	**1.1**	**20**
EX	COS-31	COS-31	4/3/2006	11:49	PRI	SRP	<0.5	<0.5	**1.6**	**1.0**	**19**
EX	COS-31	COS-31	6/5/2006	7:49	PRI	SRP	<0.5	<0.5	**1.3**	**1.1**	**19**
EX	COS-31	Duplicate "A"	6/5/2006	0:00	DUP	SRP	<0.5	<0.5	**1.3**	**1.0**	**19**
EX	COS-31	COS-31	7/3/2006	9:20	PRI	SRP	<0.5	<0.5	<0.5	<0.5	**16**
EX	COS-31	COS-31	8/1/2006	9:30	PRI	SRP	<0.5	<0.5	<0.5	<0.5	**15**
EX	COS-31	COS-31	9/5/2006	9:40	PRI	SRP	<0.5	<0.5	<0.5	<0.5	**14**
EX	COS-31	COS-31	10/2/2006	10:01	PRI	SRP	<0.5	<0.5	<0.5	<0.5	**13**
EX	COS-31	COS-31	11/1/2006	8:55	PRI	SRP	<0.5	<0.5	<0.5	<0.5	**14**
EX	COS-31	COS-31	12/7/2006	7:00	PRI	SRP	<0.5	<0.5	<0.5	<0.5	**12**
EX	COS-71	COS-71	1/3/2006	11:51	PRI	SRP	<0.5	**1.4**	**1.4**	**7.4**	**97**
EX	COS-71	Duplicate "A"	1/3/2006	0:00	DUP	SRP	<0.5	**1.3**	**1.3**	**6.5**	**95**
EX	COS-71	COS-71	2/1/2006	7:46	PRI	SRP	<0.5	**1.3**	**1.4**	**7.4**	**99**
EX	COS-71	COS-71	2/27/2006	7:22	PRI	SRP	<0.5	**1**	**1.4**	**7.8**	**90**
EX	COS-71	COS-71	4/3/2006	11:25	PRI	SRP	<0.5	**1.6**	**1.6**	**7.5**	**89**
EX	COS-71	Duplicate "A"	4/3/2006	0:00	DUP	SRP	<0.5	**1.2**	**1.5**	**7.8**	**90**
EX	COS-71	COS-71	5/1/2006	6:36	PRI	SRP	<0.5	**1.4**	**1.4**	**7.9**	**89**
EX	COS-71	COS-71	6/5/2006	7:30	PRI	SRP	<0.5	**1.4**	**1.3**	**7.9**	**85**
EX	COS-71	COS-71	7/3/2006	7:05	PRI	SRP	<0.5	**1.3**	**1.3**	**7.6**	**90**
EX	COS-71	COS-71	8/1/2006	7:07	PRI	SRP	<0.5	**1.3**	**1.3**	**7.6**	**84**
EX	COS-71	COS-71	9/5/2006	7:30	PRI	SRP	<0.5	**1.3**	**1.3**	**7.3**	**100**
EX	COS-71	COS-71	10/2/2006	7:15	PRI	SRP	<0.5	**1.2**	**1.2**	**7.3**	**88**
EX	COS-71	Duplicate "A"	10/2/2006	0:00	DUP	SRP	<0.5	**1.4**	**1.4**	**7.7**	**88**
EX	COS-71	COS-71	11/1/2006	6:35	PRI	SRP	<0.5	**1.3**	**1.3**	**7.4**	**96**
EX	COS-71	COS-71	12/4/2006	7:47	PRI	SRP	<0.5	**1.3**	**1.3**	**7.7**	**97**
EX	COS-72	COS-72	1/3/2006	12:03	PRI	SRP	<0.5	**0.7**	**1.1**	**5.9**	**31**
EX	COS-72	COS-72	2/1/2006	7:55	PRI	SRP	<0.5	**0.7**	**1.2**	**6.0**	**34**
EX	COS-72	COS-72	2/27/2006	7:35	PRI	SRP	<0.5	**0.7**	**1.1**	**6.1**	**35**

TABLE 5. 2006 LABORATORY RESULTS FOR VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER EXTRACTION WELLS NORTH INDIAN BEND WASH AREA, SCOTTSDALE, ARIZONA
(results presented in µg/L)

Location Type	Sample Location	Field Sample ID	Sample Date	Sample Time	Sample Type	Lab	1,1,1-TCA	1,1-DCE	TCM	PCE	TCE
EX	COS-72	Duplicate "A"	2/27/2006	0:00	DUP	SRP	<0.5	**0.7**	**1.2**	**6.1**	**35**
EX	COS-72	COS-72	4/3/2006	11:38	PRI	SRP	<0.5	**0.8**	**1.4**	**5.6**	**33**
EX	COS-72	COS-72	5/1/2006	6:45	PRI	SRP	<0.5	**0.8**	**1.2**	**5.7**	**35**
EX	COS-72	COS-72	6/5/2006	7:38	PRI	SRP	<0.5	**0.6**	**1.2**	**5.6**	**36**
EX	COS-72	COS-72	7/3/2006	7:13	PRI	SRP	<0.5	**0.7**	**1.1**	**5.1**	**36**
EX	COS-72	COS-72	8/1/2006	7:14	PRI	SRP	<0.5	**0.5**	**0.9**	**3.7**	**27**
EX	COS-72	COS-72	9/5/2006	10:10	PRI	SRP	<0.5	<0.5	<0.5	<0.5	**10**
EX	COS-72	COS-72	10/2/2006	7:29	PRI	SRP	<0.5	<0.5	**0.9**	**3.6**	**29**
EX	COS-72	COS-72	11/1/2006	6:43	PRI	SRP	<0.5	**0.6**	**1.1**	**4.2**	**31**
EX	COS-72	COS-72	12/4/2006	8:02	PRI	SRP	<0.5	**0.6**	**1.1**	**4.2**	**32**
EX	COS-72	Duplicate "A"	12/4/2006	0:00	DUP	SRP	<0.5	**0.6**	**1.1**	**4.2**	**32**
EX	COS-75A	COS-75A	1/3/2006	12:14	PRI	SRP	<0.5	**3.2**	**4.3**	**14**	**170**
EX	COS-75A	COS-75A	2/1/2006	8:24	PRI	SRP	<0.5	**3.3**	**4.5**	**14**	**170**
EX	COS-75A	COS-75A	2/27/2006	8:31	PRI	SRP	<0.5	**3.2**	**4.4**	**14**	**170**
EX	COS-75A	COS-75A	4/3/2006	12:01	PRI	SRP	<0.5	**3.5**	**5.6**	**14**	**170**
EX	COS-75A	COS-75A	5/1/2006	7:03	PRI	SRP	<0.5	**3.1**	**4.3**	**14**	**160**
EX	COS-75A	COS-75A	6/5/2006	8:04	PRI	SRP	<0.5	**2.2**	**4.1**	**14**	**160**
EX	COS-75A	COS-75A	7/3/2006	7:30	PRI	SRP	<0.5	**2.9**	**4.0**	**13**	**170**
EX	COS-75A	Duplicate "A"	7/3/2006	0:00	DUP	SRP	<0.5	**2.8**	**4.0**	**13**	**160**
EX	COS-75A	COS-75A	8/1/2006	7:42	PRI	SRP	<0.5	**2.9**	**4.3**	**14**	**160**
EX	COS-75A	COS-75A	9/5/2006	8:00	PRI	SRP	<0.5	**2.9**	**4.4**	**14**	**160**
EX	COS-75A	Duplicate "A"	9/5/2006	0:00	DUP	SRP	<0.5	**3.0**	**4.5**	**14**	**150**
EX	COS-75A	COS-75A	10/2/2006	7:46	PRI	SRP	<0.5	**2.7**	**4**	**13**	**150**
EX	COS-75A	COS-75A	11/1/2006	7:01	PRI	SRP	<0.5	**2.9**	**4.2**	**13**	**150**
EX	COS-75A	COS-75A	12/4/2006	8:27	PRI	SRP	<0.5	**3**	**4.3**	**13**	**150**
EX	MEX-1	MEX-1	4/3/2006	14:04	PRI	SRP	<0.5	**4.6**	**2.5**	**5.2**	**69**
EX	MEX-1	MEX-1	7/3/2006	9:32	PRI	SRP	<0.5	**2.1**	**1.9**	**4.2**	**59**
EX	MEX-1	MEX-1	10/2/2006	10:26	PRI	SRP	<0.5	**2.3**	**2.2**	**4.1**	**61**
EX	PCX-1	PCX-1	1/3/2006	12:43	PRI	SRP	<0.5	**0.5**	**1.5**	**2.0**	**70**
EX	PCX-1	PCX-1	2/1/2006	9:08	PRI	SRP	<0.5	**0.6**	**1.5**	**2.2**	**72**
EX	PCX-1	PCX-1	2/27/2006	9:18	PRI	SRP	<0.5	**0.5**	**1.5**	**2.1**	**72**
EX	PCX-1	PCX-1	4/3/2006	12:45	PRI	SRP	<0.5	**0.7**	**1.7**	**1.9**	**67**
EX	PCX-1	PCX-1	5/1/2006	7:40	PRI	SRP	<0.5	**0.6**	**1.5**	**2.1**	**71**
EX	PCX-1	PCX-1	6/5/2006	8:35	PRI	SRP	<0.5	**0.5**	**1.4**	**2.1**	**70**
EX	PCX-1	PCX-1	7/3/2006	8:04	PRI	SRP	<0.5	**0.6**	**1.3**	**2.0**	**72**
EX	PCX-1	PCX-1	8/1/2006	8:30	PRI	SRP	<0.5	**0.5**	**1.4**	**2.1**	**70**
EX	PCX-1	PCX-1	9/5/2006	8:42	PRI	SRP	<0.5	**0.5**	**1.4**	**2.1**	**72**
EX	PCX-1	PCX-1	10/2/2006	8:17	PRI	SRP	<0.5	<0.5	**1.3**	**2.1**	**66**
EX	PCX-1	PCX-1	11/1/2006	7:20	PRI	SRP	<0.5	**0.5**	**1.4**	**2.1**	**64**
EX	PCX-1	PCX-1	12/4/2006	8:51	PRI	SRP	<0.5	**0.5**	**1.4**	**2.1**	**70**
EX	SRP 23.6E-06.0N	SRP 23.6E-6.0N	4/3/2006	14:14	PRI	SRP	<0.5	<0.5	**4.3**	**2.6**	**88**
EX	SRP 23.6E-06.0N	SRP 23.6E-06.0N	7/3/2006	9:39	PRI	SRP	<0.5	**1.2**	**5.4**	**3.3**	**130**
EX	SRP 23.6E-06.0N	SRP 23.6E-06.0N	10/12/2006	6:52	PRI	SRP	<0.5	**1.1**	**5**	**2.8**	**110**
Trip/Field Blanks											
	Trip Blank	FRB	1/3/2006	9:23	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	1/4/2006	6:37	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	1/5/2006	5:34	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	1/6/2006	6:08	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	1/10/2006	5:55	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	2/1/2006	6:08	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	2/27/2006	4:55	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	4/3/2006	5:03	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	4/6/2006	9:21	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	4/7/2006	6:27	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	4/11/2006	6:34	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	4/13/2006	6:10	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	4/14/2006	5:30	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	5/1/2006	5:45	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	6/5/2006	6:00	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	7/3/2006	5:45	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	7/19/2006	5:57	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	7/20/2006	5:41	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	7/21/2006	5:43	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	7/26/2006	5:45	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	8/1/2006	5:25	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	9/5/2006	5:45	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	10/2/2006	5:40	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	10/5/2006	10:10	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	10/6/2006	6:35	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	10/10/2006	6:15	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	10/11/2006	6:01	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5

TABLE 5. 2006 LABORATORY RESULTS FOR VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER EXTRACTION WELLS NORTH INDIAN BEND WASH AREA, SCOTTSDALE, ARIZONA
(results presented in µg/L)

Location Type	Sample Location	Field Sample ID	Sample Date	Sample Time	Sample Type	Lab	1,1,1-TCA	1,1-DCE	TCM	PCE	TCE
	Trip Blank	FRB	10/12/2006	5:51	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	10/13/2006	6:00	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	10/17/2006	5:30	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	10/18/2006	5:30	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	10/19/2006	6:20	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	10/20/2006	6:30	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	10/24/2006	6:05	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	10/25/2006	5:31	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	10/26/2006	6:04	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	11/1/2006	4:55	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	11/1/2006	5:47	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	11/16/2006	6:04	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	12/4/2006	5:18	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5
	Trip Blank	FRB	12/7/2006	5:30	TRA	SRP	<0.5	<0.5	<0.5	<0.5	<0.5

Note:
<# Below detection limit
PRI Primary
DUP Duplicate
PTS Post Treatment Sample
TRA Travel or Trip Blank
EX Extraction Well
MW Montoring Well
SRP Salt River Project Laboratories

1,1,1-TCA = 1,1,1-Trichloroethane
1,1-DCE = 1,1-Dichloroethene
TCM = Chloroform
PCE = Tetrachloroethene
TCE = Trichloroethene

TABLE 6. SUMMARY OF 2006 MONTHLY GROUNDWATER PRODUCTION
NORTH INDIAN BEND WASH AREA, SCOTTSDALE, ARIZONA

Production Well ID	Jan	Feb	March	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total	Total In Acre-Feet
7EX-3MA	6,558	6,076	5,910	6,432	6,540	5,403	6,451	6,811	3,831	6,451	5,975	6,655	73,094	224.3
7EX-4MA	1,533	1,838	1,874	1,998	1,761	1,945	2,000	2,280	1,316	2,000	1,481	2,177	22,204	68.1
7EX-5MA	9,067	8,207	7,986	8,478	7,196	6,603	8,469	8,296	5,379	8,469	8,465	8,918	95,532	293.2
AAWC 11	4,740	11,780	3,460	8,650	44,870	64,120	46,800	62,700	57,920	47,340	36,560	14,470	403,410	1,238.0
AAWC 12	8,100	270	5,000	2,700	4,840	28,780	6,230	27,030	48,330	58,100	35,740	17,480	242,600	744.5
AAWC 14	7,560	17,120	19,750	42,200	85,030	79,410	92,610	43,170	0	650	0	0	387,500	1,189.2
AAWC 15	94,660	85,820	96,260	92,520	96,620	91,490	92,950	94,740	80,120	88,270	74,470	78,870	1,066,790	3,273.9
AAWC 16	11,300	8,140	5,060	25,460	25,860	44,540	36,810	5,230	0	33,450	31,690	25,770	253,310	777.4
AAWC 17	0	0	0	0	0	400	29,050	37,680	52,660	29,640	22,690	5,090	177,210	543.8
AVI	7,195	2,694	5,722	6,127	8,555	8,561	5,834	5,624	6,542	NA(1)	2,749	3,044	62,647	192.3
AWC 7	1,162	5,514	6,976	1,064	4,495	2,170	4,682	5,907	4,358	4,732	2,798	1,190	45,048	138.2
AWC 8	23,105	14,097	14,406	12,272	19,572	23,257	29,542	40,758	35,045	23,776	13,757	5,087	254,674	781.6
AWC 8A	15,247	15,995	11,606	19,747	34,965	23,340	41,177	22,303	0	11,205	0	0	195,585	600.2
AWC 9	3,788	0	4,984	8,167	43,242	28,570	28,632	37,921	45,062	44,696	20,770	12,296	278,128	853.5
AWC 12A	22,058	20,030	22,304	21,465	57,920	52,898	62,245	25,771	47,652	39,416	22,299	12,030	406,088	1,246.2
COS 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
COS 3	2,059	0	0	0	0	0	0	0	0	0	0	0	2,059	6.3
COS 4	17,764	0	0	0	0	0	0	0	0	0	0	0	17,764	54.5
COS 14	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
COS 25	97	92	12,439	1,002	2,157	2,833	1,936	1,814	1,757	761	152	330	25,370	77.9
COS 69	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
COS 70	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
COS 71	70,315	62,394	70,795	67,307	71,935	68,910	72,000	70,549	55,430	71,931	70,630	74,416	826,612	2,536.8
COS 72	93,018	84,800	92,587	76,063	93,781	91,304	83,349	67,715	34,332	91,204	79,794	40,358	928,304	2,848.9
COS 73	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
COS 74	108,632	98,410	108,976	80,096	320	9,046	0	1,961	0	755	3,948	12,596	424,741	1,303.5
COS 75A	80,694	72,891	78,865	72,882	79,695	76,273	77,509	80,323	71,482	81,001	79,616	78,259	929,491	2,852.5
COS 76	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
COS 77	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
COS 78	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
COT 6	0	0	0	0	0	0	0	391	0	0	0	0	391	1.2
IBGC	2,932	2,393	2,692	4,095	9,505	10,326	8,680	7,850	4,995	5,184	3,129	2,039	63,818	195.8
LIARD 2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MDWC	0	0	3,984	5,698	NA	6,756	6,654	7,480	6,376	5,359	5,197	2,575	50,079	153.7
MEX-1MA	0	11,180	35,940	36,950	39,530	34,410	39,630	32,460	40,090	41,790	0	0	311,980	957.4
QRIA	0	0	0	1,228	2,325	NA(2)	NA(2)	NA(2)	NA(2)	NA(2)	NA(2)	NA(2)	3,553	10.9
SRIR SCC	3,622	3,637	3,810	6,150	10,724	10,724	12,405	9,523	6,925	4,920	6,505	3,836	82,781	254.0
SRIR 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
SRIR 10	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0

Abbreviations:
7EX = Area 7 Extraction Wells
AAWC = Arizona-American Water Company
AVI = Arcadia Vista Improvement
AWC = Arcadia Water Company
COS = City of Scottsdale
COT = City of Tempe
IBGC = Indian Bend (Rio Salado) Golf Course
LAIRD = Tempe School District No. 3
MDWC = McDowell Water Company
MEX = Motorola Extraction Well
QRIA = Quail Run Irrigation Association
SRIR = Salt River Indian Reservation
SCC = Scottsdale Community College
NA = Not Available

Notes:
(1) No readings available due to apparent installation of a new well meter.
(2) No reading could be taken at well QRIA from Jun 2006 through Dec 2006 due to locked gate blocking access to meter.

TABLE 6. SUMMARY OF 2006 MONTHLY GROUNDWATER PRODUCTION
NORTH INDIAN BEND WASH AREA, SCOTTSDALE, ARIZONA

Production Well ID	Jan	Feb	March	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total	Total In Acre-Feet
SRP 21.5E,8N	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
SRP 22.1E,8.5N	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
SRP 22.3E,7N	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
22.4E,9N	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
SRP 22.5E,5.5N	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
SRP 22.5E,6N	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
SRP 22.5E,9.3N (PCX 1)	93,370	86,720	95,830	93,050	90,130	93,070	96,140	96,070	93,070	95,820	83,750	92,240	1,109,260	3,404.2
SRP 22.6E,10N	19,962	21,281	15,970	5,549	36	14,008	6,295	7,195	1,838	5,559	1,756	3,858	103,308	317.0
SRP 23E,10.8N	5,008	8,413	1,874	26	0	0	1,880	1,799	0	0	414	1,590	21,004	64.5
SRP 23.3E,7.3N (COS 31)	62,674	86,201	73,049	47,470	76,086	78,318	43,165	18,055	11,568	63,297	707	411	561,001	1,721.7
SRP 23.3E,7.5N (COS 6)	0	0	0	0	0	0	1,763	0	13	0	0	0	1,776	5.5
SRP 23.4E,10.6N	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
SRP 23.5E,5.3N	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
SRP 23.5E,8.8N	23	0	0	0	0	0	2,845	0	52	0	0	0	2,920	9.0
SRP 23.5E,9.5N	0	0	0	0	0	0	0	0	1,988	0	0	0	1,988	6.1
SRP 23.6E,6N (Granite Reef)	0	0	6,420	31,610	0	20,250	15,620	0	11,890	14,180	44,790	28,940	173,700	533.1
SRP 24E,10.5N	10,887	12,910	3,477	1,890	16	4,262	5,113	3,757	0	0	1,017	2,372	45,701	140.3
Total Monthly Discharge	**787,129**	**748,903**	**818,006**	**788,347**	**917,704**	**981,977**	**968,468**	**833,162**	**730,021**	**879,958**	**660,848**	**536,898**	**9,651,420**	**29,619**

Abbreviations:
SRP = Salt River Project
COS = City of Scottsdale

TABLE 7. SUMMARY OF ANNUAL GROUNDWATER PRODUCTION FROM 1991 THROUGH 2006 NORTH INDIAN BEND WASH AREA, SCOTTSDALE, ARIZONA

Production Well ID	Gallons (x1000)															
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
7EX-3MA (1)	---	---	---	---	---	---	---	---	13,170	87,374	76,403	64,048	77,689	83,654	72,477	73,094
7EX-4MA (1)	---	---	---	---	---	---	---	---	12,498	57,647	50,957	29,734	35,822	27,687	19,075	22,204
7EX-5MA (2)	---	---	---	---	---	---	---	---	---	---	---	42,094	96,278	85,913	102,190	95,532
AAWC 11 (3)	---	---	---	---	---	---	---	---	---	---	---	---	272,550	317,470	234,740	388,570
AAWC 12 (3)	---	---	---	---	---	---	---	---	---	---	---	---	256,100	182,030	190,290	235,690
AAWC 14 (4)	---	---	---	---	---	---	203,055	584,634	575,455	512,210	487,780	593,520	632,010	677,340	771,890	387,500
AAWC 15	607,770	653,870	616,680	404,350	204,540	289,070	629,292	950,088	1,066,523	996,540	811,430	913,460	1,017,490	1,082,600	1,059,240	1,066,790
AAWC 16 (3)	---	---	---	---	---	---	---	---	---	---	---	---	414,570	319,870	341,430	246,220
AAWC 17 (3)	---	---	---	---	---	---	---	---	---	---	---	---	128,340	102,833	38,140	173,640
AVI	74,590	79,207	17,595	96,339	72,417	39,227	93,095	79,881	84,354	75,739	79,388	76,052	70,536	78,500	68,608	62,647
AWC 7	77,329	337,391	401,397	424,219	387,121	340,693	190,891	223,939	298,584	305,173	276,139	220,293	229,398	170,814	176,533	45,048
AWC 8	363,054	418,922	404,031	417,253	240,649	340,509	270,556	370,565	319,653	292,496	138,796	279,500	212,213	321,431	293,884	254,674
AWC 8A	0	0	0	215,529	251,691	265,624	271,981	266,445	271,890	184,595	136,052	226,062	257,184	245,349	156,651	195,585
AWC 9	434,554	131,541	100,701	136,885	202,215	226,038	236,429	180,339	166,739	214,812	323,118	213,269	168,569	159,195	133,704	278,128
AWC 12A	0	0	0	0	329,054	241,350	331,891	272,151	232,163	309,620	329,925	295,894	321,100	312,605	370,418	406,088
COS 2	262,040	366,760	204,638	14,120	0	0	0	0	0	0	0	0	0	0	0	0
COS 3	226,923	224,340	371,860	410,088	406,191	322,975	386,620	363,730	260,750	91,100	156,910	142,950	129,912	95,897	162,642	2,059
COS 4 (3)	---	---	---	---	---	---	---	---	---	---	---	---	347,168	308,158	445,982	17,764
COS 14 (3)	---	---	---	---	---	---	---	---	---	---	---	---	0	0	0	0
COS 25	260,148	198,980	83,510	484,560	522,689	242,260	25,617	8,730	0	0	6,481	15,629	14,630	15,460	9,443	25,370
COS 69	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COS 70	133,670	2,530	43,100	390,090	110,770	55,230	93,120	2,711	0	0	0	0	0	0	0	0
COS 71	0	0	6,480	502,616	234,890	1,126,820	958,760	947,553	632,400	788,420	1,014,176	432,284	765,243	639,383	388,004	826,612
COS 72	0	0	4,990	394,624	299,620	699,790	662,880	779,564	953,930	763,910	556,695	812,383	561,121	1,028,700	1,016,884	928,304
COS 73	3,270	649,250	1,007,030	3,200	800	9,740	3,130	521	180	220	190	0	0	0	0	0
COS 74	42,760	38,040	635,470	733,980	825,023	460,991	396,916	790,900	918,170	1,093,461	1,166,630	1,003,434	956,413	1,098,277	1,172,058	424,741
COS 75A	0	0	5,270	367,020	452,560	812,540	892,870	951,517	830,740	896,410	979,502	836,010	933,509	926,309	936,469	929,491
COS 76	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
COS 77	180	3,040	480	110	0	0	0	0	0	0	0	0	0	0	0	0
COS 78	999,340	310	900	730	160	0	3,100	220	0	0	0	0	0	0	0	0
COT 6	0	840	860	0	3,400	349,295	4,200	0	0	446,787	734,806	221,231	26,849	0	22,585	391
IBGC	62,212	58,959	11,990	66,749	53,289	69,829	75,790	68,933	343	28,383	65,041	70,029	62,896	65,980	59,126	63,818
LAIRD 2	0	3,360	2,836	0	8,933	894	4,654	1,575	8,436	9,866	0	0	0	0	0	NA
MDWC	25,906	27,757	34,814	145,294	150,774	147,025	62,105	60,425	67,519	72,472	59,486	53,209	51,867	45,982	1,352	50,079
MEX-1MA (5)	---	---	---	---	---	---	---	---	34,348	256,585	361,411	227,276	119,380	315,710	309,920	311,980
QRIA	9,630	0	82	4,805	2,116	0	0	16,542	19,830	0	16,437	5,081	14,628	13,539	12,886	3,553
SRIR SCC	0	80,622	62,103	91,759	41,294	77,805	77,857	36,377	69,626	78,220	76,351	76,149	65,411	68,044	76,317	82,781
SRIR 4	60,569	7,768	0	31,623	3	0	248	38	0	0	0	0	0	0	0	0
SRIR 10	47,570	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Abbreviations:

7EX = Area 7 Extraction Wells
AAWC = Arizona-American Water Company
AVI = Arcadia Vista Improvement
AWC = Arcadia Water Company
COS = City of Scottsdale
COT = City of Tempe
IBGC = Indian Bend (Rio Salado) Golf Course
LAIRD = Tempe School District No. 3
MDWC = McDowell Water Company
MEX = Motorola Extraction Well
QRIA = Quail Run Irrigation Association
SRIR = Salt River Indian Reservation

Notes:

(1) Extraction wells 7EX-3MA and 7EX-4MA went into service in September 1999.
(2) Extraction well 7EX-5MA went into service in February 2002.
(3) Historical discharge data from 1991 through 2002 not collected for these wells.
(4) Well AAWC 14 was added to the semi-annual reports in April 1997.
(5) Well MEX-1MA was added to the semi-annual reports in October 1999.
(6) Well 22.5E,9.3N (PCX-1) went into service in April 1997.

