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BEFORE THE ARIZONA CORPORATION COMMISSION

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IN THE MATTER OF THE APPLICATION OF ARIZONA WATER COMPANY, FOR AN EXTENSION OF ITS EXISTING CERTIFICATE OF CONVENIENCE AND NECESSITY. AT CASA GRANDE, PINAL COUNTY, ARIZONA	DOCKET NO. W-01445A-06-0199
IN THE MATTER OF THE APPLICATION OF PALO VERDE UTILITIES COMPANY FOR AN EXTENSION OF ITS EXISTING CERTIFICATE OF CONVENIENCE AND NECESSITY.	DOCKET NO. SW-03575A-05-0926
IN THE MATTER OF THE APPLICATION OF SANTA CRUZ WATER COMPANY FOR AN EXTENSION OF ITS CERTIFICATE OF ITS EXISTING CERTIFICATE OF CONVENIENCE AND NECESSITY.	DOCKET NO. W-03576A-05-0926 **CERTIFICATE OF FILING OF DIRECT TESTIMONY AND EXHIBITS**

Arizona Water Company is today filing the direct testimony and exhibits of its witnesses William M. Garfield, Michael J. Whitehead and Ralph Kennedy.

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RESPECTFULLY SUBMITTED this 26th day of January, 2007.

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A copy of the foregoing was mailed this 26th day of January, 2007 to:

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BEFORE THE ARIZONA CORPORATION COMMISSION

IN THE MATTER OF THE APPLICATION OF ARIZONA WATER COMPANY, AN ARIZONA CORPORATION, TO EXTEND ITS EXISTING CERTIFICATE OF CONVENIENCE AND NECESSITY IN THE CITY OF CASA GRANDE AND IN PINAL COUNTY, ARIZONA.	Docket No. W-01445A-06-0199
IN THE MATTER OF THE APPLICATION OF PALO VERDE UTILITIES COMPANY FOR AN EXTENSION OF ITS EXISTING CERTIFICATE OF CONVENIENCE AND NECESSITY.	Docket No. SW-03575A-05-0926
IN THE MATTER OF THE APPLICATION OF SANTA CRUZ WATER COMPANY FOR AN EXTENSION OF ITS EXISTING CERTIFICATE OF CONVENIENCE AND NECESSITY.	Docket No. W-03576A-05-0926

PRE-FILED DIRECT TESTIMONY OF WILLIAM M. GARFIELD

ON BEHALF OF ARIZONA WATER COMPANY

JANUARY 26, 2007

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Q. What are your name, employer and occupation?

A. My name is William M. Garfield. I am employed by Arizona Water Company (the "Company") as President.

Q. Please describe your work experience, educational background and professional affiliations.

A. Since my initial employment with the Arizona Water Company in February 1984, I have held the positions of Engineer, Senior Engineer, Operations Manager, Vice President of Operations, and I currently hold the position of President, which I have held since July 18, 2003.

I completed my undergraduate work at Southern Illinois University at Carbondale and received a Bachelor of Science degree with honors in Thermal and Environmental Engineering. I have taken post-graduate course work at Arizona State University in Civil Engineering, including coursework in hydrology, water and wastewater treatment and statistics. I am a member of Tau Beta Pi, a national honorary engineering society.

I am a member of the American Water Works Association, the Arizona Water and Pollution Control Association and serve on the American Water Works Association's Water Meter Standards Committee. I have been active in numerous water industry stakeholder groups with the Arizona Department of Environmental Quality ("ADEQ"), the Arizona Department of Water Resources ("ADWR") and the Central Arizona Groundwater Replenishment District. I also participated in the water task force put together by the Arizona Corporation Commission (the "Commission"). I

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serve on the Arizona Water Company's Board of Directors, the Board of Directors of the Water Infrastructure Finance Authority of Arizona, ADEQ's Water Systems Coordinating Council, ADWR's Statewide Water Resource Advisory Group, and the Board of Directors of the Water Utilities Association of Arizona ("WUAA"), as well as currently serving as WUAA's Vice President and Treasurer. I also serve as Chairman of the Water Management Subcommittee of the Pinal Active Management Area Groundwater User Advisory Council, and I am president of Arsenic Remediation Coalition, a group of water providers assembled to address arsenic issues in Arizona.

Q. Will you be sponsoring any exhibits with your direct testimony?

A. Yes. I will be sponsoring the exhibits listed on the attached Exhibit List, with the exhibits themselves following the Exhibit List in tabbed order:

1. Arizona Water Company's CCN expansion application and supporting materials.
2. Arizona Water Company's CAP Water Use Plan.
3. Cooperative Service Agreement with Southwest Water Company.
4. Customer Growth.

These documents are true and accurate copies of documents from the Arizona Water Company's business records, or were prepared directly by me or the Arizona Water Company's staff.

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Q. What is the purpose of your testimony?

A. I will describe the Arizona Water Company's operations in Arizona in general and Pinal County and Casa Grande in particular, the Arizona Water Company's master plan for providing water service to the Pinal Valley, and the reasons why Arizona Water Company should be awarded an extension of its Certificate of Convenience and Necessity ("CCN") to serve the area which is the subject of this proceeding. A copy of Arizona Water Company's application is attached to my testimony as Exhibit WMG1. I will also explain the reasons why it would better serve the public interest to award the CCN to Arizona Water Company rather than awarding the CCN to Santa Cruz Water Company.

Q. In your years with Arizona Water Company, have you become familiar with the Arizona Water Company's operations in Arizona and Pinal County and the Arizona water utility industry?

A. Yes, I have. During my more than twenty years of working with the Arizona Water Company, both as an engineer and now as President, I have become very familiar with the Arizona Water Company's operations. In addition, my involvement with a variety of water-related boards and associations has provided me with a wide range of experience and understanding, not only about private water companies but also about municipally owned utilities, water improvement districts, community facility districts, and many different governmental agencies, including state, county and local governmental agencies. My experience in the utility industry has also afforded me the opportunity to network with other utility managers in dealing with utility issues common to both private and public entities.

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Q. Please briefly describe Arizona Water Company's operations and resources in the State of Arizona.

A. Arizona Water Company is a Class A water company with over 82,000 customers served by 22 water systems in eight counties in Arizona. Arizona Water Company has been in business since 1955. The towns, cities and unincorporated areas served by Arizona Water Company include Sedona, Pinewood, Ajo, Tierra Grande, Claypool, Globe, Forest Towne, Bisbee, Sierra Vista, Oracle, Casa Grande, Mesa, Goodyear, Buckeye, Coolidge, Randolph, Apache Junction, Gold Canyon, Miami, Pinetop-Lakeside, San Manuel, Winkelman, Stanfield, Overgaard, Rimrock, the Goldfield area and Superior. We provide service to portions of some of the above-listed cities which have their own water system, such as Globe, Mesa, Goodyear, and Apache Junction.

Arizona Water Company owns and operates more than 125 water production wells in the State, which have the capacity to produce in excess of 60,000 gallons per minute ("GPM"), or approximately 85 million gallons per day ("MGD"). Arizona Water Company also owns and operates more than 120 water storage tanks in the State, representing approximately 60 million gallons of storage. Arizona Water Company annually produces and delivers over 14 billion gallons of potable and non-potable water, which it delivers to its customers through approximately 9 million linear feet (1,750 miles) of water distribution system pipelines.

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Arizona Water Company has four allocations of Colorado River surface water through subcontracts for Central Arizona Project ("CAP") water as part of three-way agreements with the United States Bureau of Reclamation and the Central Arizona Water Conservation District in the following water systems:

Water System	CAP allocation
Casa Grande	8,884 AF/Yr
Coolidge	2,000 AF/Yr
Apache Junction	6,000 AF/Yr
White Tank	968 AF/Yr

In addition, non-CAP surface water rights exist and are available for future use by the Arizona Water Company in its Miami, Superior, White Tank, Coolidge, Tierra Grande and Casa Grande water systems. Allocations of non-Indian Agricultural priority CAP water may also be available to the Arizona Water Company as part of future allocations of such water approved by ADWR. Arizona Water Company's plans for use of CAP water in the Arizona Water Company's Casa Grande, Coolidge and other Pinal Valley water systems is addressed in the Arizona Water Company's CAP Water Use Plan filed with the Commission on December 29, 2006, which is attached as Exhibit WMG2 to my testimony.

As part of its operations, the Arizona Water Company owns, operates and manages approximately 300 parcels of land used for well sites, tank sites, booster pump stations, regulator stations, meter shops, and other purposes involving public utility water service.

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Q. Does Arizona Water Company engage in any other businesses besides the provision of water utility service?

A. No. For over 50 years, Arizona Water Company has concentrated primarily on the provision of public utility water service. Although Arizona Water Company has owned and operated several wastewater systems in the past, including Bisbee, Overgaard and Lakeside, Arizona Water Company no longer owns or operates wastewater systems. Currently, Arizona Water Company focuses solely on providing water service to its customers, principally potable water, but also some non-potable water for its customers that can use non-potable water. Even so, Arizona Water Company and Southwest Water Company, a sewer/wastewater service provider, have joined in a Cooperative Service Agreement to provide sewer/wastewater service to developments served by Arizona Water Company that need such services. See Cooperative Service Agreement dated November 18, 2002, attached as Exhibit WMG3.

Q. Please describe the experience of Arizona Water Company's employees.

A. Unlike Santa Cruz Water Company, which has no employees, Arizona Water Company employs more than 190 employees, with the average employee having more than 12 years of experience with the Arizona Water Company. Of Arizona Water Company's employees, more than 115 are ADEQ-certified operators, with a large number certified at the highest level of certification. Two of Arizona Water Company's employees are also ADEQ certified backflow prevention specialists. Arizona Water Company has its own in-house engineering, drafting, accounting, billing, operations and legal departments. Arizona Water Company also has its own meter repair and test facility, which maintains water meters in accordance with

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Commission and ADWR regulations. Arizona Water Company's experienced meter repair technicians have also provided training to Commission staff in the testing of water meters. This facility is highly regarded by both Commission staff and meter manufacturers.

Q. Does the Arizona Water Company directly employ these individuals, or are they actually employees of an affiliate or contractor?

A. Arizona Water Company hires and trains its own employees and does not rely upon outside consultants or affiliates to provide Arizona Water Company's staff. Arizona Water Company also uses contractors, such as hydrologists, water storage tank builders and water storage tank painters, to perform specialized work,

Q. Why is that?

A. Long experience has taught us that a utility works most efficiently when it hires, trains, pays and retains its own employees. Our employees become experts on Arizona Water Company's procedures, practices and physical system. Moreover, its better public policy because it makes the Commission's task of regulating a utility company more effective and transparent. For example, Arizona Water Company pays its employees based on their experience and skills. There is no hidden layer of profit, which can result when a utility pays an unregulated affiliated entity for use of that entity's employees, thereby allowing the affiliated entity to collect an extra layer of unregulated profit.

In addition, my experience with other large private and public water and wastewater utilities shows that while a small start-up water utility and wastewater utility might

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sometimes share personnel when customer counts are low, as utilities increase in size, the use of separate personnel for operating and maintaining the water utility and separate personnel to operate and maintain the wastewater utility is very necessary and common. In fact, as you look at the largest Arizona utilities, namely the cities of Phoenix, Mesa, Gilbert, Glendale, Chandler, Tucson, Tempe and other large water and wastewater providers, the industry standard is to have separate water and wastewater personnel and management.

Q. Does the fact that Arizona Water Company has its own departments and various areas of expertise in-house have an impact in terms of rates and reliability?

A. Yes. Arizona Water Company is large enough for it to be cost-effective to have the engineering, legal, accounting, billing, and operations functions in-house, which results in reliability, economies of scale, and lower rates for our customers. In addition, with Arizona Water Company's employees averaging more than 12 years of service, the overall operating efficiencies are greater than those utilities that rely on consultants, contractors or employees who are greatly inexperienced in water utility operations.

Q. Please describe the experience of Arizona Water Company's Board of Directors.

A. Arizona Water Company has seven board members, with a cumulative experience greater than 230 years in the water utility business, for an average of more than 30 years per board member. In addition, the cumulative experience of its board members in dealing with utility regulatory commissions in more than one state provides a perspective that few utilities in Arizona can match.

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Q. Please describe the growth rate of Arizona Water Company and how it affects the Arizona Water Company's plans.

A. During the most recent 12-month period, Arizona Water Company added approximately 4,000 customers, statewide. In the Pinal County area of Casa Grande and Coolidge alone, Arizona Water Company added approximately 3,000 customers, as illustrated in Exhibit WMG4. Because of this growth, Arizona Water Company must plan for more water storage, distribution and transmission facilities, water supplies, pumping capacity, and treatment facilities, and have trained and capable personnel. Our engineering department is continually addressing planning issues to ensure that the necessary infrastructure is designed, constructed, and in place in advance of demand. This allows Arizona Water Company to provide reliable water service to all of our customers as growth occurs.

Q. What is the approximate amount in value of utility plant that Arizona Water Company has in service?

A. Arizona Water Company currently has more than $290 million of gross utility plant in service or under construction.

Q. Does Arizona Water Company have access to a short-term line of credit for use in expanding its utility systems as needed?

A. Yes. Arizona Water Company has a $28 million line of credit with Bank of America.

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Q. What is Arizona Water Company's standing with regulators such as Commission, ADEQ and ADWR?

A. Arizona Water Company is in good standing with the Commission and with other agencies involved in water issues. So far as I am aware, the Commission has not sanctioned the Arizona Water Company for non-compliance with any Commission order or directive in my twenty-three years with Arizona Water Company. Likewise, ADEQ and ADWR have stated that Arizona Water Company is in compliance with all standards and guidelines. Arizona Water Company has not been made aware of any operational or maintenance deficiencies by either ADEQ or Pinal County.

Q. To the best of your knowledge, have any of Arizona Water Company's past or present engineers ever been prohibited by the Commission from designing a water treatment plant?

A. No.

Q. Has Arizona Water Company ever been ordered by the Commission to supply a performance bond or any other bond to ensure Arizona Water Company's capabilities and performance?

A. No.

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Q. Could you briefly describe Arizona Water Company's experience in treatment of water to comply with the new arsenic standard?

A. Yes. Since early 2004, Arizona Water Company has worked jointly with the U.S. Environmental Protection Agency ("EPA") and its contractors to install and operate two demonstration plants for the treatment of water to comply with the new arsenic standard. These are the only two such demonstration plants for private water companies in the State of Arizona which were funded by EPA. In addition, Arizona Water Company has completed or is nearing completion of over twenty arsenic treatment facilities ranging in size from 0.07 MGD to over 10.0 MGD with an overall capital cost of approximately $30 million.

Q. Has Arizona Water Company from time to time been called upon to take over failing or defunct water systems around the State?

A. Yes. There have been situations where because of catastrophic failures of small water companies, the Commission called upon Arizona Water Company to take over or extend service to those customers. There have also been a number of small start-up water utilities that have simply decided to get out of the business and have called on Arizona Water Company to acquire their systems or extend service to their customers. In the Casa Grande area alone, for example, Arizona Water Company has taken over the Val Vista Water Company, the Arizola Water Company, the Mobile City Water Company, the Desert Carmel Service Company and the Lake in the Desert Water Company, to name a few. Arizona Water Company has also taken over service to portions of the Francisco Grande Utility Company. Arizona Water Company is also the sole water provider to the CP Water Company, the Signal Peak Water Company, and the South Mountain Water Company and provides back-up

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water supplies to the Casa Grande West Water Company. Recently, the Commission Staff called upon Arizona Water Company to become the interim manager for the Golden Corridor Water Company, a public utility located in the southeastern portion of Arizona Water Company's Casa Grande water system. Arizona Water Company is working with Commission Staff to make sure the customers immediate water needs are met, and to plan for the long-term needs of Golden Corridor's customers for a stable, reliable and affordable supply of water. Arizona Water Company anticipates that it will soon become the interim manager through an agreement with the Commission.

Q. The Global entities often publicize their so-called "Triad of Conservation." Does Arizona Water Company have a commitment to water conservation?

A. Certainly. Arizona Water Company has been involved in efforts to alert its customers to the importance of water conservation and the responsible management of water resources. Arizona Water Company regularly and consistently reduces usage of groundwater in each of its systems though 1) the use of surface water supplies when available; 2) the use of reclaimed water when such a resource can be used; 3) the use of appropriately treated effluent or reclaimed water for groundwater recharge; and 4) the efficient use of all sources of water through conservation, including the best management practices conservation plan which Arizona Water Company has helped ADWR to develop over the last three years.

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Q. For example, Global lauds its use of reclaimed water or effluent. Has Arizona Water Company taken steps to use reclaimed water?

A. Yes. Arizona Water Company's Superstition system has been providing reclaimed water service since 1989. Arizona Water Company stands ready to work with Southwest Water Company, the City of Casa Grande or any other sewer provider in the requested extension area to coordinate the use of reclaimed water for turf facilities and other purposes where reclaimed water can be substituted for groundwater. In fact, Arizona Water Company is working with the consulting engineering firm for the Copper Mountain Ranch and with the City of Casa Grande to identify the developments potable water and infrastructure needs and the reclaimed water component and its related infrastructure. Arizona Water Company is planning to work with the City of Casa Grande and other wastewater providers in Arizona Water Company's water service areas to implement similar solutions to integrated water and wastewater resource planning.

Q. Another example is the use of renewable surface water. Has Arizona Water Company made use of renewable surface water?

A. Yes. Unlike Santa Cruz Water Company, Arizona Water Company has a CAP allocation for both its Casa Grande and Coolidge water systems, and will soon begin construction of a surface water treatment plant to treat CAP water for the Pinal Valley water systems, which plant should be completed by 2012. Moreover, Arizona Water Company already serves untreated CAP surface water in its Superstition and Casa Grande water systems to customers who are able to make use of such water. In addition to the use of untreated CAP water, Arizona Water Company serves treated

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CAP water to customers in its Superstition water system and will be delivering treated CAP water in its White Tank water system in the near future.

Beyond the existing CAP allocations for which Arizona Water Company has 100-year contracts, Arizona Water Company has the potential to bring other surface water supplies into use. These include surface water supplies allocated for district lands within the Maricopa Water District, San Carlos Irrigation and Drainage District, and non-Indian Agricultural Priority CAP water referenced earlier. These surface water supplies are available to Arizona Water Company in great part because of the location of these lands within Arizona Water Company's CCN.

Q. Global talks about recharge activities. Has Arizona Water Company engaged in groundwater recharge activities?

A. No. Arizona Water Company does not currently own or operate any direct recharge projects. However, to my knowledge, Global has not recharged any effluent, but like Arizona Water Company, has delivered treated effluent to turf facilities or agricultural uses. Future uses of treated effluent or reclaimed water will play a larger role in meeting water demands, including both direct uses and recharge and recovery.

It should be pointed out, however, that the factors that determine the best use of treated effluent or reclaimed water are: 1) economic – direct delivery of reclaimed water to each house is cost-prohibitive, whereas a delivery system designed to provide cost-effective and affordable use of reclaimed water coupled with recharge and recovery of effluent treated to a high standard provides a cost-effective supply for future uses; 2) protecting the quality of water available as the primary water supply, namely groundwater, by recharging only high quality treated effluent to

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ensure safe, long-term, reliable water supplies, and 3) offsetting the need for groundwater or treated surface water supplies where water of non-drinking water quality is available and more suitable and cost-effective for such use.

Q. Please describe Arizona Water Company's operations in Pinal County, particularly the Casa Grande and Coolidge water systems.

A. In the Casa Grande water system, Arizona Water Company has approximately 21,300 customers, including several large industrial customers. The Casa Grande water system added approximately 2,400 customers in 2006. The Casa Grande water system has 19 wells with the capacity to produce approximately 24 million gallons of water per day, and has approximately 15 million gallons of storage capacity.

In the Coolidge water system, Arizona Water Company has approximately 4,600 customers. The Coolidge water system has the capacity to produce approximately six million gallons of water per day, and has a storage capacity of approximately two million gallons. Arizona Water Company's Coolidge water system added approximately 700 customers in 2006.

As noted, Exhibit WMG4 to my testimony is a chart showing customer growth in Arizona Water Company's Casa Grande and Coolidge water systems as well as the total Company.

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Q. Why are the resources of both the Casa Grande and Coolidge water systems relevant to this CCN application?

A. Arizona Water Company plans to interconnect the Casa Grande and Coolidge systems within the next 18 to 24 months. Once the two systems are interconnected, the resources of both systems will be available to serve the requested extension area. This is important because a single consolidated water system will reduce costs that two water systems typically would incur when operated separately. In addition, water system personnel can be used to operate the consolidated system in more efficient ways. For example, an employee in each separate system responding to customer call-outs after hours can be replaced with one employee to respond to such calls in the consolidated system. More importantly, however, these interconnected water systems would share common sources of water supply, such as treated CAP water and groundwater. Also, the consolidated water system would achieve greater flexibility, not available to stand-alone water systems, that will enhance the development of water resources where regulatory and physical barriers currently exist. In addition, in areas where reclaimed water is used for groundwater recharge and direct uses are not feasible or cost-effective, having a larger geographic area provides greater opportunity to plan for the proper recharge and recovery methods. Moreover, where an area's water supply is limited due to shallow bedrock, poor water quality, or low permeability, having more areas from which to develop and plan water supplies will provide an integration of available resources, and ultimately, a lower cost of service to the consolidated system's customers.

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Q. Does Arizona Water Company have a Master Plan for the provision of water utility service to this area?

A. Yes. Arizona Water Company's Engineering Department has provided a planning blueprint providing for water transmission and distribution infrastructure and water storage, treatment and other infrastructure. Another aspect of the master planning process is water resource planning. Planning for the efficient distribution of potable water is important, as is the distribution of reclaimed water and other non-potable water supplies. It is also prudent to plan for the recharge of reclaimed water or treated effluent, all of which is especially important when it comes to planning for an area as large as Arizona Water Company's Pinal Valley water system planning area. Planning at the earliest stage helps to prevent unnecessary redundancy, rebuilding, modifications to planning, and duplication of facilities.

Q. Can you tell us why Arizona Water Company has put together such a plan?

A. As I previously explained, long-range planning is very important in the water utility business. Arizona Water Company's objective is to plan for and stay ahead of growth in the Pinal Valley, to ensure that all of our customers, both existing and new customers, have reliable and cost efficient water utility service.

In addition, on December 29, 2006, Arizona Water Company provided the Commission with a copy of a detailed CAP Water Use Plan discussing all existing water supplies and demand patterns, how and when CAP water will be used through the year 2025, all future water sources that the Company plans to use, all major infrastructure components required to use CAP water, projected capital and operating and maintenance costs for future water supplies and numerous other matters. The

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Arizona Legislature also recently enacted A.R.S. §45-330 et seq., which requires public water systems like Arizona Water Company to submit detailed water plans (including a water supply plan, drought preparation plan and water conservation plan) to the director of ADWR in January of 2007 and every fifth calendar year thereafter. In other words, Arizona Water Company planning for the future growth and development of its water systems coincides with statewide public planning goals to provide for growth in Arizona.

Q. Is it correct to say that Arizona Water Company takes a regional view of water issues, as opposed to serving isolated developments?

A. Yes. We continually plan on a regional basis to serve our customers and our future customers. We plan ahead so that when potential customers outside our CCN area require water service, we are able to meet their needs while continuing to provide reliable and cost-effective service to our existing customers. As a public service corporation, Arizona Water Company has a duty to provide public utility water service to customers within its CCN and to be prepared to provide service to customers outside of its CCN, contiguous or otherwise.