TABLE 7. SUMMARY OF ANNUAL GROUNDWATER PRODUCTION FROM 1991 THROUGH 2006 NORTH INDIAN BEND WASH AREA, SCOTTSDALE, ARIZONA

Production Well ID	Gallons (x1000)															
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
SRP 21.5E,8N	73,329	1,958	2,289	53,774	17,598	19,467	0	1,300	213,318	454,441	247,363	160,469	166,326	254,060	28,799	0
SRP 22.1E,8.5N	155,780	315	3,617	81,801	3,259	22,642	23	1,055	7	488,287	214,764	3,128	0	7,302	0	0
SRP 22.3E,7N	0	0	0	0	652	1,307	0	3	0	0	0	0	0	0	0	0
SRP 22.4E,9N	0	1,630	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SRP 22.5E,5.5N	0	0	0	0	0	0	0	0	0	0	123,758	264,558	0	0	3	0
SRP 22.5E,6N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SRP 22.5E,9.3N (PCX 1) (6)	---	---	---	---	---	---	744,310	1,169,489	928,957	1,094,150	709,460	1,080,880	1,032,520	1,002,260	1,003,410	1,109,260
SRP 22.6E,10N (3)	---	---	---	---	---	---	---	---	---	---	---	---	935,913	828,615	98,003	103,308
SRP 23E,10.8N (3)	---	---	---	---	---	---	---	---	---	---	---	---	447,265	174,919	14,321	21,004
SRP 23.3E,7.3N (COS 31)	0	1,304	21,832	1,006,984	15,970	1,222,118	974,585	493,535	917,420	748,630	983,963	1,092,080	1,019,979	517,254	827,369	561,001
SRP 23.3E,7.5N (COS 6)	156,759	24,121	0	35,523	47,907	192,143	168,259	246,937	101,319	62,195	102,252	80,341	138,383	88,935	1,639	1,776
SRP 23.4E,10.6N (3)	---	---	---	---	---	---	---	---	---	---	---	---	470,573	577,062	30,021	0
SRP 23.5E,5.3N	130,686	3,259	4,236	3,259	5,215	3,201	0	34,498	111,445	144,215	126,689	226,059	128,635	255,258	3,350	0
SRP 23.5E,8.8N	63,877	5	2	326	7,170	0	49	691	1,499	132,276	70,906	21,051	213,022	241,944	1,502	2,920
SRP 23.5E,9.5N	0	0	0	0	0	0	0	88	502	117,593	131	99,547	30,043	256,542	2,053	1,988
SRP 23.6E,6N (Granite Reef)	0	0	0	0	0	0	0	0	104,440	287,658	174,198	319,109	180,870	42,940	58,780	173,700
SRP 24E,10.5N (3)	---	---	---	---	---	---	---	---	---	---	---	---	528,529	428,179	31,259	45,701
Total Discharge (Gallons x1000)	4,271,946	3,316,078	4,048,793	6,517,611	4,897,970	7,578,583	7,762,283	8,904,975	9,216,207	11,091,484	10,657,588	10,196,813	13,530,934	13,464,000	10,743,444	9,619,010
Total Discharge (Acre-Feet)	13,110	10,177	12,425	20,002	15,031	23,258	23,822	27,328	28,283	34,038	32,707	31,293	41,525	41,319	32,970	29,520

Abbreviations:
SRP = Salt River Project
COS = City of Scottsdale

Notes:
(1) Extraction wells 7EX-3MA and 7EX-4MA went into service in September 1999.
(2) Extraction well 7EX-5MA went into service in February 2002.
(3) Historical discharge data from 1991 through 2002 not collected for these wells.
(4) Well AAWC 14 was added to the semi-annual reports in April 1997.
(5) Well MEX-1MA was added to the semi-annual reports in October 1999.
(6) Well 22.5E,9.3N (PCX-1) went into service in April 1997.

TABLE 8. SUMMARY OF 2006 NIBW EXTRACTION WELL PUMPAGE AND ESTIMATED TCE MASS REMOVED, NORTH INDIAN BEND WASH AREA, SCOTTSDALE, ARIZONA

		Jan-06	Feb-06	Mar-06	Apr-06	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Total	Daily Average	Pumpage (gpm)
Central Groundwater Treatment Facility:																
COS-31	pumpage	62,648	86,214	73,308	47,469	76,085	78,320	43,167	18,054	11,148	62,842	706	412	560,373	1,535	1,066
	[TCE]	11	19	20	19	19	19	16	15	14	13	14	12			
	est TCE mass	5.7	13.7	12.2	7.5	12.1	12.4	5.8	2.3	1.3	6.8	0.1	0.0	79.9	0.2	
COS-71	pumpage	70,319	62,394	68,480	67,310	71,935	68,910	72,001	70,549	55,472	71,932	70,611	71,976	821,889	2,252	1,564
	[TCE]	97	99	90	89	89	85	90	84	100	88	96	97			
	est TCE mass	56.9	51.5	51.4	49.9	53.4	48.8	54.0	49.4	46.3	52.8	56.5	58.2	629.1	1.7	
COS-72	pumpage	93,282	84,800	89,500	76,063	93,781	91,304	83,349	67,715	32,750	91,209	77,278	40,361	921,392	2,524	1,753
	[TCE]	31.0	34.0	35.0	33.0	35.0	36.0	36	27	10	29	31	32			
	est TCE mass	24.1	24.0	26.1	20.9	27.4	27.4	25.0	15.2	2.7	22.1	20.0	10.8	221.6	0.6	
COS-75A	pumpage	80,695	72,891	76,844	72,882	79,695	76,273	77,509	80,323	71,482	81,001	79,614	75,570	924,779	2,534	1,759
	[TCE]	170	170	170	170	160	160	170	160	160	150	150	150			
	est TCE mass	114.4	103.3	108.9	103.3	106.3	101.8	109.9	107.2	95.4	101.3	99.6	94.5	1,246	3.4	
CGTF total	pumpage	306,944	306,299	308,132	263,724	321,496	314,807	204,025	166,092	115,380	306,984	228,209	188,319	3,030,411	8,302	5,766
	est TCE mass	201	193	199	182	199	190	195	174	146	183	176	164	2,201	6.03	
Miller Road Treatment Facility:					592											
PCX-1	pumpage	93,270	86,720	95,830	93,050	87,030	93,070	96,140	92,960	89,980	95,620	83,840	92,240	1,099,750	3,013	2,092
	[TCE]	70	72	72	67	71	70	72	70	72	66	64	70			
	est TCE mass	54.4	52.1	57.5	52.0	51.5	54.3	57.7	54.3	54.0	52.6	44.7	53.8	639	1.8	
AAWC-15	pumpage	94,470	85,820	96,260	92,520	92,970	91,490	92,910	91,700	77,100	87,150	75,190	78,870	1,056,450	2,894	2,010
	[TCE]	3.1	3.0	3.0	2.8	2.8	3.3	3.7	3.8	3.4	3.3	3.3	2.9			
	est TCE mass	2.4	2.1	2.4	2.2	2.2	2.5	2.9	2.9	2.2	2.4	2.1	1.9	28	0.1	
MRTF Total	pumpage	187,740	172,540	192,090	185,570	180,000	184,560	189,050	184,660	167,080	182,770	159,030	171,110	2,156,200	5,907	4,102
	est TCE mass	56.9	54.2	59.9	54.1	53.7	56.8	60.6	57.2	56.2	55.0	46.8	55.7	667.2	1.83	
Area 7 Groundwater and Extraction and Treatment System:																
7EX-1UA	pumpage	1,687	1,363	1,524	1,642	1,696	1,428	1,642	1,687	1,687	1,642	1,687	1,553	19,238	53	37
	[TCE]	16	16	16	11	11	11	12	12	12	9	9	9			
	est TCE mass	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.1	0.1	1.9	0.0	
7EX-3aMA	pumpage	6,558	6,076	5,910	6,432	6,540	5,403	6,451	6,811	3,831	6,451	6,811	6,655	73,929	203	141
	[TCE]	640	640	640	680	680	680	670	670	670	600	600	600			
	est TCE mass	35.0	32.4	31.5	36.5	37.1	30.6	36.0	38.0	21.4	32.3	34.1	33.3	398.3	1.1	
7EX-4MA	pumpage	1,533	1,838	1,874	1,998	1,761	1,945	2,000	2,280	1,316	2,000	2,280	2,177	23,002	63	44
	[TCE]	1,500	1,500	1,500	1,600	1,600	1,600	1,600	1,600	1,600	1,500	1,500	1,500			
	est TCE mass	19.2	23.0	23.4	26.7	23.5	25.9	26.7	30.4	17.6	25.0	28.5	27.2	297.1	0.8	
7EX-5MA	pumpage	9,067	8,207	7,986	8,478	7,196	6,603	8,469	8,296	5,379	8,469	8,296	8,918	95,364	261	181
	[TCE]	480	480	480	500	500	500	300	300	300	390	390	390			
	est TCE mass	36.3	32.8	32.0	35.3	30.0	27.5	21.2	20.8	13.5	27.5	27.0	29.0	332.9	0.9	
Area 7 Total	pumpage	18,845	17,484	17,294	18,550	17,193	15,379	18,562	19,074	12,213	18,562	19,074	19,303	211,533	580	402
	est TCE mass	90.7	88.4	87.1	98.6	90.7	84.2	84.1	89.4	52.6	84.9	89.7	89.6	1,030.1	2.82	
Area 12 Groundwater Extraction and Treatment System:																
MEX-1MA	pumpage	N.I.S.	11,180	35,940	36,950	39,530	34,410	39,630	32,460	40,090	41,790	N.I.S.	N.I.S.	311,980	855	594
	[TCE]		92	85	69	69	69	59	59	59	61					
	est TCE mass		8.6	25.5	21.3	22.7	19.8	19.5	16.0	19.7	21.3	-	-	174	0.5	
SRP 23.6E-6N	pumpage	N.I.S.	N.I.S.	6,420	31,610	N.I.S.	20,250	15,620	N.I.S.	11,890	14,180	44,790	28,940	173,700	476	330
	[TCE]			88	88	-	88	130	-	130	110	110	110			
	est TCE mass		-	4.7	23.2		14.9	16.9		12.9	13.0	41.1	26.5	153	0.4	
Area 12 Total	pumpage	-	11,180	42,360	68,560	39,530	54,660	55,250	32,460	51,980	55,970	44,790	28,940	485,680	1,331	924
	est TCE mass		8.6	30.2	44.5	22.7	34.7	36.4	16.0	32.6	34.3	41.1	26.5	327.5	0.90	
TOTALS	pumpage	513,529	507,503	559,876	536,404	558,219	569,406	466,887	402,286	346,653	564,286	451,103	407,672	5,883,824	16,120	11,194
	est TCE mass	349	344	376	379	366	366	376	337	287	357	354	335	4,225	12	

Note:
Pumpage reported in thousands of gallons
TCE concentration reported in ug/L
TCE mass reported in pounds
N.I.S. indicates the well was not in service at the time of sampling

TABLE 9. 2006 LABORATORY RESULTS FOR VOLATILE ORGANIC COMPOUNDS IN PROCESS WATER SAMPLES OBTAINED AT MRTF, AREA 7 GWETS, AND AREA 12 GWETS

(results presented in µg/L)

Sample Location	Field Sample ID	Sample Date	Sample Time	Sample Type	Lab	1,1,1-TCA	1,1-DCE	TCM	PCE	TCE
AREA-7										
SP-102-S	SP-102	1/4/2006	9:25	PRI	TGI	<0.5	<0.5	**0.7**	**4.2**	**720 D2**
SP-102-S	SP-102	2/6/2006	14:20	PRI	TGI	<0.5	<0.5	**0.7**	**3.8**	**740 D2**
SP-102-S	SP-102	3/6/2006	15:15	PRI	TGI	<0.5	<0.5	**0.8**	**4.0**	**790 D2**
SP-102-S	SP-102	4/3/2006	14:05	PRI	TGI	<0.5	<0.5	**0.7**	**4.1**	**750 D2**
SP-102-S	SP_102	5/1/2006	15:30	PRI	TGI	<0.5	<0.5	**0.7**	**4.1**	**730 D2**
SP-102-S	SP-102	6/6/2006	15:35	PRI	TGI	<0.5	<0.5	**0.7**	**4.0**	**740 D2**
SP-102-S	SP_102	7/5/2006	16:15	PRI	TGI	<0.5	<0.5	**0.6**	**3.3**	**640 D2**
SP-102-S	SP_102	7/27/2006	11:47	PRI	TGI	<0.5	<0.5	**0.7**	**3.3**	**670 D2**
SP-102-S	SP_102	9/5/2006	15:00	PRI	TGI	<0.5	<0.5	**0.9**	**2.5**	**300 D2**
SP-102-S	SP_102	10/2/2006	14:05	PRI	TGI	<0.5	<0.5	**0.7**	**3.2**	**500 D2**
SP-102-S	SP-102 S	11/7/2006	10:20	PRI	TGI	<0.5	<0.5	**0.9**	**2.6**	**320 D2**
SP-102-S	SP-102.S	12/8/2006	12:05	PRI	TGI	<0.5	<0.5	**0.6**	**3.2**	**590 D2**
SP-103-S	SP-103	1/4/2006	9:20	PRI	TGI	<0.5	<0.5	**0.7**	**1.9**	**160 D2**
SP-103-S	SP-103	2/6/2006	14:15	PRI	TGI	<0.5	<0.5	**0.7**	**1.9**	**210 D2**
SP-103-S	SP-103	3/6/2006	15:10	PRI	TGI	<0.5	<0.5	**0.8**	**1.9**	**180 D2**
SP-103-S	SP-103	4/3/2006	14:10	PRI	TGI	<0.5	<0.5	**0.7**	**1.7**	**170 D2**
SP-103-S	SP_103	5/1/2006	15:20	PRI	TGI	<0.5	<0.5	**0.7**	**1.7**	**170 D2**
SP-103-S	SP-103	6/6/2006	15:30	PRI	TGI	<0.5	<0.5	**0.7**	**1.7**	**210 D2**
SP-103-S	SP_103	7/5/2006	16:10	PRI	TGI	<0.5	<0.5	**0.7**	**1.5**	**180 D2**
SP-103-S	SP_103	7/27/2006	11:43	PRI	TGI	<0.5	<0.5	**0.7**	**1.3**	**190 D2**
SP-103-S	SP_103	9/5/2006	14:55	PRI	TGI	<0.5	<0.5	**0.9**	**1.1**	**95 D2**
SP-103-S	SP_103	10/2/2006	14:00	PRI	TGI	<0.5	<0.5	**0.7**	**1.6**	**150 D2**
SP-103-S	SP-103 S	11/7/2006	10:15	PRI	TGI	<0.5	<0.5	**0.9**	**1.8**	**170 D2**
SP-103-S	SP-103.S	12/8/2006	12:00	PRI	TGI	<0.5	<0.5	**0.6**	**1.2**	**94 D2**
SP-105-S	SP-105	1/4/2006	9:15	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
SP-105-S	SP-105	2/6/2006	14:10	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
SP-105-S	SP-105	3/6/2006	15:05	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
SP-105-S	SP-105	4/3/2006	14:15	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
SP-105-S	SP_105	5/1/2006	15:15	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
SP-105-S	SP-105	6/6/2006	15:25	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
SP-105-S	SP_105	7/5/2006	16:05	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
SP-105-S	SP_105	7/27/2006	11:40	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
SP-105-S	SP_105	9/5/2006	14:50	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
SP-105-S	SP_105	10/2/2006	13:55	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
SP-105-S	SP-105 S	11/7/2006	10:10	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5

TABLE 9. 2006 LABORATORY RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN PROCESS WATER SAMPLES OBTAINED AT MRTF, AREA 7 GWETS, AND AREA 12 GWETS
(results presented in µg/L)

Sample Location	Field Sample ID	Sample Date	Sample Time	Sample Type	Lab	1,1,1-TCA	1,1-DCE	TCM	PCE	TCE
SP-105-S	SP-105.S	12/8/2006	11:50	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
AREA-12										
MEX-1	MEX-1-1A-022106	2/21/2006	13:45	PRI	TGI	<0.5	**5.8**	**2.7**	**9.8**	**92 D2**
MEX-1	MEX-1-1A-030106	3/1/2006	12:45	PRI	TGI	<0.5	**3.8**	**2.9**	**7.1**	**86 D2**
MEX-1	MEX-1-1B-030106	3/1/2006	12:50	DUP	TGI	<0.5	**3.7**	**3.0**	**7.2**	**84 D2**
MEX-1	MEX-1-1A-040306	4/3/2006	14:00	PRI	TGI	<0.5	**3.6**	**1.8**	**9.3**	**56 D2**
MEX-1	MEX-1-1A-050806	5/8/2006	14:10	PRI	TGI	<0.5	**2.8**	**2.7**	**5.2**	**75 D2**
MEX-1	MEX-1-1A-060506	6/5/2006	12:30	PRI	TGI	<0.5	**2.5**	**1.8**	**5.3**	**78 D2**
MEX-1	MEX-1-1A-070506	7/5/2006	12:15	PRI	TGI	<0.5	**2.3**	**2.3**	**4.4**	**65 D2**
MEX-1	MEX-1-1A-080306	8/3/2006	13:35	PRI	TGI	<0.5	**3.0**	**2.7**	**4.9**	**80 D2**
MEX-1	MEX-1-1B-080306	8/3/2006	13:40	DUP	TGI	<0.5	**2.9**	**2.8**	**5.2**	**81 D2**
MEX-1	MEX-1-1A-090406	9/4/2006	16:15	PRI	TGI	<0.5	**2.8**	**2.5**	**5.0**	**75 D2,N1**
MEX-1	MEX-1-1A-101006	10/10/2006	15:20	PRI	TGI	<0.5	**2.1**	**2.2**	**3.8**	**59 D2**
SRP 23.6E-06.0N	GR-1-1A-040306	4/3/2006	13:45	PRI	TGI	<0.5	**0.5**	**4.0**	**2.6**	**90 D2**
SRP 23.6E-06.0N	GR-1-1B-040306	4/3/2006	13:50	DUP	TGI	<0.5	<0.5	**3.9**	**2.5**	**83 D2**
SRP 23.6E-06.0N	GR-1-1A-070506	7/5/2006	12:25	PRI	TGI	<0.5	**1.5**	**6.4**	**3.6**	**140 D2**
SRP 23.6E-06.0N	GR-1-1B-070506	7/5/2006	12:30	DUP	TGI	<0.5	**1.5**	**6.4**	**3.7**	**140 D2**
SRP 23.6E-06.0N	GR-1-1A-09-25-06	9/25/2006	10:45	PRI	TL	<0.50	**1.0**	**4.4**	**2.6**	**120**
SRP 23.6E-06.0N	GR-1-1A-101006	10/10/2006	15:40	PRI	TGI	<0.5	**1.3**	**6.2**	**3.4**	**130 D2**
SRP 23.6E-06.0N	GR-1-1A-110706	11/7/2006	15:00	PRI	TGI	<0.5	**1.2**	**5.5**	**3.4**	**140 D2**
SRP 23.6E-06.0N	GR-1-1B-110706	11/7/2006	15:05	DUP	TGI	<0.5	**1.4**	**5.8**	**3.3**	**140 D2**
SRP 23.6E-06.0N	GR-1-1A-120506	12/5/2006	15:45	PRI	TGI	<0.5	**1.4**	**4.4**	**3.1**	**110 D2**
WSP-1	WSP-1-1A-022106	2/21/2006	13:55	PRI	TGI	<0.5	**5.8**	**2.7**	**9.9**	**91 D2**
WSP-1	WSP-1-1B-022106	2/21/2006	14:00	DUP	TGI	<0.5	**5.9**	**2.7**	**9.8**	**91 D2**
WSP-1	WSP-1-1A-030106	3/1/2006	13:15	PRI	TGI	<0.5	**3.3**	**3.0**	**6.9**	**81 D2**
WSP-1	WSP-1-1A-040306	4/3/2006	14:10	PRI	TGI	<0.5	**2.0**	**3.6**	**4.1**	**92 D2**
WSP-1	WSP-1-1A-050806	5/8/2006	14:20	PRI	TGI	<0.5	**3.0**	**2.7**	**5.2**	**75 D2**
WSP-1	WSP-1-1A-060506	6/5/2006	12:45	PRI	TGI	<0.5	**2.8**	**2.5**	**5.0**	**76 D2**
WSP-1	WSP-1-1B-060506	6/5/2006	12:50	DUP	TGI	<0.5	**3.1**	**2.6**	**5.2**	**76 D2**
WSP-1	WSP-1-1A-070506	7/5/2006	12:45	PRI	TGI	<0.5	**1.8**	**4.5**	**3.8**	**110 D2**
WSP-1	WSP-1-1A-080306	8/3/2006	14:00	PRI	TGI	<0.5	**2.8**	**2.7**	**4.9**	**82 D2**
WSP-1	WSP-1-1A-090406	9/4/2006	16:45	PRI	TGI	<0.5	**2.7**	**2.5**	**5.1**	**78 D2**
WSP-1	WSP-1-1A-101006	10/10/2006	15:45	PRI	TGI	<0.5	**1.7**	**4.3**	**3.7**	**97 D2**
WSP-1	WSP-1-1B 101006	10/10/2006	15:50	DUP	TGI	<0.5	**1.7**	**4.4**	**3.8**	**95 D2**
WSP-1	WSP-1-1A-110706	11/7/2006	15:10	PRI	TGI	<0.5	**1.3**	**5.9**	**3.5**	**140 D2**
WSP-1	WSP-1-1A-120506	12/5/2006	16:15	PRI	TGI	<0.5	**1.1**	**5.6**	**3.5**	**130 D2**

TABLE 9. 2006 LABORATORY RESULTS FOR VOLATILE ORGANIC COMPOUNDS IN PROCESS WATER SAMPLES OBTAINED AT MRTF, AREA 7 GWETS, AND AREA 12 GWETS

(results presented in µg/L)

Sample Location	Field Sample ID	Sample Date	Sample Time	Sample Type	Lab	1,1,1-TCA	1,1-DCE	TCM	PCE	TCE
WSP-1	WSP-1-1B-120506	12/5/2006	16:20	DUP	TGI	<0.5	**1.3**	**5.6**	**3.3**	**110 D2**
WSP-2	WSP-2-1A-022106	2/21/2006	14:10	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
WSP-2	WSP-2-1A-030106	3/1/2006	13:00	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
WSP-2	WSP-2-1A-040306	4/3/2006	14:15	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
WSP-2	WSP-2-1A-050806	5/8/2006	14:25	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
WSP-2	WSP-2-1B-050806	5/8/2006	14:25	DUP	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
WSP-2	WSP-2-1A-060506	6/5/2006	12:55	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
WSP-2	WSP-2-1A-070506	7/5/2006	13:00	PRI	TGI	<0.5	<0.5	<0.5	<0.5	**1.0**
WSP-2	WSP-2-1A-080306	8/3/2006	14:05	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
WSP-2	WSP-2-1A-090406	9/4/2006	16:50	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
WSP-2	WSP-2-1B-090406	9/4/2006	16:55	DUP	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
WSP-2	WSP-2-1A-101006	10/10/2006	16:00	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
WSP-2	WSP-2-1A-110706	11/7/2006	15:15	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
WSP-2	WSP-2-1A-120506	12/5/2006	16:25	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
MRTF										
AZC Outfall	AZ Canal Outfall	1/3/2006	7:50	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
AZC Outfall	AZ Canal Outfall	2/6/2006	6:50	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
AZC Outfall	AZ Canal Outfall	3/6/2006	7:00	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
AZC Outfall	ARIZONA Canal outfall	4/3/2006	7:15	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
AZC Outfall	AZ Canal Outfall	5/1/2006	7:10	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
AZC Outfall	AZ Canal Outfall	6/5/2006	8:20	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
AZC Outfall	AZ Canal Eff	7/3/2006	8:50	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
AZC Outfall	AZ Canal Eff	8/7/2006	6:50	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
AZC Outfall	AZ. Canal Outfall	9/5/2006	8:10	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
AZC Outfall	AZ Canal Outfall	10/2/2006	9:40	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
AZC Outfall	AZ Canal Outfall	11/6/2006	6:50	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
AZC Outfall	AZ Canal Outfall	12/4/2006	7:15	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
MRTF Eff	MRTF Eff	1/3/2006	7:30	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
MRTF Eff	MRTF Eff	1/9/2006	7:00	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
MRTF Eff	MRTF Eff	1/16/2006	7:10	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
MRTF Eff	MRTF EFF	1/23/2006	7:15	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
MRTF Eff	MRTF EFF	1/30/2006	6:40	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
MRTF Eff	MRTF EFF	2/6/2006	7:00	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
MRTF Eff	MRTF Eff	2/13/2006	7:10	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
MRTF Eff	MRTF Eff	2/20/2006	7:10	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
MRTF Eff	MRTF Eff	2/27/2006	7:00	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5

TABLE 9. 2006 LABORATORY RESULTS FOR VOLATILE ORGANIC COMPOUNDS IN PROCESS WATER SAMPLES OBTAINED AT MRTF, AREA 7 GWETS, AND AREA 12 GWETS

(results presented in µg/L)

Sample Location	Field Sample ID	Sample Date	Sample Time	Sample Type	Lab	1,1,1-TCA	1,1-DCE	TCM	PCE	TCE
MRTF Eff	MRTF Eff	3/6/2006	6:45	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
MRTF Eff	MRTF Eff	3/13/2006	6:50	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
MRTF Eff	MRTF Eff	3/20/2006	7:45	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
MRTF Eff	MRTF Eff	3/27/2006	7:00	PRI	TGI	<0.5	<0.5	**0.8**	<0.5	<0.5
MRTF Eff	MRTF Eff	4/3/2006	7:00	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
MRTF Eff	MRTF Eff	4/10/2006	7:00	PRI	TGI	<0.5	<0.5	**0.7**	<0.5	<0.5
MRTF Eff	MRTF EFF	4/17/2006	7:00	PRI	TGI	<0.5	<0.5	**0.5**	<0.5	<0.5
MRTF Eff	MRTF EFF	4/24/2006	7:00	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
MRTF Eff	MRTF Eff	5/1/2006	7:00	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
MRTF Eff	MRTF EFF	5/8/2006	7:00	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
MRTF Eff	MRTF EFF	5/15/2006	7:30	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
MRTF Eff	MRTF Eff	5/22/2006	6:40	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
MRTF Eff	MRTF Eff	5/30/2006	7:10	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
MRTF Eff	MRTF EFF	6/5/2006	8:20	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
MRTF Eff	MRTF Eff	6/12/2006	7:00	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
MRTF Eff	MRTF Eff	6/19/2006	7:00	PRI	TGI	<0.5	<0.5	**0.8**	<0.5	<0.5
MRTF Eff	MRTF EFF	6/26/2006	7:30	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
MRTF Eff	MRTF Eff	7/3/2006	8:40	PRI	TGI	<0.5	<0.5	**0.6**	<0.5	<0.5
MRTF Eff	MRTF Eff	7/10/2006	7:00	PRI	TGI	<0.5	<0.5	**1.2**	<0.5	<0.5
MRTF Eff	MRTF Eff	7/17/2006	8:00	PRI	TGI	<0.5	<0.5	**0.5**	<0.5	<0.5
MRTF Eff	MRTF Eff	7/27/2006	6:45	PRI	TGI	<0.5	<0.5	**0.5**	<0.5	<0.5
MRTF Eff	MRTF Eff	7/31/2006	6:50	PRI	TGI	<0.5	<0.5	**1.0**	<0.5	<0.5
MRTF Eff	MRTF Eff	8/7/2006	6:30	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
MRTF Eff	MRTF Eff	8/14/2006	7:20	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
MRTF Eff	MRTF Eff	8/21/2006	7:30	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
MRTF Eff	MRTF Eff	8/28/2006	6:35	PRI	TGI	<0.5	<0.5	**0.7**	<0.5	<0.5
MRTF Eff	MRTF Eff	9/5/2006	7:50	PRI	TGI	<0.5	<0.5	**0.7**	<0.5	<0.5
MRTF Eff	MRTF Eff	9/11/2006	6:30	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
MRTF Eff	MRTF Eff	9/18/2006	6:50	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
MRTF Eff	MRTF EFF	9/25/2006	7:30	PRI	TL	<0.50	<0.50	<0.50	<0.50	<0.50
MRTF Eff	MRTF EFF	10/2/2006	9:30	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
MRTF Eff	MRTF Eff	10/9/2006	6:30	PRI	TGI	<0.5	<0.5	**0.9**	<0.5	<0.5
MRTF Eff	MRTF Eff	10/16/2006	7:00	PRI	TGI	<0.5	<0.5	**0.8**	<0.5	<0.5
MRTF Eff	MRTF Eff	10/23/2006	7:30	PRI	TGI	<0.5	<0.5	**1.5**	<0.5	<0.5
MRTF Eff	MRTF Eff	10/30/2006	6:30	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
MRTF Eff	MRTF Eff	11/6/2006	6:35	PRI	TGI	<0.5	<0.5	**14**	<0.5	<0.5

TABLE 9. 2006 LABORATORY RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN PROCESS WATER SAMPLES OBTAINED AT MRTF, AREA 7 GWETS, AND AREA 12 GWETS
(results presented in µg/L)

Sample Location	Field Sample ID	Sample Date	Sample Time	Sample Type	Lab	1,1,1-TCA	1,1-DCE	TCM	PCE	TCE
MRTF Eff	MRTF Eff	11/13/2006	9:00	PRI	TGI	<0.5	<0.5	**2.4**	<0.5	<0.5
MRTF Eff	MRTF Eff	11/20/2006	8:00	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
MRTF Eff	MRTF Eff	11/27/2006	8:30	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
MRTF Eff	MRTF Eff	12/4/2006	7:00	PRI	TGI	<0.5	<0.5	**0.8**	<0.5	<0.5
MRTF EFF	MRTF EFF	12/11/2006	7:10	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
MRTF Eff	MRTF Eff	12/18/2006	7:30	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
MRTF Eff	MRTF Eff	12/27/2006	7:30	PRI	TGI	<0.5	<0.5	**0.7**	<0.5	<0.5
Tower 3 Eff	Tower #3 Eff PCX-1	1/3/2006	7:40	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	Tower #3 Eff	1/9/2006	7:10	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	Tower #3 Eff PCX-1	1/16/2006	7:15	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	Tower #3 EFF PCX-1	1/23/2006	7:20	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	Tower #3 EFF PCX-1	1/30/2006	6:50	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	Tower #3 EFF	2/6/2006	7:10	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	Tower #3 Eff PCX-1	2/13/2006	7:00	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	Tower #3 Eff PCX-1	2/20/2006	7:15	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	Tower #3 Eff PCX-1	2/27/2006	7:10	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	Tower #3 Eff PCX-1	3/6/2006	6:50	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	Tower #3 Eff PCX-1	3/13/2006	7:00	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	Tower #3 Eff PCX-1	3/20/2006	7:35	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	Tower #3 Eff PCX-1	3/27/2006	7:10	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	Tower #3 Eff PCX-1	4/3/2006	7:10	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	Tower #3 Eff PCX-1	4/10/2006	7:10	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	Tower #3 EFF PCX-1	4/17/2006	7:10	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	Tower #3 Eff PCX-1	4/24/2006	7:10	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	Tower #3 Eff PCX-1	5/1/2006	7:05	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	Tower #3 Eff PCX-1	5/8/2006	7:10	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	Tower #3 Eff PCX-1	5/16/2006	10:15	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	Tower #3 Eff PCX-1	5/22/2006	6:30	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	Tower #3 Eff PCX-1	5/30/2006	7:15	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	Tower #3 EFF PCX-1	6/5/2006	8:20	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	Tower 3 Eff PCX-1	6/12/2006	7:05	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	Tower #3 Eff	6/19/2006	7:10	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	Tower #3 EFF	6/26/2006	7:40	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	Tower #3 Eff PCX-1	7/3/2006	8:45	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	Tower #3 Eff PCX-1	7/10/2006	7:10	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	Tower #3 Eff PCX-1	7/17/2006	8:05	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5

TABLE 9. 2006 LABORATORY RESULTS FOR VOLATILE ORGANIC COMPOUNDS IN PROCESS WATER SAMPLES OBTAINED AT MRTF, AREA 7 GWETS, AND AREA 12 GWETS

(results presented in µg/L)

Sample Location	Field Sample ID	Sample Date	Sample Time	Sample Type	Lab	1,1,1-TCA	1,1-DCE	TCM	PCE	TCE
Tower 3 Eff	Tower #3 Eff PCX-1	7/27/2006	6:50	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	Tower #3 Eff PCX-1	7/31/2006	7:00	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	Tower #3 EFF PCX-1	8/7/2006	6:40	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	Tower #3 Eff PCX-1	8/14/2006	7:30	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	Tower #3 Eff PCX-1	8/21/2006	7:40	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	Tower #3 Eff PCX-1	8/28/2006	6:45	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	Tower #3 Eff PCX-1	9/5/2006	8:00	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	TOWER #3 Eff PCX-1	9/11/2006	6:40	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	Tower #3 Eff	9/18/2006	7:00	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	Tower # EFF PCX-1	9/25/2006	7:40	PRI	TL	<0.50	<0.50	<0.50	<0.50	<0.50
Tower 3 Eff	Tower #3 EFF PCX-1	10/2/2006	9:35	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	Tower #3 Eff PCX-1	10/9/2006	6:40	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	Tower #3 Eff PCX-1	10/16/2006	7:10	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	Tower #3 Eff PCX-1	10/23/2006	7:40	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	Tower #3 Eff PCX-1	10/30/2006	6:40	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	Tower #3 Eff PCX-1	11/6/2006	6:40	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	Tower #3 Eff PCX-1	11/13/2006	9:10	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	Tower #3 Eff PCX-1	11/20/2006	8:10	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	PCX-1, Tower #3 Eff	11/27/2006	8:40	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	Tower #3 Eff PCX-1	12/4/2006	7:10	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	Tower #3 Eff PCX-1	12/11/2006	7:15	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	Tower #3 Eff PCX-1	12/18/2006	7:40	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Tower 3 Eff	Tower #3 Eff PCX-1	12/27/2006	7:40	PRI	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip/Field Blanks										
Trip Blank Area-7	Trip Blank	1/4/2006	9:15	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank Area-7	Trip Blank	2/6/2006	14:10	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank Area-7	Trip Blank	3/6/2006	15:05	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank Area-7	Trip Blank	4/3/2006	14:05	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank Area-7	Trip Blank	5/1/2006	15:10	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank Area-7	Trip Blank	6/6/2006	15:20	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank Area-7	Trip Blank	7/5/2006	16:05	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank Area-7	Trip Blank	9/5/2006	14:50	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank Area-7	Trip Blank	10/2/2006	13:55	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank Area-7	Trip Blank	11/7/2006	10:10	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank Area-7	Trip Blank	12/8/2006	11:50	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank Area-12	TB	2/21/2006	0:00	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5

TABLE 9. 2006 LABORATORY RESULTS FOR VOLATILE ORGANIC COMPOUNDS IN PROCESS WATER SAMPLES OBTAINED AT MRTF, AREA 7 GWETS, AND AREA 12 GWETS

(results presented in µg/L)

Sample Location	Field Sample ID	Sample Date	Sample Time	Sample Type	Lab	1,1,1-TCA	1,1-DCE	TCM	PCE	TCE
Trip Blank Area-12	FB-1-1A-022106	2/21/2006	13:30	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank Area-12	TB	3/1/2006	0:00	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank Area-12	FB-1-1A-030106	3/1/2006	12:30	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank Area-12	TB	4/3/2006	0:00	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank Area-12	FB-1-1A-040306	4/3/2006	13:30	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank Area-12	TB	5/8/2006	14:00	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank Area-12	FB-1-1A-050806	5/8/2006	14:00	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank Area-12	TB	6/5/2006	12:30	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank Area-12	FB-1-1A-060506	6/5/2006	12:30	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank Area-12	TB	7/5/2006	0:00	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank Area-12	FB-1-1A-070506	7/5/2006	12:10	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank Area-12	TB	8/3/2006	0:00	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank Area-12	FB 1-1A-080306	8/3/2006	13:30	TRA	TGI	<0.5	<0.5	**0.5**	<0.5	<0.5
Trip Blank Area-12	TB-	9/4/2006	0:00	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank Area-12	FB-1-1A-090406	9/4/2006	16:00	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank Area-12	TB	10/10/2006	0:00	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank Area-12	FB-1-1A-101006	10/10/2006	15:00	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank Area-12	TB	11/7/2006	0:00	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank Area-12	FB-1-1A-110706	11/7/2006	15:00	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank Area-12	TB	12/5/2006	0:00	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank Area-12	FB-1-1A-120506	12/5/2006	16:10	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	1/3/2006	7:30	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	1/9/2006	7:00	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	1/16/2006	7:10	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	1/23/2006	7:15	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	1/30/2006	6:40	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	2/6/2006	6:50	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	2/13/2006	7:00	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	2/20/2006	7:10	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	2/27/2006	7:00	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	3/6/2006	0:00	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	3/13/2006	6:50	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	3/20/2006	0:00	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	3/27/2006	7:00	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	4/3/2006	7:00	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	4/10/2006	7:00	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5

TABLE 9. 2006 LABORATORY RESULTS FOR VOLATILE ORGANIC COMPOUNDS IN PROCESS WATER SAMPLES OBTAINED AT MRTF, AREA 7 GWETS, AND AREA 12 GWETS

(results presented in µg/L)

Sample Location	Field Sample ID	Sample Date	Sample Time	Sample Type	Lab	1,1,1-TCA	1,1-DCE	TCM	PCE	TCE
Trip Blank MRTF	Travel Blank	4/17/2006	7:00	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	4/24/2006	7:00	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	5/1/2006	7:00	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	5/8/2006	7:00	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	5/15/2006	7:30	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	5/16/2006	10:15	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	5/22/2006	6:30	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	5/30/2006	7:10	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	6/5/2006	8:20	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	6/12/2006	7:00	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	6/19/2006	7:00	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	6/26/2006	7:30	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	7/3/2006	8:40	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	7/10/2006	7:00	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	7/17/2006	8:00	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	7/27/2006	0:00	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	7/31/2006	0:00	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	8/7/2006	6:30	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	8/14/2006	7:20	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	8/21/2006	7:30	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	8/28/2006	6:35	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	9/5/2006	7:50	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	9/11/2006	6:30	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	9/18/2006	6:50	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	9/25/2006	7:30	TRA	TL	<0.50	<0.50	<0.50	<0.50	<0.50
Trip Blank MRTF	Travel Blank	10/2/2006	9:30	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	10/9/2006	6:30	TRA	TGI	<0.5 N1	<0.5 N1	<0.5 N1	<0.5 N1	<0.5 N1
Trip Blank MRTF	Travel Blank	10/16/2006	7:00	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	10/23/2006	7:30	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	10/30/2006	6:30	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	11/6/2006	6:35	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	11/13/2006	9:00	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	11/20/2006	8:00	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	11/27/2006	8:30	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	12/4/2006	7:00	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	12/11/2006	7:10	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5

TABLE 9. 2006 LABORATORY RESULTS FOR VOLATILE ORGANIC COMPOUNDS IN PROCESS WATER SAMPLES OBTAINED AT MRTF, AREA 7 GWETS, AND AREA 12 GWETS
(results presented in µg/L)

Sample Location	Field Sample ID	Sample Date	Sample Time	Sample Type	Lab	1,1,1-TCA	1,1-DCE	TCM	PCE	TCE
Trip Blank MRTF	Travel Blank	12/18/2006	7:30	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5
Trip Blank MRTF	Travel Blank	12/27/2006	7:30	TRA	TGI	<0.5	<0.5	<0.5	<0.5	<0.5

Note:
<# Below detection limit
PRI Primary
DUP Duplicate
TRA Travel or Trip Blank
TGI Transwest Geochem
TL Turner Laboratories
D2 Sample required dilution due to high concentration of target analyte.
N1 See case narrative.

1,1,1-TCA = 1,1,1-Trichloroethane
1,1-DCE = 1,1-Dichloroethene
TCM = Chloroform
PCE = Tetrachloroethene
TCE = Trichloroethene

TABLE 10. SUMMARY OF VOC MASS ESTIMATES IN UAU GROUNDWATER FOR OCTOBER 2006
NORTH INDIAN BEND WASH SITE, SCOTTSDALE, ARIZONA

POLYGON (WELL NAME)	TOTAL VOCs (micrograms per liter) [a]	ELEVATION BASE OF UAU (feet, MSL)	ELEVATION UAU WATER TABLE (feet, MSL) [b]	SATURATED THICKNESS (feet)	POLYGON AREA (square feet)	SATURATED POLYGON VOLUME (cubic feet)	SATURATED PORE VOLUME (liters)	VOC MASS (gallons)	VOC MASS (pounds)
B-J	3.1	1,065	1126.3	61	1,312,017	80,426,642	683,280,623	0.39	4.67
B-3UA	0	1,072	1132.8	61	1,488,621	90,552,815	769,309,554	0.00	0.00
D-1UA	12	1,093	1142.9	50	1,155,418	57,643,804	489,724,466	1.08	12.96
E-2UA	0	1,069	1127.1	58	2,567,322	149,033,042	1,266,140,016	0.00	0.00
E-3UA	0.9	1,071	1121.0	50	1,605,557	80,293,906	682,152,934	0.11	1.35
E-4UA	0	1,103	1139.3	36	1,180,805	42,827,797	363,852,118	0.00	0.00
E-5UA	11.8	1,067	1125.7	59	1,563,483	91,760,817	779,572,375	1.69	20.28
E-6UA	0	1,043	1113.2	70	2,854,410	200,465,214	1,703,092,321	0.00	0.00
E-7UA	6.6	1,079	1121.5	43	2,135,156	90,829,536	771,660,491	0.94	11.23
E-9UA	7.2	1,065	1114.9	50	1,382,699	68,941,372	585,705,215	0.78	9.30
E-12UA	3.7	1,075	1134.4	59	1,868,432	110,928,808	942,417,873	0.64	7.69
E-13UA	2.4	1,080	1133.2	53	851,113	45,313,256	384,967,830	0.17	2.04
M-2UA	3.5	1,081	1133.3	52	1,081,841	56,601,921	480,872,941	0.31	3.71
M-3UA	0	1,072	1138.3	66	1,266,711	83,957,605	713,278,625	0.00	0.00
M-4UA	0	1,093	1135.0	42	1,606,588	67,412,432	572,715,803	0.00	0.00
M-5UA[c]	0	1,100	1131.3	31	2,037,505	63,672,031	540,938,476	0.00	0.00
M-9UA	4.2	1,090	1139.2	49	1,750,970	86,112,705	731,587,704	0.57	6.78
M-10UA[d]	0	1,075	1127.1	52	2,920,909	152,033,313	1,291,629,421	0.00	0.00
M-11UA	0	1,067	1123.4	56	2,607,678	147,151,270	1,250,153,041	0.00	0.00
M-12UA	0	1,085	1133.5	48	1,060,650	51,388,493	436,581,216	0.00	0.00
M-13UA	6.6	1,079	1131.3	52	1,905,763	99,576,117	845,968,815	1.03	12.31
M-15UA	0	1,102	1133.8	32	2,850,181	90,664,258	770,256,333	0.00	0.00
M-16UA	0	1,080	1130.7	51	2,329,925	118,127,198	1,003,573,232	0.00	0.00
PG-3UA	1.4	1,046	1117.9	72	1,523,224	109,550,270	930,706,230	0.24	2.87
PG-4UA	63.9	1,055	1103.6	49	2,867,709	139,255,949	1,183,076,766	13.90	166.69
PG-5UA	9.7	1,036	1113.4	77	1,729,659	133,806,420	1,136,779,204	2.03	24.31
PG-6UA	3.8	1,043	1111.5	69	2,363,199	161,973,659	1,376,079,619	0.96	11.53
PG-7UA	0	1,041	1119.0	78	2,461,634	192,081,301	1,631,865,109	0.00	0.00
PG-8UA	7	1,060	1110.9	51	1,631,115	82,958,509	704,790,604	0.91	10.88
7EX-1UA[e]	9.6	1,092	1113.4	21	775,509	16,564,872	140,730,185	0.25	2.98
PG-10UA	1.6	1,089	1113.4	24	693,947	16,904,549	143,615,976	0.04	0.51
PG-11UA	5	1,076	1118.0	42	2,167,731	90,936,315	772,567,655	0.71	8.52
PG-12UA	0	1,088	1129.3	41	2,891,994	119,468,272	1,014,966,600	0.00	0.00
PG-13UA	0	1,079	1126.9	48	2,336,575	111,875,211	950,458,230	0.00	0.00
PG-14UA	0	1,081	1131.8	51	1,452,225	73,816,597	627,123,661	0.00	0.00
PG-15UA	0.5	1,097	1136.6	40	1,640,417	64,960,513	551,885,032	0.05	0.61
PG-16UA	3	1,079	1120.9	42	1,327,719	55,684,535	473,079,103	0.26	3.13
PG-17UA	0	1,089	1143.6	55	436,424	23,841,843	202,553,147	0.00	0.00
PG-18UA	2.2	1,045	1122.7	78	1,953,438	151,743,064	1,289,163,547	0.52	6.25
PG-19UA	7.1	1,049	1120.5	72	1,407,810	100,700,649	855,522,506	1.12	13.39
PG-20UA	0	1,050	1114.1	64	1,865,337	119,568,102	1,015,814,722	0.00	0.00
PG-21UA	0	1,065	1121.3	56	1,566,447	88,159,637	748,977,829	0.00	0.00
PG-22UA	13.5	1,067	1125.9	59	1,764,305	103,864,635	882,402,783	2.19	26.27
PG-23UA	5.6	1,055	1113.5	59	1,753,035	102,552,548	871,255,678	0.90	10.76
PG-24UA[f]	8.8	1,054	1113.4	59	1,535,896	91,170,787	774,559,651	1.25	15.03
PG-25UA[g]	11	1,056	1120.5	65	1,538,241	99,262,692	843,306,050	1.71	20.45
PG-26UA	0	1,087	1136.5	50	1,888,615	93,524,215	794,553,672	0.00	0.00
PG-27UA	0	1,058	1128.3	70	2,772,049	194,930,486	1,656,070,927	0.00	0.00
PG-28UA	10.3	1,061	1123.9	63	1,669,714	105,058,405	892,544,690	1.69	20.27
PG-29UA	2.9	1,080	1126.0	46	1,345,997	61,862,022	525,561,181	0.28	3.36
PG-30UA	0	1,074	1122.3	48	2,013,301	97,161,906	825,458,407	0.00	0.00
PG-31UA	25.6	1,081	1119.9	39	2,706,853	105,161,239	893,418,339	4.21	50.43
PG-32UA	0	1,100	1133.0	33	2,381,203	78,460,639	666,578,049	0.00	0.00
PG-33UA	0	1,115	1140.1	25	1,617,384	40,515,469	344,207,272	0.00	0.00
PG-34UA	0	1,110	1135.5	26	1,201,943	30,697,624	260,797,806	0.00	0.00
PG-35UA	0	1,072	1116.2	44	3,523,828	155,788,436	1,323,531,815	0.00	0.00

TABLE 10. SUMMARY OF VOC MASS ESTIMATES IN UAU GROUNDWATER FOR OCTOBER 2006
NORTH INDIAN BEND WASH SITE, SCOTTSDALE, ARIZONA

POLYGON (WELL NAME)	TOTAL VOCs (micrograms per liter) [a]	ELEVATION BASE OF UAU (feet, MSL)	ELEVATION UAU WATER TABLE (feet, MSL) [b]	SATURATED THICKNESS (feet)	POLYGON AREA (square feet)	SATURATED POLYGON VOLUME (cubic feet)	SATURATED PORE VOLUME (liters)	VOC MASS (gallons)	VOC MASS (pounds)
PG-36UA	38.9	1,103	1123.1	20	1,225,128	24,612,822	209,103,148	1.50	17.94
PG-39UA	0	1,062	1103.4	41	2,984,814	123,630,996	1,050,331,852	0.00	0.00
ST-1UA	0	1,083	1137.5	54	1,380,724	75,221,844	639,062,216	0.00	0.00
W-3UA	6.8	1,084	1130.4	46	2,138,932	99,225,055	842,986,304	1.05	12.64
TOTALS							**48,104,916,988**	**43.46**	**521.15**

[a] Includes total concentration of TCE, PCE, 1,1,1-TCA, DCE, and Chloroform from October 2006 water quality data set. "0" indicates either that concentrations of all VOCs were below the detection limit, the well was dry, or the well is no longer included in the NIBW Monitoring Program.

[b] October 2006 water level data set.

[c] Water level estimated based on M-13UA.

[d] Water level estimated based on E-2UA.

[e] Water level estimated based on PG-10UA.

[f] Water level estimated based on PG-5UA.

[g] Water level estimated based on PG-19UA.

TABLE 11. AVERAGE TCE CONCENTRATIONS FOR MONITOR WELLS WITHIN ZONE OF HYDRAULIC CAPTURE, MIDDLE ALLUVIUM UNIT, AREA 7

Average TCE Concentrations (micrograms per liter)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
D-2MA	---	5,600	4,650	3,500	2,200	2,177	2,650	2,164	2,200	1,650	1,650	1,145
E-10MA	5.6	5.9	6.0	11	15	15	15	13	10	8	7	6
PA-10MA	12	15	26	68	96	66	41	39	46	39	41	36
PA-12MA	190	135	163	360	760	616	616	572	580	483	483	400
W-1MA	2,800	1,045	560	200	460	1,404	680	348	495	270	335	151
W-2MA	3,000	1,950	2,050	1,950	3,233	3,830	4,071	4,325	4,875	4,725	5,275	4,325
ANNUAL AVERAGE	**1,202**	**1,458**	**1,243**	**1,015**	**1,127**	**1,351**	**1,346**	**1,243**	**1,368**	**1,196**	**1,298**	**1,010**

Five-Year Average TCE Concentrations (micrograms per liter)

1995-1999	**1,209**	**Start-Up of 7EX-3MA and 7EX-4MA Extraction Wells**
1996-2000	**1,239**	
1997-2001	**1,216**	
1998-2002	**1,216**	**Start-Up of 7EX-5MA Extraction Well**
1999-2003	**1,287**	**Area 7 GWETS Fully Operational**
2000-2004	**1,301**	
2001-2005	**1,290**	
2002-2006	**1,223**	
2003-2007	**---**	**First computed 5-year running average**

TABLE 12. AVERAGE TCE CONCENTRATIONS FOR MONITOR WELLS WITHIN ZONE OF HYDRAULIC CAPTURE, MIDDLE ALLUVIUM UNIT, AREA 12

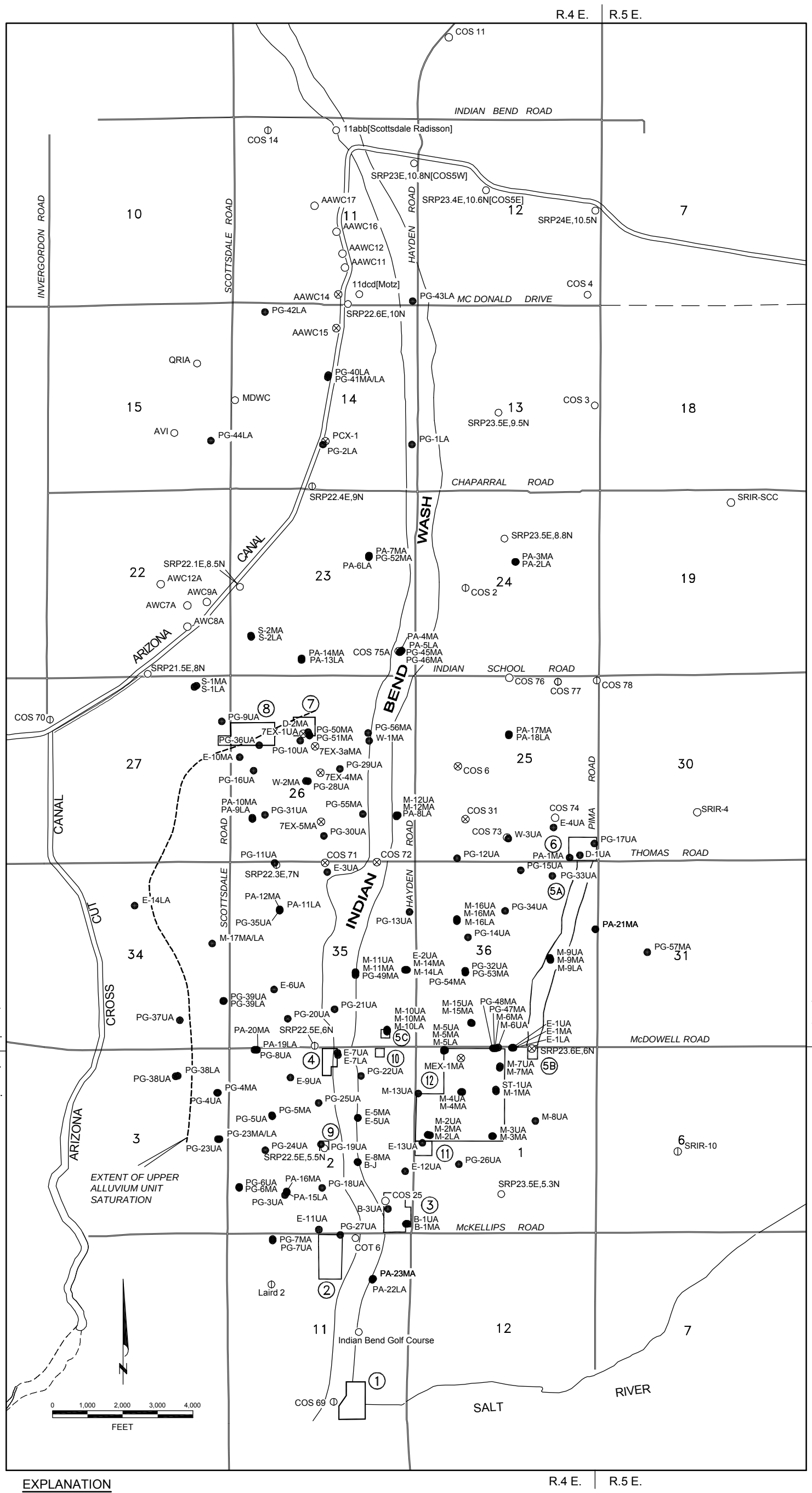
Average TCE Concentrations (micrograms per liter)

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
E-1MA	367	440	560	400	350	390	18	2.6	130	3.3	50	73	42
M-4MA	29	20	32	31	32	28	27	20	24	21	25	26	20
M-5MA	377	365	295	120	43	65	79	115	94	45	53	54	68
M-6MA	333	360	180	113	120	125	22	7.1	69	2	40	69	43
M-7MA	11	6.5	5.6	7.8	9.0	3.0	0	0.8	1.9	0.9	1.3	1.1	0.9
M-9MA	113	113	72	52	25	15	9.6	8.3	5.1	6.4	7.0	7.0	4.0
M-15MA	105	14	115	83	40	75	40	25	19	14	13	11	12
PA-21MA	44	20	7.7	7.5	3.4	1.6	1.7	0.8	0.3	0	0	1	0
ANNUAL AVERAGE	**172**	**167**	**158**	**102**	**78**	**88**	**24**	**22**	**43**	**12**	**24**	**30**	**24**