Q. What are Arizona Water Company's water resources to serve the area which is the subject of this application?

A. The Casa Grande system currently has the capacity to produce 24 million gallons of groundwater per day. In addition to that amount, Arizona Water Company previously filed a demonstration of physical availability with ADWR which shows the availability of approximately 62,000 acre-feet of groundwater per year for the next 100 years for its Casa Grande water system. Arizona Water Company also has

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an allocation of at least 8,884 acre-feet of surface water from CAP available for the Casa Grande water system. In the Coolidge water system, the same physical availability demonstration, shows the availability of 13,510 acre-feet of groundwater per year for the next 100 years. Arizona Water Company also has a CAP allocation of at least 2,000 acre-feet for the Coolidge water system.

In addition, Arizona Water Company is in the process of filing an updated physical availability demonstration for Arizona Water Company's Pinal Valley water systems, the initial results of which show considerably more groundwater available than the previous demonstration. This updated demonstration should be filed with ADWR by April 1, 2007.

Q. Does Arizona Water Company solicit requests for water service from real estate developers and other landowners?

A. No, we do not. We are not in the business of soliciting requests for water service, or presenting ourselves in an aggressive marketing campaign as a preferred provider. That conduct, in our view, is inconsistent with Arizona Water Company's role as a regulated public service corporation. We have served as the regulated water utility service provider in this area of Pinal County for over 50 years. We respond to emerging needs for water service as appropriate, and do not aggressively market for growth. Rather, we plan ahead for additional water service, anticipate what areas will need water service in the future, and plan for the extension of water service to those areas to ensure we are capable of providing such service when water service is needed.

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Q. Has Arizona Water Company received requests for water service for the entire extension area it has requested?

A. Arizona Water Company has directly received requests for water service from property owners covering approximately 175 acres. In addition, Arizona Water Company is relying on the requests for water service attached to Santa Cruz Water Company's application, which indicate that there is a need for water service to approximately 19,373 acres. There are other areas in the requested extension area for which there are no requests for water service at this time. However, Arizona Water Company has included those areas because it is good planning and sound public policy to include those areas in Arizona Water Company's CCN. In a recent Staff Report in Docket No. W-01445-06-0059, the Commission Staff outlined nine factors to consider when determining whether to include an area with no request for service in a CCN:

1. Whether inclusion of the area could reasonably be expected to contribute to operational efficiencies.
2. Whether exclusion of the area could reasonably be expected to result in operational inefficiencies.
3. Whether there is a competing application for the area.
4. Whether a customer in the area requests to be excluded and the nature of the request.
5. Whether the area is contiguous to the company's current service territory.

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6. Whether the requested area 'squares off' the service territory or fills in holes in the service territory.

7. Whether the company is financially sound.

8. Whether the company at issue is in compliance with Commission decisions, ADEQ and ADWR.

9. Other showings by the company at issue that it is in the public interest to approve the extension.

Arizona Water Company in general agrees with the Staff's list of factors. Most of the factors support awarding Arizona Water Company the requested extension area, including areas for which there is no request for service. All of the requested extension area falls within Arizona Water Company's master plan for the Pinal Valley. Extending Arizona Water Company's CCN into the areas, which are a logical extension of growth, would be sound public policy. Moreover, Arizona Water Company believes that factors 1, 2, 5, 7 and 8 listed above all support extension of Arizona Water Company's CCN to the requested area. In addition, in areas where there is a competing CCN application, Arizona Water Company's application should be approved because Arizona Water Company's rates are normally lower than its competitors' rates and because of other public interest factors in Arizona Water Company's favor.

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Q. Do you believe that the cost of service and impact on current and future ratepayers should also be considered when deciding whether to include an area in Arizona Water Company's CCN?

Yes. The nine factors listed by the Commission Staff are certainly not the only factors that could be considered when approving an extension of a CCN, as is demonstrated by Factor 9. For example, cost of service and financial impact on the customers should be primary considerations. While Arizona Water Company funds utility plant through a mix of equity and debt, Arizona Water Company also funds water mains and other utility plants through advances or contributions in aid of construction. Conversely, Global has represented (and their Infrastructure Coordination and Finance Agreements ("ICFA") recorded against most, if not all, of the parcels which are the subject of their application, show) that, except for the onsite distribution and collection systems, i.e., those facilities immediately contained within each subdivision, the majority of utility infrastructure is funded through Global's purported equity funding in its utilities. But none of these investments by Global has ever been the subject of a rate proceeding, and none of the parent company's "overhead" or profit has ever been scrutinized in regulatory reviews by the Commission.

Global's ICFAs show payments ranging from $3,000 to more than $5,000 per lot, are to be paid to the unregulated parent company for coordinating and financing with its water and wastewater entities. If you consider the investment necessary to install only the reclaimed water service portion of Global's promised infrastructure, which Global recently estimated to cost from $5,915 to $6,844 per home, you will see that home prices will correspondingly increase to cover the up-front infrastructure costs. See Global's comments, Docket No. W-0000C-06-0149, p. 6, lines 3-6. But those

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ICFA fees should, as ACC Staff has pointed out, be treated as advances or contributions and excluded from the utilities' rate base – not treated as Global's equity in the utilities. Even if the ICFA fees are excluded from rate base, it is very doubtful that the $3,000 to $5,000 per lot fee would be sufficient to finance all the facilities for drinking water, sewer, and reclaimed water that Global talks about installing. Where does that shortfall come from? It either comes from the developers (which is at odds with Global's commitments to the landowners and developers in the ICFAs) or it comes from debt or equity financing in the regulated utilities - which would lead to significant increases in water and sewer rates to cover those costs. Those increases would only compound the rate penalty customers would have to pay if Global's Santa Cruz Water Company is given the water CCN instead of Arizona Water Company.

Q. Does it make sense to build a reclaimed water system to distribute reclaimed water to every residential customer, and won't reclaimed water be wasted and not put to beneficial use if you don't do that?

A. No, of course not. The goals of every water provider are to provide reliable, safe and cost-effective water service, including potable water and non-potable and reclaimed water, where appropriate, delivered to its customers at just and reasonable rates. The fact is, it is doubtful that reclaimed water can be cost-effectively delivered to every customer. The most likely users of most, if not all reclaimed water are golf courses and large non-potable water users, like industrial and public authority customers who typically employ highly trained agronomists, soil and water experts, etc., who are in a position to know all the health risks and precautions needed to safely use reclaimed water.

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Besides the fact that water discharged from a wastewater treatment plant is recharged into the region's aquifer and can be retained for future use and is not wasted, a more important consideration is whether there is a more cost-effective means of ensuring that reclaimed water is put to a beneficial use in a reasonable and cost-effective way, and there is. Common water industry practice calls for providing reclaimed water to large users located within a reasonable distance from the delivery system. This practice is followed by most, if not all of the Phoenix metropolitan area's largest water providers, and reclaimed water use studies, including recent studies in the Tucson area, support this approach. To the extent reclaimed water can be delivered directly to customers who are able to use large enough quantities to justify building a separate distribution system, it should be. Beyond that, properly treated reclaimed water is appropriately recharged into groundwater aquifers to be stored and recovered for future beneficial uses.

Q. Can Arizona Water Company, as a larger and more experienced water utility, offer lower water rates than a smaller water utility?

A. Yes. As Mr. Kennedy has shown in his testimony, water utility operations enjoy economies of scale, which enable lower rates as customer counts increase. Because of its size, Arizona Water Company is able to perform all of its functions in a more cost-effective manner. Arizona Water Company has a billing department that sends out over 85,000 bills per month in a very efficient manner. Arizona Water Company's employees, who specialize in water production and treatment, meter reading, water main maintenance, engineering, and all of the other functions that a water utility is required to perform, are very efficient at performing those functions. For example, our engineers are not outside contractors designing on a theoretical basis. They know the system "inside and out" and have been working on it for years.

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By performing all of these functions in-house and in a cost-effective and efficient manner, Arizona Water Company is able to achieve cost savings because of economies of scale and thereby charge significantly lower rates to the ultimate customers.

Q. Turning to the particular CCN extension sought in this application, do you believe that Arizona Water Company would be able to provide service to the requested area at lower rates than Santa Cruz Water Company?

A. There is no doubt about it. For example, for a customer using only 1,000 gallons, the Santa Cruz Water Company bill would be $25.00, while the Arizona Water Company bill would be $11.48, less than half the Santa Cruz Water Company bill. Because of the rate structure of the two companies, this price differential will continue as the customer uses more water. The Staff Report recognizes that Arizona Water Company's current rates are much lower than the rates of Santa Cruz Water Company. Even after the anticipated ACRM filings and a hypothetical $20 million additional investment in utility plant in the Company's Casa Grande water system, Mr. Kennedy's testimony shows that the Arizona Water Company rate advantage over Santa Cruz Water Company will persist. Santa Cruz Water Company and Palo Verde Utilities Company rates do not even reflect the levels of investment Global says are necessary to provide for advanced reclamation service, the cost of the ICFAs, or any level of costs that have stood the regulatory scrutiny of a rate proceeding. Suffice it to say, the rates originally approved for Santa Cruz Water Company, prior to Global's involvement, are based on projected costs and investments, believed to be true in 1998 or 1999. In comparison Arizona Water Company just completed a rate case involving the Casa Grande and Coolidge water

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systems which ensures the reasonableness of the rates and provides rate stability and certainty.

Q. Do you believe that Arizona Water Company offers rate stability?

A. Yes. Arizona Water Company's most recent ratemaking proceeding concluded with Commission Decision No. 68302 which set rates for Arizona Water Company's Western Group water systems, including the Casa Grande and Coolidge water systems, effective December 1, 2005. Prior to that proceeding, Arizona Water Company had applied for only two general rate increases in 20 years. Arizona Water Company has had very little change in rates for many years, which speaks highly of the efficiency and resulting rate stability that Arizona Water Company can offer its customers. Commission Staff and others have speculated in past CCN proceedings about the rate impact from arsenic treatment for the Company. But the projected cost of arsenic treatment for Arizona Water Company's Casa Grande water system reveals a cost per customer of less than $5.50 per month. In contrast, the cost impact on the Global utilities from equity-funded infrastructure, the high cost for advanced reclamation, and the services provided by an unregulated affiliate, have not been scrutinized by the Commission Staff, and Santa Cruz Water Company's rates have not been decided based on known and measurable costs and investments which are likely to drive Santa Cruz Water Company's rates even higher.

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Q. Do you believe that Arizona Water Company, because of its size, is able to provide a broad range of water sources to the area at issue?

A. Yes. Extensive growth is occurring over a wide geographic area in Pinal County. Obviously, there are areas with plentiful water and areas where water is scarce. The quality of water also varies widely. Because of its size, Arizona Water Company has a wide range of groundwater sources, as well as significant CAP allocations, that are available to meet customer demands.

Q. How will Arizona Water Company's planned construction of a CAP surface water treatment plant affect its ability to serve the requested area?

A. Arizona Water Company has already purchased the treatment plant site, which is southeast of Coolidge, approximately one-half mile from the CAP canal. Arizona Water Company plans to use that plant as a regional water treatment plant to treat both its Casa Grande and Coolidge CAP water allocations. Arizona Water Company is also discussing the potential of treating the CAP allocations of other entities, such as the City of Eloy. We plan to have the water treatment plant constructed and placed into service no later than 2012. Arizona Water Company's CAP water allocations treated at that plant would then become available to meet the water needs of the requested area.

Q. Can you describe Arizona Water Company's experience in working with entities providing sewer service?

A. Yes. As I mentioned earlier, Arizona Water Company once owned several smaller wastewater treatment systems. Those were sold, and the Company now works with a

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number of entities that provide wastewater treatment and sewer services within Arizona Water Company's CCN areas. These include both private and municipal sewer providers. Arizona Water Company has entered into agreements with sewer providers to achieve efficiencies in billing by, for example, providing information to sewer services about new water customers. We also work with sewer providers on integrated approaches for the delivery of effluent or reclaimed water to turf facilities. For example, Arizona Water Company has a longstanding relationship with several municipalities, and similar relationships can be established with sewer providers in the extension area. Moreover, as noted above, Arizona Water Company and Southwest Water Company, a wastewater service provider, have joined in a Cooperative Service Agreement (Exhibit WMG3), to service areas served by Arizona Water Company which need wastewater utility service.

In addition, Arizona Water Company is working with the City of Casa Grande to plan for and incorporate reclaimed water, including direct deliveries, and groundwater recharge and recovery into its water resource master planning. Arizona Water Company will work similarly with other wastewater providers within its Pinal Valley water service area.

Q. If Arizona Water Company receives the water CCN and Palo Verde Utilities Company receives the sewer CCN, would you see any impediment to establishing such a working relationship between the two companies?

A. No. We would work closely with them to meet the needs of the project and work cooperatively with them as we have with other sewer providers.

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Q. Could you discuss any efficiencies in billing that might exist if Arizona Water Company were awarded the CCN rather than Santa Cruz Water Company?

A. Because of its larger size, Arizona Water Company enjoys must more favorable economies of scale in billing its more than 85,000 customers and receiving and processing their payments at a centralized location. Arizona Water Company's billing department has actually decreased in size as Arizona Water Company has grown and become more efficient at processing bills. These efficiencies would equal or surpass any efficiency that might result from Santa Cruz Water Company and Palo Verde Utilities Company sending out a single bill for both sewer and water. Efficiencies achieved because of the volume handled by Arizona Water Company's central billing capability are also reflected in Arizona Water Company's overall lower water rates.

Q. Do you believe that any other efficiency is achieved if water service and sewer service is provided by the same or affiliated companies?

A. No. The sewer provider will still have to comply with the Clean Water Act in any case. The use of effluent or reclaimed water for golf courses, irrigation and turf facilities can go forward regardless of whether potable water service is provided by a non-affiliated company. All of the elements of the State's water conservation policy can and will go forward unimpeded if Arizona Water Company receives the water CCN for the extension area. The term "integrated water and wastewater provider" is a slogan that has been used commonly in recent Commission proceedings by Commission Staff, equating Global's model to one company providing both services. But the conclusion that two separate legal entities owned by a common holding company can provide more cost-effective and efficient service, even when all

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services typically provided by the regulated utility are provided by the parent company, has never been demonstrated in any way. The Commission Staff simply states in its Staff Report on this matter that the Company has to show that the Company is more efficient than Santa Cruz Water Company and Palo Verde Utilities Company operating under one parent company since Staff "believes" that efficiencies are present or that efficiencies are "likely" based on Staff's unfounded belief. The fact of the matter is that Arizona Water Company's cost of water service when coupled with the City of Casa Grande's cost of wastewater service is much less than the combined bill for such services from Santa Cruz Water Company and Palo Verde Utilities Company. That is an established fact. If there is a greater operating efficiency for Santa Cruz Water Company and Palo Verde Utilities Company, it is not evidenced by their rates or any evidence produced in this case.

Q. If the Commission were to deny Santa Cruz Water Company the CCN for the extension area, would development of the area still be able to proceed?

A. Certainly. Arizona Water Company stands ready, willing and able to provide water service to all of the planned developments in the extension area. In fact, the developers can move forward with their projects with Arizona Water Company as water provider, offering both better levels of service and lower rates.

Q. Does this complete your prepared direct testimony?

A. Yes, it does.

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EXHIBITS

1. Arizona Water Company's CCN expansion application and supporting materials.
2. Arizona Water Company's CAP Water Use Plan
3. Cooperative Service Agreement with Southwest Water Company
4. Customer Growth.

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BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

JEFF HATCH-MILLER - Chairman
WILLIAM A. MUNDELL
MARC SPITZER
MIKE GLEASON
KRISTIN K. MAYES

IN THE MATTER OF THE APPLICATION OF ARIZONA WATER COMPANY, AN ARIZONA CORPORATION, TO EXTEND ITS EXISTING CERTIFICATE OF CONVENIENCE AND NECESSITY IN THE CITY OF CASA GRANDE AND IN PINAL COUNTY, ARIZONA	DOCKET NO. W-01445A-06- APPLICATION TO EXTEND EXISTING CERTIFICATE OF CONVENIENCE AND NECESSITY TO INCLUDE ADDITIONAL TERRITORY

ARIZONA WATER COMPANY, an Arizona corporation, ("AWC") through its undersigned counsel, presents the following Application to extend its existing Certificate of Convenience and Necessity ("CC&N") for its Casa Grande system. This Application is based on the following:

1. AWC presently holds CC&Ns issued by the Arizona Corporation Commission (the "Commission") in various decisions beginning in 1955, authorizing AWC to provide water utility service in the City of Casa Grande and the surrounding area in Pinal County, Arizona.

2. AWC is a long-established Arizona public service water utility corporation having been engaged in the business of providing water service for over fifty years.

AWC serves approximately 80,000 customers throughout the state, including some 19,000 customers in the Casa Grande area. Statewide, AWC operates 22 water systems in eight counties, produces over 80 million gallons of water per day, and has gross utility plant in excess of $261 million.

3. The area that AWC seeks to add to its CC&N in this Application is described in Exhibit 1 hereto. The area described in Exhibit 1 is adjacent to areas presently certificated to and served by AWC as well as areas pending to be certificated as shown in Exhibit 2 hereto.

4. AWC presently owns and operates water system facilities in the vicinity of the area described in Exhibit 1 that are used to serve existing customers, and will be used to provide service to future customers.

5. Certain property owners or property owner representatives have requested that water service be provided to their properties, which are included within the area to be added to AWC's CC&N as described in Exhibit 1 and shown in Exhibit 2. Copies of letters from, or on behalf of the property owners, are attached as Exhibit 3 hereto.

6. AWC estimates the total number of customers to be served in the area described in Exhibit 1 will be approximately 4,050 within five years following the date of the filing of this Application.

11. A portion of the area described in Exhibit 1 is located within the municipal boundaries of the City of Casa Grande and the remainder is located within unincorporated areas of Pinal County. AWC has a Casa Grande City Franchise for the area within municipal boundaries and a Pinal County Franchise for the area located within unincorporated areas for which it is proposing to extend its CC&N. Copies of the franchises are attached as Exhibits 7 and 8 hereto.

12. AWC's By-Laws do not require a corporate resolution in conjunction with this Application.

13. A certificate of good standing for AWC is attached as Exhibit 9 hereto.

14. An updated Commission Utilities Division Extension Agreement Data Sheet for the Casa Grande system is attached as Exhibit 10 hereto.

15. A copy of the most recent compliance status report from the Arizona Department of Environmental Quality for the Casa Grande system is attached as Exhibit 11 hereto.

16. AWC proposes to apply its currently authorized Casa Grande system rates and charges for service to the area described in Exhibit 1. AWC will continue to charge these rates until the Commission changes the rates. A copy of AWC's current Casa Grande General Service Tariff is attached as Exhibit 12 hereto.

17. Public convenience and necessity will be served by having AWC extend its CC&N to include the area described in Exhibit 1.

WHEREFORE, AWC respectfully requests that the Commission hold a hearing on this Application, and enter an order, or, in the alternative, that it enter an order without the necessity of a hearing, which order shall provide for the following:

1. Issuing to AWC a Certificate of Convenience and Necessity for the area described in Exhibit 1 hereto.

2. Granting such other further relief as may be appropriate.

RESPECTFULLY SUBMITTED this 29th day of March, 2006.

ARIZONA WATER COMPANY

By: Robert W. Geake

Robert W. Geake
Vice President and General Counsel
ARIZONA WATER COMPANY
Post Office Box 29006
Phoenix, Arizona 85038-9006

and

Steven A. Hirsch
Rodney W. Ott
BRYAN CAVE LLP
Two North Central Avenue, Ste. 2200
Phoenix, Arizona 85004-4406

Original and thirteen (13) copies of the foregoing filed this 29th day of March, 2006 with:

Docket Control Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

A copy of the foregoing was mailed this 29th day of March, 2006 to:

Christopher Kempley, Chief Counsel
Legal Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

Ernest G. Johnson
Director, Utilities Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

By: Robert W. Geake

EXHIBIT 1

CC&N this Application
Legal Description

T.5S.,R4E.

The East half of Section 10, 11, 12, 13, 14, the East half of Section 15, the East half of Section 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, and 36 all in Township 5 South, Range 4 East of the Gila and Salt River Base and Meridian, Pinal County, Arizona, EXCEPT any portion lying with the Ak Chin Indian Reservation.

T.5S.,R.5E.

Sections 17, 18, 19, 20, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, and 36 all in Township 5 South, Range 5 East of the Gila and Salt River Base and Meridian, Pinal County, Arizona.

T.6S.,R.3E.

Sections 1, 11, 12, 14, 23, 26, and 35 all in Township 6 South, Range 3 East of the Gila and Salt River Base and Meridian, Pinal County, Arizona.

T.6S.,R.4E.

Sections 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, and 12 all in Township 6 South, Range 4 East of the Gila and Salt River Base and Meridian, Pinal County, Arizona.

T.6S.,R.5E.

Sections 5, 6, 7, and 8 all in Township 6 South, Range 5 East of the Gila and Salt River Base and Meridian, Pinal County, Arizona.

T.7S.,R.3E.

Sections 1, 12, 13, 24, 25, and 36 all in Township 7 South, Range 3 East of the Gila and Salt River Base and Meridian, Pinal County, Arizona.

T.7S.,R.4E.

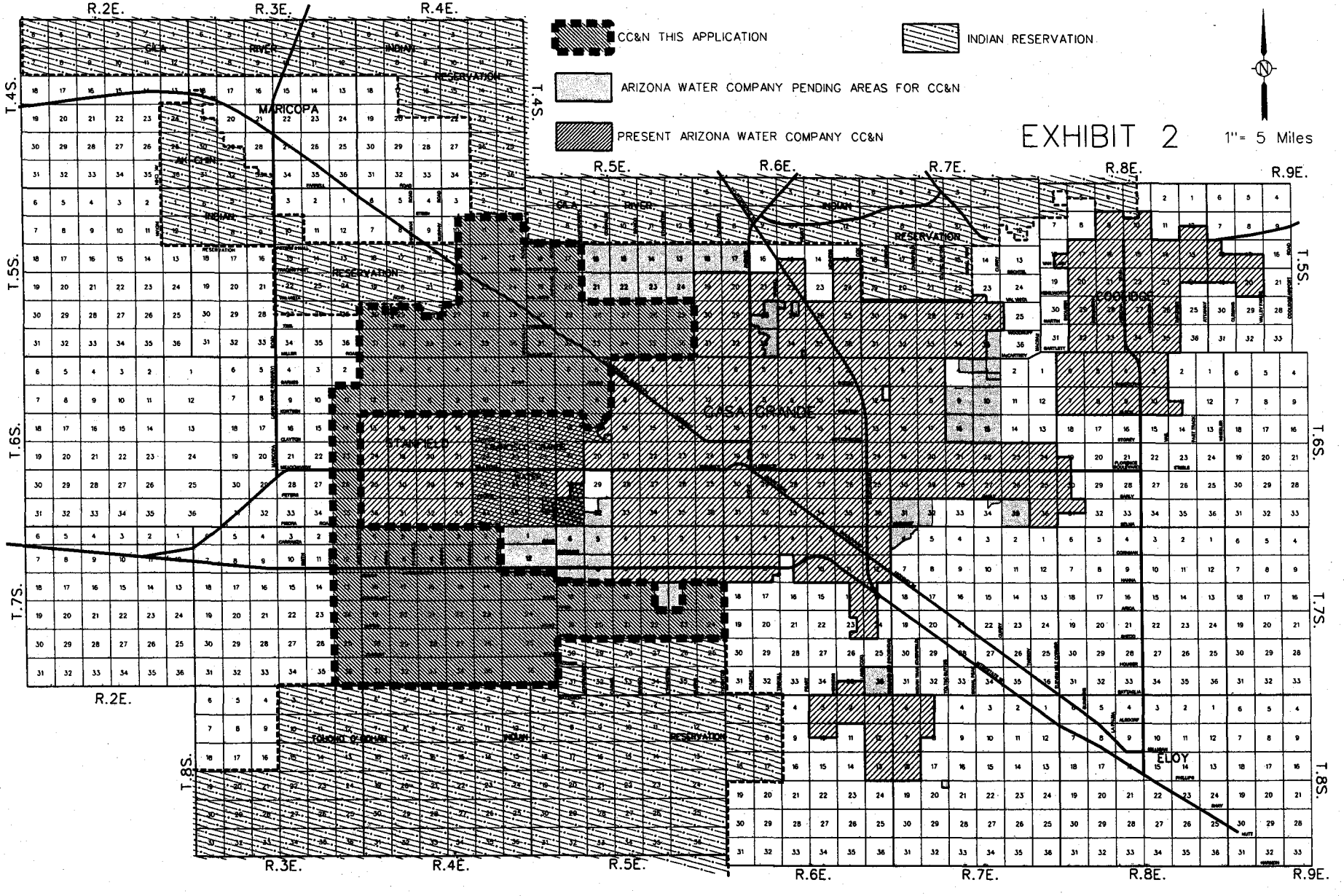
Sections 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, and 36 all in Township 7 South, Range 4 East of the Gila and Salt River Base and Meridian, Pinal County, Arizona.