Five-Year Average TCE Concentrations (micrograms per liter)

1994-1998	**135**	
1995-1999	**119**	**Start-Up of MEX-1 and SRP Granite Reef Extraction**
1996-2000	**90**	**Area 12 GWETS Fully Operational**
1997-2001	**63**	
1998-2002	**51**	
1999-2003	**38**	
2000-2004	**25**	**First Computed 5-Year Running Average**
2001-2005	**26**	
2002-2006	**26**	

ILLUSTRATIONS



EXPLANATION

● PA-15LA	MONITOR WELL LOCATION AND IDENTIFIER
⊗ COS75A	EXTRACTION WATER WELL LOCATION AND IDENTIFIER
○ COS 74	PRODUCTION WATER WELL LOCATION AND IDENTIFIER
⦶ SRP22.5E,6N	INACTIVE PRODUCTION WATER WELL LOCATION AND IDENTIFIER

NORTH INDIAN BEND WASH AREA
MARICOPA COUNTY, ARIZONA

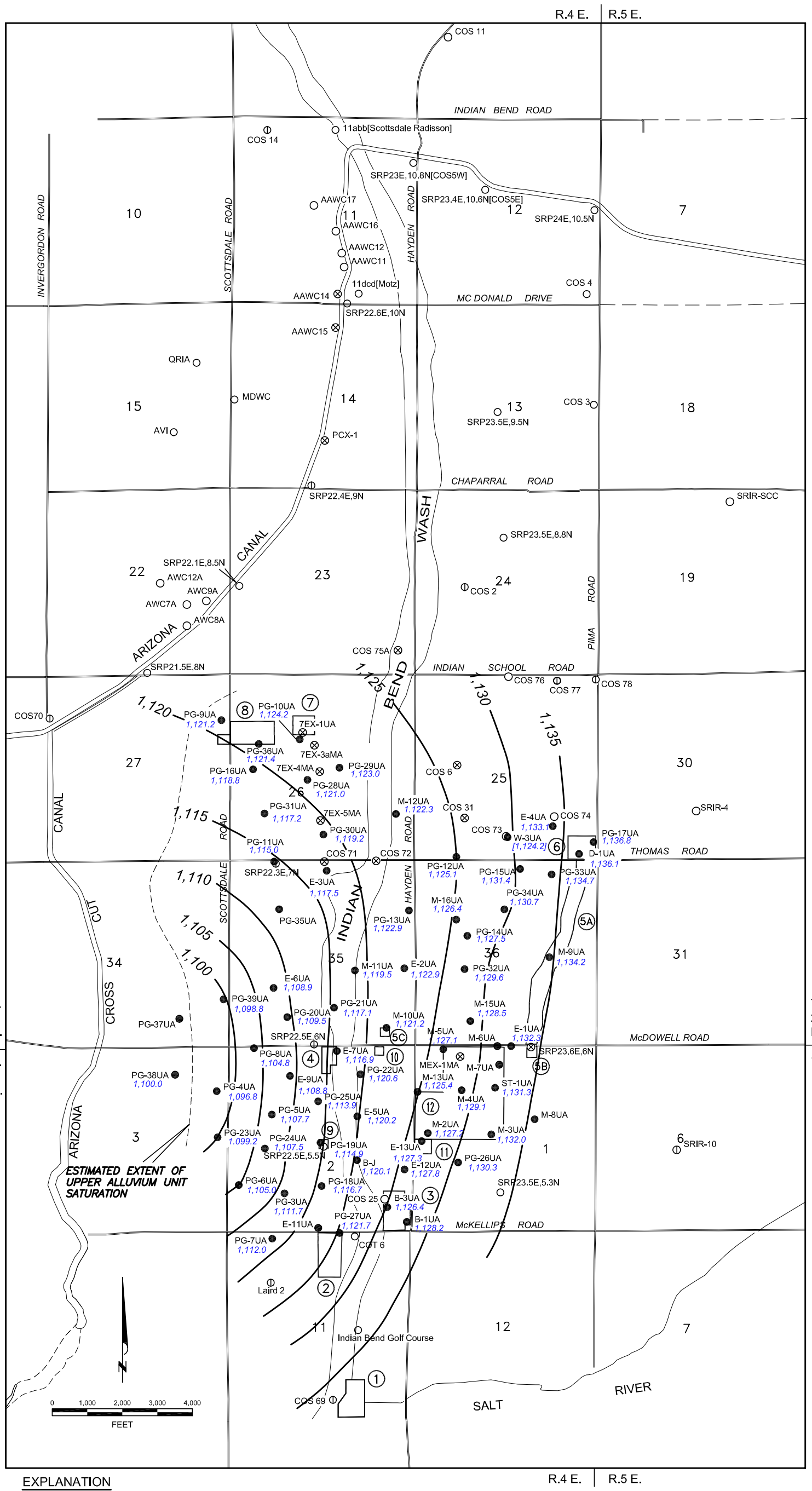
WELL LOCATION MAP

2005

North Indian Bend Wash Superfund Site

FIGURE 1

366.20\\All Well locmap NAD83 Central zone\23Feb2005



EXPLANATION

● PG-7UA 1,112.0	LOWER ALLUVIUM UNIT MONITOR WELL LOCATION AND IDENTIFIER GROUNDWATER LEVEL ALTITUDE, feet above mean sea level [ ] INDICATES ANOMALOUS DATA
⊗ COS75A	EXTRACTION WATER WELL LOCATION AND IDENTIFIER
○ COS 74	PRODUCTION WATER WELL LOCATION AND IDENTIFIER
⦶ SRP22.5E,6N	INACTIVE PRODUCTION WATER WELL LOCATION AND IDENTIFIER
— 1,120 —	GROUNDWATER LEVEL ALTITUDE CONTOUR, feet above mean sea level

NORTH INDIAN BEND WASH AREA
MARICOPA COUNTY, ARIZONA

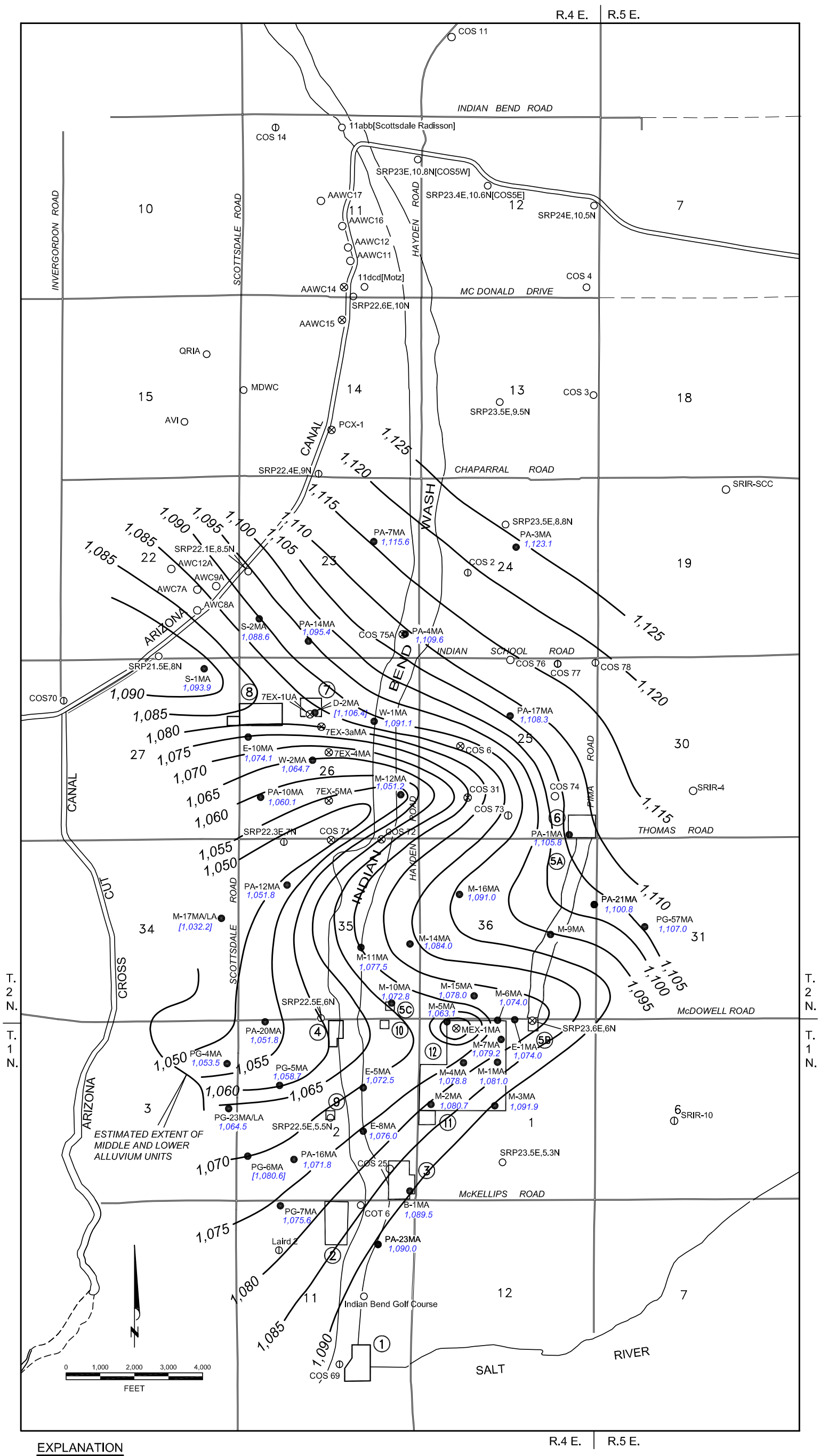
GROUNDWATER LEVEL CONTOURS
UPPER ALLUVIUM UNIT
APRIL 2006

2007

North Indian Bend Wash Superfund Site

FIGURE 2

366.20\WL-2006\UAU-wl-April2006\21Feb2007 NAD83 State Plane



EXPLANATION

PG-5MA 1,058.7	MIDDLE ALLUVIUM UNIT MONITOR WELL LOCATION AND IDENTIFIER GROUNDWATER LEVEL ALTITUDE, feet above mean sea level [ ] INDICATES ANOMALOUS DATA
COS75A	EXTRACTION WATER WELL LOCATION AND IDENTIFIER
COS74	PRODUCTION WATER WELL LOCATION AND IDENTIFIER
SRP22.5E,6N	INACTIVE PRODUCTION WATER WELL LOCATION AND IDENTIFIER
—1,090—	GROUNDWATER LEVEL ALTITUDE CONTOUR, feet above mean sea level

NORTH INDIAN BEND WASH AREA
MARICOPA COUNTY, ARIZONA

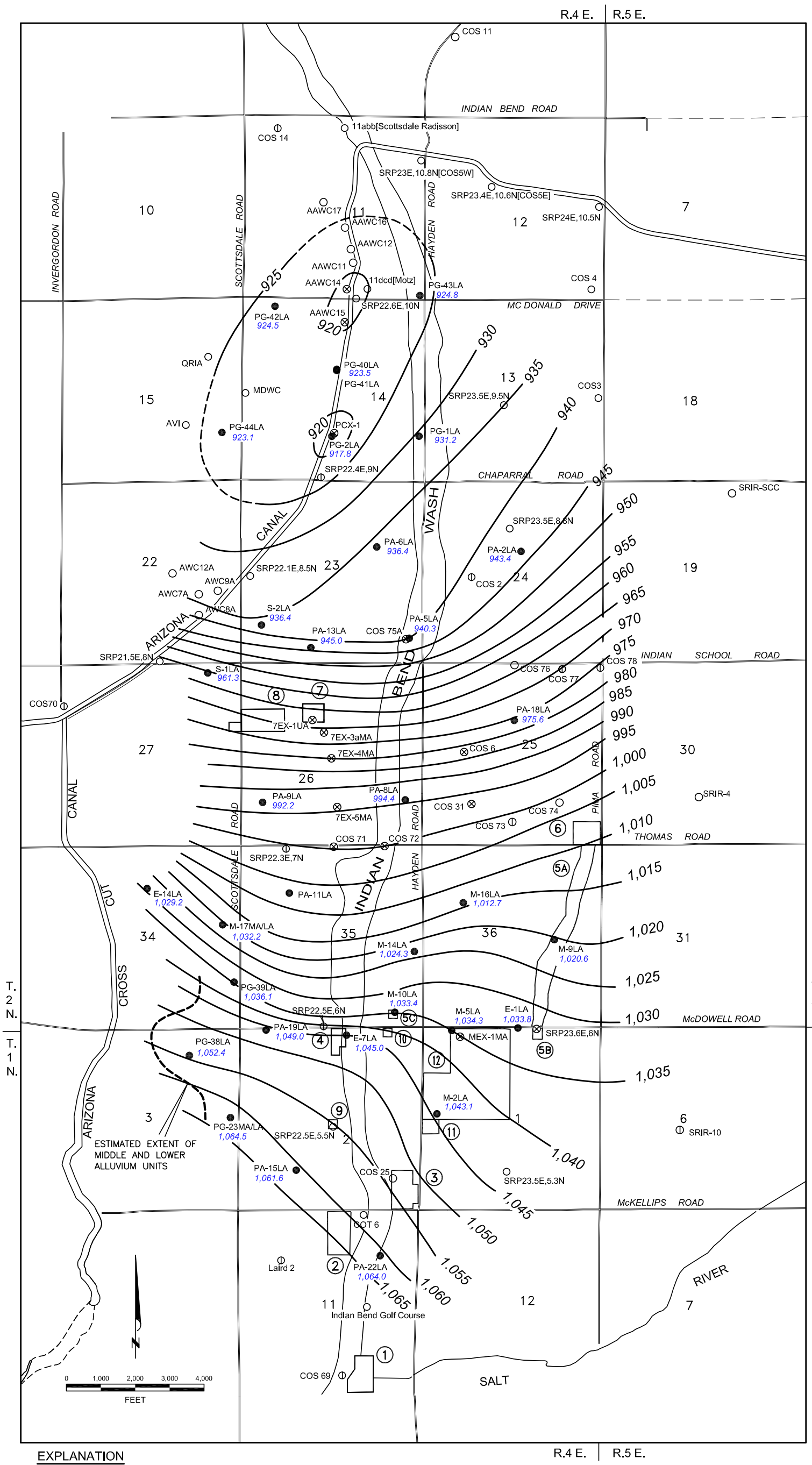
GROUNDWATER LEVEL CONTOURS
MIDDLE ALLUVIUM UNIT
APRIL 2006

North Indian Bend Wash Superfund Site

2007

FIGURE 3

366.20\wl-2006\MAU-wl Apr2006\23Feb2007 State Plane Nad83



EXPLANATION

● PA-15LA 1,061.6	LOWER ALLUVIUM UNIT MONITOR WELL LOCATION AND IDENTIFIER; GROUNDWATER LEVEL ALTITUDE, feet above mean sea level
⊗ COS75A	EXTRACTION WATER WELL LOCATION AND IDENTIFIER
○ COS 74	PRODUCTION WATER WELL LOCATION AND IDENTIFIER
⦶ SRP22.5E,6N	INACTIVE PRODUCTION WATER WELL LOCATION AND IDENTIFIER
—1,060—	GROUNDWATER LEVEL ALTITUDE CONTOUR, feet above mean sea level

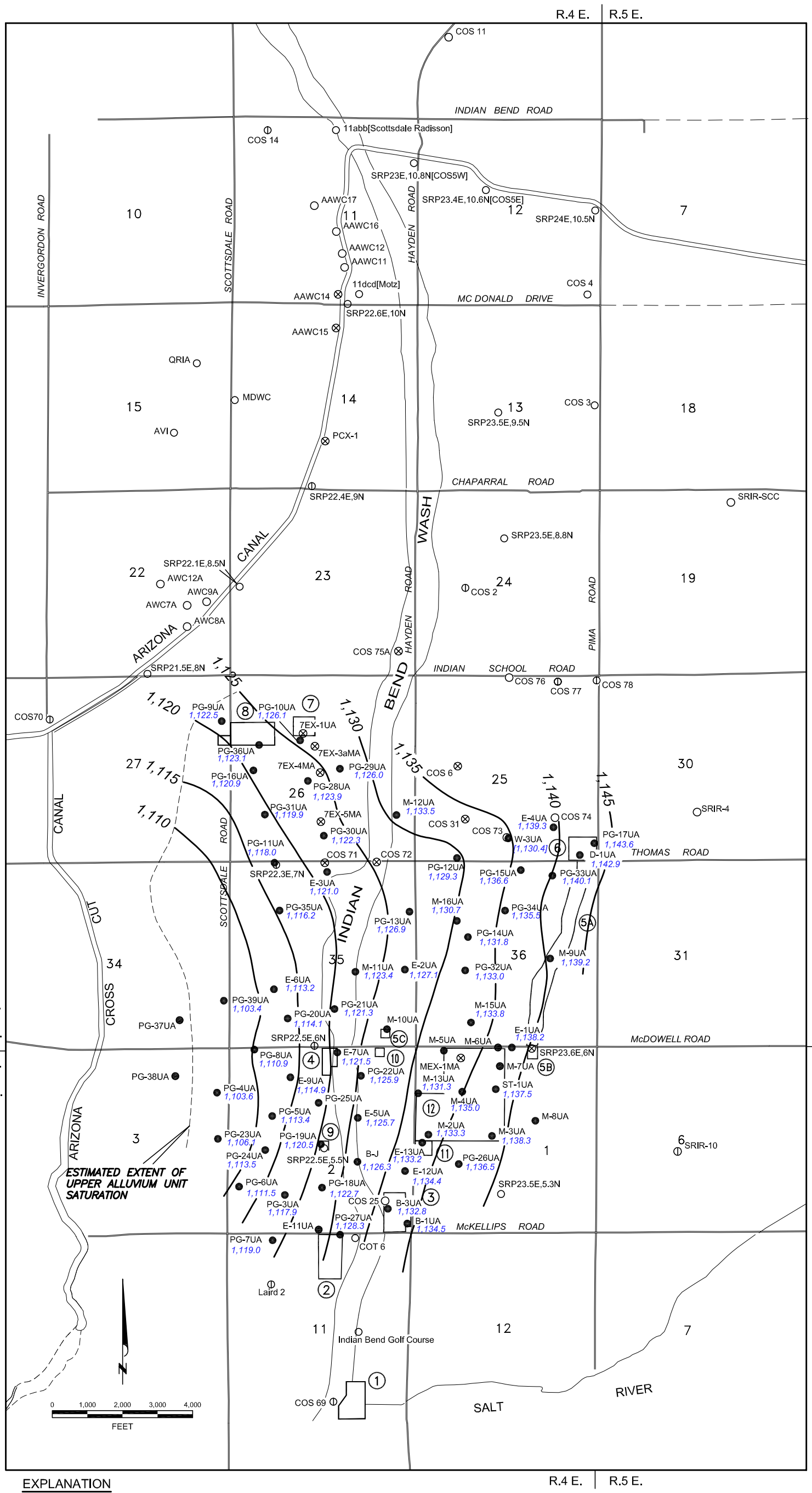
NORTH INDIAN BEND WASH AREA
MARICOPA COUNTY, ARIZONA

GROUNDWATER LEVEL CONTOURS
LOWER ALLUVIUM UNIT
APRIL 2006

North Indian Bend Wash Superfund Site 2007

FIGURE 4

366.20\WL-2006\LAU-wl-Apr2006\27Feb2007



EXPLANATION

● PG-7UA 1,119.0	LOWER ALLUVIUM UNIT MONITOR WELL LOCATION AND IDENTIFIER GROUNDWATER LEVEL ALTITUDE, feet above mean sea level [ ] INDICATES ANOMALOUS DATA
⊗ COS75A	EXTRACTION WATER WELL LOCATION AND IDENTIFIER
○ COS 74	PRODUCTION WATER WELL LOCATION AND IDENTIFIER
⦶ SRP22.5E,6N	INACTIVE PRODUCTION WATER WELL LOCATION AND IDENTIFIER
— 1,120 —	GROUNDWATER LEVEL ALTITUDE CONTOUR, feet above mean sea level

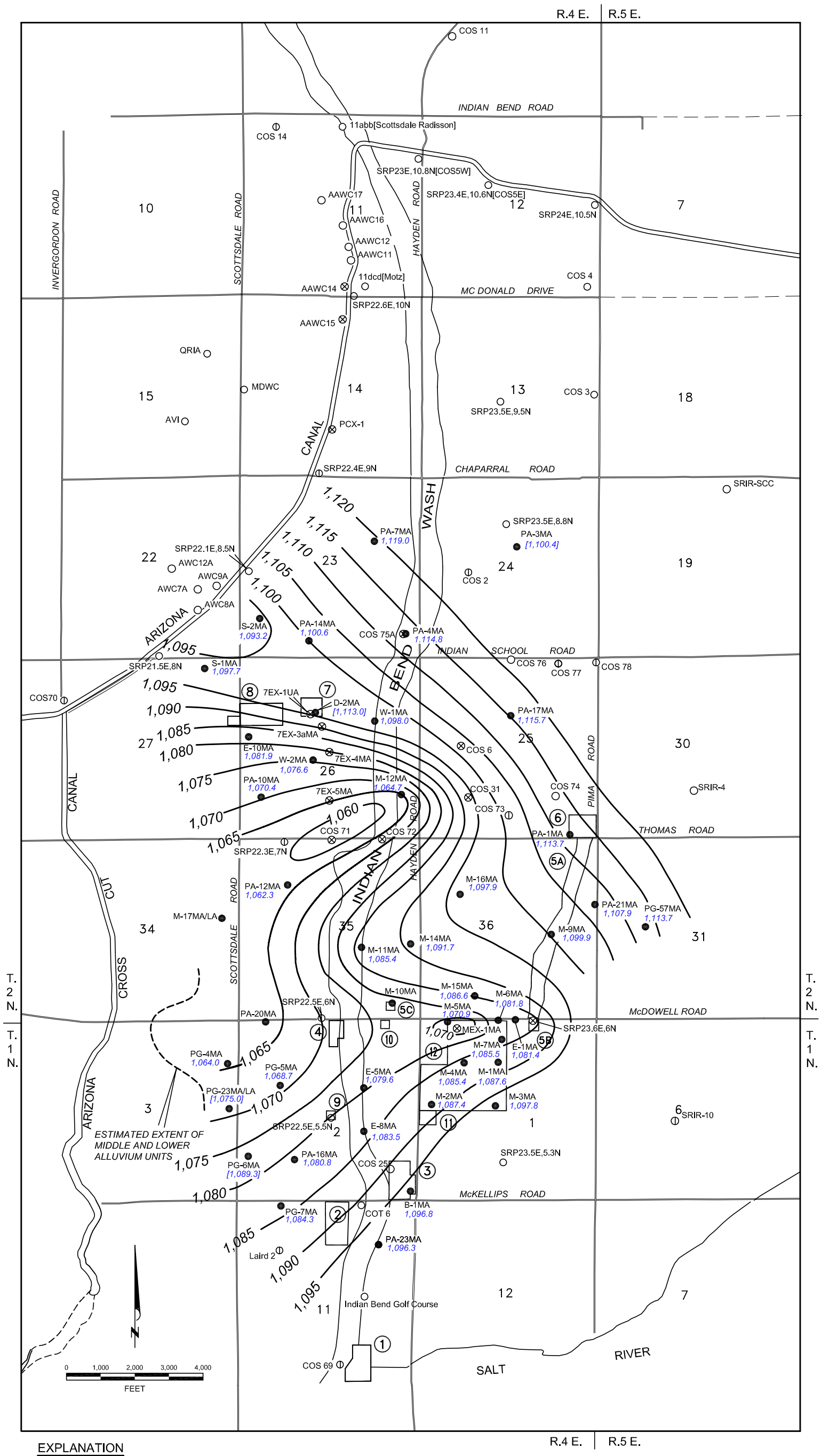
366.20\WL-2006\UAU-wl-Octl2006\22Feb2007 NAD83 State Plane

NORTH INDIAN BEND WASH AREA
MARICOPA COUNTY, ARIZONA

GROUNDWATER LEVEL CONTOURS
UPPER ALLUVIUM UNIT
OCTOBER 2006

North Indian Bend Wash Superfund Site 2007

FIGURE 5



EXPLANATION

PG-5MA 1,068.7	MIDDLE ALLUVIUM UNIT MONITOR WELL LOCATION AND IDENTIFIER
	GROUNDWATER LEVEL ALTITUDE, feet above mean sea level [ ] INDICATES ANOMALOUS DATA
COS75A	EXTRACTION WATER WELL LOCATION AND IDENTIFIER
COS74	PRODUCTION WATER WELL LOCATION AND IDENTIFIER
SRP22.5E,6N	INACTIVE PRODUCTION WATER WELL LOCATION AND IDENTIFIER
	GROUNDWATER LEVEL ALTITUDE CONTOUR, feet above mean sea level

NORTH INDIAN BEND WASH AREA
MARICOPA COUNTY, ARIZONA

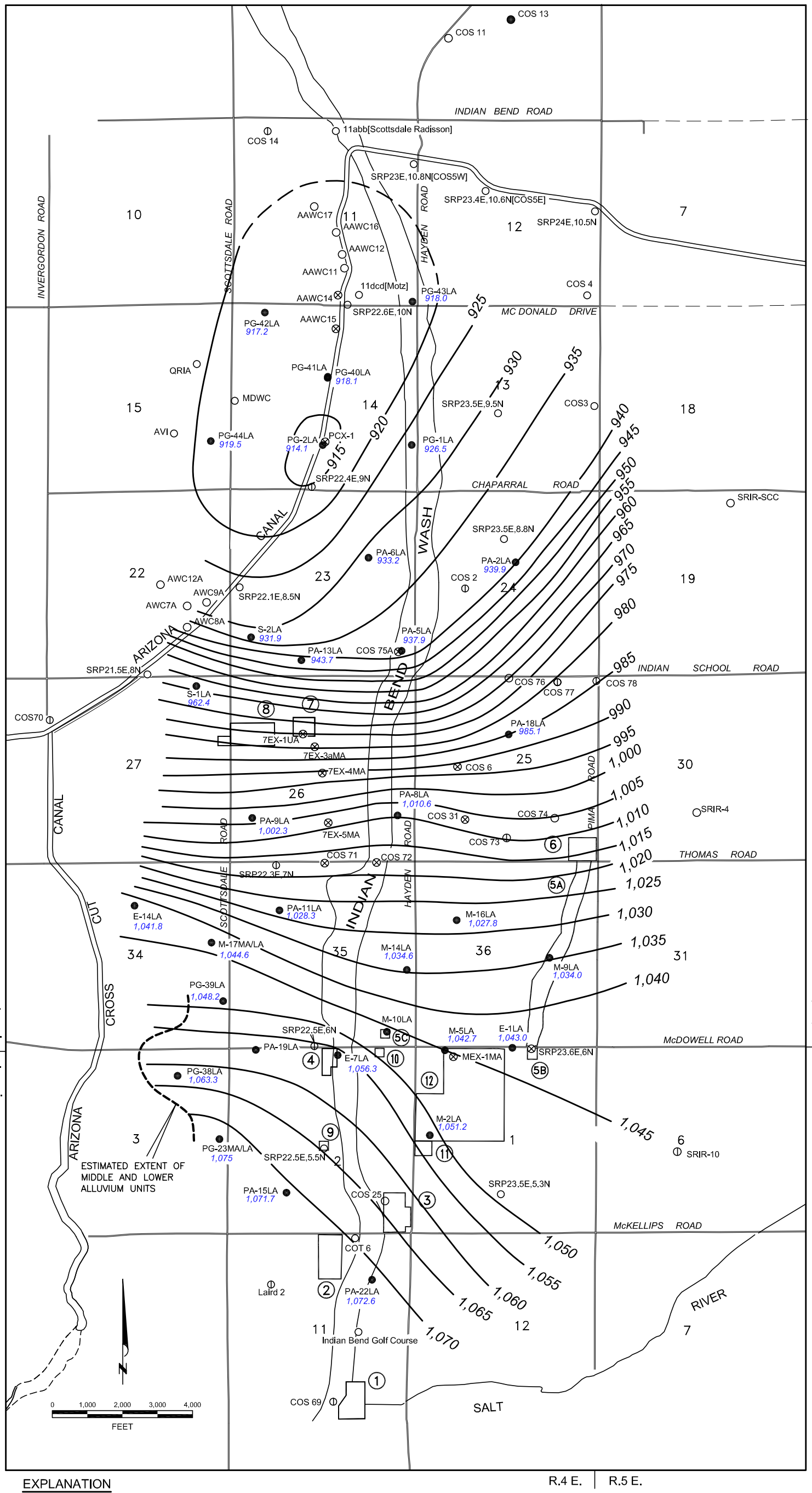
GROUNDWATER LEVEL CONTOURS
MIDDLE ALLUVIUM UNIT
OCTOBER 2006

North Indian Bend Wash Superfund Site

2007

FIGURE 6

366.20\wl-2006\MAU-wl Oct2006\27Feb2007 State Plane Nad83



EXPLANATION

● PA-15LA 1,071.7	LOWER ALLUVIUM UNIT MONITOR WELL LOCATION AND IDENTIFIER
	GROUNDWATER LEVEL ALTITUDE, feet above mean sea level
	( ) Denotes adjusted water level based on change observed in adjacent wells
⊗ COS75A	EXTRACTION WATER WELL LOCATION AND IDENTIFIER
○ COS 74	PRODUCTION WATER WELL LOCATION AND IDENTIFIER
⦶ SRP22.5E,6N	INACTIVE PRODUCTION WATER WELL LOCATION AND IDENTIFIER
— 1,050 —	GROUNDWATER LEVEL ALTITUDE CONTOUR, feet above mean sea level

NORTH INDIAN BEND WASH AREA
MARICOPA COUNTY, ARIZONA

GROUNDWATER LEVEL CONTOURS
LOWER ALLUVIUM UNIT
OCTOBER 2006

North Indian Bend Wash Superfund Site

2007

FIGURE 7

366.20\WL-2006\LAU-wl-Oct2006\23Feb2007

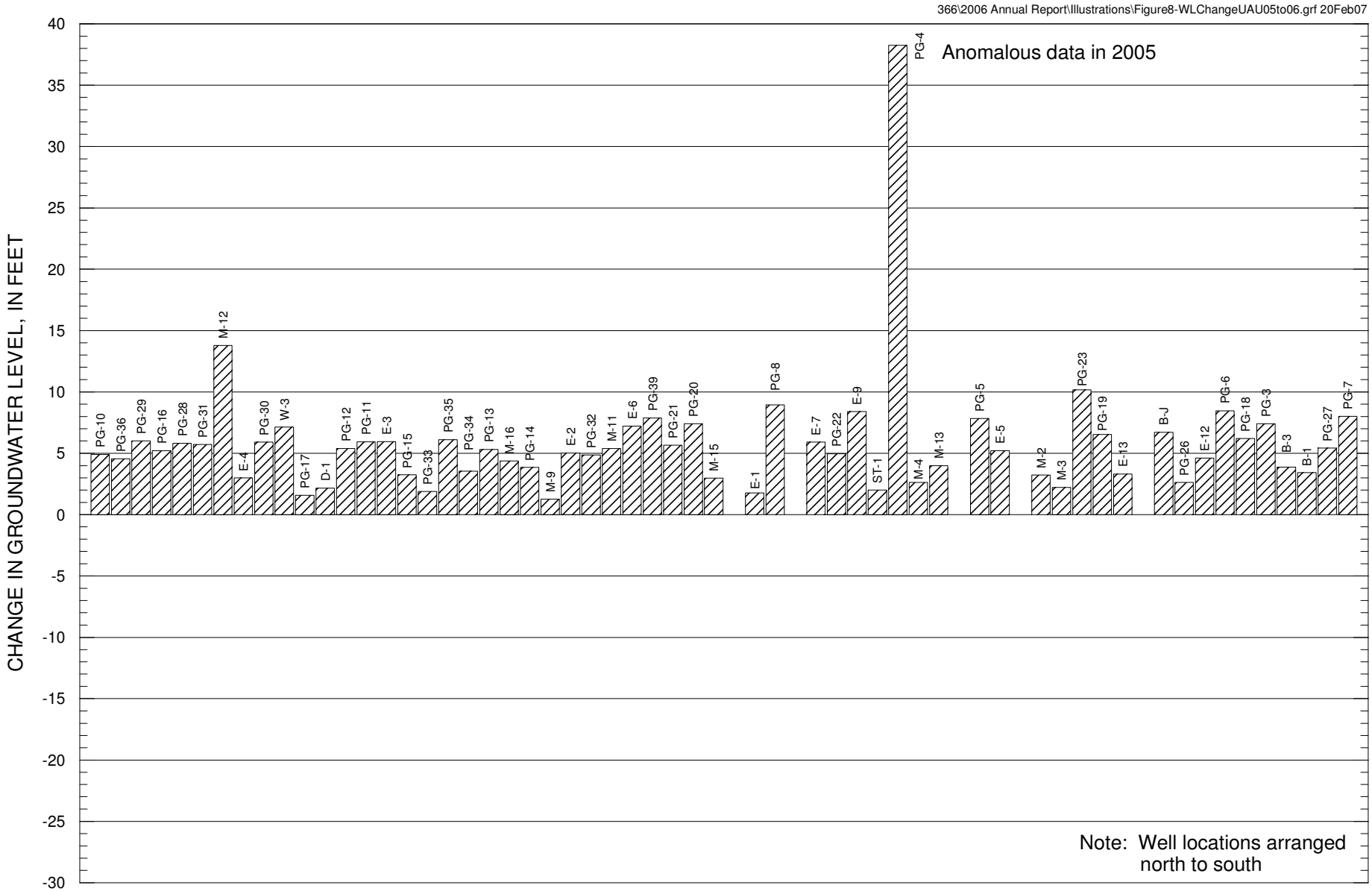


FIGURE 8. CHANGE IN UPPER ALLUVIUM UNIT GROUNDWATER LEVEL, OCTOBER 2005 TO OCTOBER 2006

North Indian Bend Wash Superfund Site

366\2006 Annual Report\Illustrations\Figure9-WLChangeMAU05to06.grf 20Feb07

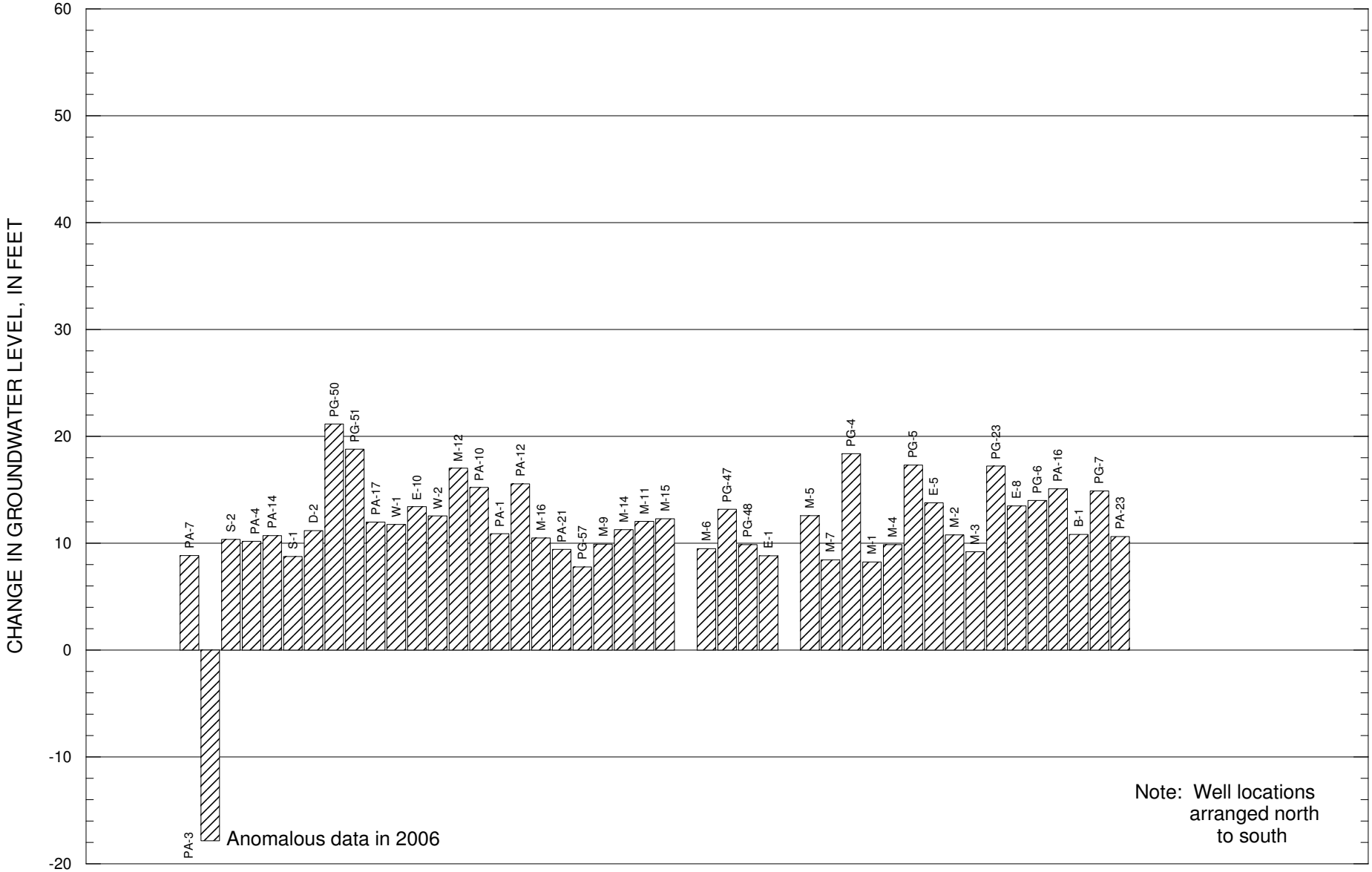


FIGURE 9. CHANGE IN MIDDLE ALLUVIUM UNIT GROUNDWATER LEVEL, OCTOBER 2005 TO OCTOBER 2006

North Indian Bend Wash Superfund Site

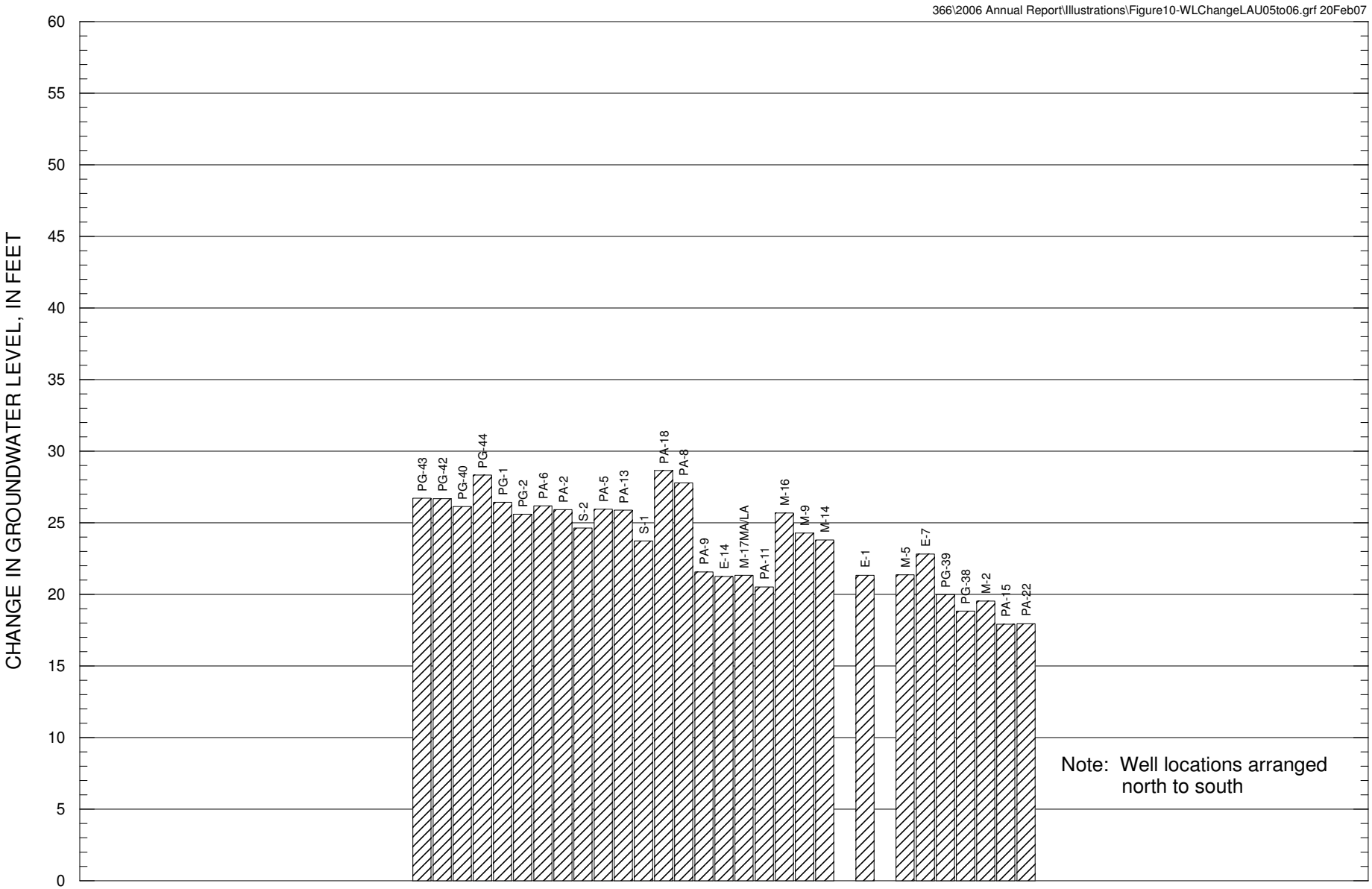
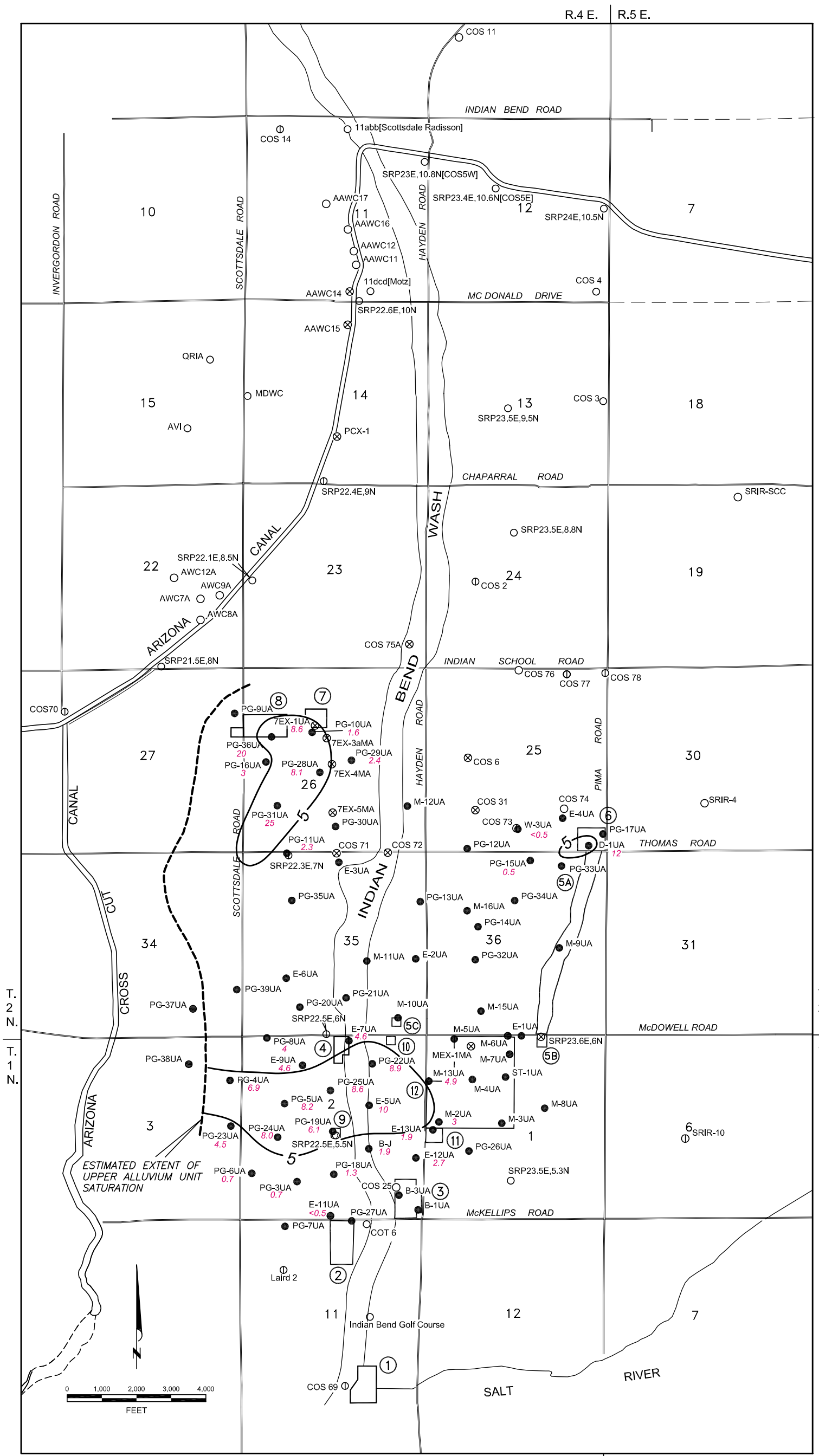


FIGURE 10. CHANGE IN LOWER ALLUVIUM UNIT GROUNDWATER LEVEL, OCTOBER 2005 TO OCTOBER 2006

North Indian Bend Wash Superfund Site



EXPLANATION

M-2UA	UPPER ALLUVIUM UNIT MONITOR WELL LOCATION AND IDENTIFIER
3	CONCENTRATION OF TCE; micrograms per liter
COS75A	EXTRACTION WATER WELL LOCATION AND IDENTIFIER
COS74	PRODUCTION WATER WELL LOCATION AND IDENTIFIER
SRP22.5E,6N	INACTIVE PRODUCTION WATER WELL LOCATION AND IDENTIFIER
— 5 —	TCE CONCENTRATION CONTOUR, in micrograms per liter

NORTH INDIAN BEND WASH AREA
MARICOPA COUNTY, ARIZONA

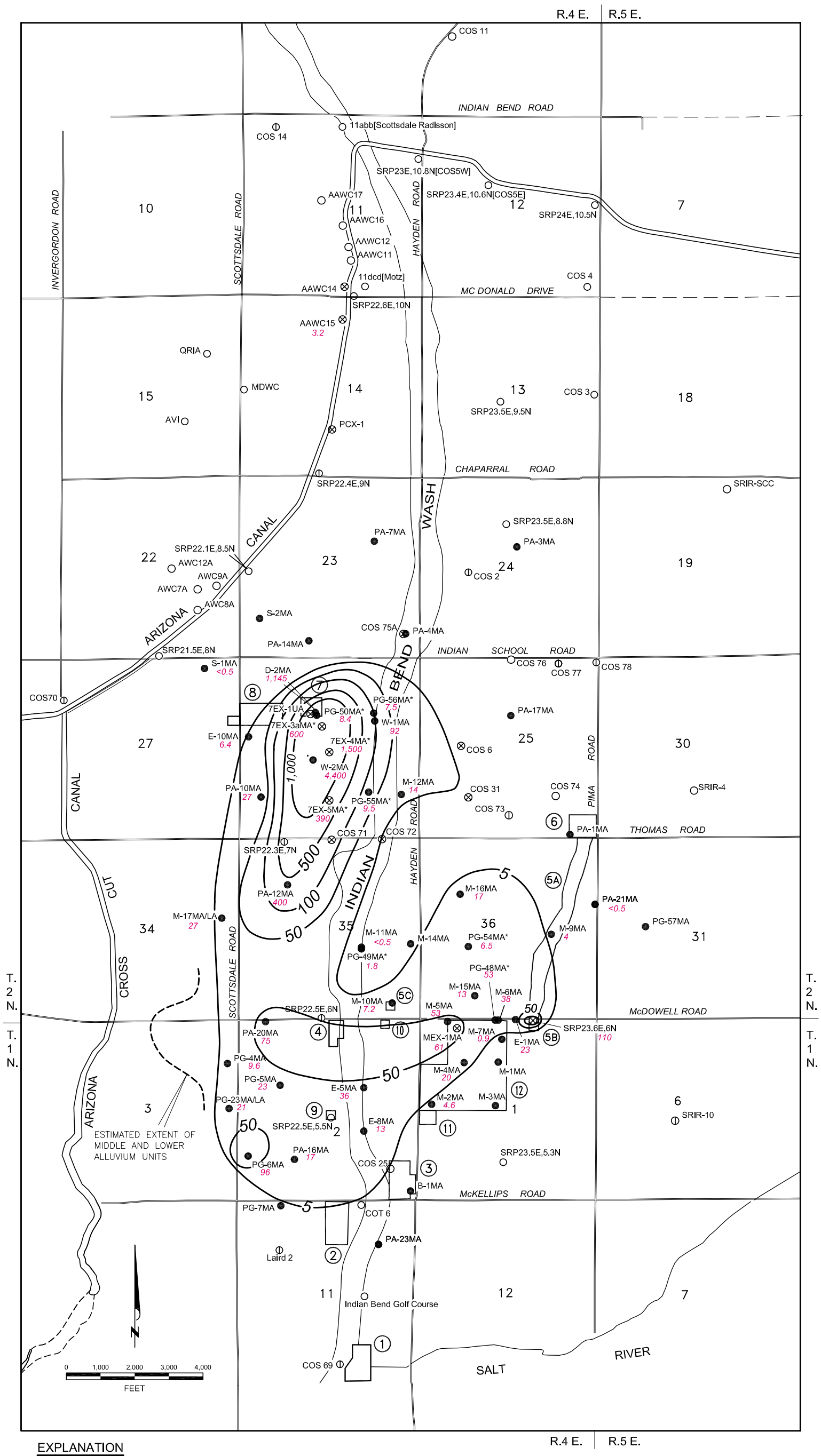
CONCENTRATION OF TCE IN UPPER ALLUVIUM UNIT WELLS OCTOBER 2006

North Indian Bend Wash Superfund Site

2007

FIGURE 11

366.20\TCE-2006\UTCE-10-2006\27Feb2007 State Plane Nad83



EXPLANATION

● PG-6MA	MIDDLE ALLUVIUM UNIT MONITOR WELL LOCATION AND IDENTIFIER *Indicates completion inconsistent with other wells; TCE value not used for contouring
96	CONCENTRATION OF TCE; micrograms per liter
⊗ COS75A	EXTRACTION WATER WELL LOCATION AND IDENTIFIER
○ COS74	PRODUCTION WATER WELL LOCATION AND IDENTIFIER
⦶ SRP22.5E,6N	INACTIVE PRODUCTION WATER WELL LOCATION AND IDENTIFIER
—50—	TCE CONCENTRATION CONTOUR, in micrograms per liter

NORTH INDIAN BEND WASH AREA
MARICOPA COUNTY, ARIZONA

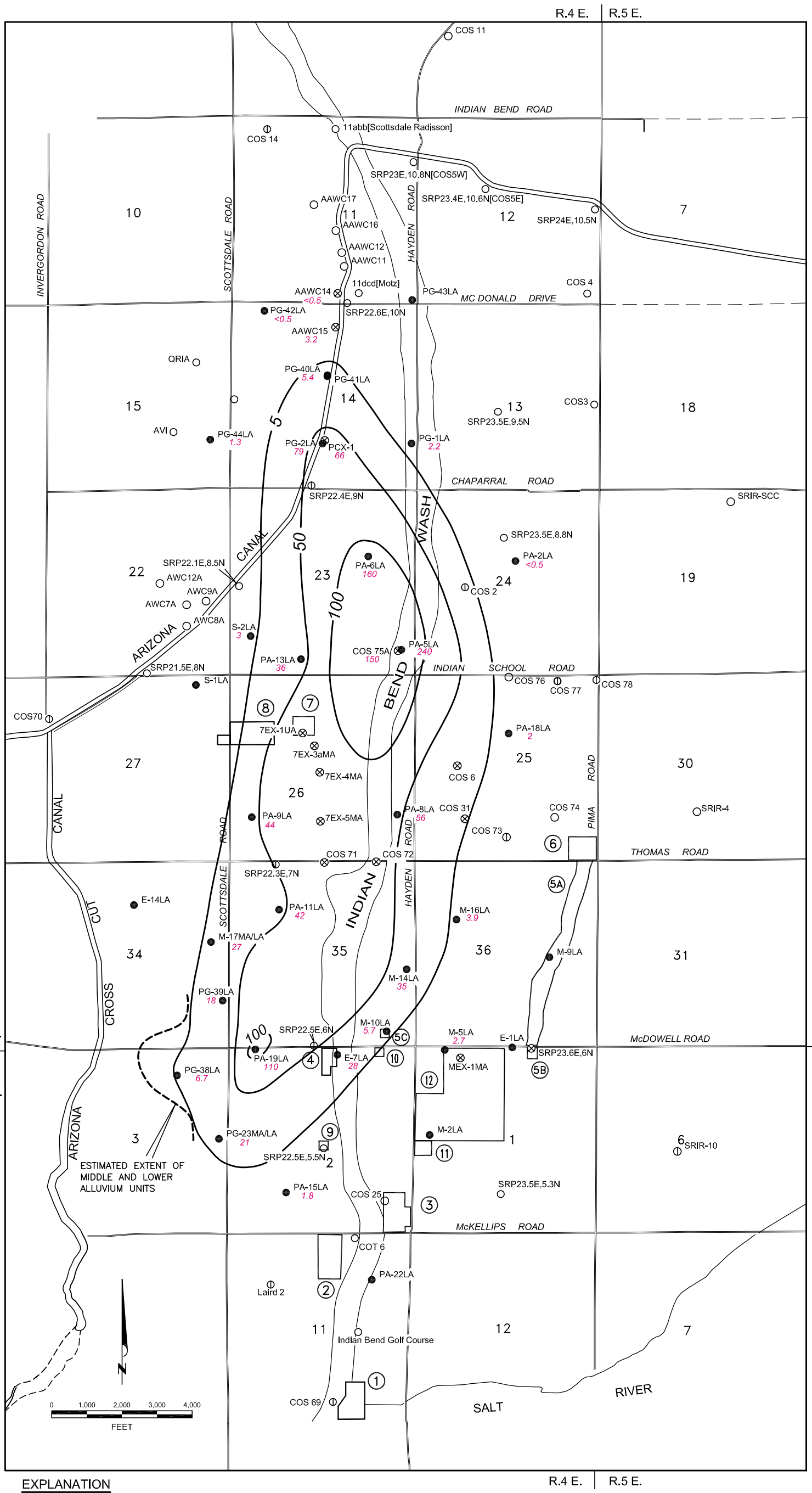
CONCENTRATION OF TCE IN MIDDLE ALLUVIUM UNIT WELLS OCTOBER 2006

2007

North Indian Bend Wash Superfund Site

FIGURE 12

366.20\TCE-2006\MTCE-10-2006\01Mar2007 State Plane Nad83



EXPLANATION

M-14LA ● 35	LOWER ALLUVIUM UNIT MONITOR WELL LOCATION AND IDENTIFIER CONCENTRATION OF TCE; micrograms per liter
⊗ COS75A	EXTRACTION WATER WELL LOCATION AND IDENTIFIER
○ COS74	PRODUCTION WATER WELL LOCATION AND IDENTIFIER
⦶ SRP22.5E,6N	INACTIVE PRODUCTION WATER WELL LOCATION AND IDENTIFIER
—— 5 ——	TCE CONCENTRATION CONTOUR, in micrograms per liter

R.4 E. | R.5 E.