EXHIBIT 1

CC&N this Application
Legal Description
continued

T.7S.,R.5E.

Sections 13, the East half of Section 14, the West half of Section 15, 16, 17, 18, 19, 20, 21, 22, 23, and 24 all in Township 7 South, Range 5 East of the Gila and Salt River Base and Meridian, Pinal County, Arizona.


CC&N THIS APPLICATION
INDIAN RESERVATION
ARIZONA WATER COMPANY PENDING AREAS FOR CC&N
PRESENT ARIZONA WATER COMPANY CC&N
EXHIBIT 2
1"= 5 Miles
R.2E.
R.3E.
R.4E.
R.5E.
R.6E.
R.7E.
R.8E.
R.9E.
T.4S.
T.5S.
T.6S.
T.7S.
T.8S.
GILA RIVER INDIAN RESERVATION
MARICOPA
AK-CHIN INDIAN RESERVATION
STANFIELD
CASA GRANDE
COOLIDGE
ELOY
TOHONO O'ODHAM INDIAN RESERVATION

November 21, 2005

Mike Whitehead
Vice President, Engineering
Arizona Water Company
P.O. Box 29006
Phoenix, Arizona 85038-9006

Re: Extension Of CC&N for Ivan Jue, Casa Grande AZ.

Dear Mr. Whitehead,

Ivan Jue requests to be included in your next application to extend its Certificate of Convenience and Necessity in or near Casa Grande, Pinal, Arizona with the Arizona Corporation Commission to include an overall area of 35 acres, which is more accurately described in Attachment 'A' and depicted on the map as Attachment 'B', both attached hereto. Please notify us when you have been issued a Procedural Order on this extension.

Sincerely,

Ivan Jue

Ivan Jue

ATTACHMENT #. "A"

W[redacted] & ASSOCIATES

LA[redacted] - CIVIL ENGINEERING

MARY E. LEO[redacted]
OFFICE MANA[redacted]

DENNIS DYER, [redacted]
REGISTERED [redacted]

TRAVIS STEE[redacted]
PROFESSIONAL[redacted]
REGISTERED [redacted]

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CHANDLER AZ 85

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FAX (480) 812-9

July 9, 2005

Job No. 050511PC-1

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
32778
DENNIS L.
DYER
Date Signed 7-18-2005
ARIZONA U.S.A.

LEGAL DESCRIPTION
FOR
IVAN JUE
PARCEL C-1
7.349 AC M/L
GROSS

[redacted] NE ¼ of Section 13, T.7S.-R.5E., G. & S.R.B. & M., Pinal [redacted], being more particularly described as follows;

[redacted] at the E ¼ Corner of said Section 13, being marked by a 5/8" [redacted] N. 0 deg. 15' 43" W., (basis of bearings), along the Easterly [redacted] of Section 13, a distance of 742.46 feet to the SE Corner of [redacted] recorded in Book 13 of Surveys Page 156, Pinal County [redacted] by a cotton picker spindle, said point also being the TRUE [redacted]NG; thence S. 89 deg. 39' 32" W., along the Southerly line of [redacted] a distance of 556.59 feet to a point fromwhich the SW Corner of said [redacted] by a ½" bar, LS 32778, bears S. 89 deg. 39' 32" W., [redacted] therefrom; thence N. 0 deg. 15' 18" W., 575.18 feet to a point on [redacted] line of said Parcel 'C', and fromwhich point the NW Corner of said [redacted] by a ½" bar, LS 32778, bears S. 89 deg. 39' 32" W., [redacted] therefrom; thence N. 89 deg. 39' 32" E, along the said Northerly [redacted] distance of 556.52 feet to the NE Corner of said Parcel 'C', being [redacted] cotton [redacted] picker spindle and fromwhich point the NE Corner of said [redacted] being marked by a an Arizona Highway Department brass cap in hand [redacted] N. 0 deg. 15' 43" W., 1349.34 feet distant therefrom; thence S. 0 deg. 15' [redacted] feet to the TRUE POINT OF BEGINNING.

[redacted] easement for roadway over the Easterly 33.00 feet thereof as [redacted] 375 Page 573, Pinal County Records.

[redacted]

[redacted] easement for Ingress, Egress and Public Utilities over the [redacted] thereof.

[redacted] and all existing easements and or rights-of-way affecting the [redacted] property.

WECKERLY & ASSOCIATES
LAND SURVEYING - CIVIL ENGINEERING

MARY E. LEONARD, PRES.
OFFICE MANAGER

DENNIS DYER, V.P.
REGISTERED LAND SURVEYOR

TRAVIS STEELE, V.P.
PROFESSIONAL ENGINEER
REGISTERED LAND SURVEYOR

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July 9, 2005

Job No. 050511PC-2

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
32778
DENNIS L.
DYER
Date Signed 7-18-2005
ARIZONA U.S.A.

LEGAL DESCRIPTION
FOR
IVAN JUE
PARCEL C-2
6.913 AC M/L
GROSS

That part of the NE ¼ of Section 13, T.7S.-R.5E., G. & S.R.B. & M., Pinal County, Arizona; being more particularly described as follows;

Commencing at the E ¼ Corner of said Section 13, being marked by a 5/8" bar, LS 17258; thence N. 0 deg. 15' 43" W., (basis of bearings), along the Easterly line of the said NE ¼ of Section 13, a distance of 742.46 feet to the SE Corner of Parcel 'C' of a survey recorded in Book 13 of Surveys Page 156, Pinal County Records, being marked by a cotton picker spindle, and fromwhich point the NE Corner of said Section 13, being marked by an Arizona Highway Department brass cap in hand hole, bears N. 0 deg. 15' 43" W., 1924.52 feet distant therefrom; thence S. 89 deg. 39' 32" W., along the Southerly line of said Parcel 'C', a distance of 556.59 feet to the TRUE POINT OF BEGINNING; thence continuing S. 89 deg. 39' 32" W., 523.58 feet to a point fromwhich the SW Corner of said Parcel 'C', being marked by a ½" bar, LS 32778, bears S. 89 deg. 39' 32" W., 1570.76 feet distant therefrom; thence N. 0 deg. 15' 00" W., 575.18 feet to a point on the Northerly line of said Parcel 'C', and fromwhich point the NW Corner of said Parcel 'C', being marked by a ½" bar, LS 32778, bears S. 89 deg. 39' 32" W., 1570.57 feet distant therefrom; thence N. 89 deg. 39' 32" E., along the said Northerly line of Parcel 'C', a distance of 523.53 feet to a point fromwhich the NE Corner of said Parcel 'C', being marked by a cotton picker spindle, bears N. 89 deg. 39' 32" E., 556.52 feet distant therefrom; thence S. 0 deg. 15' 18" E., 575.18 feet to the TRUE POINT OF BEGINNING.

Subject to an easement for Ingress, Egress and Public Utilities over the Northerly 23.00 feet thereof.

Subject to any and all existing easements and or rights-of-way affecting the above described property.

WECKERLY & ASSOCIATES
LAND SURVEYING - CIVIL ENGINEERING

MARY E. LEONARD, PRES.
OFFICE MANAGER

DENNIS DYER, V.P.
REGISTERED LAND SURVEYOR

TRAVIS STEELE, V.P.
PROFESSIONAL ENGINEER
REGISTERED LAND SURVEYOR

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July 9, 2005

Job No. 050511PC-3

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
32778
DENNIS L.
DYER
Date Signed 7-18-2005
ARIZONA U.S.A.

LEGAL DESCRIPTION
FOR
IVAN JUE
PARCEL C-3
6.913 AC M/L
GROSS

That part of the NE ¼ of Section 13, T.7S.-R.5E., G. & S.R.B. & M., Pinal County, Arizona, being more particularly described as follows;

Commencing at the E ¼ Corner of said Section 13, being marked by a 5/8" bar, LS 17258; thence N. 0 deg. 15' 43" W., (basis of bearings), along the Easterly line of the said NE ¼ of Section 13, a distance of 742.46 feet to the SE Corner of Parcel 'C' of a survey recorded in Book 13 of Surveys Page 156, Pinal County Records, being marked by a cotton picker spindle, and fromwhich point the NE Corner of said Section 13, being marked by an Arizona Highway Department brass cap in hand hole, bears N. 0 deg. 15' 43" W., 1924.52 feet distant therefrom; thence S. 89 deg. 39' 32" W., along the Southerly line of said Parcel 'C', a distance of 1080.17 feet to the TRUE POINT OF BEGINNING; thence continuing S. 89 deg. 39' 32" W., 523.59 feet to a point fromwhich the SW Corner of said Parcel 'C', being marked by a ½" bar, LS 32778, bears S. 89 deg. 39' 32" W., 1047.17 feet distant therefrom; thence N. 0 deg. 14' 35" W., 575.18 feet to a point on the Northerly line of said Parcel 'C', and fromwhich point the NW Corner of said Parcel 'C', being marked by a ½" bar, LS 32778, bears S. 89 deg. 39' 32" W., 1047.05 feet distant therefrom; thence N. 89 deg. 39' 32" E., along the said Northerly line of Parcel 'C', a distance of 523.52 feet to a point fromwhich the NE Corner of said Parcel 'C', being marked by a cotton picker spindle, bears N. 89 deg. 39' 32" E., 1080.05 feet distant therefrom; thence S. 0 deg. 15' 00" E., 575.18 feet to the TRUE POINT OF BEGINNING.

Subject to an easement for Ingress, Egress and Public Utilities over the Northerly 23.00 feet thereof.

Subject to any and all existing easements and or rights-of-way affecting the above described property.

WECKERLY & ASSOCIATES
LAND SURVEYING - CIVIL ENGINEERING

MARY E. LEONARD, PRES.
OFFICE MANAGER

DENNIS DYER, V.P.
REGISTERED LAND SURVEYOR

TRAVIS STEELE, V.P.
PROFESSIONAL ENGINEER
REGISTERED LAND SURVEYOR

337 N. ARIZONA AVENUE
CHANDLER AZ 85225

(480) 963-6481
FAX (480) 812-9140

July 9, 2005

Job No. 050511PC-4

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
32778
DENNIS L
DYER
Date Signed 7-18-2005
ARIZONA U.S.A.

LEGAL DESCRIPTION
FOR
IVAN JUE
PARCEL C-4
6.913 AC M/L
GROSS

That part of the NE ¼ of Section 13, T.7S.-R.5E., G. & S.R.B. & M., Pinal County, Arizona, being more particularly described as follows;

Commencing at the E ¼ Corner of said Section 13, being marked by a 5/8" bar, LS 17268; thence N. 0 deg. 15' 43" W., (basis of bearings), along the Easterly line of the said NE ¼ of Section 13, a distance of 742.46 feet to the SE Corner of Parcel 'C' of a survey recorded in Book 13 of Surveys Page 156, Pinal County Records, being marked by a cotton picker spindle, and fromwhich point the NE Corner of said Section 13, being marked by an Arizona Highway Department brass cap in hand hole, bears N. 0 deg. 15' 43" W., 1924.52 feet distant therefrom; thence S. 89 deg. 39' 32" W., along the Southerly line of said Parcel 'C', a distance of 1603.76 feet to the TRUE POINT OF BEGINNING; thence continuing S. 89 deg. 39' 32" W., 523.58 feet to a point fromwhich the SW Corner of said Parcel 'C', being marked by a ½" bar, LS 32778, bears S. 89 deg. 39' 32" W., 523.59 feet distant therefrom; thence N. 0 deg. 14' 17" W., 575.18 feet to a point on the Northerly line of said Parcel 'C', and fromwhich point the NW Corner of said Parcel 'C', being marked by a ½" bar, LS 32778, bears S. 89 deg. 39' 32" W., 523.52 feet distant therefrom; thence N. 89 deg. 39' 32" E., along the said Northerly line of Parcel 'C', a distance of 523.53 feet to a point fromwhich the NE Corner of said Parcel 'C', being marked by a cotton picker spindle, bears N. 89 deg. 39' 32" E., 1603.57 feet distant therefrom; thence S. 0 deg. 14' 35" E., 575.18 feet to the TRUE POINT OF BEGINNING.

Subject to an easement for Ingress, Egress and Public Utilities over the Northerly 23.00 feet thereof.

Subject to any and all existing easements and or rights-of-way affecting the above described property.

WECKERLY & ASSOCIATES
LAND SURVEYING - CIVIL ENGINEERING

MARY E. LEONARD, PRES.
OFFICE MANAGER

DENNIS DYER, V.P.
REGISTERED LAND SURVEYOR

TRAVIS STEELE, V.P.
PROFESSIONAL ENGINEER
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CHANDLER AZ 85225

(480) 963-6481
FAX (480) 812-9140

July 9, 2005

Job No. 050511PC-5

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
32778
DENNIS L.
DYER
Date Signed 7-18-2005
ARIZONA U.S.A.

LEGAL DESCRIPTION
FOR
IVAN JUE
PARCEL C-5
6.913 AC M/L
GROSS

That part of the NE ¼ of Section 13, T.7S.-R.5E., G. & S.R.B. & M., Pinal County, Arizona, being more particularly described as follows;

Commencing at the E ¼ Corner of said Section 13, being marked by a 5/8" bar, LS 17258; thence N. 0 deg. 15' 43" W., (basis of bearings), along the Easterly line of the said NE ¼ of Section 13, a distance of 742.46 feet to the SE Corner of Parcel 'C' of a survey recorded in Book 13 of Surveys Page 156, Pinal County Records, being marked by a cotton picker spindle, and fromwhich point the NE Corner of said Section 13, being marked by an Arizona Highway Department brass cap in hand hole, bears N. 0 deg. 15' 43" W., 1924.52 feet distant therefrom; thence S. 89 deg. 39' 32" W., along the Southerly line of said Parcel 'C', a distance of 2127.34 feet to the TRUE POINT OF BEGINNING; thence continuing S. 89 deg. 39' 32" W., 523.59 feet to the SW Corner of said Parcel 'C', being marked by a ½" bar, LS 32778 and fromwhich point the Center of said Section 13, being marked by a 1 ½" aluminum cap, LS 19847, bears S. 0 deg. 13' 53" E., 736.33 feet distant therefrom; thence N. 0 deg. 13' 53" W., along the North-South Mid-Section line of said Section 13, a distance of 575.18 feet to the NW Corner of said Parcel 'C' being marked by a ½" bar, LS 32778 and fromwhich point the N ¼ Corner of said Section 13, being marked by a 5/8" bar with Pinal County plastic cap, bears N. 0 deg. 13' 53" W., 1349.34 feet distant therefrom; thence N. 89 deg. 39' 32" E., along the Northerly line of said Parcel 'C', a distance of 523.52 feet to a point fromwhich the NE Corner of said Parcel 'C', being marked by a cotton picker spindle, bears N. 89 deg. 39' 32" E., 2127.10 feet distant therefrom; thence S. 0 deg. 14' 17" E., 575.18 feet to the TRUE POINT OF BEGINNING.

Subject to an easement for Ingress, Egress and Public Utilities over the Northerly 23.00 feet thereof.

Subject to any and all existing easements and or rights-of-way affecting the above described property.

WECKERLY & ASSOCIATES
LAND SURVEYING - CIVIL ENGINEERING

MARY E. LEONARD, PRES.
OFFICE MANAGER

DENNIS DYER, V.P.
REGISTERED LAND SURVEYOR

TRAVIS STEELE, V.P.
PROFESSIONAL ENGINEER
REGISTERED LAND SURVEYOR

337 N. ARIZONA AVENUE
CHANDLER AZ 85225

(480) 963-6481
FAX (480) 812-9140

July 9, 2005

Job No. 050511EA

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
32778
DENNIS L.
DYER
Date Signed 7-18-2005
ARIZONA U.S.A.

LEGAL DESCRIPTION
FOR
IVAN JUE
23' EASEMENT FOR INGRESS, EGRESS AND PUBLIC UTILITIES

An easement for Ingress, Egress and Public Utilities over the Northerly 23.00 feet of that part of the NE ¼ of Section 13, T.7S.-R.5E., G. & S.R.B. & M., Pinal County, Arizona, being more particularly described as follows;

Commencing at the E ¼ Corner of said Section 13, being marked by a 5/8" bar, LS 17258; thence N. 0 deg. 15' 43" W., (basis of bearings), along the Easterly line of the said NE ¼ of Section 13, a distance of 742.46 feet to the SE Corner of Parcel 'C' of a survey recorded in Book 13 of Surveys Page 156, Pinal County Records, being marked by a cotton picker spindle, said point also being the TRUE POINT OF BEGINNING; thence S. 89 deg. 39' 32" W., along the Southerly line of said Parcel 'C', a distance of 2650.93 feet to the SW Corner of said Parcel 'C', being marked by a ½" bar, LS 32778 and fromwhich point the Center of said Section 13, being marked by a 1 ½" aluminum cap, LS 19847, bears S. 0 deg. 13' 53" E., 736.33 feet distant therefrom; thence N. 0 deg. 13' 53" W., along the North-South Mid-Section line of said Section 13, a distance of 575.18 feet to the NW Corner of said Parcel 'C' being marked by a ½" bar, LS 32778 and fromwhich point the N ¼ Corner of said Section 13, being marked by a 5/8" bar with Pinal County plastic cap, bears N. 0 deg. 13' 53" W., 1349.34 feet distant therefrom; thence N. 89 deg. 39' 32" E, along the said Northerly line of Parcel 'C' a distance of 2650.62 feet to the NE Corner of said Parcel 'C', being marked by a cotton picker spindle and fromwhich point the NE Corner of said Section 13, being marked by a an Arizona Highway Department brass cap in hand hole, bears N. 0 deg. 15' 43" W., 1349.34 feet distant therefrom; thence S. 0 deg. 15' 43" E., 575.18 feet to the TRUE POINT OF BEGINNING.

Subject to any and all existing easements and or rights-of-way affecting the above described property.

SHOWING

A MINOR LAND DIVISION

LOCATED IN

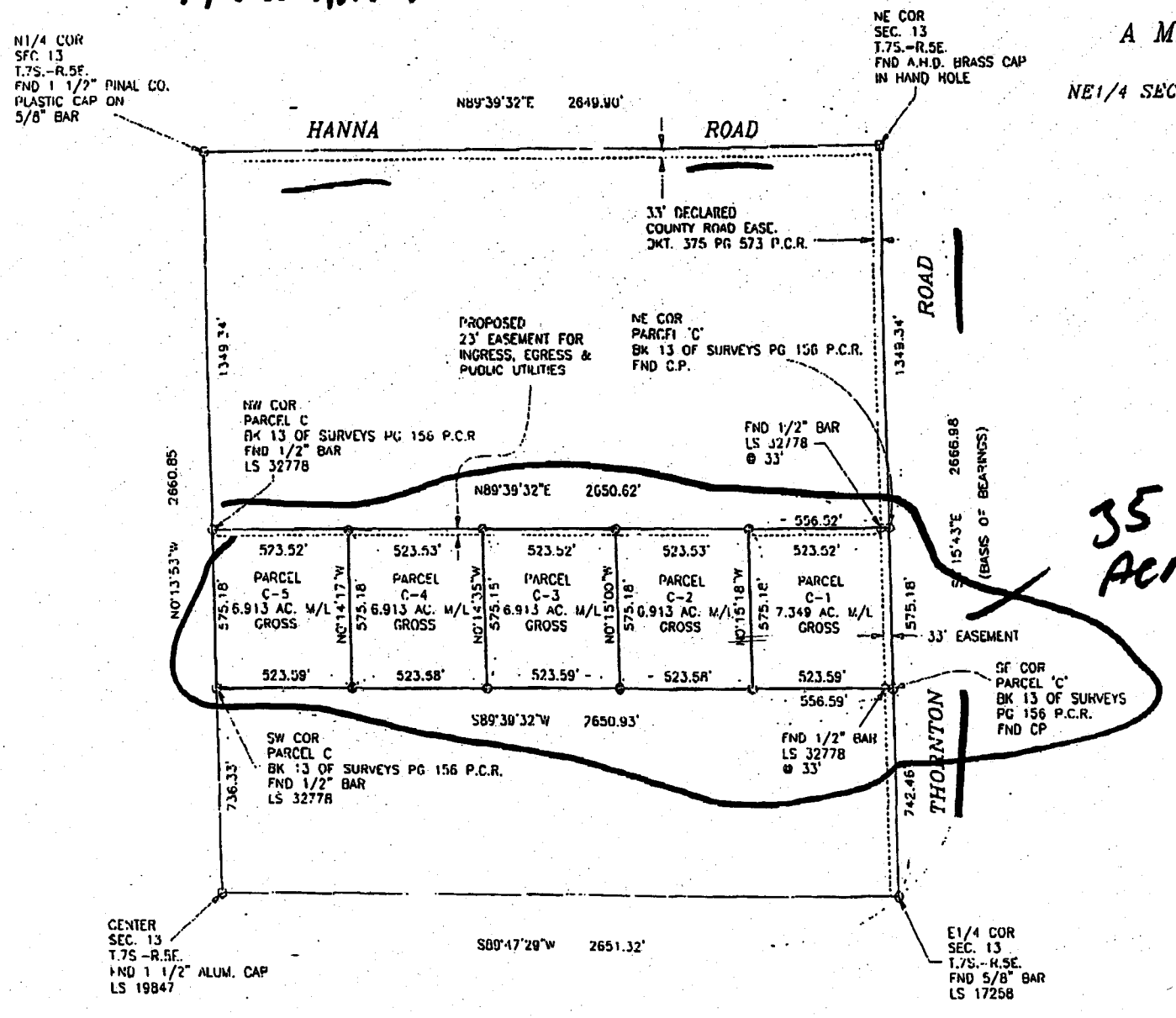
NE1/4 SECTION 13, T.7S.-R.5E., G.&S.R.B.&M.,

PINAL COUNTY, ARIZONA

SURVEYED DURING JUNE, 2005

FOR

IVAN JUE



35 ACRES

SCALE: 1" =300'

300 0 300 600 900

GRAPHIC SCALE - FEET

LEGEND

- O = FOUND 1/2" IRON BAR (UNLESS OTHERWISE NOTED)
- ⊙ = SET 1/2" IRON BAR (UNLESS OTHERWISE NOTED)
- ⊡ = FOUND BRASS CAP IN HAND HOLE
- C.P. = COTTON PICKER SPINDLE
- M/L = MORE OR LESS
- AC. = ACRE
- A.H.D. = ARIZONA HIGHWAY DEPARTMENT

THIS SURVEY HAS BEEN PERFORMED IN THE FIELD EITHER BY ME OR UNDER MY DIRECT SUPERVISION.

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
32778
GENNIS L. DYER
ARIZONA U.S.A.