NORTH INDIAN BEND WASH AREA
MARICOPA COUNTY, ARIZONA

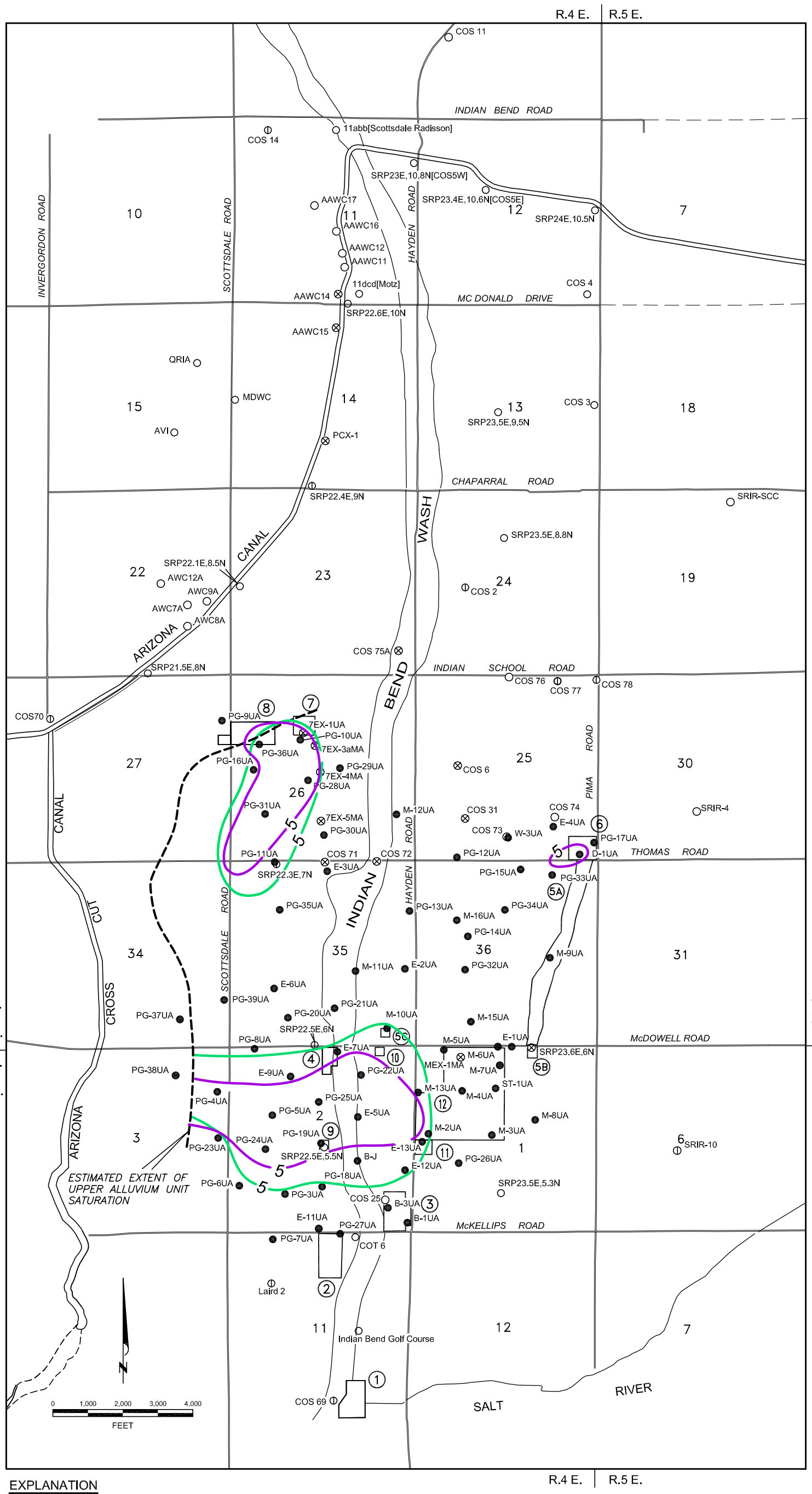
CONCENTRATION OF TCE IN LOWER ALLUVIUM UNIT WELLS OCTOBER 2006

2007

North Indian Bend Wash Superfund Site

FIGURE 13

366.20\TCE-2006\LTCE-10-2006\22Feb2007 State Plane Nad83



EXPLANATION

● M-2UA	UPPER ALLUVIUM UNIT MONITOR WELL LOCATION AND IDENTIFIER
⊗ COS75A	EXTRACTION WATER WELL LOCATION AND IDENTIFIER
○ COS74	PRODUCTION WATER WELL LOCATION AND IDENTIFIER
⦶ SRP22.5E,6N	INACTIVE PRODUCTION WATER WELL LOCATION AND IDENTIFIER
—— 5 ——	TCE CONCENTRATION CONTOUR, in micrograms per liter (October 2001)
—— 5 ——	TCE CONCENTRATION CONTOUR, in micrograms per liter (October 2006)

NORTH INDIAN BEND WASH AREA
MARICOPA COUNTY, ARIZONA

CONCENTRATION OF TCE IN UPPER ALLUVIUM UNIT WELLS OCTOBER 2001-OCTOBER 2006

North Indian Bend Wash Superfund Site

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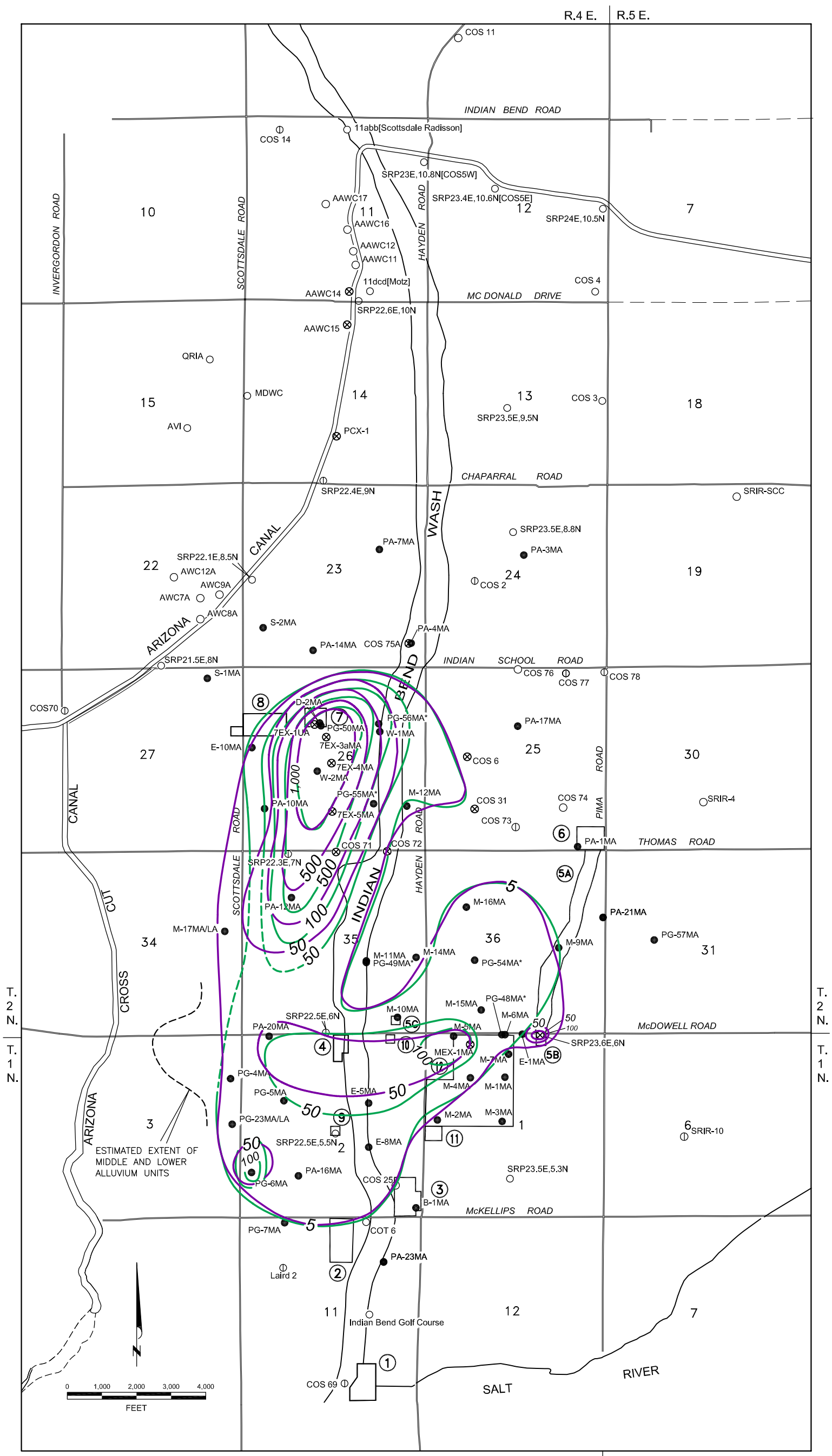
FIGURE 14

366.20\TCE-2006\UTCE-10-2001-2006\28Feb2007



EXPLANATION

PG-6MA ●	MIDDLE ALLUVIUM UNIT MONITOR WELL LOCATION AND IDENTIFIER * Indicates Lower Middle Alluvium Unit completion; TCE value not used for contouring
⊗ COS75A	EXTRACTION WATER WELL LOCATION AND IDENTIFIER
○ COS74	PRODUCTION WATER WELL LOCATION AND IDENTIFIER
⦶ SRP22.5E,6N	INACTIVE PRODUCTION WATER WELL LOCATION AND IDENTIFIER
— 50 —	TCE CONCENTRATION CONTOUR, in micrograms per liter (October 2001) — — — Indicates contour re-evaluated based on new data for well M-17MA/LA
— 50 —	TCE CONCENTRATION CONTOUR, in micrograms per liter (October 2006)

NORTH INDIAN BEND WASH AREA
MARICOPA COUNTY, ARIZONA

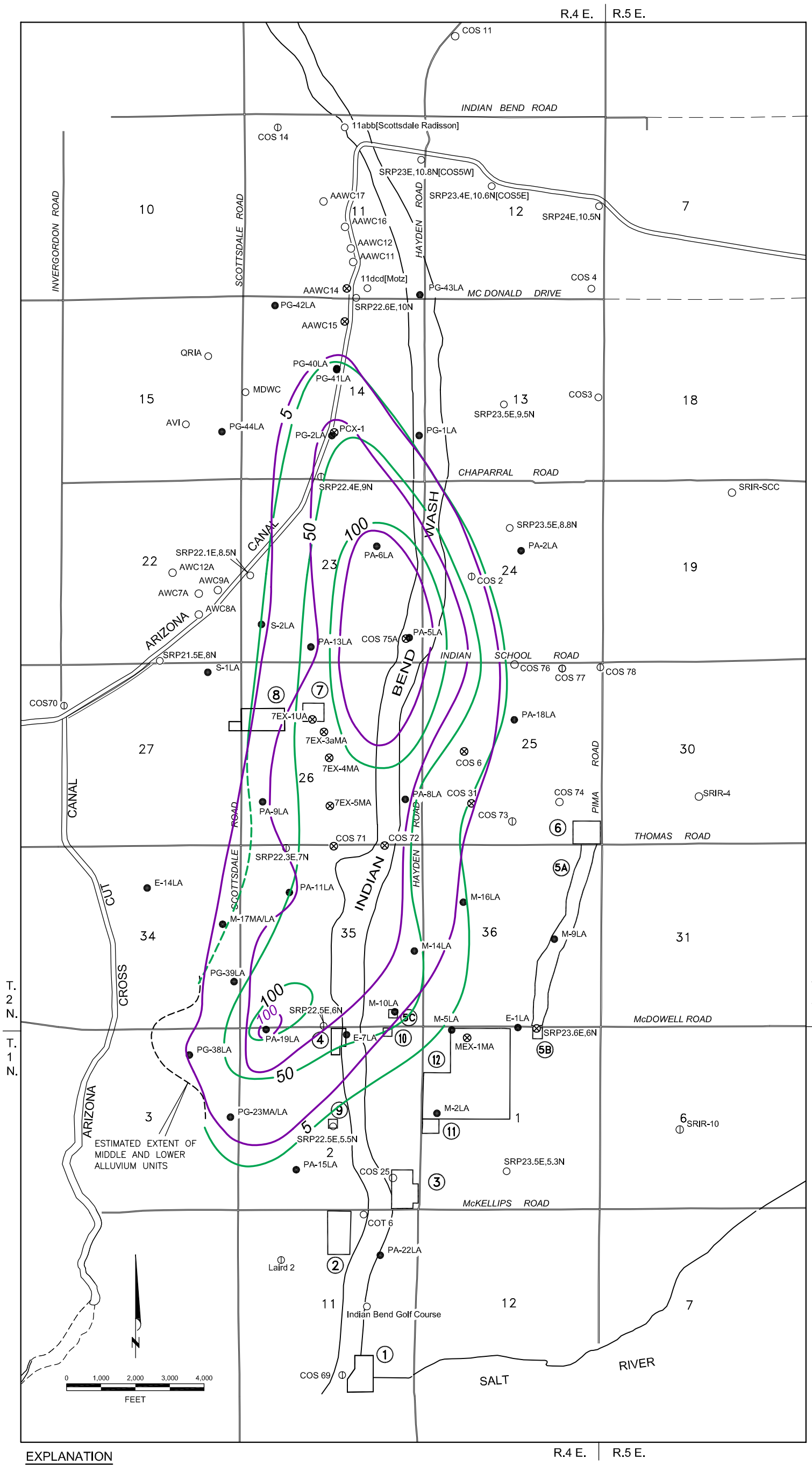
CONCENTRATION OF TCE IN MIDDLE ALLUVIUM UNIT WELLS OCTOBER 2001-OCTOBER 2006

2007

North Indian Bend Wash Superfund Site

FIGURE 15

366.20\TCE-2006\MTCE-10-2001-2006\02Mar2007



EXPLANATION

● M-14LA	LOWER ALLUVIUM UNIT MONITOR WELL LOCATION AND IDENTIFIER
⊗ COS75A	EXTRACTION WATER WELL LOCATION AND IDENTIFIER
○ COS74	PRODUCTION WATER WELL LOCATION AND IDENTIFIER
⦶ SRP22.5E,6N	INACTIVE PRODUCTION WATER WELL LOCATION AND IDENTIFIER
—50—	TCE CONCENTRATION CONTOUR, in micrograms per liter (October 2001) — — — Indicates contour re-evaluated based on new data for well M-17MA/LA
—50—	TCE CONCENTRATION CONTOUR, in micrograms per liter (October 2006)

NORTH INDIAN BEND WASH AREA
MARICOPA COUNTY, ARIZONA

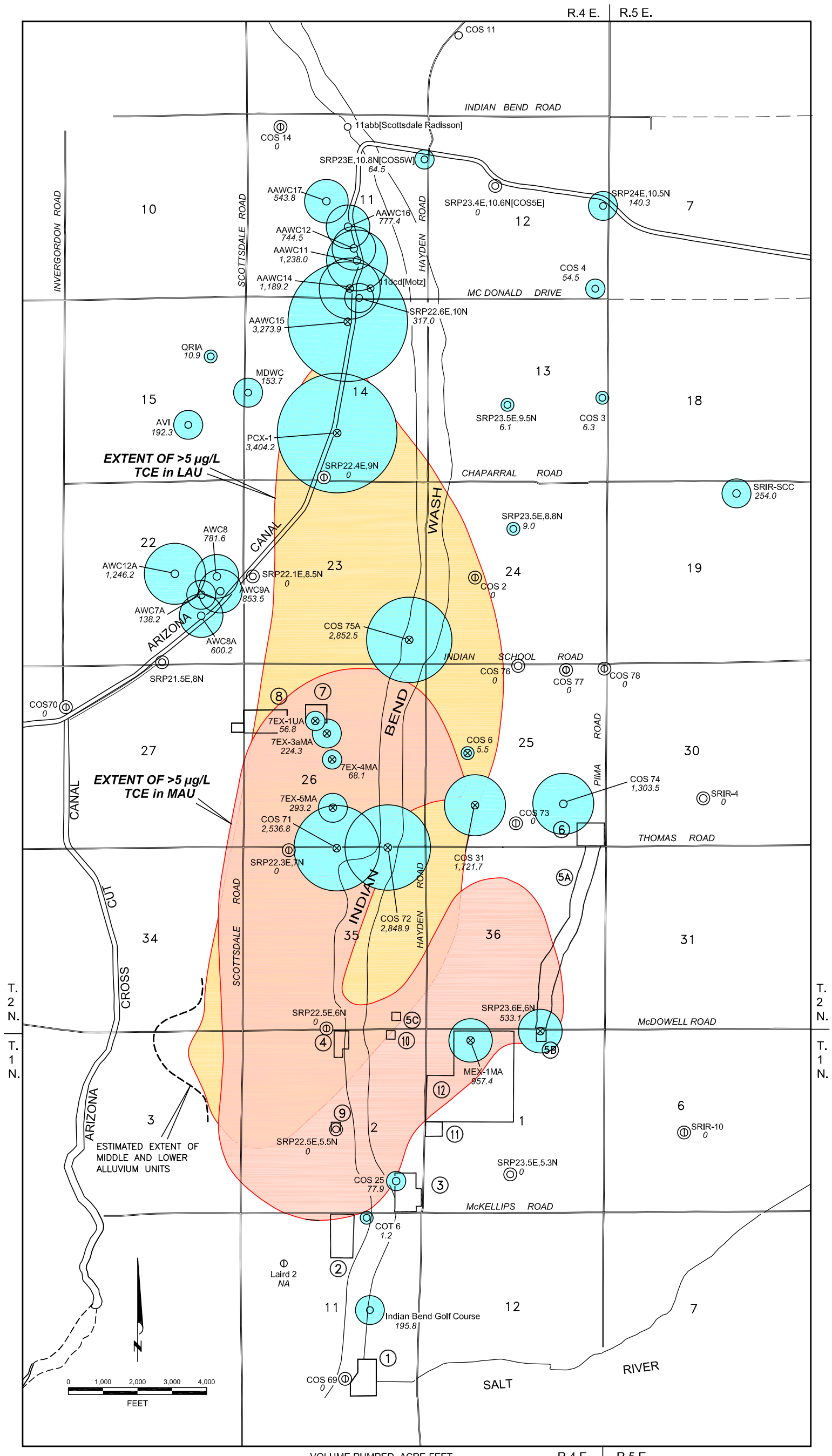
CONCENTRATION OF TCE IN LOWER ALLUVIUM UNIT WELLS OCTOBER 2001-OCTOBER 2006

North Indian Bend Wash Superfund Site

2007

FIGURE 16

366.20\TCE-2006\LTCE-10-2001-2006\26Feb2007



EXPLANATION

COS75A — EXTRACTION WATER WELL LOCATION AND IDENTIFIER

COS74 1,303.5 — PRODUCTION WATER WELL LOCATION AND IDENTIFIER; ANNUAL PRODUCTION FOR 2006, IN ACRE-FEET

SRP22.3E, 7N — INACTIVE PRODUCTION WATER WELL LOCATION AND IDENTIFIER

VOLUME PUMPED, ACRE-FEET

- 0
- >0 - 50
- 51 - 100
- 101 - 500
- 501 - 1,000
- 1,001 - 2,000
- 2,001 - 3000
- >3,001

NORTH INDIAN BEND WASH AREA
MARICOPA COUNTY, ARIZONA

ANNUAL WELL PRODUCTION 2006

2007

North Indian Bend Wash Superfund Site

FIGURE 17

366.20\2006-well production\02Mar2007

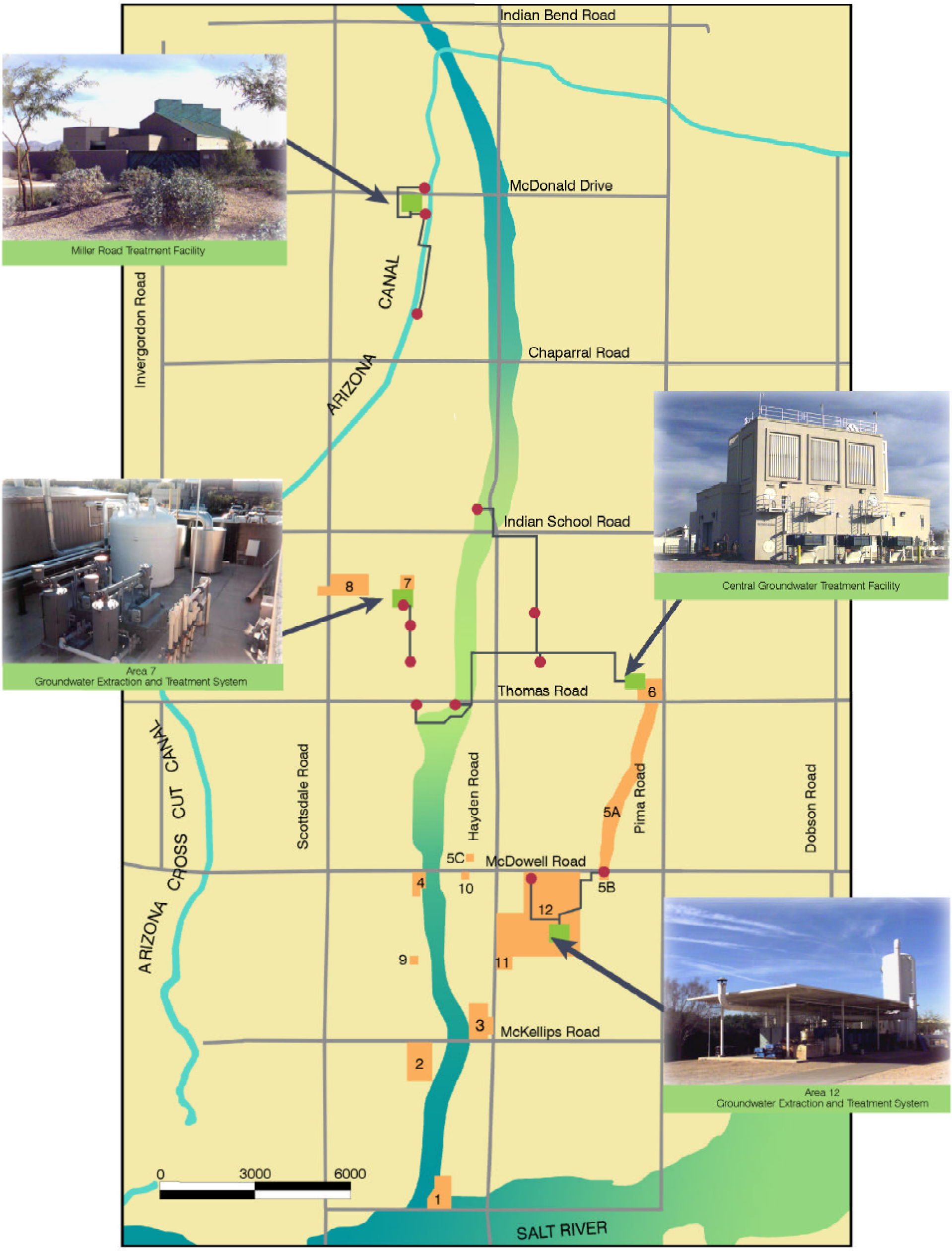
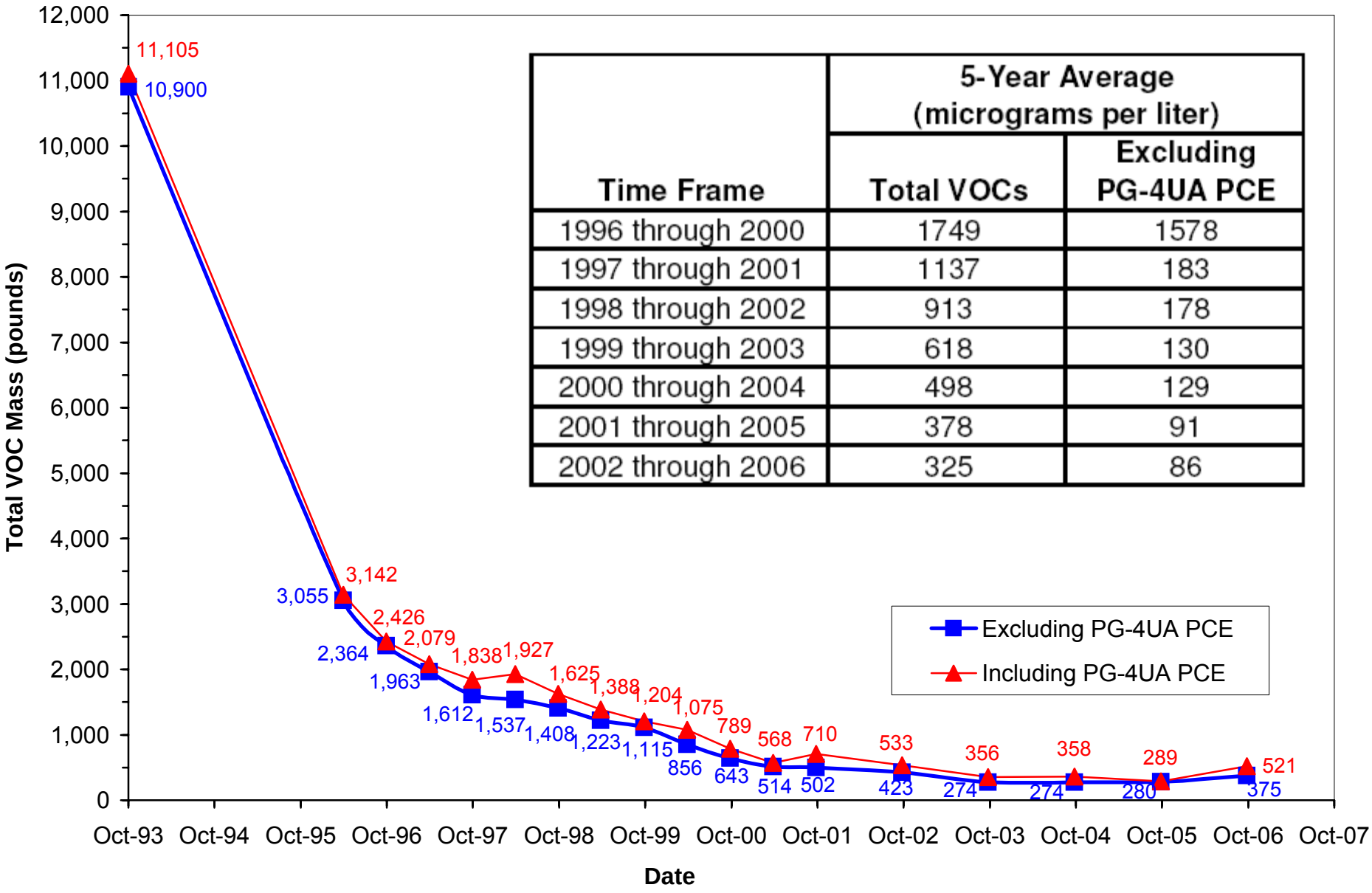