NOTE: THIS SURVEY WAS MADE IN ACCORDANCE WITH LEGAL DESCRIPTIONS AND INSTRUCTIONS PROVIDED BY THE CLIENT. ANY DRAWINGS PRODUCED AS A RESULT OF THIS SURVEY ARE INSTRUMENTS OF SERVICE AND SHALL REMAIN THE PROPERTY OF WECKERLY & ASSOCIATES; ANY UNAUTHORIZED REPRODUCTION, REVISIONS, ADDITIONS, ALTERATIONS OR USE OF THESE DRAWINGS WILL BE

NOTE: THE CLIENT HAS BEEN INFORMED AND HEREBY IS REMINDED

WECKERLY & ASSOCIATES
SURVEYORS---ENGINEERS
337 N. ARIZONA AVENUE

November 21, 2005

Mike Whitehead
Vice President, Engineering
Arizona Water Company
P.O. Box 29006
Phoenix, Arizona 85038-9006

Re: Extension Of CC&N for Jeff Holt, Casa Grande AZ.

Dear Mr. Whitehead,

Jeffrey J. Holt requests to be included in your next application to extend its Certificate of Convenience and Necessity in or near Casa Grande, Pinal, Arizona with the Arizona Corporation Commission to include an overall area of 32 acres, which is more accurately described in Attachment 'A' and depicted on the map as Attachment 'B', both attached hereto. Please notify us when you have been issued a Procedural Order on this extension.

Sincerely,

Jeffrey J. Holt

ATTACHMENT "A"

WECKERLY & ASSOCIATES
LAND SURVEYING - CIVIL ENGINEERING

MARY E. LEONARD, PRES.
OFFICE MANAGER

DENNIS DYER, V.P.
REGISTERED LAND SURVEYOR

TRAVIS STEELE, V.P.
PROFESSIONAL ENGINEER
REGISTERED LAND SURVEYOR

337 N. ARIZONA AVENUE
CHANDLER AZ 85225

(480) 963-6481
FAX (480) 812-9140

August 11, 2005

Job No. 050510EAJH-23S

REGISTERED LAND SURVEYOR
CERTIFICATE NO. 32778
DENNIS L. DYER
Date Signed 8-11-2005
ARIZONA U.S.A.

LEGAL DESCRIPTION
FOR
JEFF HOLT
23' EASEMENT FOR INGRESS, EGRESS & PUBLIC UTILITIES

An easement for Ingress, Egress and Public Utilities over the Southerly 23.00 feet of that part of the NE ¼ of Section 13, T.7S.-R.5E., G. & S.R.B. & M., Pinal County, Arizona, being more particularly described as follows;

Commencing at the NE Corner of said Section 13, being marked by an Arizona Highway Department brass cap in hand hole; thence S. 0 deg. 15' 43" E., (basis of bearings) along the Easterly line of the said NE ¼ of Section 13, a distance of 660.00 feet to the TRUE POINT OF BEGINNING; thence continuing S. 0 deg. 15' 43" E., 689.34 feet to a point fromwhich the E ¼ Corner of said Section 13, being marked by a 5/8" bar, LS 17258, bears S. 0 deg. 15' 43" E., 1317.64 feet distant therefrom; thence S. 89 deg. 39' 32" W., being parallel with the Northerly line of the said NE ¼ of Section 13, a distance of 1359.28 feet to a point fromwhich a point on the North-South Mid-Section line of said Section 13, bears S. 89 deg. 39' 32" W., 1291.34 feet distant therefrom; thence N. 0 deg. 13' 53" W., 1349.34 feet to a point on the Northerly line of the said NE ¼ of Section 13 and fromwhich point the N ¼ Corner of said Section 13, being marked by a 5/8" bar with a Pinal County plastic cap, bears S. 89 deg. 39' 32" W., 1291.34 feet distant therefrom; thence N. 89 deg. 39' 32" E., 698.55 feet to a point fromwhich the NE Corner of said Section 13, bears N. 89 deg. 39' 32" E., 660.01 feet distant therefrom; thence S. 0 deg. 15' 43" E., being parallel with the said Easterly line of the NE ¼ of Section 13, a distance of 660.00 feet; thence N. 89 deg. 39' 32" E., being parallel with the said Northerly line of the NE ¼ of Section 13, a distance of 660.01 feet to the TRUE POINT OF BEGINNING.

Subject to any and all existing easements and or rights-of-way affecting the above described property.

WECKERLY & ASSOCIATES
LAND SURVEYING - CIVIL ENGINEERING

MARY E. LEONARD, PRES.
OFFICE MANAGER

DENNIS DYER, V.P.
REGISTERED LAND SURVEYOR

TRAVIS STEELE, V.P.
PROFESSIONAL ENGINEER
REGISTERED LAND SURVEYOR

337 N. ARIZONA AVENUE
CHANDLER AZ 85225

(480) 963-6481
FAX (480) 812-9140

August 11, 2005

Job No. 050510EAJH-23W

REGISTERED LAND SURVEYOR CERTIFICATE NO. 32778 DENNIS L. DYER Date Signed 8-11-2005 ARIZONA U.S.A.

LEGAL DESCRIPTION
FOR
JEFF HOLT
23' EASEMENT FOR INGRESS, EGRESS & PUBLIC UTILITIES

An easement for Ingress, Egress and Public Utilities over the Westerly 23.00 feet of that part of the NE ¼ of Section 13, T.7S.-R.5E., G. & S.R.B. & M., Pinal County, Arizona, being more particularly described as follows;

Commencing at the NE Corner of said Section 13, being marked by an Arizona Highway Department brass cap in hand hole; thence S. 0 deg. 15' 43" E., (basis of bearings) along the Easterly line of the said NE ¼ of Section 13, a distance of 660.00 feet to the TRUE POINT OF BEGINNING; thence continuing S. 0 deg. 15' 43" E., 689.34 feet to a point fromwhich the E ¼ Corner of said Section 13, being marked by a 5/8" bar, LS 17258, bears S. 0 deg. 15' 43" E., 1317.64 feet distant therefrom; thence S. 89 deg. 39' 32" W., being parallel with the Northerly line of the said NE ¼ of Section 13, a distance of 1359.28 feet to a point fromwhich a point on the North-South Mid-Section line of said Section 13, bears S. 89 deg. 39' 32" W., 1291.34 feet distant therefrom; thence N. 0 deg. 13' 53" W., 1349.34 feet to a point on the Northerly line of the said NE ¼ of Section 13 and fromwhich point the N ¼ Corner of said Section 13, being marked by a 5/8" bar with a Pinal County plastic cap, bears S. 89 deg. 39' 32" W., 1291.34 feet distant therefrom; thence N. 89 deg. 39' 32" E., 698.55 feet to a point fromwhich the NE Corner of said Section 13, bears N. 89 deg. 39' 32" E., 660.01 feet distant therefrom; thence S. 0 deg. 15' 43" E., being parallel with the said Easterly line of the NE ¼ of Section 13, a distance of 660.00 feet; thence N. 89 deg. 39' 32" E., being parallel with the said Northerly line of the NE ¼ of Section 13, a distance of 660.01 feet to the TRUE POINT OF BEGINNING.

Subject to any and all existing easements and or rights-of-way affecting the above described property.

WECKERLY & ASSOCIATES
LAND SURVEYING - CIVIL ENGINEERING

MARY E. LEONARD, PRES.
OFFICE MANAGER

DENNIS DYER, V.P.
REGISTERED LAND SURVEYOR

TRAVIS STEELE, V.P.
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REGISTERED LAND SURVEYOR

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FAX (480) 812-9140

August 11, 2005

Job No. 050510PB-1

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
32778
DENNIS L.
DYER
Date Signed 8-11-2005
ARIZONA U.S.A.

LEGAL DESCRIPTION
FOR
JEFF HOLT
PARCEL B-1
10.586 AC M/L
GROSS

That part of the NE ¼ of Section 13, T.7S.-R.5E., G. & S.R.B. & M., Pinal County, Arizona, being more particularly described as follows;

Commencing at the NE Corner of said Section 13, being marked by an Arizona Highway Department brass cap in hand hole and fromwhich point the E ¼ Corner of said Section 13, being marked by a 5/8" bar, LS 17258, bears S. 0 deg. 15' 43" E., (basis of bearings), 2666.98 feet distant therefrom; thence S. 89 deg. 39' 32" W., along the Northerly line of the said NE ¼ of Section 13, a distance of 660.01 feet to a corner of Parcel 'B' of a survey recorded in Book 13 of Surveys, Page 156, Pinal County records, being marked by a cotton picker spindle, said point also being the TRUE POINT OF BEGINNING; thence S. 0 deg. 15' 43" E., being parallel with the Easterly line of the said NE ¼ of Section 13, a distance of 660.00 feet to a corner of said Parcel 'B', being marked by a ½" bar, LS 32778; thence S. 89 deg. 39' 32" W., being parallel with the said Northerly line of the NE ¼ of Section 13, a distance of 698.90 feet to a point on the Westerly line of said Parcel 'B' and fromwhich point, the SW Corner of said Parcel 'B', being marked by a ½" bar, LS 32778, bears S. 0 deg. 13' 53" E., 689.34 feet distant therefrom; thence N. 0 deg. 13' 53" W., 660.00 feet to the NW Corner of said Parcel 'B', being marked by a cotton picker spindle and fromwhich point the N ¼ Corner of said Section 13, being marked by a 5/8" bar with a Pinal County plastic cap, bears S. 89 deg. 39' 32" W., 1291.34 feet distant therefrom; thence N. 89 deg. 39' 32" E., along the Northerly line of the NE ¼ of said Section 13, a distance of 698.55 feet to the TRUE POINT OF BEGINNING.

Subject to an easement for roadway over the Northerly 33.00 feet thereof as recorded in Docket 375, Page 573, Pinal County records.

Also

Subject to an easement for Ingress, Egress and Public Utilities over the Westerly 23.00 feet thereof.

Subject to any and all existing easements and or rights-of-way affecting the above described property.

WECKERLY & ASSOCIATES
LAND SURVEYING - CIVIL ENGINEERING

MARY E. LEONARD, PRES.
OFFICE MANAGER

DENNIS DYER, V.P.
REGISTERED LAND SURVEYOR

TRAVIS STEELE, V.P.
PROFESSIONAL ENGINEER
REGISTERED LAND SURVEYOR

337 N. ARIZONA AVENUE
CHANDLER AZ 85225

(480) 963-6481
FAX (480) 812-9140

August 11, 2005

Job No. 050510PB-3

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
32778
DENNIS L.
DYER
Date Signed 8-11-2005
ARIZONA U.S.A.

LEGAL DESCRIPTION
FOR
JEFF HOLT
PARCEL B-3
6.252 AC M/L
GROSS

That part of the NE ¼ of Section 13, T.7S.-R.5E., G. & S.R.B. & M., Pinal County, Arizona, being more particularly described as follows;

Commencing at the NE Corner of said Section 13, being marked by an Arizona Highway Department brass cap in hand hole and fromwhich point the E ¼ Corner of said Section 13, being marked by a 5/8" bar, LS 17258, bears S. 0 deg. 15' 43" E., (basis of bearings), 2666.98 feet distant therefrom; thence S. 89 deg. 39' 32" W., along the Northerly line of the said NE ¼ of Section 13, a distance of 1358.56 feet to the NW Corner of Parcel 'B' of a survey recorded in Book 13 of Surveys, Page 156, Pinal County records, being marked by a cotton picker spindle and fromwhich point the N ¼ Corner of said Section 13, being marked by a 5/8" bar with a Pinal County plastic cap, bears S. 89 deg. 39' 32" W., 1291.34 feet distant therefrom; thence S. 0 deg. 13' 53" E., along the Westerly line of said Parcel 'B', a distance of 870.69 feet to the TRUE POINT OF BEGINNING; thence N. 89 deg. 39' 32" E., being parallel with the Northerly line of the said NE ¼ of Section 13, a distance of 568.85 feet; thence S. 0 deg. 15' 43" E., being parallel with the Easterly line of the said NE ¼ of Section 13, a distance of 478.65 feet to a point on the Southerly line of said Parcel 'B' and fromwhich point the SE Corner of said Parcel 'B', being marked by a cotton picker spindle, bears N. 89 deg. 39' 32" E., 790.18 feet distant therefrom; thence S. 89 deg. 39' 32" W., 569.10 feet to the SW Corner of said Parcel 'B', being marked by a ½" bar, LS 32778; thence N. 0 deg. 13' 53" W., along the Westerly line of said Parcel 'B', a distance of 478.65 feet to the TRUE POINT OF BEGINNING.

Subject to an easement for Ingress, Egress and Public Utilities over the Westerly 23.00 feet thereof.

Also

Subject to an easement for Ingress, Egress and Public Utilities over the Southerly 23.00 feet thereof.

Subject to any and all existing easements and or rights-of-way affecting the above described property.

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
32778
DENNIS L.
DYER
Date Signed 8-11-2005
ARIZONA U.S.A.

WECKERLY & ASSOCIATES
LAND SURVEYING - CIVIL ENGINEERING

MARY E. LEONARD, PRES.
OFFICE MANAGER

DENNIS DYER, V.P.
REGISTERED LAND SURVEYOR

TRAVIS STEELE, V.P.
PROFESSIONAL ENGINEER
REGISTERED LAND SURVEYOR

337 N. ARIZONA AVENUE
CHANDLER AZ 85225

(480) 963-6481
FAX (480) 812-9140

August 11, 2005

Job No. 050510PB-4

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
32778
DENNIS L.
DYER
Date Signed 8-11-2005
ARIZONA U.S.A.

LEGAL DESCRIPTION
FOR
JEFF HOLT
PARCEL B-4
6.252 AC M/L
GROSS

That part of the NE ¼ of Section 13, T.7S.-R.5E., G. & S.R.B. & M., Pinal County, Arizona, being more particularly described as follows;

Commencing at the NE Corner of said Section 13, being marked by an Arizona Highway Department brass cap in hand hole; thence S. 0 deg. 15' 43" E., (basis of bearings) along the Easterly line of the NE ¼ of said Section 13, a distance of 1349.34 feet to the SE Corner of Parcel 'B' of a survey recorded in Book 13 of Surveys, Page 156, Pinal County records, being marked by a cotton picker spindle and fromwhich point the E ¼ Corner of said Section 13, being marked by a 5/8" bar, LS 17258, bears S. 0 deg. 15' 43" E., 1317.64 feet distant therefrom; thence S. 89 deg. 39' 32" W., along the Southerly line of said Parcel 'B', a distance of 395.09 feet to the TRUE POINT OF BEGINNING; thence continuing S. 89 deg. 39' 32" W., 395.09 feet to a point fromwhich the SW Corner of said Parcel 'B', being marked by a ½" bar, LS 32778, bears S. 89 deg. 39' 32" W., 569.10 feet distant therefrom; thence N. 0 deg. 15' 43" W., being parallel with the said Easterly line of the NE ¼ of Section 13, a distance of 689.34 feet; thence N. 89 deg. 39' 32" E., 395.09 feet; thence S. 0 deg. 15' 43" E., 689.34 feet to the TRUE POINT OF BEGINNING.

Subject to an easement for Ingress, Egress and Public Utilities over the Southerly 23.00 feet thereof.

Subject to any and all existing easements and or rights-of-way affecting the above described property.

WECKERLY & ASSOCIATES
LAND SURVEYING - CIVIL ENGINEERING

MARY E. LEONARD, PRES.
OFFICE MANAGER

DENNIS DYER, V.P.
REGISTERED LAND SURVEYOR

TRAVIS STEELE, V.P.
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August 11, 2005

Job No. 050510PB-5

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
32778
DENNIS L.
DYER
Date Signed 8-11-2005
ARIZONA U.S.A.

LEGAL DESCRIPTION
FOR
JEFF HOLT
PARCEL B-5
6.252 AC M/L
GROSS

That part of the NE ¼ of Section 13, T.7S.-R.5E., G. & S.R.B. & M., Pinal County, Arizona, being more particularly described as follows;

Commencing at the NE Corner of said Section 13, being marked by an Arizona Highway Department brass cap in hand hole; thence S. 0 deg. 15' 43" E., (basis of bearings) along the Easterly line of the NE ¼ of said Section 13, a distance of 660.00 feet to a point marking a corner of Parcel 'B' of a survey recorded in Book 13 of Surveys, Page 156, Pinal County records, being marked by a cotton picker spindle, said point also being the TRUE POINT OF BEGINNING; thence continuing S. 0 deg. 15' 43" E., 689.34 feet to the SE Corner of said Parcel 'B', being marked by a cotton picker spindle and fromwhich point the E ¼ Corner of said Section 13, being marked by a 5/8" bar, LS 17258, bears S. 0 deg. 15' 43" E., 1317.64 feet distant therefrom; thence S. 89 deg. 39' 32" W., along the Southerly line of said Parcel 'B', a distance of 395.09 feet to a point fromwhich the SW Corner of said Parcel 'B', being marked by a ½" bar, LS 32778, bears S. 89 deg. 39' 32" W., 964.19 feet distant therefrom; thence N. 0 deg. 15' 43" W., being parallel with the Easterly line of the said NE ¼ of Section 13, a distance of 689.34 feet; thence N. 89 deg. 39' 32" E., 395.09 feet to the TRUE POINT OF BEGINNING.

Subject to an easement for roadway over the Easterly 33.00 feet thereof as recorded in Docket 375, Page 573, Pinal County records.

Also

Subject to an easement for Ingress, Egress and Public Utilities over the Southerly 23.00 feet thereof.

Subject to any and all existing easements and or rights-of-way affecting the above described property.

LOCATED IN

NE1/4 SECTION 13, T.7S.-R.5E., G.&S.R.B.&M.,

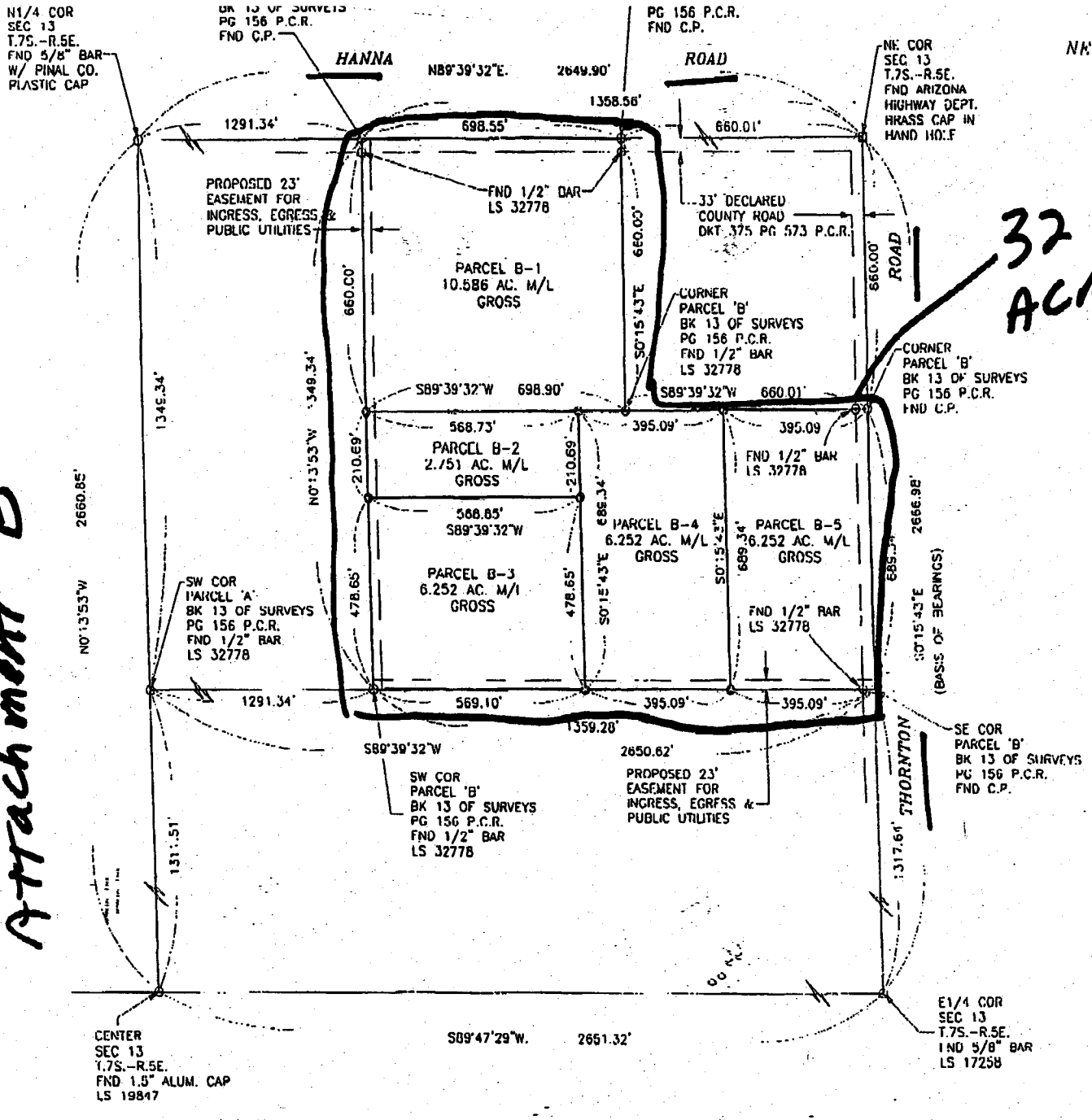
PINAL COUNTY, ARIZONA

SURVEYED DURING AUGUST, 2005

JEFF HOLT

32 ACRES

Attachment B



SCALE: 1" =200'

200 0 200 400 600

GRAPHIC SCALE - FEET

LEGEND

- O = FOUND 1/2" IRON BAR (UNLESS OTHERWISE NOTED)
- ⊖ = SET 1/2" IRON BAR (UNLESS OTHERWISE NOTED)
- □ = FOUND BRASS CAP IN HAND HOLE
- C.P. = COTTON PICKER SPINDLE
- M/L = MORE OR LESS
- AC. = ACRE

THIS SURVEY HAS BEEN PERFORMED IN THE FIELD EITHER BY ME OR UNDER MY DIRECT SUPERVISION.

32778 REGISTERED LAND SURVEYOR

8-12-05

NOTE: THIS SURVEY WAS MADE IN ACCORDANCE WITH LEGAL DESCRIPTIONS AND INSTRUCTIONS PROVIDED BY THE CLIENT. ANY DRAWINGS PRODUCED AS A RESULT OF THIS SURVEY ARE INSTRUMENTS OF SERVICE AND SHALL REMAIN THE PROPERTY OF WECKERLY & ASSOCIATES: ANY UNAUTHORIZED REPRODUCTION, REVISIONS, ADDITIONS, ALTERATIONS OR USE OF THESE DRAWINGS WILL BE CONSIDERED TO BE IN VIOLATION OF THE ARIZONA STATE TECHNICAL BOARD CODE 32-125 & 32-142 AND IS STRICTLY PROHIBITED.

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THE CLIENT HAS BEEN INFORMED AND HEREBY IS REMINDED THAT THERE ARE RULES AND REGULATIONS THAT MUST BE COMPLIED WITH REGARDING LAND DIVISION. THE PROPER GOVERNING AUTHORITIES SHOULD BE CONTACTED TO ANSWER ANY QUESTIONS.

JEFF HOLT

WECKERLY & ASSOCIATES
SURVEYORS---ENGINEERS
337 N. ARIZONA AVENUE
CHANDLER, ARIZONA
480-963-6481

JOB NO. 050510B

November 21, 2005

Mike Whitehead
Vice President, Engineering
Arizona Water Company
P.O. Box 29006
Phoenix, Arizona 85038-9006

Re: Extension Of CC&N for Loren Whipple, Casa Grande AZ.