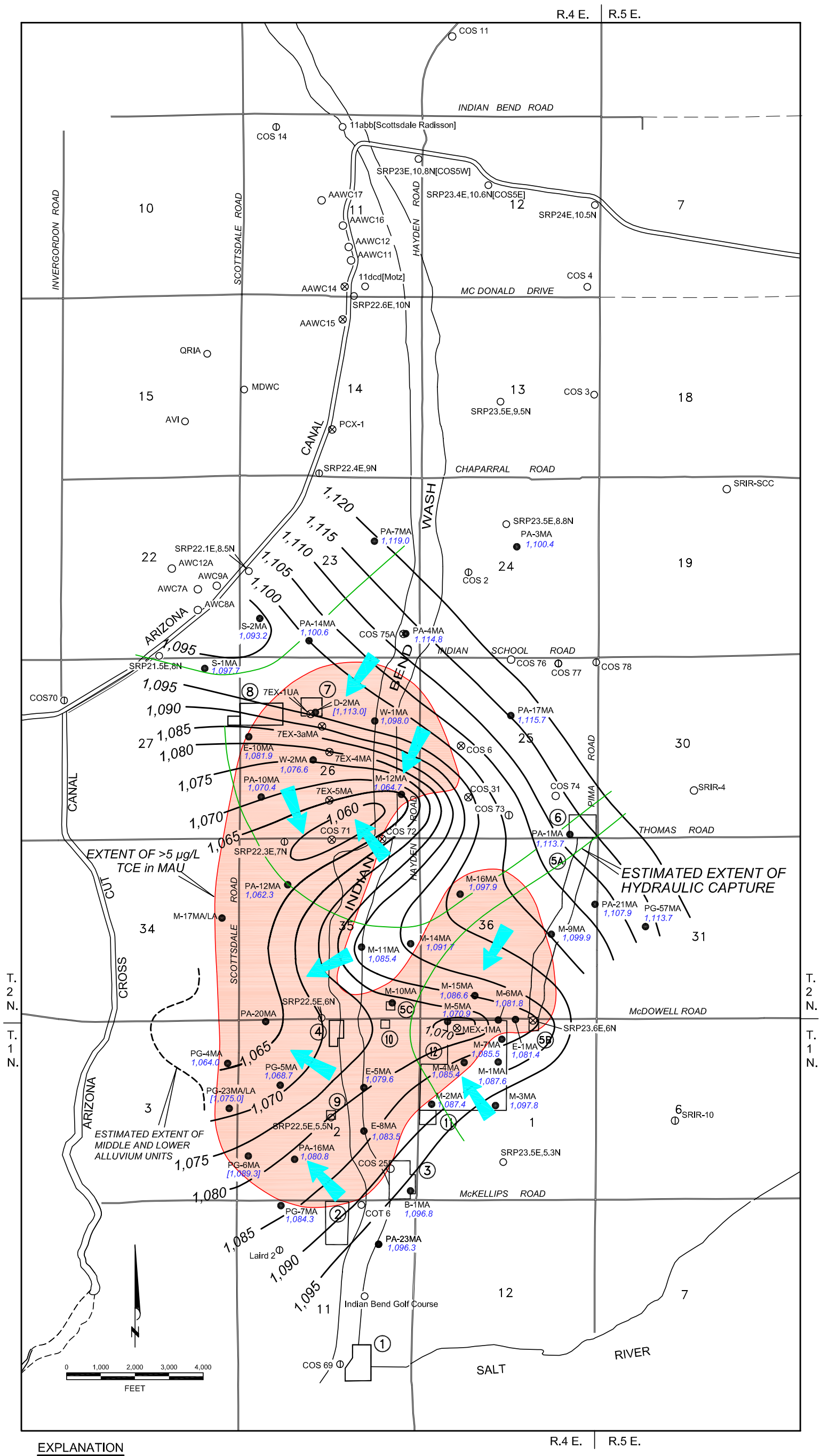
FIGURE 18. LOCATIONS FOR EXTRACTION WELLS, PIPELINES, AND TREATMENT FACILITIES, NIBW SUPERFUND SITE



Time Frame	5-Year Average (micrograms per liter)	
	Total VOCs	Excluding PG-4UA PCE
1996 through 2000	1749	1578
1997 through 2001	1137	183
1998 through 2002	913	178
1999 through 2003	618	130
2000 through 2004	498	129
2001 through 2005	378	91
2002 through 2006	325	86

FIGURE 19. TOTAL MASS OF VOLATILE ORGANIC COMPOUNDS IN SATURATED PORTION OF UPPER ALLUVIUM UNIT

North Indian Bend Wash Superfund Site



EXPLANATION

PG-5MA 1,068.7	MIDDLE ALLUVIUM UNIT MONITOR WELL LOCATION AND IDENTIFIER GROUNDWATER LEVEL ALTITUDE, feet above mean sea level [ ] INDICATES ANOMALOUS DATA
COS75A	EXTRACTION WATER WELL LOCATION AND IDENTIFIER
COS74	PRODUCTION WATER WELL LOCATION AND IDENTIFIER
SRP22.5E,6N	INACTIVE PRODUCTION WATER WELL LOCATION AND IDENTIFIER
1,090	GROUNDWATER LEVEL ALTITUDE CONTOUR, feet above mean sea level
	DIRECTION OF GROUNDWATER MOVEMENT

NORTH INDIAN BEND WASH AREA
MARICOPA COUNTY, ARIZONA

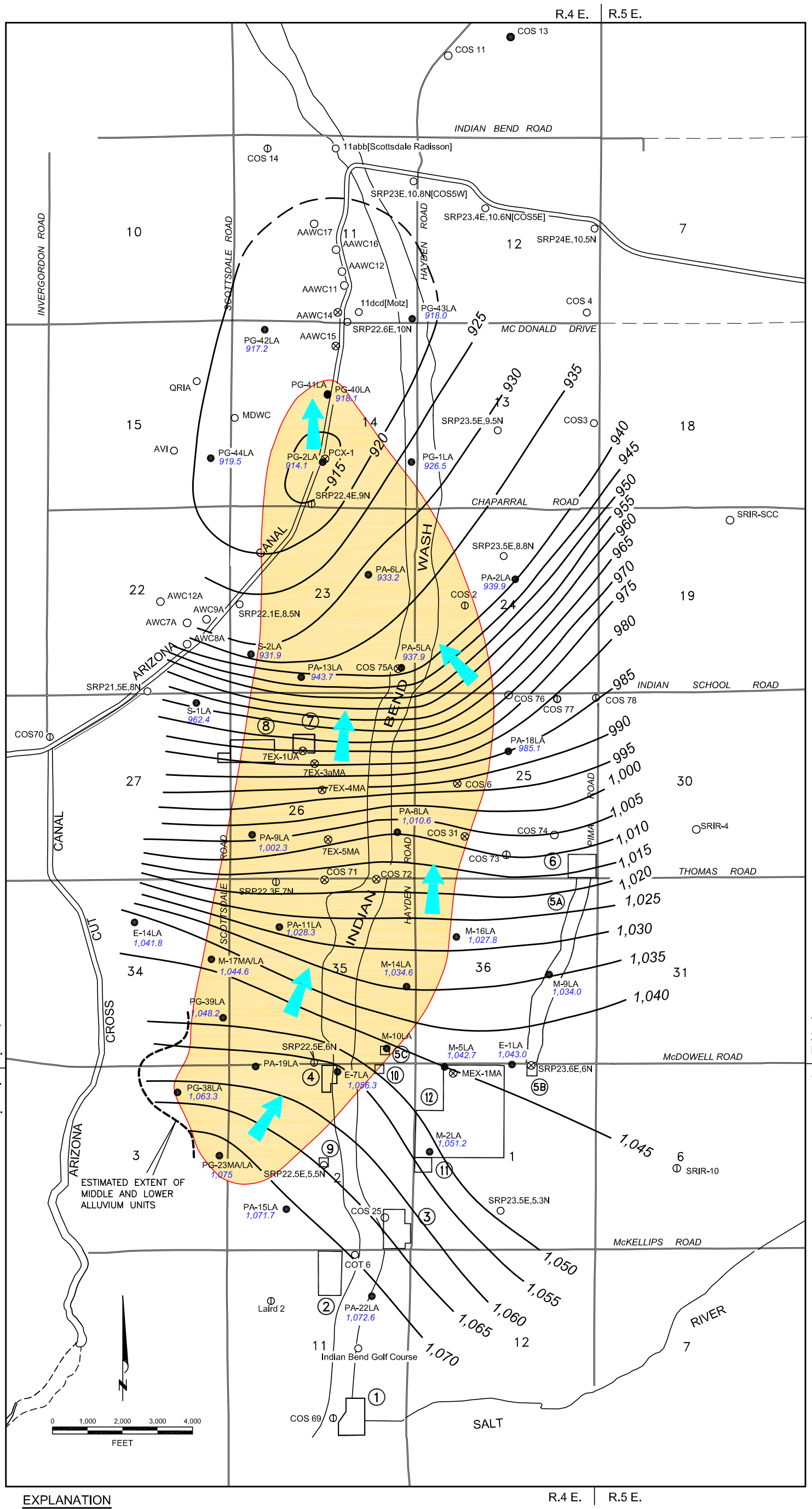
ESTIMATED CAPTURE OF ZONE OF MIDDLE ALLUVIUM UNIT CONTAMINATION, OCTOBER 2006

North Indian Bend Wash Superfund Site

2007

FIGURE 20

366.20\wl-2006\MAU-wl Oct2006_TCE_capture\01Mar2007 State Plane Nad83



NORTH INDIAN BEND WASH AREA
MARICOPA COUNTY, ARIZONA

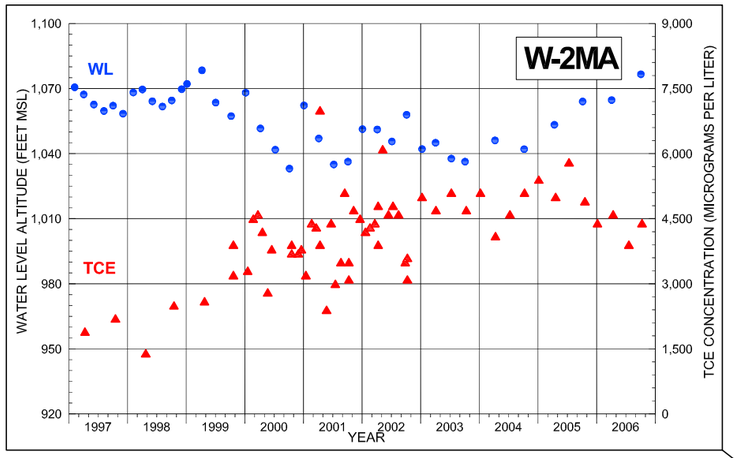
ESTIMATED CAPTURE OF ZONE OF LOWER ALLUVIUM UNIT CONTAMINATION, OCTOBER 2006

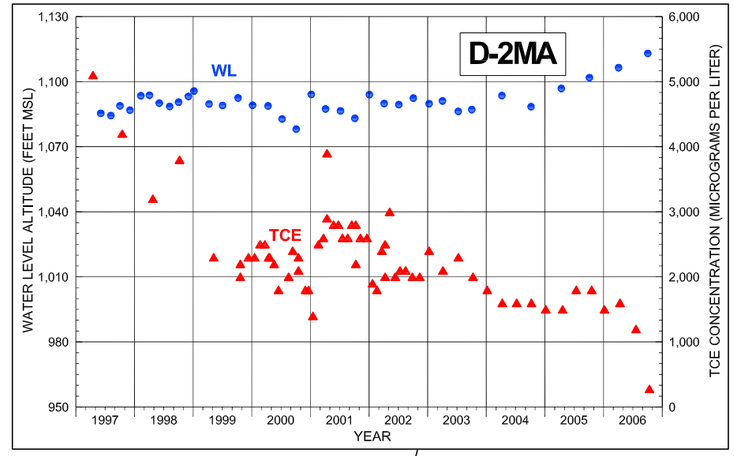
North Indian Bend Wash Superfund Site

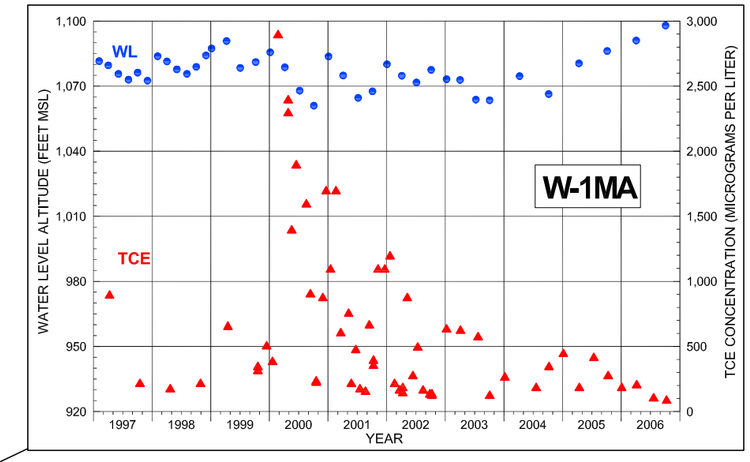
2007

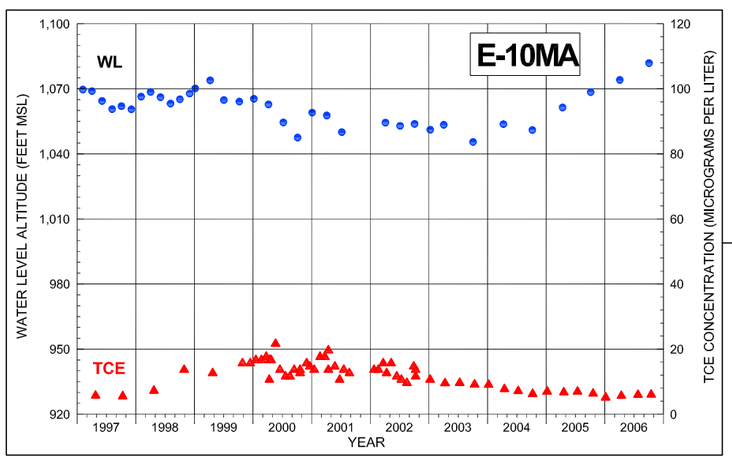
FIGURE 21

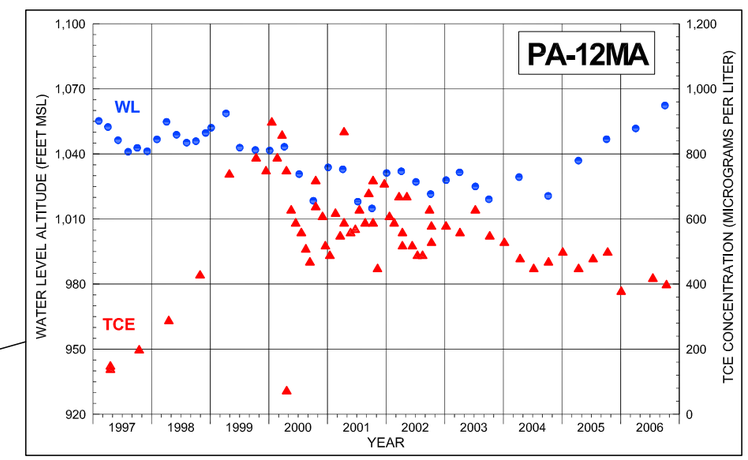
366.20\WL-2006\LAU-wl-Oct2006_tce_CAPTURE\01Mar2007

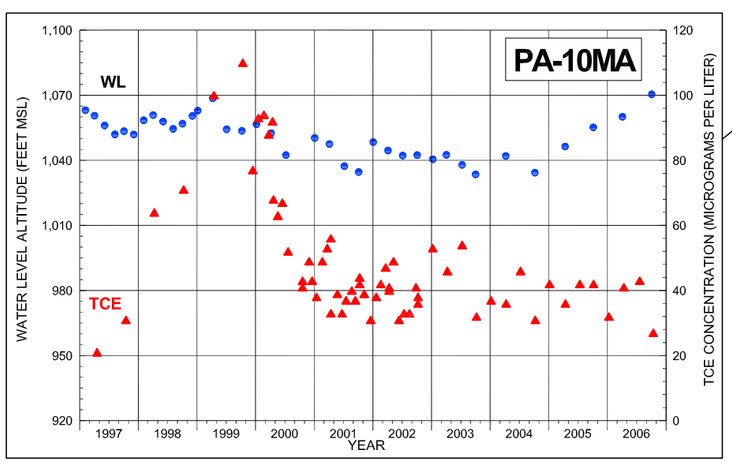


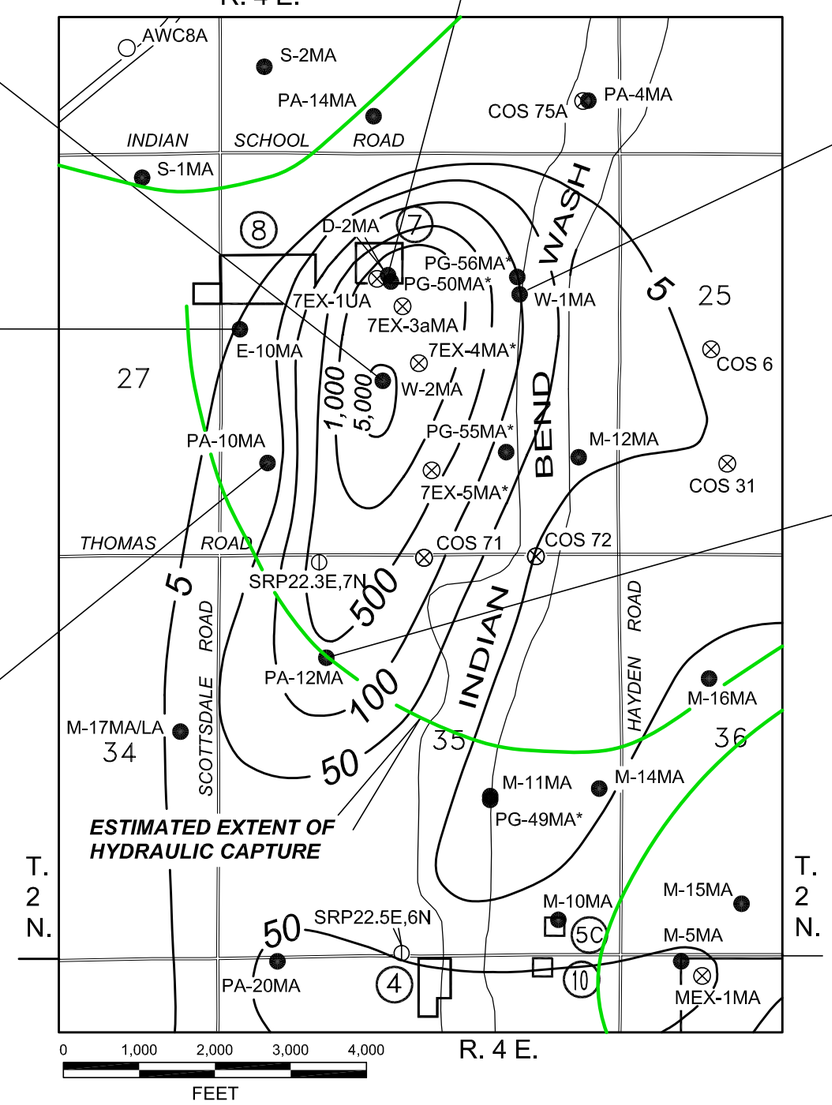












EXPLANATION

—— 50 —— TCE CONCENTRATION CONTOUR, in micrograms per liter

NORTH INDIAN BEND WASH AREA
MARICOPA COUNTY, ARIZONA

WATER LEVELS, TCE CONCENTRATIONS, AND ESTIMATED HYDRAULIC CAPTURE
UPPER MIDDLE ALLUVIUM UNIT
VICINITY OF AREA 7
OCTOBER 2006

North Indian Bend Wash Superfund Site

2007

FIGURE 22

366.20\TCE-2006\Area7-UMAU-hydrographs 10-2006\01Mar2007

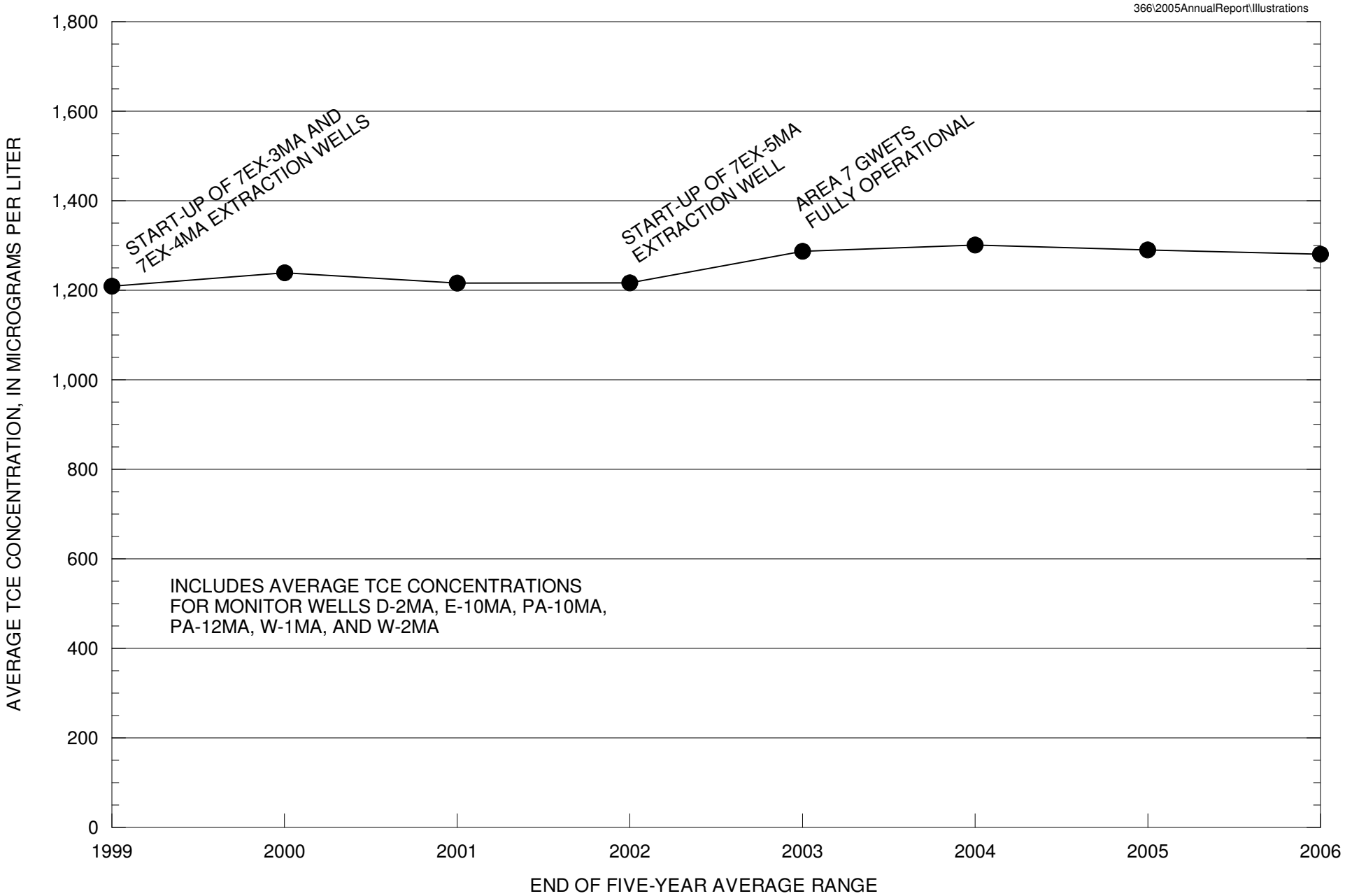
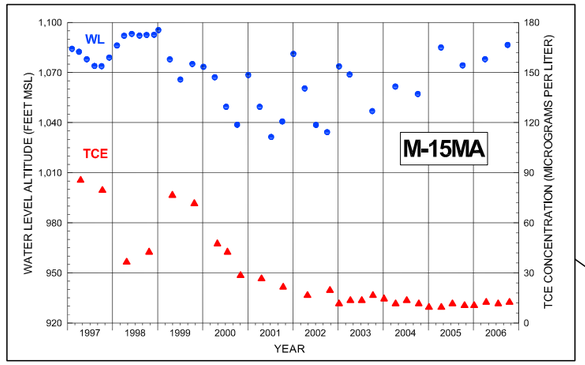
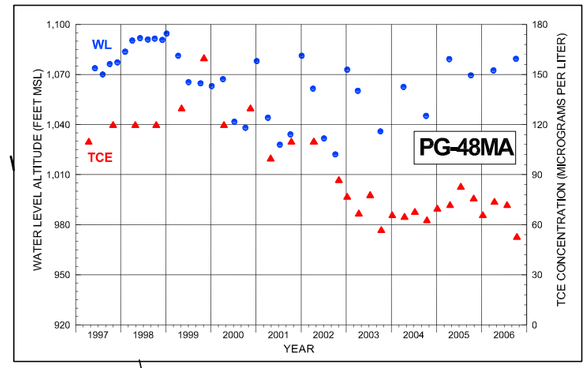
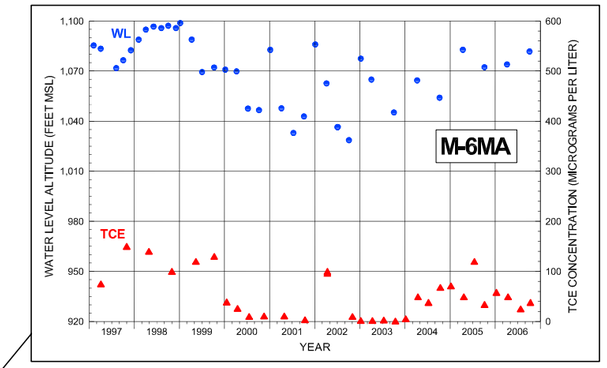