Dear Mr. Whitehead,

Loren Whipple requests to be included in your next application to extend its Certificate of Convenience and Necessity in or near Casa Grande, Pinal, Arizona with the Arizona Corporation Commission to include an overall area of 40 acres, which is more accurately described in Attachment 'A' and depicted on the map as Attachment 'B', both attached hereto. Please notify us when you have been issued a Procedural Order on this extension.

Sincerely,

Loren Whipple

Loren Whipple

ATTachment "A"

WECKERLY & ASSOCIATES
LAND SURVEYING - CIVIL ENGINEERING

MARY E. LEONARD, PRES.
OFFICE MANAGER

DENNIS DYER, V.P.
REGISTERED LAND SURVEYOR

TRAVIS STEELE, V.P.
PROFESSIONAL ENGINEER
REGISTERED LAND SURVEYOR

337 N. ARIZONA AVENUE
CHANDLER AZ 85225

(480) 963-6481
FAX (480) 812-9140

July 9, 2005

Job No. 050510EA-1

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
32778
DENNIS L.
DYER
Date Signed 7-19-2005
ARIZONA U.S.A.

LEGAL DESCRIPTION
FOR
JEFF HOLT
23' EASEMENT FOR INGRESS, EGRESS AND PUBLIC UTILITIES

An easement for Ingress, Egress and Public Utilities over the Easterly 23.00 feet of that part of the NE ¼ of Section 13, T.7S.-R.5E., G. & S.R.B. & M., Pinal County, Arizona, being more particularly described as follows;

Commencing at the NE Corner of said Section 13, being marked by an Arizona Highway Department brass cap in hand hole and fromwhich point the E ¼ Corner of said Section 13, being marked by a 5/8" bar, LS 17258, bears S. 0 deg. 15' 43" E., (basis of bearings), 2666.98 feet distant therefrom; thence S. 89 deg. 39' 32" W., along the Northerly line of the said NE ¼ of Section 13, a distance of 1358.56 feet to the NE Corner of Parcel 'A' of a survey recorded in Book 13 of Surveys, Page 156, Pinal County Records, being marked by a cotton picker spindle; thence continuing S. 89 deg. 39' 32" W., 1033.07 feet to the TRUE POINT OF BEGINNING; thence S. 0 deg. 13' 53" E., 1349.34 feet to a point on the Southerly line of said Parcel 'A', and fromwhich point the SE Corner of said Parcel 'A', being marked by a ½" bar, LS 32778, bears N. 89 deg. 39' 32" E., 1033.07 feet distant therefrom; thence S. 89 deg. 39' 32" W., along the Southerly line of said Parcel 'A', a distance of 258.27 feet to the SW Corner of said Parcel 'A', being marked by a ½" bar LS 32778 and fromwhich point the Center of said Section 13, being marked by a 1 ½" aluminum cap, LS 19847, bears S. 0 deg. 13' 53" E., 1311.51 feet distant therefrom; thence N. 0 deg. 13' 53" W., 1349.34 feet to the N ¼ Corner of said Section 13, also being the NW Corner of said Parcel 'A', being marked by a 5/8" bar with Pinal County Plastic cap; thence N. 89 deg. 39' 32" E., 258.27 feet to the TRUE POINT OF BEGINNING.

Subject to any and all existing easements and or rights-of-way affecting the above described property.

WECKERLY & ASSOCIATES
LAND SURVEYING - CIVIL ENGINEERING

MARY E. LEONARD, PRES.
OFFICE MANAGER

DENNIS DYER, V.P.
REGISTERED LAND SURVEYOR

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337 N. ARIZONA AVENUE
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July 9, 2005

Job No. 050510EA-S

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
32778
DENNIS L.
DYER
Date Signed 7-9-2005
ARIZONA U.S.A.

LEGAL DESCRIPTION
FOR
JEFF HOLT
23' EASEMENT FOR INGRESS, EGRESS AND PUBLIC UTILTIES

An easement for Ingress, Egress and Public Utilities over the Southerly 23.00 feet of that part of the NE ¼ of Section 13, T.7S.-R.5E., G. & S.R.B. & M., Pinal County, Arizona, being more particularly described as follows;

Commencing at the NE Corner of said Section 13, being marked by an Arizona Highway Department brass cap in hand hole and fromwhich point the E ¼ Corner of said Section 13, being marked by a 5/8" bar, LS 17258, bears S. 0 deg. 15' 43" E., (basis of bearings), 2666.98 feet distant therefrom; thence S. 89 deg. 39' 32" W., along the Northerly line of the said NE ¼ of Section 13, a distance of 1358.56 feet to the NE Corner of Parcel 'A' of a survey recorded in Book 13 of Surveys, Page 156, Pinal County Records, being marked by a cotton picker spindle, said point also being the TRUE POINT OF BEGINNING; thence S. 0 deg. 13' 53" E., 1349.34 feet to the SE Corner of said Parcel 'A', being marked by a ½" bar, LS 32778; thence S. 89 deg. 39' 32" W., along the Southerly line of said Parcel 'A', a distance of 1291.34 feet to the SW Corner of said Parcel 'A', being marked by a ½" bar LS 32778 and fromwhich point the Center of said Section 13, being marked by a 1 ½" aluminum cap, LS 19847, bears S. 0 deg. 13' 53" E., 1311.51 feet distant therefrom; thence N. 0 deg. 13' 53" W., 1349.34 feet to the N ¼ Corner of said Section 13, also being the NW Corner of said Parcel 'A', being marked by a 5/8" bar with Pinal County Plastic cap; thence N. 89 deg. 39' 32" E., 1291.34 feet to the TRUE POINT OF BEGINNING.

Subject to any and all existing easements and or rights-of-way affecting the above described property.

WECKERLY & ASSOCIATES
LAND SURVEYING - CIVIL ENGINEERING

MARY E. LEONARD, PRES.
OFFICE MANAGER

DENNIS DYER, V.P.
REGISTERED LAND SURVEYOR

TRAVIS STEELE, V.P.
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REGISTERED LAND SURVEYOR

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CHANDLER AZ 85225

(480) 963-6481
FAX (480) 812-9140

July 9, 2005

Job No. 050510EA-2

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
32778
DENNIS L.
DYER
Date Signed 7-19-2005
ARIZONA U.S.A.

LEGAL DESCRIPTION
FOR
JEFF HOLT
23' EASEMENT FOR INGRESS, EGRESS AND PUBLIC UTILITIES

An easement for Ingress, Egress and Public Utilities over the Westerly 23.00 feet of that part of the NE ¼ of Section 13, T.7S.-R.5E., G. & S.R.B. & M., Pinal County, Arizona, being more particularly described as follows;

Commencing at the NE Corner of said Section 13, being marked by an Arizona Highway Department brass cap in hand hole and fromwhich point the E ¼ Corner of said Section 13, being marked by a 5/8" bar, LS 17258, bears S. 0 deg. 15' 43" E., (basis of bearings), 2666.98 feet distant therefrom; thence S. 89 deg. 39' 32" W., along the Northerly line of the said NE ¼ of Section 13, a distance of 1358.56 feet to the NE Corner of Parcel 'A' of a survey recorded in Book 13 of Surveys, Page 156, Pinal County Records, being marked by a cotton picker spindle; thence continuing S. 89 deg. 39' 32" W., 774.80 feet to the TRUE POINT OF BEGINNING; thence S. 0 deg. 13' 53" E., 1349.34 feet to a point on the Southerly line of said Parcel 'A', and fromwhich point the SE Corner of said Parcel 'A', being marked by a ½" bar, LS 32778, bears N. 89 deg. 39' 32" E., 774.80 feet distant therefrom; thence S. 89 deg. 39' 32" W., along the Southerly line of said Parcel 'A', a distance of 258.27 feet to a point fromwhich the SW Corner of said Parcel 'A', being marked by a ½" bar, LS 32778, bears S. 89 deg. 39' 32" W., 258.27 feet distant therefrom; thence N. 0 deg. 13' 53" W., 1349.34 feet to a point on the Northerly line of the said NE ¼ of Section 13 and fromwhich point the N ¼ Corner of said Section 13, also being the NW Corner of said Parcel 'A', being marked by a 5/8" bar with Pinal County plastic cap, bears S. 89 deg. 39' 32" W., 258.27 feet distant therefrom; thence N. 89 deg. 39' 32" E., 258.27 feet to the TRUE POINT OF BEGINNING.

Subject to any and all existing easements and or rights-of-way affecting the above described property.

WECKERLY & ASSOCIATES
LAND SURVEYING - CIVIL ENGINEERING

MARY E. LEONARD, PRES.
OFFICE MANAGER

DENNIS DYER, V.P.
REGISTERED LAND SURVEYOR

TRAVIS STEELE, V.P.
PROFESSIONAL ENGINEER
REGISTERED LAND SURVEYOR

337 N. ARIZONA AVENUE
CHANDLER AZ 85225

(480) 963-6481
FAX (480) 812-9140

July 9, 2005

Job No. 050510EA-3

REGISTERED LAND SURVEYOR CERTIFICATE NO. 32778 DENNIS L. DYER Date Signed 7-19-2005 ARIZONA U.S.A.

LEGAL DESCRIPTION
FOR
JEFF HOLT
23' EASEMENT FOR INGRESS, EGRESS AND PUBLIC UTLITIES

An easement for Ingress, Egress and Public Utilities over the Easterly 23.00 feet of that part of the NE ¼ of Section 13, T.7S.-R.5E., G. & S.R.B. & M., Pinal County, Arizona, being more particularly described as follows;

Commencing at the NE Corner of said Section 13, being marked by an Arizona Highway Department brass cap in hand hole and fromwhich point the E ¼ Corner of said Section 13, being marked by a 5/8" bar, LS 17258, bears S. 0 deg. 15' 43" E., (basis of bearings), 2666.98 feet distant therefrom; thence S. 89 deg. 39' 32" W., along the Northerly line of the said NE ¼ of Section 13, a distance of 1358.56 feet to the NE Corner of Parcel 'A' of a survey recorded in Book 13 of Surveys, Page 156, Pinal County Records, being marked by a cotton picker spindle; thence continuing S. 89 deg. 39' 32" W., 516.54 feet to the TRUE POINT OF BEGINNING; thence S. 0 deg. 13' 53" E., 1349.34 feet to a point on the Southerly line of said Parcel 'A', and fromwhich point the SE Corner of said Parcel 'A', being marked by a ½" bar, LS 32778, bears N. 89 deg. 39' 32" E., 516.54 feet distant therefrom; thence S. 89 deg. 39' 32" W., along the Southerly line of said Parcel 'A', a distance of 258.26 feet to a point fromwhich the SW Corner of said Parcel 'A', being marked by a ½" bar, LS 32778, bears S. 89 deg. 39' 32" W., 516.54 feet distant therefrom; thence N. 0 deg. 13' 53" W., 1349.34 feet to a point on the Northerly line of the said NE ¼ of Section 13 and fromwhich point the N ¼ Corner of said Section 13, also being the NW Corner of said Parcel 'A', being marked by a 5/8" bar with Pinal County plastic cap, bears S. 89 deg. 39' 32" W., 516.54 feet distant therefrom; thence N. 89 deg. 39' 32" E., 258.26 feet to the TRUE POINT OF BEGINNING.

Subject to any and all existing easements and or rights-of-way affecting the above described property.

WECKERLY & ASSOCIATES
LAND SURVEYING - CIVIL ENGINEERING

MARY E. LEONARD, PRES.
OFFICE MANAGER

DENNIS DYER, V.P.
REGISTERED LAND SURVEYOR

TRAVIS STEELE, V.P.
PROFESSIONAL ENGINEER
REGISTERED LAND SURVEYOR

337 N. ARIZONA AVENUE
CHANDLER AZ 85225

(480) 963-6481
FAX (480) 812-9140

July 9, 2005

Job No. 050510EA-4

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
32778
DENNIS L.
DYER
Date Signed 7-19-2005
ARIZONA U.S.A.

LEGAL DESCRIPTION
FOR
JEFF HOLT
23' EASEMENT FOR INGRESS, EGRESS AND PUBLIC UTILTIES

An easement for Ingress, Egress and Public Utilities over the Westerly 23.00 feet of that part of the NE ¼ of Section 13, T.7S.-R.5E., G. & S.R.B. & M., Pinal County, Arizona, being more particularly described as follows;

Commencing at the NE Corner of said Section 13, being marked by an Arizona Highway Department brass cap in hand hole and fromwhich point the E ¼ Corner of said Section 13, being marked by a 5/8" bar, LS 17258, bears S. 0 deg. 15' 43" E., (basis of bearings), 2666.98 feet distant therefrom; thence S. 89 deg. 39' 32" W., along the Northerly line of the said NE ¼ of Section 13, a distance of 1358.56 feet to the NE Corner of Parcel 'A' of a survey recorded in Book 13 of Surveys, Page 156, Pinal County Records, being marked by a cotton picker spindle; thence continuing S. 89 deg. 39' 32" W., 258.27 feet to the TRUE POINT OF BEGINNING; thence S. 0 deg. 13' 53" E., 1349.34 feet to a point on the Southerly line of said Parcel 'A', and fromwhich point the SE Corner of said Parcel 'A', being marked by a ½" bar, LS 32778, bears N. 89 deg. 39' 32" E., 258.27 feet distant therefrom; thence S. 89 deg. 39' 32" W., along the Southerly line of said Parcel 'A', a distance of 258.27 feet to a point fromwhich the SW Corner of said Parcel 'A', being marked by a ½" bar, LS 32778, bears S. 89 deg. 39' 32" W., 774.80 feet distant therefrom; thence N. 0 deg. 13' 53" W., 1349.34 feet to a point on the Northerly line of the said NE ¼ of Section 13 and fromwhich point the N ¼ Corner of said Section 13, also being the NW Corner of said Parcel 'A', being marked by a 5/8" bar with Pinal County plastic cap, bears S. 89 deg. 39' 32" W., 774.80 feet distant therefrom; thence N. 89 deg. 39' 32" E., 258.27 feet to the TRUE POINT OF BEGINNING.

Subject to any and all existing easements and or rights-of-way affecting the above described property.

WECKERLY & ASSOCIATES
LAND SURVEYING - CIVIL ENGINEERING

MARY E. LEONARD, PRES.
OFFICE MANAGER

DENNIS DYER, V.P.
REGISTERED LAND SURVEYOR

TRAVIS STEELE, V.P.
PROFESSIONAL ENGINEER
REGISTERED LAND SURVEYOR

337 N. ARIZONA AVENUE
CHANDLER AZ 85225

(480) 963-6481
FAX (480) 812-9140

July 9, 2005

Job No. 050510EA-5

REGISTERED LAND SURVEYOR CERTIFICATE NO. 32778 DENNIS L. DYER Date Signed 7-19-2005 ARIZONA U.S.A.

LEGAL DESCRIPTION
FOR
JEFF HOLT
23' EASEMENT FOR INGRESS, EGRESS AND PUBLIC UTILTIES

An easement for Ingress, Egress and Public Utilities over the Easterly 23.00 feet of that part of the NE ¼ of Section 13, T.7S.-R.5E., G. & S.R.B. & M., Pinal County, Arizona, being more particularly described as follows;

Commencing at the NE Corner of said Section 13, being marked by an Arizona Highway Department brass cap in hand hole and fromwhich point the E ¼ Corner of said Section 13, being marked by a 5/8" bar, LS 17258, bears S. 0 deg. 15' 43" E., (basis of bearings), 2666.98 feet distant therefrom; thence S. 89 deg. 39' 32" W., along the Northerly line of the said NE ¼ of Section 13, a distance of 1358.56 feet to the NE Corner of Parcel 'A' of a survey recorded in Book 13 of Surveys, Page 156, Pinal County Records, being marked by a cotton picker spindle, said point also being the TRUE POINT OF BEGINNING; thence S. 0 deg. 13' 53" E., 1349.34 feet to the SE Corner of said Parcel 'A', being marked by a ½" bar, LS 32778; thence S. 89 deg. 39' 32" W., along the Southerly line of said Parcel 'A', a distance of 258.27 feet to a point fromwhich the SW Corner of said Parcel 'A', being marked by a ½" bar, LS 32778, bears S. 89 deg. 39' 32" W., 1033.07 feet distant therefrom; thence N. 0 deg. 13' 53" W., 1349.34 feet to a point on the Northerly line of the said NE ¼ of Section 13 and fromwhich point the N ¼ Corner of said Section 13, also being the NW Corner of said Parcel 'A', being marked by a 5/8" bar with Pinal County plastic cap, bears S. 89 deg. 39' 32" W., 1033.07 feet distant therefrom; thence N. 89 deg. 39' 32" E., 258.27 feet to the TRUE POINT OF BEGINNING.

Subject to any and all existing easements and or rights-of-way affecting the above described property.

WECKERLY & ASSOCIATES
LAND SURVEYING - CIVIL ENGINEERING

RY E. LEONARD, PRES.
FICE MANAGER

NNIS DYER, V.P.
GISTERED LAND SURVEYOR

AVIS STEELE, V.P.
OFESSIONAL ENGINEER
GISTERED LAND SURVEYOR

337 N. ARIZONA AVENUE
CHANDLER AZ 85225

(480) 963-6481
FAX (480) 812-9140

July 9, 2005

Job No. 050510PA-1

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
32778
DENNIS L.
DYER
Date Signed 7-19-2005
ARIZONA U.S.A.

LEGAL DESCRIPTION
FOR
JEFF HOLT
PARCEL A-1
8.00 AC M/L GROSS

That part of the NE ¼ of Section 13, T.7S.-R.5E., G. & S.R.B. & M., Pinal County, Arizona, being more particularly described as follows;

Commencing at the NE Corner of said Section 13, being marked by an Arizona Highway Department brass cap in hand hole and fromwhich point the E ¼ Corner of said Section 13, being marked by a 5/8" bar, LS 17258, bears S. 0 deg. 15' 43" E., (basis of bearings), 2666.98 feet distant therefrom; thence S. 89 deg. 39' 32" W., along the Northerly line of the said NE ¼ of Section 13, a distance of 1358.56 feet to the NE Corner of Parcel 'A' of a survey recorded in Book 13 of Surveys, Page 156, Pinal County Records, being marked by a cotton picker spindle; thence continuing S. 89 deg. 39' 32" W., 1033.07 feet to the TRUE POINT OF BEGINNING; thence S. 0 deg. 13' 53" E., 1349.34 feet to a point on the Southerly line of said Parcel 'A', and fromwhich point the SE Corner of said Parcel 'A', being marked by a ½" bar, LS 32778, bears N. 89 deg. 39' 32" E., 1033.07 feet distant therefrom; thence S. 89 deg. 39' 32" W., along the Southerly line of said Parcel 'A', a distance of 258.27 feet to the SW Corner of said Parcel 'A', being marked by a ½" bar LS 32778 and fromwhich point the Center of said Section 13, being marked by a 1 ½" aluminum cap, LS 19847, bears S. 0 deg. 13' 53" E., 1311.51 feet distant therefrom; thence N. 0 deg. 13' 53" W., 1349.34 feet to the N ¼ Corner of said Section 13, also being the NW Corner of said Parcel 'A', being marked by a 5/8" bar with Pinal County Plastic cap; thence N. 89 deg. 39' 32" E., 258.27 feet to the TRUE POINT OF BEGINNING.

Subject to an easement for roadway over the Northerly 33.00 feet thereof as recorded in Docket 375, Page 573, Pinal County Records.

Also

Subject to an easement for Ingress, Egress and Public Utilities over the Easterly 23.00 feet thereof.

Also

Subject to an easement for Ingress, Egress and Public Utilities over the Southerly 23.00 feet thereof.

Subject to any and all existing easements and or rights-of-way affecting the above described property.

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
32778
DENNIS L.
DYER
Date Signed 7-19-2005
ARIZONA U.S.A.

WECKERLY & ASSOCIATES
LAND SURVEYING - CIVIL ENGINEERING

MARY E. LEONARD, PRES.
OFFICE MANAGER

DENNIS DYER, V.P.
REGISTERED LAND SURVEYOR

TRAVIS STEELE, V.P.
PROFESSIONAL ENGINEER
REGISTERED LAND SURVEYOR

337 N. ARIZONA A
CHANDLER A

(480) 9
FAX (480) 8

July 9, 2005

Job No. 050510PA-2

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
32778
DENNIS L.
DYER
Date Signed 7-19-2005
ARIZONA U.S.A.

LEGAL DESCRIPTION
FOR
JEFF HOLT
PARCEL A-2
8.00 AC M/L GROSS

That part of the NE ¼ of Section 13, T.7S.-R.5E., G. & S.R.B. & M., Pinal County, Arizona, being more particularly described as follows;

Commencing at the NE Corner of said Section 13, being marked by an Arizona Highway Department brass cap in hand hole and fromwhich point the E ¼ Corner of said Section 13, being marked by a 5/8" bar, LS 17258, bears S. 0 deg. 15' 43" E., (basis of bearings), 2666.98 feet distant therefrom; thence S. 89 deg. 39' 32" W., along the Northerly line of the said NE ¼ of Section 13, a distance of 1358.56 feet to the NE Corner of Parcel 'A' of a survey recorded in Book 13 of Surveys, Page 156, Pinal County Records, being marked by a cotton picker spindle; thence continuing S. 89 deg. 39' 32" W., 774.80 feet to the TRUE POINT OF BEGINNING; thence S. 0 deg. 13' 53" E., 1349.34 feet to a point on the Southerly line of said Parcel 'A', and fromwhich point the SE Corner of said Parcel 'A', being marked by a ½" bar, LS 32778, bears N. 89 deg. 39' 32" E., 774.80 feet distant therefrom; thence S. 89 deg. 39' 32" W., along the Southerly line of said Parcel 'A', a distance of 258.27 feet to a point fromwhich the SW Corner of said Parcel 'A', being marked by a ½" bar, LS 32778, bears S. 89 deg. 39' 32" W., 258.27 feet distant therefrom; thence N. 0 deg. 13' 53" W., 1349.34 feet to a point on the Northerly line of the said NE ¼ of Section 13 and fromwhich point the N ¼ Corner of said Section 13, also being the NW Corner of said Parcel 'A', being marked by a 5/8" bar with Pinal County plastic cap, bears S. 89 deg. 39' 32" W., 258.27 feet distant therefrom; thence N. 89 deg. 39' 32" E., 258.27 feet to the TRUE POINT OF BEGINNING.

Subject to an easement for roadway over the Northerly 33.00 feet thereof as recorded in Docket 375, Page 573, Pinal County Records.

Also

Subject to an easement for Ingress, Egress and Public Utilities over the Westerly 23.00 feet thereof.

Also

Subject to an easement for Ingress, Egress and Public Utilities over the Southerly 23.00 feet thereof.

Subject to any and all existing easements and or rights-of-way affecting the above described property.

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
32778
DENNIS L.
DYER
Date Signed 7-19-2005
ARIZONA U.S.A.

WECKERLY & ASSOCIATES
LAND SURVEYING - CIVIL ENGINEERING

MARY E. LEONARD, PRES.
OFFICE MANAGER

DENNIS DYER, V.P.
REGISTERED LAND SURVEYOR

TRAVIS STEELE, V.P.
PROFESSIONAL ENGINEER
REGISTERED LAND SURVEYOR

337 N. ARIZONA AVENUE
CHANDLER AZ 85225

(480) 963-6481
FAX (480) 812-9140

July 9, 2005

Job No. 050510PA-3

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
32778
DENNIS L.
DYER
Date Signed 7-19-2005
ARIZONA U.S.A.

LEGAL DESCRIPTION
FOR
JEFF HOLT
PARCEL A-3
8.00 AC M/L GROSS

That part of the NE ¼ of Section 13, T.7S.-R.5E., G. & S.R.B. & M., Pinal County, Arizona, being more particularly described as follows;

Commencing at the NE Corner of said Section 13, being marked by an Arizona Highway Department brass cap in hand hole and fromwhich point the E ¼ Corner of said Section 13, being marked by a 5/8" bar, LS 17258, bears S. 0 deg. 15' 43" E., (basis of bearings), 2666.98 feet distant therefrom; thence S. 89 deg. 39' 32" W., along the Northerly line of the said NE ¼ of Section 13, a distance of 1358.56 feet to the NE Corner of Parcel 'A' of a survey recorded in Book 13 of Surveys, Page 156, Pinal County Records, being marked by a cotton picker spindle; thence continuing S. 89 deg. 39' 32" W., 516.54 feet to the TRUE POINT OF BEGINNING; thence S. 0 deg. 13' 53" E., 1349.34 feet to a point on the Southerly line of said Parcel 'A', and fromwhich point the SE Corner of said Parcel 'A', being marked by a ½" bar, LS 32778, bears N. 89 deg. 39' 32" E., 516.54 feet distant therefrom; thence S. 89 deg. 39' 32" W., along the Southerly line of said Parcel 'A', a distance of 258.26 feet to a point fromwhich the SW Corner of said Parcel 'A', being marked by a ½" bar, LS 32778, bears S. 89 deg. 39' 32" W., 516.54 feet distant therefrom; thence N. 0 deg. 13' 53" W., 1349.34 feet to a point on the Northerly line of the said NE ¼ of Section 13 and fromwhich point the N ¼ Corner of said Section 13, also being the NW Corner of said Parcel 'A', being marked by a 5/8" bar with Pinal County plastic cap, bears S. 89 deg. 39' 32" W., 516.54 feet distant therefrom; thence N. 89 deg. 39' 32" E., 258.26 feet to the TRUE POINT OF BEGINNING.

Subject to an easement for roadway over the Northerly 33.00 feet thereof as recorded in Docket 375, Page 573, Pinal County Records.

WECKERLY & ASSOCIATES
LAND SURVEYING - CIVIL ENGINEERING

MARY E. LEONARD, PRES.
OFFICE MANAGER

DENNIS DYER, V.P.
REGISTERED LAND SURVEYOR

TRAVIS STEELE, V.P.
PROFESSIONAL ENGINEER
REGISTERED LAND SURVEYOR

337 N. ARIZONA AVENI
CHANDLER AZ 852

(480) 963-64
FAX (480) 812-91

July 9, 2005

Job No. 050510PA-4

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
32778
DENNIS L.
DYER
Date Signed 7-19-2005
ARIZONA U.S.A.

LEGAL DESCRIPTION
FOR
JEFF HOLT
PARCEL A-4
8.00 AC M/L GROSS

That part of the NE ¼ of Section 13, T.7S.-R.5E., G. & S.R.B. & M., Pinal County, Arizona, being more particularly described as follows;

Commencing at the NE Corner of said Section 13, being marked by an Arizona Highway Department brass cap in hand hole and fromwhich point the E ¼ Corner of said Section 13, being marked by a 5/8" bar, LS 17258, bears S. 0 deg. 15' 43" E., (basis of bearings), 2666.98 feet distant therefrom; thence S. 89 deg. 39' 32" W., along the Northerly line of the said NE ¼ of Section 13, a distance of 1358.56 feet to the NE Corner of Parcel 'A' of a survey recorded in Book 13 of Surveys, Page 156, Pinal County Records, being marked by a cotton picker spindle; thence continuing S. 89 deg. 39' 32" W., 258.27 feet to the TRUE POINT OF BEGINNING; thence S. 0 deg. 13' 53" E., 1349.34 feet to a point on the Southerly line of said Parcel 'A', and fromwhich point the SE Corner of said Parcel 'A', being marked by a ½" bar, LS 32778, bears N. 89 deg. 39' 32" E., 258.27 feet distant therefrom; thence S. 89 deg. 39' 32" W., along the Southerly line of said Parcel 'A', a distance of 258.27 feet to a point fromwhich the SW Corner of said Parcel 'A', being marked by a ½" bar, LS 32778, bears S. 89 deg. 39' 32" W., 774.80 feet distant therefrom; thence N. 0 deg. 13' 53" W., 1349.34 feet to a point on the Northerly line of the said NE ¼ of Section 13 and fromwhich point the N ¼ Corner of said Section 13, also being the NW Corner of said Parcel 'A', being marked by a 5/8" bar with Pinal County plastic cap, bears S. 89 deg. 39' 32" W., 774.80 feet distant therefrom; thence N. 89 deg. 39' 32" E., 258.27 feet to the TRUE POINT OF BEGINNING.

Subject to an easement for roadway over the Northerly 33.00 feet thereof as recorded in Docket 375, Page 573, Pinal County Records.

Also

Subject to an easement for Ingress, Egress and Public Utilities over the Westerly 23.00 feet thereof.

Also

Subject to an easement for Ingress, Egress and Public Utilities over the Southerly 23.00 feet thereof.

Subject to any and all existing easements and or rights-of-way affecting the above described property.

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
32778
DENNIS L.
DYER
Date Signed 7-19-2005
ARIZONA U.S.A.

WECKERLY & ASSOCIATES
LAND SURVEYING - CIVIL ENGINEERING

MARY E. LEONARD, PRES.
OFFICE MANAGER

DENNIS DYER, V.P.
REGISTERED LAND SURVEYOR

TRAVIS STEELE, V.P.
PROFESSIONAL ENGINEER
REGISTERED LAND SURVEYOR

337 N. ARIZONA AVENUE
CHANDLER AZ 85225

(480) 963-6481
FAX (480) 812-9140

July 9, 2005

Job No. 050510PA-5

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
32778
DENNIS L.
DYER
Date Signed 7-19-2005
ARIZONA U.S.A.

LEGAL DESCRIPTION
FOR
JEFF HOLT
PARCEL A-5
8.00 AC M/L GROSS

That part of the NE ¼ of Section 13, T.7S.-R.5E., G. & S.R.B. & M., Pinal County, Arizona, being more particularly described as follows;

Commencing at the NE Corner of said Section 13, being marked by an Arizona Highway Department brass cap in hand hole and fromwhich point the E ¼ Corner of said Section 13, being marked by a 5/8" bar, LS 17258, bears S. 0 deg. 15' 43" E., (basis of bearings), 2666.98 feet distant therefrom; thence S. 89 deg. 39' 32" W., along the Northerly line of the said NE ¼ of Section 13, a distance of 1358.56 feet to the NE Corner of Parcel 'A' of a survey recorded in Book 13 of Surveys, Page 156, Pinal County Records, being marked by a cotton picker spindle, said point also being the TRUE POINT OF BEGINNING; thence S. 0 deg. 13' 53" E., 1349.34 feet to the SE Corner of said Parcel 'A', being marked by a ½" bar, LS 32778; thence S. 89 deg. 39' 32" W., along the Southerly line of said Parcel 'A', a distance of 258.27 feet to a point fromwhich the SW Corner of said Parcel 'A', being marked by a ½" bar, LS 32778, bears S. 89 deg. 39' 32" W., 1033.07 feet distant therefrom; thence N. 0 deg. 13' 53" W., 1349.34 feet to a point on the Northerly line of the said NE ¼ of Section 13 and fromwhich point the N ¼ Corner of said Section 13, also being the NW Corner of said Parcel 'A', being marked by a 5/8" bar with Pinal County plastic cap, bears S. 89 deg. 39' 32" W., 1033.07 feet distant therefrom; thence N. 89 deg. 39' 32" E., 258.27 feet to the TRUE POINT OF BEGINNING.

Subject to an easement for roadway over the Northerly 33.00 feet thereof as recorded in Docket 375, Page 573, Pinal County Records.

Also

Subject to an easement for Ingress, Egress and Public Utilities over the Easterly 23.00 feet thereof.

Also

Subject to an easement for Ingress, Egress and Public Utilities over the Southerly 23.00 feet thereof.

Subject to any and all existing easements and or rights-of-way affecting the above described property.

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
32778
DENNIS L.
DYER
Date signed 7-19-2005
ARIZONA U.S.A.

RESULTS OF SURVEY MAP

SHOWING

A MINOR LAND DIVISION

LOCATED IN

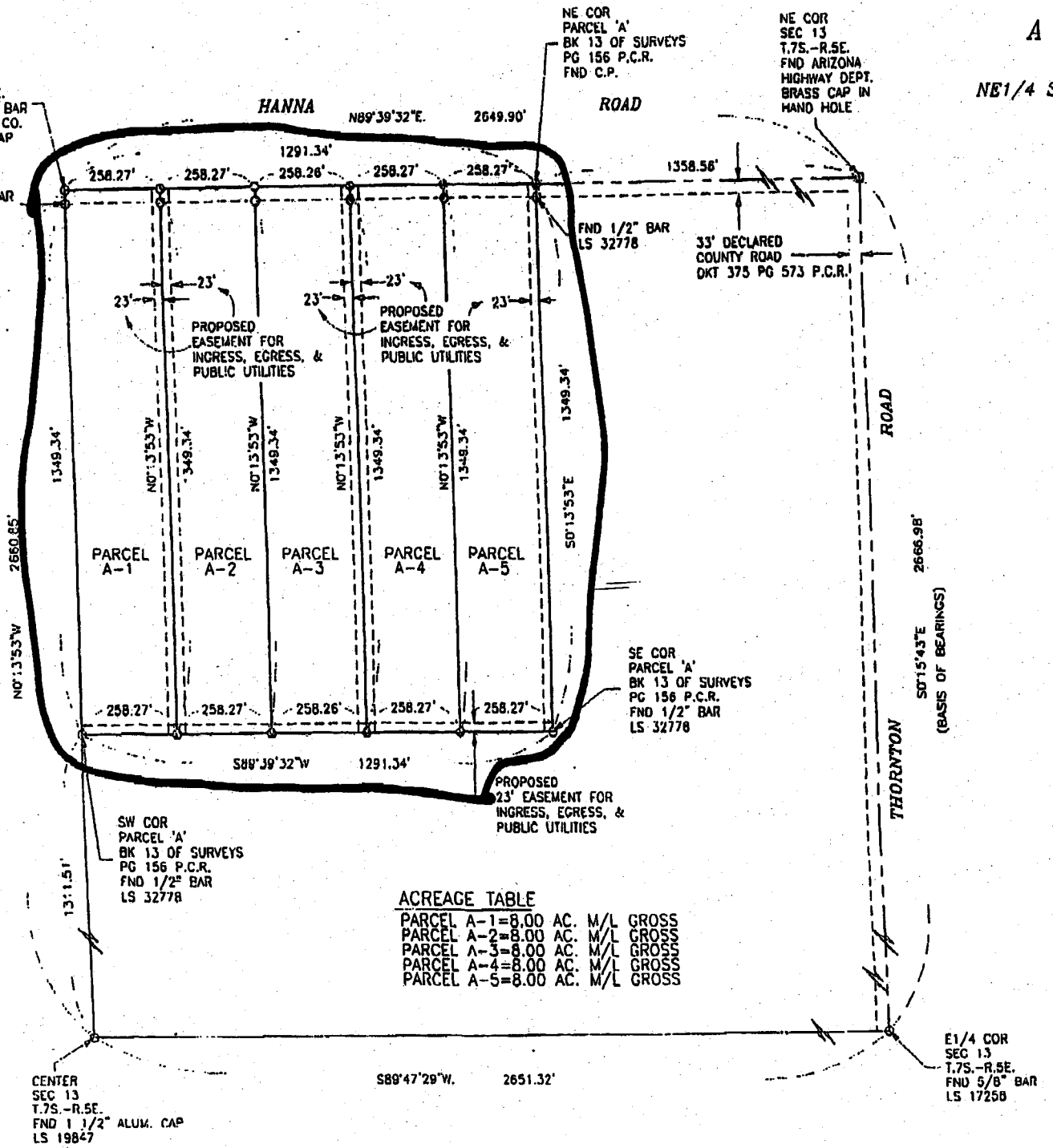
NE1/4 SECTION 13, T.7S.-R.5E., G.&S.R.B.&M.,

PINAL COUNTY, ARIZONA

SURVEYED DURING JUNE, 2005

FOR

JEFF HOLT



SCALE: 1" =200'

200 0 200 400 600

GRAPHIC SCALE - FEET

LEGEND

- O = FOUND 1/2" IRON BAR (UNLESS OTHERWISE NOTED)
- ⊙ = SET 1/2" IRON BAR (UNLESS OTHERWISE NOTED)
- ☐ = FOUND BRASS CAP IN HAND HOLE
- C.P. = COTTON PICKER SPINDLE
- M/L = MORE OR LESS
- AC. = ACRE

ACREAGE TABLE

PARCEL A-1	8.00 AC. M/L GROSS
PARCEL A-2	8.00 AC. M/L GROSS
PARCEL A-3	8.00 AC. M/L GROSS
PARCEL A-4	8.00 AC. M/L GROSS
PARCEL A-5	8.00 AC. M/L GROSS

THIS SURVEY HAS BEEN PERFORMED IN THE FIELD EITHER BY ME OR UNDER MY DIRECT SUPERVISION.

REGISTERED LAND SURVEYOR CERTIFICATE NO. 32778 DENNIS L. DYER 7-18-2005 ARIZONA U.S.A.

NOTE: THIS SURVEY WAS MADE IN ACCORDANCE WITH LEGAL DESCRIPTIONS AND INSTRUCTIONS PROVIDED BY THE CLIENT. ANY DRAWINGS PRODUCED AS

WECKERLY & ASSOCIATES

Attachment B

Carmichael & Sons, LTD.
14515 East Elgin Street
Gilbert, Arizona 85296
(480) 814-9573
(480) 814-7633 Fax

July 18, 2005

Ms. Cindy Liles
Vice President & CEO
Global Water Management, LLC
Dear Valley Financial Center
22601 North 19th Avenue, Suite 210
Phoenix, Arizona 85027

RE: Water and Wastewater Service

Please accept this letter as a request for service from Carmichael & Sons, LTD. (David Carmichael, Managing Partner) for water and wastewater service. It is our intention to continue to pursue the preliminary platting, rezoning and development of this planned area development to serve single family residential homes.

Carmichael & Sons would like to be included in your next available expansion of service areas for Santa Cruz Water Company and Palo Verde Utility Company.

Please contact David Carmichael if you have any questions at (480) 814-9573.

Sincerely,

David Carmichael

David L. Carmichael, Managing Partner
Carmichael & Sons, LTD.
14515 East Elgin Street
Gilbert, Arizona 85296
(480) 814-9573
(480) 814-7633 Fax

DLC/bp

July 18,2005

Ms. Cindy Liles
Santa Cruz Water Company, LLC
Palo Verde Utilities Company, LLC
22601 North 19th Avenue, Suite 210
Phoenix, Arizona 85027

Re: Water and Wastewater

Please accept this letter as a request from the following entity: CACHE Investments, L.L.C. an Arizona limited partnership, (Gale J. Brimhall, as Co-Trustee of the Gale and Sherie Brimhall Family trust, and Dated December 22,1998, Member and Sherie H. Brimhall, as Co-Trustee of the Gale and Sherie Brimhall Family trust, Dated December 22, 1998, Member) for water and wastewater services. It is our intention to continue to pursue the preliminary platting, rezoning and development of this planned area development to serve single family residential homes.

CACHE Investments, L.L.C. an Arizona limited partnership, would like to have their property included in your next available expansion of service areas for Santa Cruz Water Company and Palo Verde Utilities Company.

Please contact Bob Yost you have questions at 480 988-3550.

Very truly yours,

By: Gale J. Brimhall
Gale J. Brimhall, as Co-Trustee of the Gale and Sherie Brimhall Family trust,
Dated December 22,1998, Member

By: Sherie H. Brimhall
Sherie H. Brimhall, as Co-Trustee of the Gale and Sherie Brimhall Family trust,
Dated December 22,1998, Member

LANGLEY PROPERTIES

Ms. Cindy Liles
Vice President & CEO
Global Water Management, LLC
Dear Valley Financial Center
22601 North 19th Avenue, Suite 210
Phoenix, AZ 85027

RE: Water and Wastewater Service

Please accept this letter as a request for service from Langley Farm Investment, LLC (Steve Rees, Manager) for water and wastewater service. It is our intention to continue to pursue the preliminary platting, rezoning and development of this planned area development to serve single family residential homes.

Langley Farm Investments would like to be included in you next available expansion of service areas for Santa Cruz Water Company and Palo Verde Utility Company.

Pleas contact Steve Rees if you have any questions at (480) 633-0999.

Sincerely,

Steve Rees, Manager

16248 EAST GUADALUPE ROAD, GILBERT, ARIZONA 85234 P 480.633.0999 F 480.633.1001

Harvard Capital Limited Partnership

1819 East Southern Avenue
Suite B-10
Mesa. Arizona 85204
(480) 305-9500
Fax (480) 505-9501

August 4, 2005

Ms. Cindy Liles
Santa Cruz Water Company, LLC
Palo Verde Utilities Company. LLC
22601 North 19th Avenue Suite 210
Phoenix. Arizona 85027

Re: Water and Wastewater

Dear Ms. Liles

Please accept this letter as a request from the following entity: Harvard Capital, LP, an Arizona limited partnership, for water and wastewater services. It is our intention to continue to pursue the preliminary platting, rezoning and development of this planned area development to serve single family residential homes.

Harvard Capital, LP, an Arizona limited partnership, would like to have its property included in your next available expansion of service areas for Santa Cruz Water Company and Palo Verde Utilities Company.

Please contact Wilford R. Cardon if you have questions at 480 926-3200.

Very truly yours,

Wilford R. Cardon, Manager
Harvard Capital, LP

DART PROPERTIES, LLC PO BOX 159, SACATON, AZ 85247

Ms. Cindy Liles
Santa Cruz Water Company, LLC
Palo Verde Utilities Company, LLC
22601 N. 19th Avenue, Suite 210
Phoenix, AZ 85027

RE: Water and Wastewater Services Southeast of the City of Maricopa

Dear Ms. Liles:

Please accept this letter as a request from Dart Properties, LLC_("Owner") for water and wastewater services to approximately 618 acres located Southeast of the City of Maricopa, Arizona specifically referred to as the Southeast Expansion Area. Owner would like to be included in your next available expansion of service areas for Santa Cruz Water Company and Palo Verde Utilities Company.

Please contact me with if you have any questions. I can be reached at (520) 418-3642.

Sincerely,

Terry F. Button, managing member

Dart Properties, LLC.

October 5, 2005

Ms. Cindy Liles
Vice President & CEO
Global Water Management, LLC
Dear Valley Financial Center
22601 N. 19th Avenue, Suite 210
Phoenix, AZ 85027

RE: Water and Wastewater Service for approximately 30 acres at the NWC of Woodruff Road and Montgomery Road in Pinal County, Arizona. Pinal County Tax Parcel Numbers: 502-38-009, 502-38-013A, 502-38-013B.

Please accept thie letter as a request for service from CRW Holdings I, LLC and Mark C. Williams (Managing Member) and Matt Ladendorf (Member) for water and wastewater service to approximately 30 acres at the NWC of Woodruff Road and Montgomery Road.

We would like this *30* acres to be included in your next available expansion of service areas for Santa Cruz Water Company and Palo Verde Utility Company.

Please contact me if you have any questions. I can be reached at 480-449-1667.

Sincerely,

Mark C. Williams
Managing Member
CRW Holdings I, LLC

Matt Ladendorf
Member
CRW Holdings I, LLC

October 5,2005

Ms. Cindy Liles
Vice President & CEO
Global Water Management, LLC
Dear Valley Financial Center
22601 N. 19th Avenue, Suite 210
Phoenix, AZ 85027

RE: Water and Wastewater Service for approximately 40 acres at the NWC of Val Vista Road and Montgomery Road in Pinal County, Arizona. Pinal County Tax Parcel Number: 502-32-009D.

Please accept this letter as a request for service from Val Vista & Montgomery, LLC and Mark C. Williams (Managing Member) for water and wastewater service to approximately 40 acres at the NWC of Val Vista Road and Montgomery Road.

We would like this 40 acres to be included in your next available expansion of service areas for Santa Cruz Water Company and Palo Verde Utility Company.

Please contact me if you have any questions. I can be reached at 480-449-1667.

Sincerely,

Mark C. Williams
Managing Member
Val Vista & Montgomery, LLC

September 9,2005

Ms. Cindy Liles
Vice President and CEO
Global Water Management, LLC
22601 North 19"Avenue, Suite 210
Phoenix, AZ 85027

RE: Water and Wastewater Services

Dear Ms. Liles,

Please accept this letter as a request for service from Gallup Financial, LLC for water and wastewater services to approximately 2700 acres, more particularly described as Exhibit A attached hereto. It is our intention to continue to pursue the preliminary platting, rezoning and development of this planned area, in order to serve single family residential homes, multi-family residential homes, and/or commercial uses.

Gallup Financial, LLC would like to be included in your next available expansion of service areas for Santa Cruz Water Company and Palo Verde Utility Company.

Gallup Financial LLC
An Arizona Limited Liability Company.
By Philip J Polich
Its: Managing Member

EXHIBIT A
LEGAL DESCRIPTION
POLICH PARCELS
WATER AND SEWER SERVICE AGREEMENT

THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 24, TOWNSHIP 5 SOUTH, RANGE 4 EAST OF THE GILA AND SALT RIVER MERIDIAN, PINAL COUNTY, ARIZONA.

THE NORTHWEST QUARTER OF SECTION 18, TOWNSHIP 5 SOUTH, RANGE 5 EAST, OF THE GILA AND SALT RIVER MERIDIAN, PINAL COUNTY, ARIZONA.

THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 19, TOWNSHIP 5 SOUTH, RANGE 5 EAST OF THE GILA AND SALT RIVER MERIDIAN, PINAL COUNTY, ARIZONA.

THE EAST HALF OF THE NORTHWEST QUAKTER OF THE NORTHEAST QUARTER OF SECTION 29, TOWNSHIP 5 SOUTH, RANGE 5 EAST OF THE GILA AND SALT RIVER MERIDIAN, PINAL COUNTY, ARIZONA.

THE SOUTH 1878.00 FEET OF SECTION 31, TOWNSHIP 5 SOUTH, RANGE 5 EAST OF THE GILA AND SALT RIVER MERIDIAN, PINAL COUNTY, ARIZONA.
EXCEPT THE SOUTH HALF OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SAID SECTION 31.

THE NORTH HALF OF SECTION 32, TOWNSHIP 5 SOUTH, RANGE 5 EAST OF THE GILA AND SALT RIVER MERIDIAN, PINAL COUNTY, ARIZONA.

THE NORTH HALF OF SECTION 6, TOWNSHIP 6 SOUTH, RANGE 5 EAST OF THE GILA AND SALT RIVER MERIDIAN, PINAL COUNTY, ARIZONA.

RECEIVED
DEC 0 7 2005

September 9,2005

Ms. Cindy Liles
Vice President and CEO
Global Water Management, LLC
22601 North 19th Avenue, Suite 210
Phoenix, AZ 85027

RE: Water and Wastewater Services

Dear Ms. Liles,

Please accept this letter as a request for service from Gallup Financial, LLC for water and wastewater services to approximately 2700 acres, more particularly described as Exhibit A attached hereto. It is our intention to continue to pursue the preliminary platting, rezoning and development of this planned area, in order to serve single family residential homes, multi-family residential homes, and/or commercial uses.

Gallup Financial, LLC would like to be included in your next available expansion of service areas for Santa Cruz Water Company and Palo Verde Utility Company.