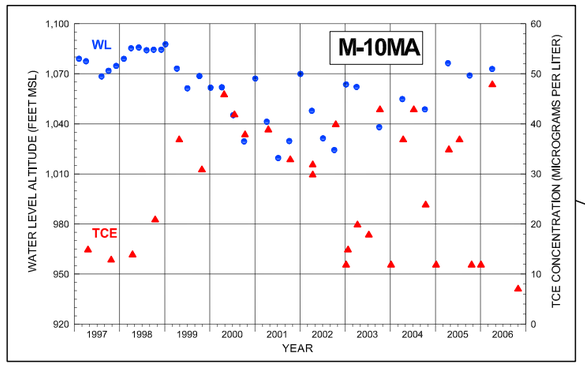
FIGURE 23. FIVE-YEAR RUNNING AVERAGE TCE CONCENTRATIONS UPPER MIDDLE ALLUVIUM UNIT VICINITY OF AREA 7

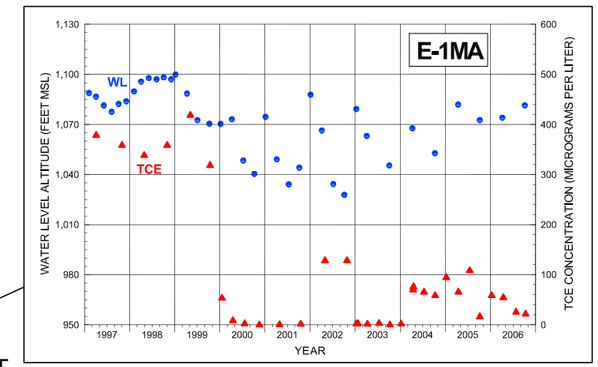
North Indian Bend Wash Superfund Site

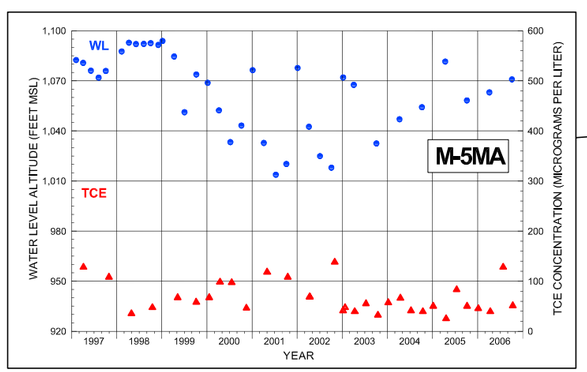


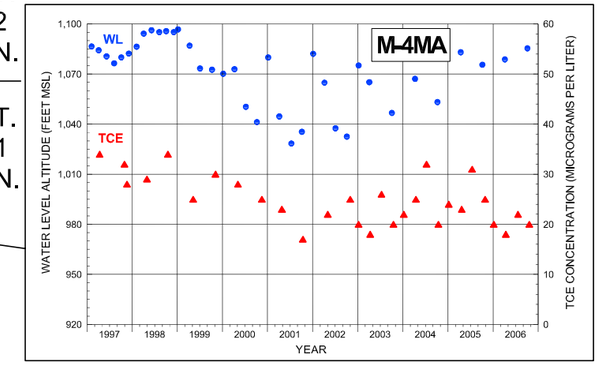


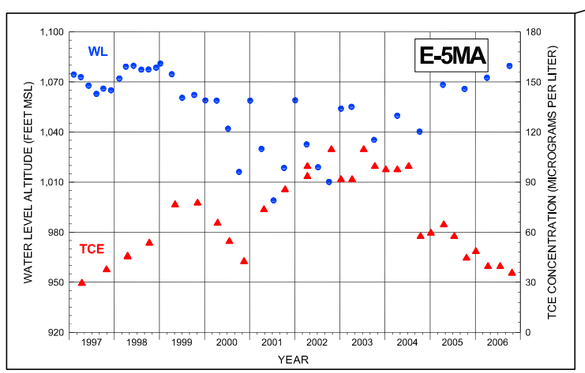


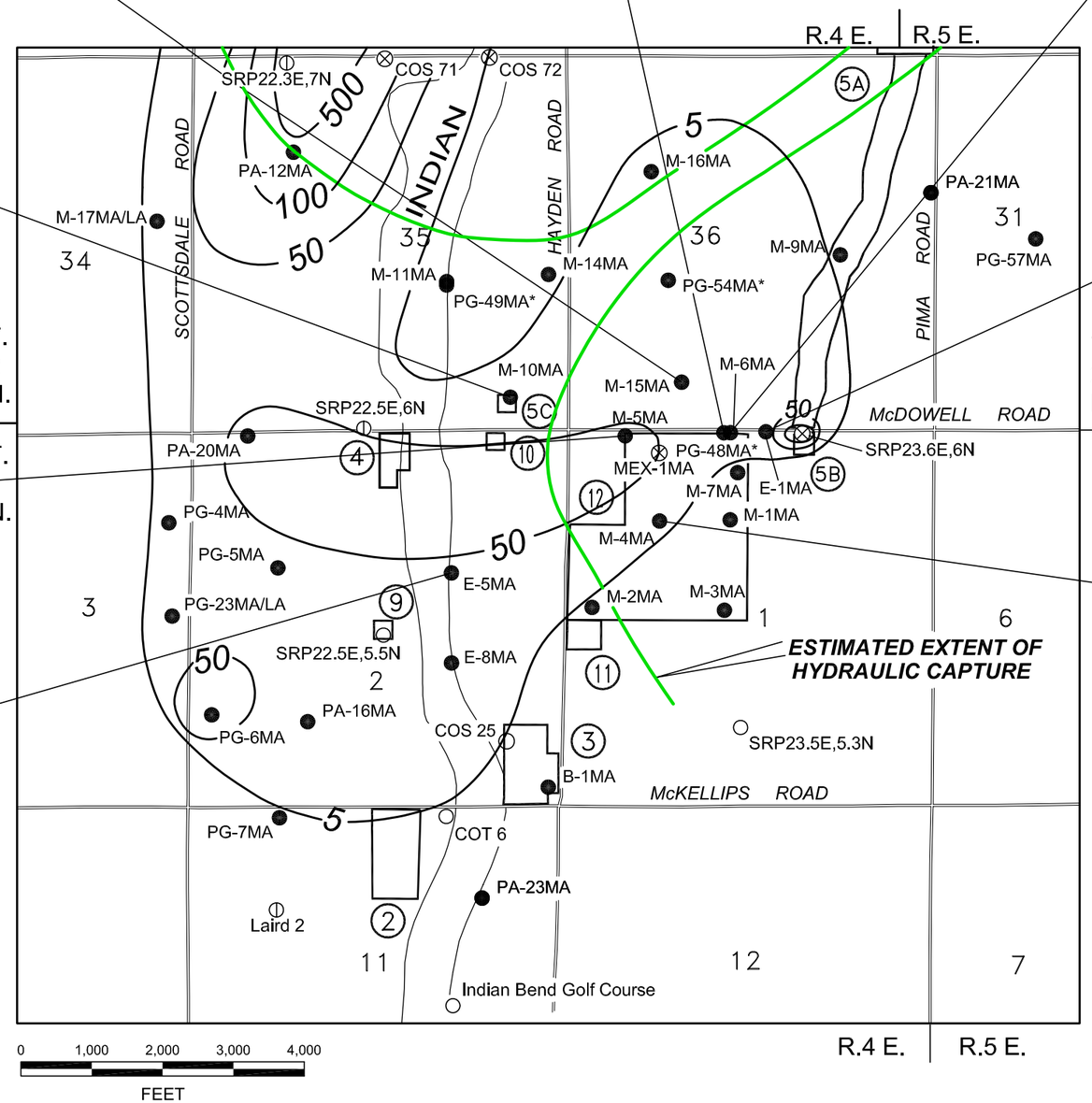












EXPLANATION

— 50 — TCE CONCENTRATION CONTOUR, in micrograms per liter

NORTH INDIAN BEND WASH AREA
MARICOPA COUNTY, ARIZONA

WATER LEVELS, TCE CONCENTRATIONS, AND ESTIMATED HYDRAULIC CAPTURE
UPPER MIDDLE ALLUVIUM UNIT
VICINITY OF AREA 12
OCTOBER 2006

North Indian Bend Wash Superfund Site

2007

FIGURE 24

366.20\TCE-2006\Area12-MAU-hydrographs 10-2006\28Feb2007

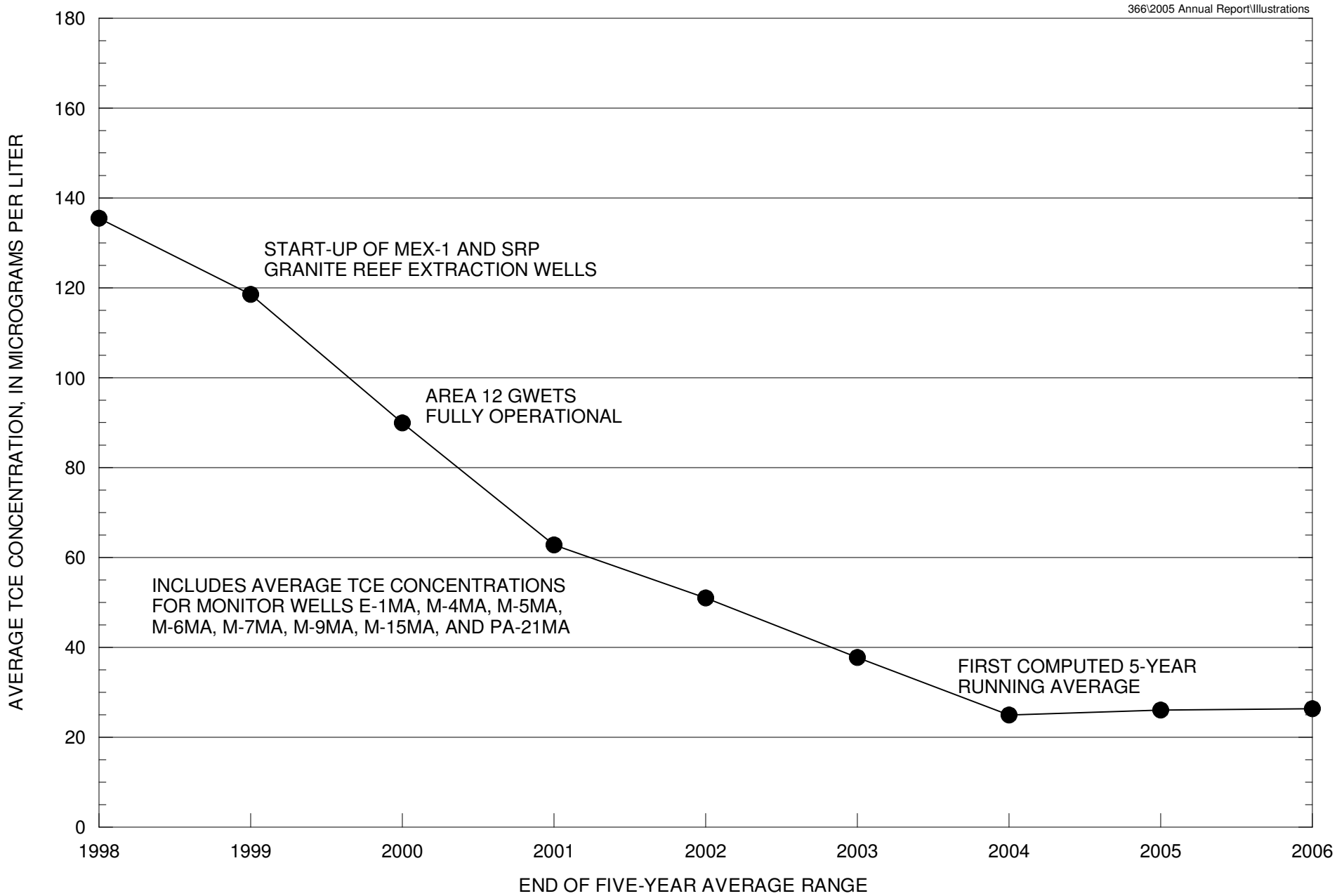
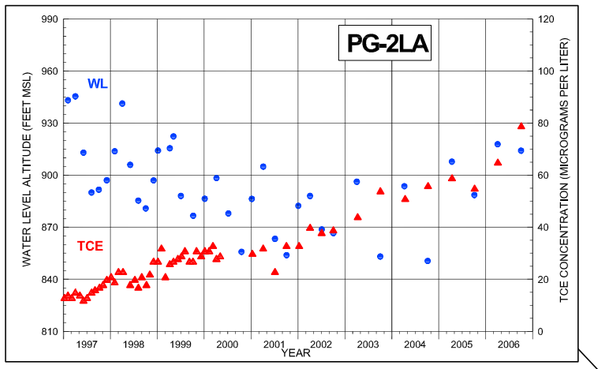
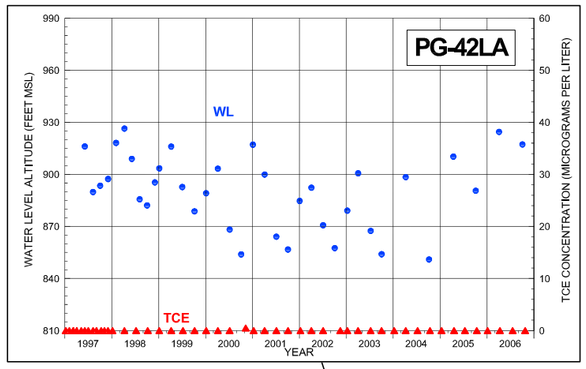
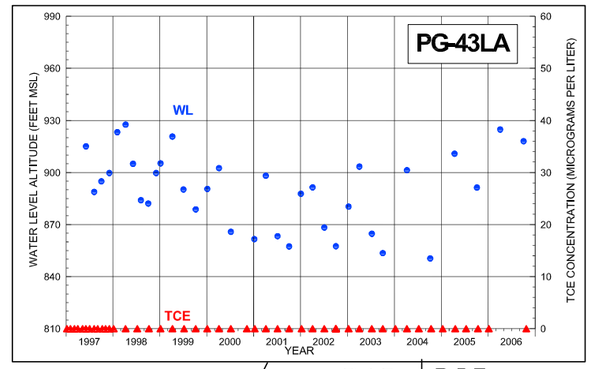


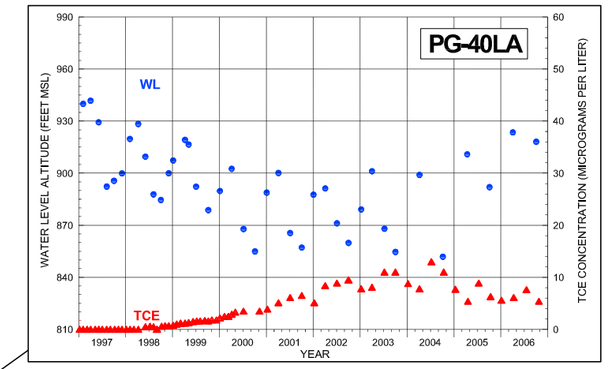
FIGURE 25. FIVE-YEAR RUNNING AVERAGE TCE CONCENTRATIONS UPPER MIDDLE ALLUVIUM UNIT, VICINITY OF AREA 12

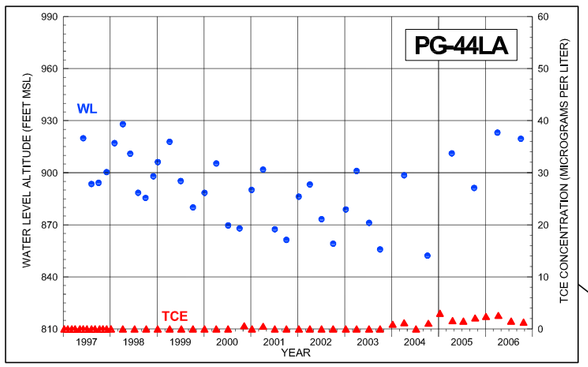
North Indian Bend Wash Superfund Site

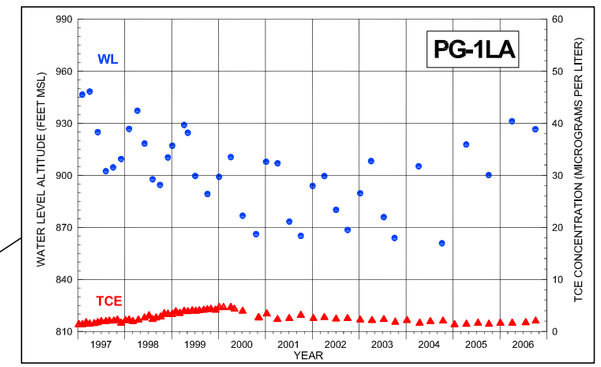


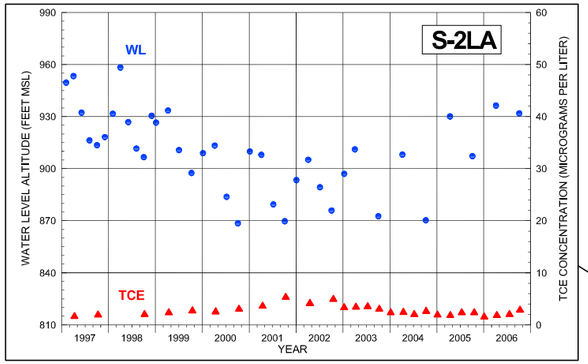


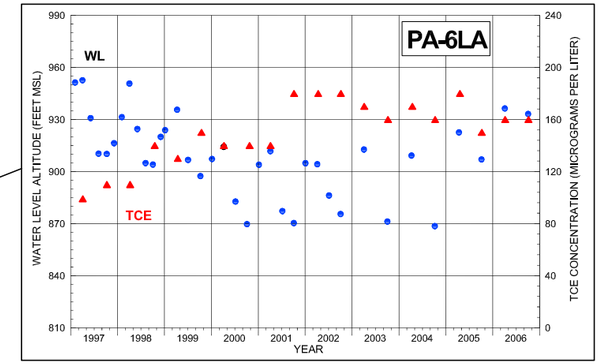


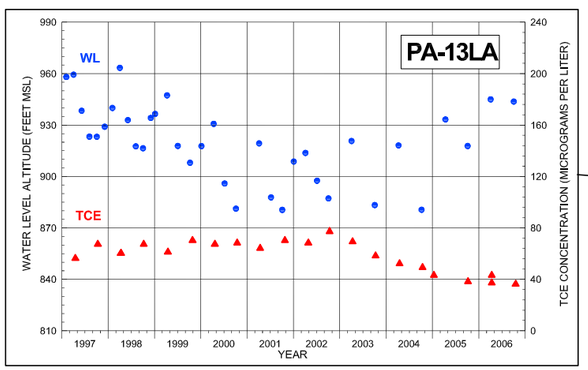


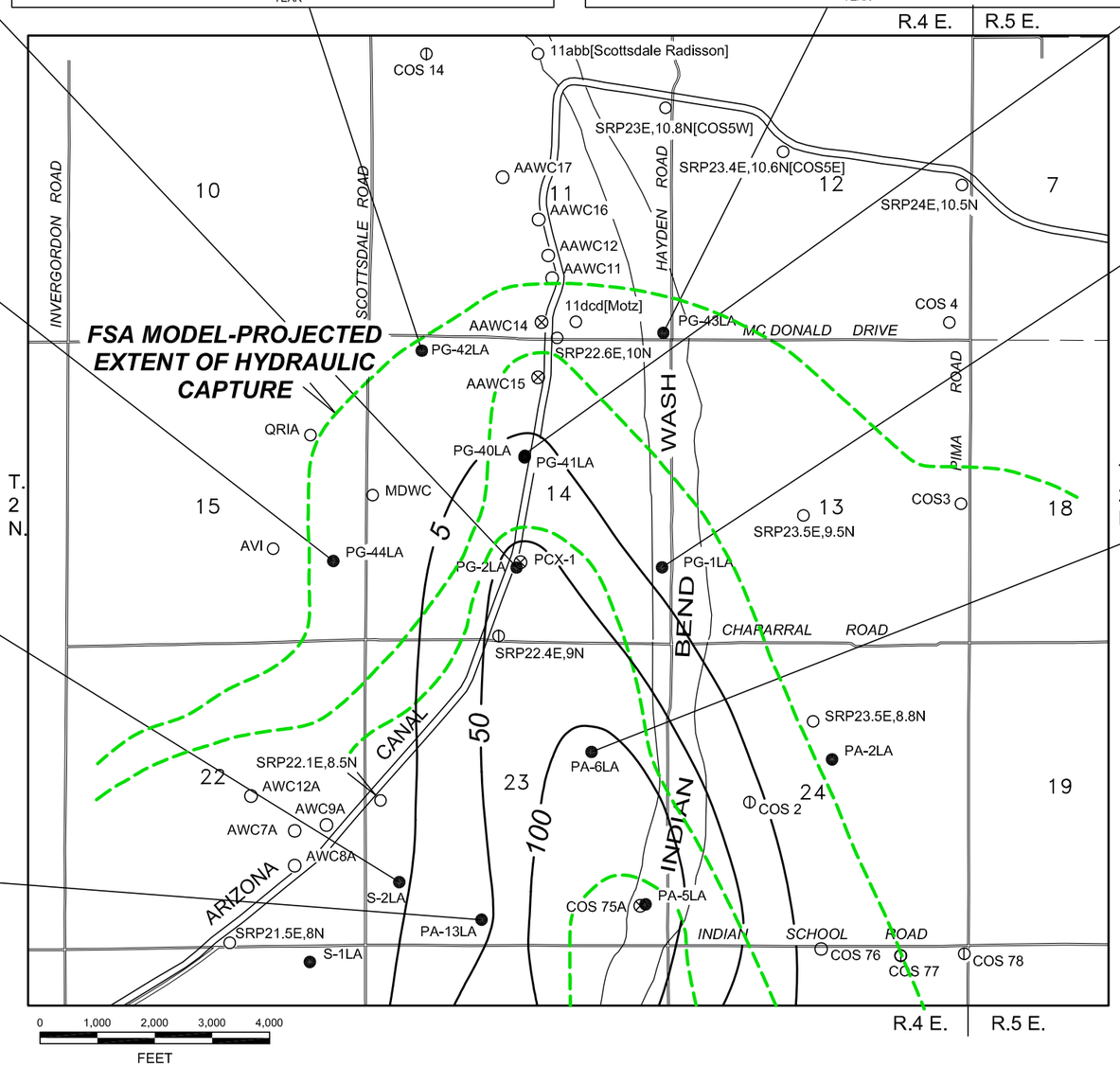












EXPLANATION

—— 5 —— TCE CONCENTRATION CONTOUR, in micrograms per liter

NORTH INDIAN BEND WASH AREA
MARICOPA COUNTY, ARIZONA

WATER LEVELS, TCE CONCENTRATIONS, AND ESTIMATED HYDRAULIC CAPTURE NORTHERN LOWER ALLUVIUM UNIT OCTOBER 2006

2007

North Indian Bend Wash Superfund Site

FIGURE 26

366.20\TCE-2006\Area-NORTHERN-LAU-hydrographs 10-2006\28Feb2007

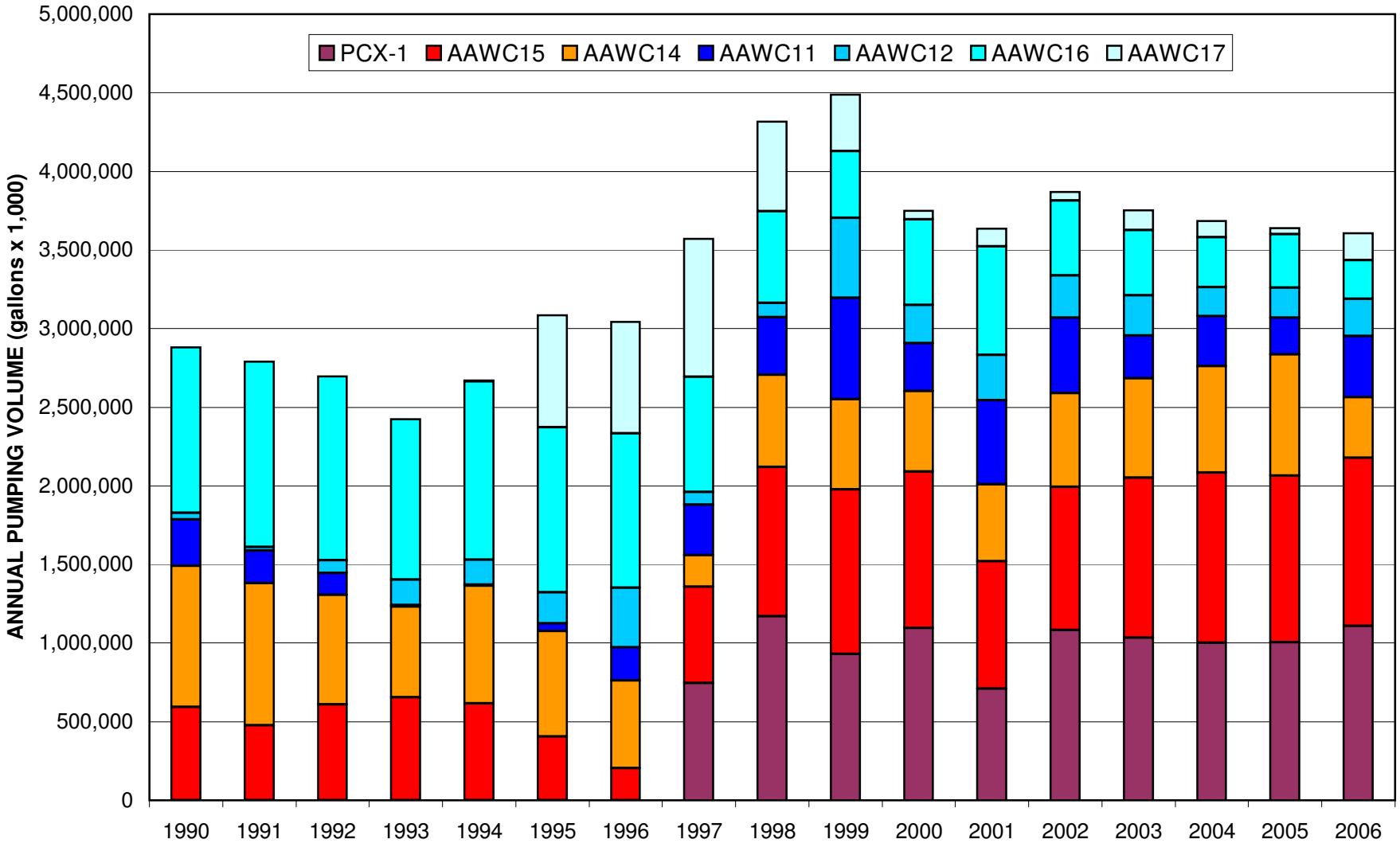


FIGURE 27. DISTRIBUTION OF PUMPING IN AAWC WELLFIELD