Gallup Financial LLC
An Arizona Limited Liability Company.
By Philip J Polich
Its: Managing Member

EXHIBIT A

INFRASTRUCTURE COORDINATION AGREEMENT

LEGAL DESCRIPTION OF LAND

Legal Description

Grande Valley

Parcel No. 1:

A portion of Sections 29,30, and 31, Township 5 South, Range 5 East of the Gila and Salt River Meridian, Pinal County, Arizona, more particularly described as follows:

COMMENCING at the Northwest corner of said Section 30, the TRUE POINT OF BEGINNING;

THENCE North 89 degrees 39 minutes 12 seconds East, a distance of 2662.57 feet to the North quarter corner of said section 30;

THENCE North 89 degrees 39 minutes 11 seconds East, a distance of 2651.77 feet to the Northeast corner of said Section 30 said point also being the Northwest corner of said Section 29;

THENCE South 89 degrees 56 minutes 22 seconds East, along the North tine of said Section 29, a distance of 1330.23 feet;

THENCE South 00 degrees 02 minutes 39 seconds West, a distance of 1318.35 feet;

THENCE South 89 degree 56 minutes 46 seconds East, a distance of 1217.90 feet;

THENCE South 00 degrees 04 minutes 18 seconds West, a distance of 1318.14 feet;

THENCE South 00 degrees 05 minutes 45 seconds West, a distance of 2637.11 feet to a point on the South line of said Section 29;

THENCE North 89 degrees 57 minutes 34 seconds West, a distance of 2542.75 feet to the Southwest corner of said Section 29, said point also being the Northeast corner of said Section 31;

THENCE South 00 degrees 10 minutes 05 seconds West, along the West line of said Section 31, a distance of 198.73 feet to a point on the Northerly right-of-way line of the Maricopa-Casa Grande Highway;

THENCE North 53 degrees 48 minutes 11 seconds West, along said right-of-way line, a distance of 6582.80 feet to a point on the West line of said Section 30;

THENCE North 00 degrees 00minutes 39 seconds East, a distance of 1553.34 feet to the TRUE POINT OF BEGINNING.

EXCEPT an undivided ½ interest of all minerals as reserved in Deed recorded June 17, 1985 in Docket 1293, Page 3 16 and Docket 779, Page 468.

Parcel No. 2:

A portion of Sections 30 and 31, Township 5 South, Range 5 East, and Section 25, Township 5 South, Range 4 East of the Gila and Salt River Meridian, Pinal County, Arizona, more particularly described as follows:

COMMENCING at the Northwest corner of said Section 31, said point also being the Southwest corner of said Section 30, the TRUE POINT OF BEGINNING;

THENCE North 00 degrees 03 minutes 35 seconds West, a distance of 41 8.83 feet to the Southeast corner of said Section 25;

THENCE North 88 degrees 21 minutes 52 seconds West, along the South line of said Section 25, a distance of 1000.41 feet;

THENCE North 00 degrees 00 minutes 04 seconds West, a distance of 3501.85 feet;

THENCE South 53 degrees 48 minutes 11 seconds East, a distance of 3495.30 feet;

THENCE South 00 degrees 10 minutes 05 seconds West, a distance of 5274.90 feet;

THENCE South 89 degrees 35 minutes 00 seconds West, a distance of 1805.25 feet to a point on the West line of said Section 31;

THENCE North 00 degrees 05 minutes 28 seconds West, a distance of 760.64 feet to the West quarter corner of said Section 31;

THENCE North 00 degrees 02 minutes 13 seconds East, a distance of 2642.33 feet to the TRUE POINT OF BEGINNING.

Parcel No. 3:

A portion of Sections 30 and 31, Township 5 South, Range 5 East of the Gila and Salt River Meridian, Pinal County, Arizona, more particularly described as follows:

COMMENCING at the Northeast corner of said Section 31, said point also being the Southeast corner of said Section 30;

THENCE South 00 degrees 10 minutes 05 seconds West, along the East line of said Section 31, a distance of 705.70 feet to the TRUE POINT OF BEGINNING;

THENCE continuing South 00 degrees 10 minutes 05 seconds West, a distance of 1929.64 feet to the East quarter corner of said Section 31;

THENCE South 00 degrees 03 minutes 41 seconds West, along the East line of the Southeast quarter of said Section 31, a distance of 765.61 feet;

THENCE South 89 degrees 35 minutes 00 seconds West, a distance of 3499.32 feet;

THENCE North 00 degrees 10 minutes 05 seconds East, a distance of 5274.90 feet;

THENCE South 53 degrees 48 minutes 11 seconds East, a distance of 4325.00 feet to the TRUE POINT OF BEGINNING.

Tax Assessor Parcel Numbers:

502-38-004A	502-38-004B	502-38-005A
502-38-005B	502-38-0120	502-39-002A
502-39-0023	502-39-0043	502-39-004C
502-39-004D	503-29-0010	502-25-010B
502-25-010C	502-25-010D	

October 5, 2005

Ms. Cindy Liles
Vice President & CEO
Global Water Management, LLC
Dear Valley Financial Center
22601 N. 19th Avenue, Suite 210
Phoenix, AZ 85027

RE: Water and Wastewater Service for approximately 160 acres at the SWC of Woodruff Road and Montgomery Road in Pinal County, Arizona (Pinal County Tax Parcel Number 502-25-009).

Please accept this letter as a request for service from Williams Family Revocable Trust, UTA; Lora G. Williams Special Trust, UTA; Lora A. Williams Trust, UTA, and Mark C. Williams Revocable Trust, UTA (Owners) and Mark C. Williams (Trustee) for water and wastewater service to approximately 160 acres at the SWC of Woodruff Road and Montgomery Road,

We would like this 160 acres to be included in your next available expansion of service areas for Santa Cruz Water Company and Palo Verde Utility Company.

Please contact me if you have any questions. I can be reached at 480-449-1667.

Sincerely,

Mark C. Williams
Trustee

Legal Descriptions

The East half of the Southwest quarter of Section 17, Township 5 South, Range 5 East of the Gila and Salt River Base and Meridian.

The West half of the Southwest Quarter of Section 17, Township 5 South, Range 5 East of the Gila and Salt River Base and Meridian.

The West half of the Southeast Quarter of Section 17, Township 5 South, Range 5 East of the Gila and Salt River Base and Meridian.

The Northeast quarter of the Southeast quarter of Section 17, Township 5 South, Range 5 East of the Gila and Salt River Base and Meridian.

September 9,2005

Ms. Cindy Liles
Vice President and CEO
Global Water Management, LLC
22601 North 19th Avenue, Suite 210
Phoenix, AZ 85027

RE: Water and Wastewater Services

Dear Ms. Liles,

Please accept this letter as a request for service from Sacaton BL LLC for water and wastewater services to approximately 280 acres, more particularly described as Exhibit A attached hereto. It is our intention to continue to pursue the preliminary platting, rezoning and development of this planned area, in order to serve single family residential homes, multi-family residential homes, and/or commercial uses.

Sacaton BL LLC would like to be included in your next available expansion of service areas for Santa Cruz Water Company and Palo Verde Utility Company.

Sacaton BL LLC
An Arizona Limited Liability Company
By Brown & Bain, P.A. Retirement
Savings Plan and Trust
By _____
Kyle B. Hettinger, Trustee

September 9, 2005

Ms. Cindy Liles
Vice President and CEO
Global Water Management, LLC
22601 North 19th Avenue, Suite 210
Phoenix, AZ 85027

RE: Water and Wastewater Services

Dear Ms. Liles,

Please accept this letter as a request for service from Trading Post Road, LLC and DLW Associates Limited Partnership for water and wastewater services to approximately 60 acres, more particularly described as Exhibit A attached hereto. It is our intention to continue to pursue the preliminary platting, rezoning and development of this planned area, in order to serve single family residential homes, multi-family residential homes, and/or commercial uses.

Trading Post Road LLC and DLW Limited Partnership would like to be included in your next available expansion of service areas for Santa Cruz Water Company and Palo Verde Utility Company.

Trading Post Road LLC
A Michigan Limited Liability Company
By Edward T Peters

Managing Member

DLW Associates LP
A Michigan Limited Partnership
By Mark Walton

General Partner

LEGAL DESCRIPTION
FOR
CHARTWELL, LLC

THE NORTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 20, TOWNSHIP 5 SOUTH, RANGE 5 EAST, GILA & SALT RIVER BASE MERIDIAN, PINAL COUNTY, ARIZONA

September 9,2005

Ms. Cindy Liles
Vice President and CEO
Global Water Management, LLC
22601 North 19th Avenue, Suite 210
Phoenix, AZ 85027

RE: Water and Wastewater Services

Dear Ms. Liles,

Please accept this letter as a request for service from Casa Grande Montgomery 240 Limited Partnership LLLP for water and wastewater services to approximately 240 acres, more particularly described as Exhibit A attached hereto. It is our intention to continue to pursue the preliminary platting, rezoning and development of this planned area, in order to serve single family residential homes, multi-family residential homes, and/or commercial uses.

Casa Grande Montgomery 240 Limited Partnership LLLP would like to be included in your next available expansion of service areas for Santa Cruz Water Company and Palo Verde Utility Company.

Casa Grande Montgomery 240 Limited Partnership LLLP
An Arizona Limited Partnership
By LKY Real Estate LLC

Manager

LEGAL DESCRIPTION
FOR
CASA GRANDE MONTGOMERY 240

THE NORTHEAST QUARTER TOGETHER WITH THE EAST HALF OF THE NORTHWEST QUARTER OF SECTION 20, TOWNSHIP 5 SOUTH, RANGE 5 EAST, GILA & SALT RIVER BASE MERIDIAN, PINAL COUNTY, ARIZONA

LEGAL DESCRIPTION
FOR
TRADING POST ROAD, LLC

THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER TOGETHER WITH THE NORTH HALF OF THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 20, TOWNSHIP 5 SOUTH, RANGE 5 EAST, GILA & SALT RIVER BASE MERIDIAN, PINAL COUNTY, ARIZONA

September 9,2005

Ms. Cindy Liles
Vice President and CEO
Global Water Management, LLC
22601 North 19th Avenue, Suite 210
Phoenix, AZ 85027

RE: Water and Wastewater Services

Dear Ms. Liles,

Please accept this letter as a request for service from CG 215 Limited Partnership LLLP for water and wastewater services to approximately 215 acres, more particularly described as Exhibit A attached hereto. It is our intention to continue to pursue the preliminary platting, rezoning and development of this planned area, in order to serve single family residential homes, multi-family residential homes, and/or commercial uses.

CG 215 Limited Partnership LLLP would like to be included in your next available expansion of service areas for Santa Cruz Water Company and Palo Verde Utility Company.

CG 215 Limited Partnership LLLP
An Arizona Limited Partnership
By LKY Real Estate LLC

Manager

LEGAL DESCRIPTION
FOR
CG215 LP

THE EAST HALF OF SECTION 25, TOWNSHIP 5 SOUTH, RANGE 4 EAST, GILA & SALT RIVER BASE MERIDIAN, PINAL COUNTY, AFUZONA, TOGETHER WITH THAT PORTION OF THE NORTHWEST QUARTER OF SAID SECTION 25 LYING NORTHERLY OF THE NORTHERLY RIGHT-OF-WAY OF THE MARICOPA-CASA GRANDE HIGHWAY, EXCEPT THE EASTERLY 1000 FEET OF SAID SECTION 25 LYING SOUTHERLY OF THE SOUTHERLY RIGHT-OF-WAY LINE OF THE UNION PACIFIC RAILROAD RIGHT-OF-WAY.

September 9, 2005

Ms. Cindy Liles
Vice President and CEO
Global Water Management, LLC
22601 North 19th Avenue, Suite 2 10
Phoenix, AZ 85027

RE: Water and Wastewater Services

Dear Ms. Liles,

Please accept this letter as a request for service from Montgomery 156 Limited Partnership LLLP for water and wastewater services to approximately 156 acres, more particularly described as Exhibit A attached hereto. It is our intention to continue to pursue the preliminary platting, rezoning and development of this planned area, in order to serve single family residential homes, multi-family residential homes, and/or commercial uses.

Montgomery 156 Limited Partnership LLLP would like to be included in your next available expansion of service areas for Santa Cruz Water Company and Palo Verde Utility Company.

Montgomery 156 Limited Partnership LLLP
An Arizona Limited Partnership
By LKY Real Estate LLC

Manager

September 9,2005

Ms. Cindy Liles
Vice President and CEO
Global Water Management, LLC
22601 North 19th Avenue, Suite 210
Phoenix, AZ 85027

RE: Water and Wastewater Services

Dear Ms. Liles,

Please accept this letter as a request for service from Chartwell Casa Grande 40 LLC for water and wastewater services to approximately 40 acres, more particularly described as Exhibit A attached hereto. It is our intention to continue to pursue the preliminary platting, rezoning and development of this planned area, in order to serve single family residential homes, multi-family residential homes, and/or commercial uses.

Chartwell Casa Grande 40 LLC would like to be included in your next available expansion of service areas for Santa Cruz Water Company and Palo Verde Utility Company.

Chartwell Casa Grande 40 LLC
An Arizona Limited Liability Company
By Richard C. Kraemer

Manager

LEGAL, DESCRIPTION
FOR
MONTGOMERY 156

LOTS 3 *AND* 4 AND THE SOUTH HALF OF THE NORTHWEST QUARTER OF SECTION 5, TOWNSHIP 6 SOUTH, RANGE 5 EAST, GILA & SALT RIVER BASE MERIDIAN, PINAL COUNTY, ARIZONA, EXCEPT THAT PORTION OF THE MARICOPA CASA GRANDE HIGHWAY RIGHT-OF-WAY AND THE ADJACENT UNION PACIFIC RAILROAD RIGHT-OF-WAY WITHIN SAID LOTS 3 AND 4.

September 9, 2005

Ms. Cindy Liles
Vice President and CEO
Global Water Management, LLC
22601 North 19th Avenue, Suite 210
Phoenix, AZ 85027

RE: Water and Wastewater Services

Dear Ms. Liles,

Please accept this letter as a request for service from Robin R. Yount, LTD. for water and wastewater services to approximately 40 acres, more particularly described as Exhibit A attached hereto. It is our intention to continue to pursue the preliminary platting, rezoning and development of this planned area, in order to serve single family residential homes, multi-family residential homes, and/or commercial uses.

Robin R. Yount, LTD. would like to be included in your next available expansion of service areas for Santa Cruz Water Company and Palo Verde Utility Company.

Robin R. Yount, LTD.
By Larry K. Yount
Its: Secretary

NOW KNOWN OR
OWNED BY:
DDY LLC
ACCORDING TO
THE LEGAL

LEGAL DESCRIPTION
FOR
ROBIN R YOUNT, LTD

THE WEST HALF OF THE WEST HALF OF THE SOUTHEAST QUARTER OF SECTION 19, TOWNSHIP 5 SOUTH, RANGE 5 EAST, GILA & SALT RIVER BASE & MERIDIAN, PINAL COUNTY, ARIZONA.

September 9, 2005

Ms. Cindy Liles
Vice President and CEO
Global Water Management, LLC
22601 North 19th Avenue, Suite 210
Phoenix, AZ 85027

RE: Water and Wastewater Services

Dear Ms. Liles,

Please accept this letter as a request for service from RRY Casa Grande 320 Limited Partnership LLLP for water and wastewater services to approximately 320 acres, more particularly described as Exhibit A attached hereto. It is our intention to continue to pursue the preliminary platting, rezoning and development of this planned area, in order to serve single family residential homes, multi-family residential homes, and/or commercial uses.

RRY Casa Grande 320 Limited Partnership LLLP would like to be included in your next available expansion of service areas for Santa Cruz Water Company and Palo Verde Utility Company.

RRY Casa Grande 320 Limited Partnership LLLP
An Arizona Limited Partnership
By LKY Real Estate LLC

Manager

LEGAL DESCRIPTION
FOR
RRY CASA GRANDE 320

THE NORTH HALF OF SECTION 19, TOWNSHIP 5 SOUTH, RANGE 5 EAST, GILA & SALT RIVER BASE & MERIDIAN, PMAL COUNTY, ARIZONA.

September 9, 2005

Ms. Cindy Liles
Vice President and CEO
Global Water Management, LLC
22601 North 19th Avenue, Suite 210
Phoenix, AZ 85027

RE: Water and Wastewater Services

Dear Ms. Liles,

Please accept this letter as a request for service from RRY Real Estate, LLC for water and wastewater services to approximately 40 acres, more particularly described as Exhibit A attached hereto. It is our intention to continue to pursue the preliminary platting, rezoning and development of this planned area, in order to serve single family residential homes, multi-family residential homes, and/or commercial uses.

RRY Real Estate, LLC would like to be included in your next available expansion of service areas for Santa Cruz Water Company and Palo Verde Utility Company.

RRY Real Estate, LLC
An Arizona Limited Liability Company
By Robin R. Yount, LTD
Manager

Its: Secretary

LEGAL DESCRIPTION
FOR
RRY REAL ESTATE

THE NORTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 24, TOWNSHIP 5 SOUTH, RANGE 4 EAST, GILA & SALT RIVER BASE & MERIDIAN, PINAL *COUNTY*, ARIZONA.

September 9, 2005

Ms. Cindy Liles
Vice President and CEO
Global Water Management, LLC
22601 North 19th Avenue, Suite 210
Phoenix, AZ 85027

RE: Water and Wastewater Services

Dear Ms. Liles,

Please accept this letter as a request for service from SVVM 80 Limited Partnership LLLP for water and wastewater services to approximately 80 acres, more particularly described as Exhibit A attached hereto. It is our intention to continue to pursue the preliminary platting, rezoning and development of this planned area, in order to serve single family residential homes, multi-family residential homes, and/or commercial uses.

SVVM 80 Limited Partnership LLLP would like to be included in your next available expansion of service areas for Santa Cruz Water Company and Palo Verde Utility Company.

SVVM 80 Limited Partnership LLLP
An Arizona Limited Partnership
By LKY Real Estate LLC

Manager

LEGAL DESCRIPTION
FOR
SVVM 80

THE SOUTH HALF OF THE NORTHEAST QUARTER OF SECTION 29, TOWNSHIP 5 SOUTH, RANGE 5 EAST, GILA & SALT RIVER BASE MERIDIAN, PINAL COUNTY, ARIZONA.

September 9,2005

Ms. Cindy Liles
Vice President and CEO
Global Water Management, LLC
22601 North 19th Avenue, Suite 210
Phoenix, AZ 85027

RE: Water and Wastewater Services

Dear Ms. Liles,

Please accept this letter as a request for service from VV Monty LLC for water and wastewater services to approximately 60 acres, more particularly described as Exhibit A attached hereto. It is our intention to continue to pursue the preliminary platting, rezoning and development of this planned area, in order to serve single family residential homes, multi-family residential homes, and/or commercial uses.

VV Monty LLC would like to be included in your next available expansion of service areas for Santa Cruz Water Company and Palo Verde Utility Company.

VV Monty LLC
An Arizona Limited Liability Company
By LKY Real Estate LLC

Manager

LEGAL DESCRIPTION
FOR
W MONTY

THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER TOGETHER WITH THE SOUTH HALF OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 20, TOWNSHIP 5 SOUTH, RANGE 5 EAST, GILA & SALT RIVER BASE MERIDIAN, PINAL *COUNTY*, ARIZONA

September 9,2005

Ms. Cindy Liles
Vice President and CEO
Global Water Management, LLC
22601 North 19th Avenue, Suite 210
Phoenix, AZ 85027

RE: Water and Wastewater Services

Dear Ms. Liles,

Please accept this letter as a request for service from 120 Townsend LLC for water and wastewater services to approximately 200 acres, more particularly described as Exhibit A attached hereto. It is our intention to continue to pursue the preliminary platting, rezoning and development of this planned area, in order to serve single family residential homes, multi-family residential homes, and/or commercial uses.

120 Townsend LLC would like to be included in your next available expansion of service areas for Santa Cruz Water Company and Palo Verde Utility Company.

120 Townsend LLC
An Arizona limited liability company
Robin R Yount. LTD.
By Larry K. Yount

Its: Secretary

EXHIBIT A

INFRASTRUCTURE COORDINATION AGREEMENT

LEGAL DESCRIPTION OF LAND

The East half of the Northwest quarter and the Northwest quarter of the Northeast quarter of Section 24, Township 5 South, Range 4 East of the Gila and Salt River Base and Meridian, Pinal County, Arizona;

Along with:

The North half of the West half of the Southeast quarter of Section 24, Township 5 South, Range 4 East of the Gila and Salt River Base and Meridian, Pinal County, Arizona;

Along with:

The South half of the Northwest quarter of the Southwest quarter and the North half of the Southwest quarter of the Southwest quarter of Section 20, Township 5 South, Range 5 East of the Gila and Salt River Base and Meridian, Pinal County, Arizona.

September 9,2005

Ms. Cindy Liles
Vice President and CEO
Global Water Management, LLC
22601 North 19th Avenue, Suite 210
Phoenix, AZ 85027

RE: Water and Wastewater Services

Dear Ms. Liles,

Please accept this letter as a request for service from NS 120 Limited Partnership LLLP for water and wastewater services to approximately 120 acres, more particularly described as Exhibit A attached hereto. It is our intention to continue to pursue the preliminary platting, rezoning and development of this planned area, in order *to* serve single family residential homes, multi-family residential homes, and/or commercial uses.

NS 120 Limited Partnership LLLP would like to be included in your next available expansion of service areas for Santa Cruz Water Company and Palo Verde Utility Company.

NS 120 Limited Partnership LLLP
An Arizona Limited Partnership
By LKY Real Estate LLC

Manager

EXHIBIT A

INFRASTRUCTURE COORDINATION AGREEMENT

LEGAL DESCRIPTION OF LAND

The Southwest quarter of the Northeast quarter and the Northeast quarter of the Southeast quarter of Section 24, Township 5 South, Range 4 East, of the Gila and Salt River Base and Meridian, Pinal County, Arizona;

Along with:

The Southeast quarter of the Northeast quarter of Section 24, Township 5 South, Range 4 East, of the Gila and Salt River Base and Meridian, Pinal County, Arizona.

September 9, 2005

Ms. Cindy Liles
Vice President and CEO
Global Water Management, LLC
22601 North 19th Avenue, Suite 210
Phoenix, AZ 85027

RE: Water and Wastewater Services

Dear Ms. Liles,

Please accept this letter as a request for service from Richard and Dana LLC for water and wastewater services to approximately 20 acres, more particularly described as Exhibit A attached hereto. It is our intention to continue to pursue the preliminary platting, rezoning and development of this planned area, in order to serve single family residential homes, multi-family residential homes, and/or commercial uses.

Richard and Dana LLC would like to be included in your next available expansion of service areas for Santa Cruz Water Company and Palo Verde Utility Company.

Richard and Dana LLC
An Arizona Limited Liability Company
By Richard G. Hock
Manager

EXHIBIT A

INFRASTRUCTURE COORDINATION AGREEMENT

LEGAL DESCRIPTION OF LAND

The North half of the South half of the West half of the Southeast quarter of Section 24, Township 5 South, Range 4 East of the Gila and Salt River Base and Meridian, Pinal County, Arizona;

Along with:

The South half of the Southwest quarter of the Southwest quarter of Section 20, Township 5 South, Range 5 East, of the Gila and Salt River Base and Meridian, Pinal County, Arizona.

BAD LEGAL

520552

September 9,2005

Ms. Cindy Liles
Vice President and CEO
Global Water Management, LLC
22601 North 19th Avenue, Suite 210
Phoenix, AZ 85027

RE: Water and Wastewater Services

Dear Ms. Liles,

Please accept this letter as a request for service from Bruce and Karen LLC for water and wastewater services to approximately 20 acres, more particularly described as Exhibit A attached hereto. It is our intention to continue to pursue the preliminary platting, rezoning and development of this planned area, in order to serve single family residential homes, multi-family residential homes, and/or commercial uses.

Bruce and Karen LLC would like to be included in your next available expansion of service areas for Santa Cruz Water Company and Palo Verde Utility Company.

Bruce and Karen LLC
An Arizona Limited Liability Company
By Bruce H. Combe
Manager

EXHIBIT A

INFRASTRUCTURE COORDINATION AGREEMENT

LEGAL DESCRIPTION OF LAND

The South half of the South half of the West half of the Southeast quarter of Section 24, Township 5 South, Range 4 East of the Gila and Salt River Base and Meridian, Pinal County, Arizona;

Along with:

The North half of the Northwest quarter of the Southwest quarter of Section 20, Township 5 South, Range 5 East, of the Gila and Salt River Base and Meridian, Pinal County, Arizona.

BAD
LEGAL

BLEVINS FARMS

3345 N FUQUA RD. STANFIELD, AZ 85272

480-883-3131 520-524-3671 520-424-3673(FAX)

December 16,2005

Ms. Cindy Liles
Vice President & CEO
Global Water Management, LLC
Dear Valley Financial Center
22601 North 19th Ave, Suite 210
Phx, AZ 85027

RE: Water and Wastewater Service for approximately 160 acres at Northeast Corner of Barnes and Stanfield roads the legal description of this property is NE of SEC 7-6s-4E

Dear Ms Liles,

Please accept this letter as a request for service from Brian Blevins owner and manager of this property for service of water and wastewater to 160 acres at the SW corner of Barnes and Stanfield roads it is our intent to pursue and sell this 160 acres to a future developer. The legal description of this property is NE of Sec 7-6S-4E. I would like to be included in your next available expansion of service areas for Santa Cruz Water Company and Palo Verde Utility Company.

I also understand that Global Water Resources, LLC (Global") is in the process of filing an application for an amendment to the CAAG 208 Area wide plan for its subsidiary Palo Verde Utility Company ("PVUC") in the vicinity that it is located southeast of the City of Maricopa, specifically in the area known as the Southeast Expansion Area. We do not oppose a

expan
We desire
service areas
needed in the future

4550.

Thank you,

Brain Blevins
Managing Partner
Blevins Farms

ARIZONA WATER COMPANY
Comparative Statement of Income
November 30, 2005

	12 MONTHS TO DATE		NOVEMBER		11 Months to Date	
	2005	2004	2005	2004	2005	2004
ERATING REVENUE	$ 41,631,549	$ 39,749,767	$ 3,495,981	$ 3,113,394	$ 38,629,811	$ 37,025,151
ERATING EXPENSES						
Operation and Maintenance	20,181,747	18,550,051	1,599,692	1,488,006	18,701,155	17,147,687
Depreciation	5,343,823	4,705,564	445,285	397,585	4,892,058	4,406,695
Taxes Other Than Income Taxes	5,903,699	5,644,118	489,164	438,089	5,472,266	5,243,433
Income Taxes	3,205,704	3,466,723	260,911	194,935	3,279,556	3,547,104
Total Operating Expenses	34,634,973	32,366,456	2,795,052	2,518,615	32,345,035	30,344,919
'ERATING INCOME	6,996,576	7,383,311	700,929	594,779	6,284,776	6,680,232
THER (INCOME) AND DEDUCTIONS						
Other (Income) - Net	(3,699,760)	(475,866)	(38,180)	(15,715)	(440,648)	(463,384)
Interest on Long-Term Debt	1,815,466	1,852,467	149,233	152,317	1,663,150	1,697,067
Other Interest and Amortization	77,360	(90,545)	30,489	(8,769)	86,224	(85,092)
Total Other (Income) and Deductions	(1,806,934)	1,286,056	141,542	127,833	1,308,726	1,148,591
IET INCOME	8,803,510	6,097,255	$ 559,387	$ 466,946	$ 4,976,050	$ 5,531,641
Regular Common Dividends	3,966,300	3,677,400				
NCOME RETAINED	$ 4,837,210	$ 2,419,855				
Active Services	77,410	72,633				

ARIZONA WATER COMPANY
Comparative Balance Sheet
at November 30, 2005

ASSETS

	Nov. 30, 2005	Nov. 30, 2004	Increase (Decrease)
UTILITY PLANT			
Gross Utility Plant	$ 251,683,033	$ 220,934,598	$ 30,748,435
Less Accumulated Depreciation	61,560,561	56,524,218	5,036,343
Net Utility Plant	190,122,472	164,410,380	25,712,092
CURRENT ASSETS			
Cash on Hand and in Banks	498,243	1,267,105	(768,862)
Investments and Special Deposits	2,703	502,703	(500,000)
Accounts Receivable	2,786,766	2,475,976	310,790
Materials and Supplies	273,827	285,520	(11,693)
Other	404,901	455,218	(50,317)
Total Current Assets	3,966,440	4,986,522	(1,020,082)
DEFERRED DEBITS	7,292,818	6,087,466	1,205,352
TOTAL	$ 201,381,730	$ 175,484,368	$ 25,897,362

LIABILITIES

CAPITALIZATION			
Common Stock	$ 2,700,000	$ 2,700,000	$ 0
Capital Surplus	9,087,347	9,087,347	0
Retained Earnings	56,137,179	51,299,969	4,837,210
Common Stock Equity	67,924,526	63,087,316	4,837,210
Long-Term Debt	21,400,000	21,800,000	(400,000)
Total Capitalization	89,324,526	84,887,316	4,437,210
CURRENT LIABILITIES			
Notes Payable	8,850,000	0	8,850,000
Accounts Payable	4,347,569	2,709,407	1,638,162
Accrued Expenses	2,890,843	2,742,987	147,856
Other	632,682	551,095	81,587
Total Current Liabilities	16,721,094	6,003,489	10,717,605
DEFERRED CREDITS			
Advances for Construction	43,764,749	39,089,642	4,675,107
Contributions in Aid of Construction	23,394,079	22,425,013	969,066
Deferred Income Tax	17,960,268	16,305,390	1,654,878
Other	10,217,014	6,773,518	3,443,496
Total Deferred Credits	95,336,110	84,593,563	10,742,547
TOTAL	$ 201,381,730	$ 175,484,368	$ 25,897,362

ARIZONA WATER COMPANY

AGREEMENT FOR EXTENSION OF WATER FACILITES

APPLICANT: _____
Name

_____
Address

_____
City and State *Zip Code*

Contract No. _____
W.A. No. _____

DATE OF AGREEMENT _____ WATER SYSTEM: [select system]

CONSTRUCTION START: Approximately 15 days after receiving all material and obtaining all necessary permits and approvals.

PROJECT COMPLETION: Estimated to be within ____(____) days from the start date. DATE OF COST ESTIMATE (Attachment "A"): _____

WATER FACILITIES: as per drawing (Attachment "B").

Refundable Advance for Construction:	$ -
Non-refundable Contribution in Aid of Construction:	$ -
Less: Main Extension Deposit Received	$ -
Total of Required Advance and Contribution (Check #1)	$ -

CENTRAL ARIZONA PROJECT Hook-Up Fee (CAP Fee) Payable After Agreement Approved by Arizona Corporation Commission (ACC

	Number of Meters	Casa Grande In 0.11883 Out 0.06883 Fee	Coolidge In 0.11883 Out 0.06883 Fee	White Tank In 0.08583 Out 0.06583 Fee	CAP Fee
5/8" x 3/4"	0	$208	$150	$500	$ -
1"	0	$208	$150	$500	$ -
2"	0	$1,173	$800	$1,667	$ -
3"	0	$2,347	$1,600	$2,667	$ -
4"	0	$3,667	$2,500	$5,333	$ -
6" or larger	0	$7,333	$5,000	$8,333	$ -
				Subtotal	$ -
Applicable Rate & Tax		0	0	0	Error

Total Non-refundable Hook-Up Fee Due Within 15 Days After Notification of ACC Approval (Check #2)	#VALUE!
The Project Will Not Be Released to Construction Until the CAP Fee Has Been Paid.	
Total (of Two Checks Payable by Applicant)	#VALUE!

THIS AGREEMENT is made and entered into by and between ARIZONA WATER COMPANY, an Arizona corporation, (hereinafter called the "Company"), and the Applicant named above. In consideration of the services to be performed by the Company and the sums of money to be paid by the Applicant, in accordance with the related Cost Estimate, it is agreed as follows:

1. The Company will construct, or will arrange for the construction of the Water Facilities as described above.
2. The Applicant will pay to the Company upon signing this Agreement the Total shown above, receipt of which is hereby acknowledged by the Company. The Total shown above to be paid by the Applicant to the Company is the Company's estimated cost of construction of the Water Facilities. The Company will determine and inform the Applicant of the actual cost of construction within sixty (60) days after the completion of construction or the Company's receipt of all invoices and charges related to the construction. If the actual cost of construction is less than the Total amount paid, the Company will refund the difference to the Applicant; conversely, if the actual cost of construction is more than the Total amount paid, the Applicant shall pay the difference to the Company within sixty (60) days of receipt of an invoice from the Company. However, if the actual cost is more than five percent (5%) greater than the Total amount paid, the Applicant will only be required to pay five percent (5%) more than the Total amount paid, unless the Company can demonstrate that the increased costs were beyond its control and could not be foreseen at the time the estimate for the Total amount paid was made. The Company and the Applicant further agree that the amount subject to refund pursuant to paragraph 3 of this Agreement shall be the refundable portion of the Company's actual cost of construction. Information about the actual cost of construction will be attached to this Agreement and forwarded to the Applicant.
3. Refunds of any Advance For Construction shall be made as follows: each year for a period of 10 years the Company shall pay to the Applicant or the Applicant's assignee or successor in interest, provided the Company has first received written notice and evidence of such assignment or succession and approved of same, an amount equal to 10 percent of the total gross annual revenue received by the Company from water sales to each bona fide Applicant whose service line is directly connected to pipelines installed pursuant to this Agreement. Refunds shall be made by the Company on or before August 31 of each year, covering any water revenues received during the preceding July 1 to June 30 period. Any balance remaining subject to refund at the end of the 10-year period shall become non-refundable. Aggregate refunds shall in no event exceed the total of the refundable Advance For Construction received from the Applicant. No interest shall be paid by the Company on any amounts paid hereunder.
4. All Water Facilities installed under this Agreement shall be the sole property of the Company, and the Applicant shall have no right, title or interest in or to any such facilities.
5. The size, design, type and quality of materials and of the system, location and manner of installation, shall be specified by the Company and shall comply with requirements of the Arizona Corporation Commission or other public agencies having authority therein.
6. The Applicant agrees to furnish to the Company adequate and recordable easements and required surveying necessary to serve each parcel or lot within the Applicant's subdivision, tract, development, or project.
7. The Applicant agrees that all easements and rights-of-way shall be free of obstacles which may interfere with the construction of the Company's Water Facilities. If the Applicant's subdivision, tract, development, or project involves road construction, all roads and drainage ways will be brought to grade by the Applicant prior to the commencement of the installation of the Company's Water Facilities. No pavement or curbs shall be installed prior to completion of all Water Facilities. If any street, road, alley or drainageway is installed at a different grade or location after the beginning of the installation of Water Facilities, the Applicant shall bear all costs incurred by the Company to relocate the Water Facilities as a result of said facilities having improper cover or location. Such costs shall be non-refundable.
8. The Applicant agrees to pay to the Company any additional costs incurred as a result of design changes made or caused by the Applicant or its employees, agents, servants, contractors or subcontractors, the Arizona Department of Environmental Quality, the Arizona Corporation Commission, any county health department or other public agency under whose jurisdiction the subject construction may fall, or anticipated or un-anticipated changes in existing Company facilities, due to any work associated with this subdivision, tract, development or project which causes said facilities to have improper cover or location.
9. This Agreement shall be binding upon and for the benefit of the successors and assigns of the Company and the Applicant. No assignment or transfer of this Agreement by the Applicant shall be binding upon the Company or create any rights in the assignee until such assignment or transfer is approved and accepted in writing by the Company.
10. This Agreement, and all rights and obligations hereunder, including those regarding water service to the Applicant, are subject to the Arizona Corporation Commission's "Rules and Regulations" and the Company's tariff schedule TC-243, "Terms and Conditions for the Provision of Water Service."

ARIZONA WATER COMPANY
Company

By: _____

Title: _____

_____
Applicant

By: _____

Title: _____

ARIZONA WATER COMPANY

3805 N. BLACK CANYON HIGHWAY, PHOENIX, ARIZONA 85015-5351 • P.O. BOX 29006, PHOENIX, ARIZONA 85038-9006
PHONE: (602) 240-6860 • FAX: (602) 240-6878 • WWW.AZWATER.COM

[Date]

«PropertyOwner»
«Address1»
«Address2»
«City» «State» «PostalCode»

PINAL COUNTY ASSESSOR'S PARCEL NO.: «ParcelNumber»

PUBLIC NOTICE OF AN APPLICATION FOR A CERTIFICATE OF CONVENIENCE AND NECESSITY BY ARIZONA WATER COMPANY

Arizona Water Company has filed with the Arizona Corporation Commission ("Commission") an application for authority to provide water utility service to an area in which records indicate that you are a property owner. If the application is granted, Arizona Water Company would be the provider of water utility service to the proposed area. The Commission will require Arizona Water Company to provide this service under rates and charges and terms and conditions established by the Commission. The application is available for inspection during regular business hours at the offices of the Commission at 1200 West Washington Street, Phoenix, Arizona, and at Arizona Water Company, 220 East 2nd Street, Casa Grande, Arizona.

The Commission may hold a hearing on this matter. As a property owner you may have the right to intervene in the proceeding or you may appear at the hearing and make a statement on your own behalf. You may contact the Commission at the address and telephone number listed below for the date and time of the hearing and for more information on intervention. You may not receive any further notice of the proceeding unless you request it.

If you have questions or concerns about this application, have any objection to its approval, or wish to make a statement in support of it, you may contact the Consumer Services Section of the Arizona Corporation Commission at 1200 West Washington St., Phoenix, Arizona 85007 or call 1-800-222-7000.

William M. Garfield

William M. Garfield
President

Exhibit 7

COPY

7552553

1268-263

FRANCHISE

BE IT RESOLVED by the Board of Supervisors, County of Pinal, State of Arizona:

THAT WHEREAS, Arizona Water Company, an Arizona corporation, has duly filed and presented its application that it be granted the right, privilege and franchise to construct, maintain and operate upon, over, along, across and under the present and future streets, avenues, alleys, highways, bridges, public roads and other public places in the County of Pinal, State of Arizona, water lines, plant and system, including mains, laterals, pumps, manholes, meters, regulator stations and related equipment, facilities and appurtenances, for the purpose of supplying water for all purposes in the County of Pinal, State of Arizona, for a period of twenty-five (25) years; and

WHEREAS, upon the filing of said application, the Board of Supervisors ordered that public notice of the intention of said Board to make such grant be given by publishing a notice in the Florence Reminder & Blade-Tribune, a newspaper of general circulation published in the City of Casa Grande, County of Pinal, State of Arizona, stating that at 10:00 o'clock A.M., on the 4th day of February, 1985, at the Courthouse in the City of Florence, County of Pinal, State of Arizona, was set for the time and place for the consideration of the granting of said right, privilege, and franchise; and

WHEREAS, said application coming on regularly for hearing on the 4th day of February, 1985, and it appearing by the affidavit of Florence Reminder of said newspaper that due and legal notice of said time and place set for the consideration of such action has been published for at least once a week for three weeks prior to the date set for said hearing;

NOW, THEREFORE,

SECTION 1. There is hereby granted to Arizona Water Company, a corporation organized and existing under and by virtue of the laws of the State of Arizona, its successors and assigns (hereinafter called "Grantee"), the right, privilege and franchise to construct, maintain and operate upon, over, along, across and under the present and future streets, avenues, alleys, highways, bridges, public roads and other public places in the County of Pinal, State of Arizona, water lines, plant and system, including mains, laterals, pumps, manholes, meters, regulator stations and related equipment, facilities and appurtenances, for the purpose of supplying water for all

Exhibit 7

1268-264

purposes in the County of Pinal, State of Arizona. Grantee's Application for franchise is made a part hereof by reference thereto.

SECTION 2. All facilities to be constructed pursuant to this franchise shall be constructed and maintained in accordance with established practices with respect to such streets, avenues, alleys, highways, bridges and public places of the County of Pinal. Prior to such construction, a map showing the location of such facilities shall be submitted to such persons as may be designated by said Board of Supervisors.

SECTION 3. In the event that any lines or related facilities installed or constructed pursuant to this franchise shall at any time be found to interfere unduly with vehicular and pedestrian traffic over such streets, avenues, alleys, highways, bridges, public roads and other public places the Grantee hereby agrees that it will, at its own expense, and within a reasonable time after notice thereof by said Board of Supervisors, remove or relocate said lines, or related facilities so as to minimize said interference. In all other instances the costs incurred in relocating any lines or facilities shall be borne by and added to the cost of the public or private improvement causing or resulting in such relocation.

SECTION 4. In the event that said Board of Supervisors, acting on behalf of the County of Pinal, takes action to dispose of unnecessary public roadways in accordance with the provisions of Arizona Revised Statutes §28-1901, et seq., said Board of Supervisors agrees to recognize and preserve each of the Grantee's prior rights of way or easements and rights under this franchise which are affected thereby, as they existed prior to such disposition, by including specific and appropriate language for that purpose in any legal instrument utilized for the purpose of accomplishing such disposition.

SECTION 5. In case of any disturbance of pavement, sidewalk, driveway or other surfacing, planting or ground cover resulting from Grantee's action pursuant to this franchise, Grantee shall, in a manner entirely satisfactory to said Board of Supervisors and the department having appropriate jurisdiction, replace and restore the paving, sidewalk, driveway, surfacing, planting or ground cover of any street, alley or other public way or place so disturbed in as good condition as it was prior to said disturbance. All such work shall be completed with due diligence.

Further, to avoid duplication of effort and untimely destruction of the street, the Grantee shall coordinate its construction and replacement

plans pursuant to this franchise with said department having appropriate jurisdiction.

SECTION 6. The Grantee shall save the County of Pinal harmless from expenses, claims and liability arising by reason of the exercise of this franchise by Grantee.

SECTION 7. The right, privilege and franchise hereby granted shall continue and exist for a period of twenty-five (25) years from the effective date hereof, and upon approval by said Board of Supervisors and acceptance by the Grantee, this franchise shall be deemed effective as of the date of approval of this Application.

SECTION 8. The right, privilege and franchise hereby granted shall inure to the benefit of, and be binding upon the Grantee, its successors and assigns.

SECTION 9. All resolutions and parts of resolutions in conflict with the provisions hereof are hereby repealed to the extent applicable to a franchised public service corporation.

SECTION 10. If any section, paragraph, subdivision, clause, phrase or provision of this resolution shall be adjudged invalid or unconstitutional, the same shall not affect the validity of this resolution as a whole or any part of the provisions hereof other than the part so adjudged to be invalid and unconstitutional.

SECTION 11. Upon the expiration of this franchise, if the Grantee shall not have acquired an extension or renewal thereof and accepted the same, it may continue operating its facilities and system within the County of Pinal until a new franchise can be effected with the County of Pinal.

Upon motion by Supervisor Mathieson,

seconded by Supervisor Weatherly,

the foregoing Resolution granting a Franchise to Arizona Water Company in the County of Pinal, State of Arizona, was duly passed and adopted by the Board of Supervisors, County of Pinal, State of Arizona, at a regular session of said Board held on the 4th day of February, 1985.

Exhibit 7

1268-366

PINAL COUNTY BOARD OF SUPERVISORS

By _____
Chairman

ATTEST:

_____
Clerk of Board of Supervisors

505 13

C.G. Contract No. ___-___

FRANCHISE AGREEMENT
BETWEEN
ARIZONA WATER COMPANY
AND THE
CASA GRANDE, ARIZONA, CITY COUNCIL

Section 1. –*Grant of Franchise.* There is hereby granted to Arizona Water Company, a corporation organized and existing under and by virtue of the laws of the State of Arizona, its successors and assigns (hereinafter called "Grantee"), the right, privilege and franchise to construct, maintain and operate upon, over, along, across and under the present and future public streets, avenues, alleys, highways, bridges and other public places in the City of Casa Grande, Pinal County, Arizona, (hereinafter called "Municipality"), water lines, plant and system, including mains, laterals, pumps, manholes, meters, fire hydrants, regulator stations and related equipment, facilities and appurtenances, for the purpose of providing water service for all purposes in Municipality.

Section 2. Construction and Maintenance in Accordance with Municipality's Ordinances & Regulations. *All facilities to be constructed* and maintained pursuant to the Franchise shall be constructed and maintained in accordance with Municipality's standards with respect to repairs and maintenance of such public streets, avenues, alleys, highways, and bridges and other public places of Municipality. Prior to construction, Grantee shall apply for a right-of-way work permit in accordance with all existing ordinances and regulations of Municipality and a map showing the location of such facilities shall be submitted to Municipality's Director of Public Works, or his/her designee. If Grantee does not comply with any Municipal ordinance or regulation governing work in the public streets,

avenues, alleys, highways, and bridges and other public places of the Municipality, Grantee shall, within 30 days after written notice of non-compliance in accordance with Section 12, undertake action to achieve compliance.

Section 3. Removal or Movement of Facilities. In the event that facilities constructed pursuant to this Franchise shall at any time be found by Municipality to interfere unduly with Municipality's governmental functions over such public streets, avenues, alleys, highways or bridges or other public places, Grantee hereby agrees that it will, at its own expenses, and within a reasonable time after notice thereof by Municipality, remove or relocate said facilities so as to minimize said interference. In all other instances the costs incurred in relocating facilities shall be borne by and added to the costs of the public or private improvement causing or resulting in such relocation.

Section 4. Disposal of Unnecessary Rights-of-Way. In the event Municipality takes action to dispose of unnecessary public roadways in accordance with the provisions of the Arizona Revised Statutes, Municipality shall recognize and preserve each of Grantee's prior rights-of-way, easements, and rights under this Franchise which are affected thereby, as they existed prior to such disposition, by including specific and appropriate language for that purpose in any legal instrument utilized for the purpose of accomplishing such disposition.

Section 5. Franchise Fee.

(a) As a further consideration for the franchise hereby granted, Grantee will pay quarterly to Municipality a sum equal to 3% of the gross receipts of Grantee from the sale of all water for residential, commercial and industrial purposes, including connect or reconnect charges, service establishment or reestablishment charges, or other similar charges, within Municipality's corporate limits, as Grantee is notified from time to time by Municipality of the extent of such corporate limits. For the purpose of

verifying the amounts payable hereunder, Grantee's billing records shall be subject to inspection by duly authorized officials or representatives of Municipality, at reasonable times.

(b) Said payment shall be a franchise fee. Said payments shall only be in lieu of any and all permit fees or other fees, charges or exactions whatsoever otherwise assessed by Municipality for the construction and maintenance of Grantee's facilities within public streets, avenues, alleys, highways, and bridges and other public places of the Municipality hereunder or for inspections thereof up to the amount payable under the terms of this Section 5. Furthermore, the amount of such franchise fee may be lawfully and specifically added to customer bills.

(c) Payment as described in the preceding paragraphs shall be payable in quarterly amounts within 30 days after the end of each calendar quarter.

Section 6. Indemnity. Grantee shall save Municipality harmless from expenses, claims and liability arising by reason of the exercise of this Franchise by Grantee.

Section 7. Term. The right, privilege, and franchise hereby granted shall continue and exist for a period of twenty-five (25) years from the date that the last representative for the parties executes this Agreement(effective date), however, either party may terminate this Franchise on its tenth (10th) anniversary by giving written notice of its intention to do so not less than six (6) months before the tenth (10th) anniversary. While such notice may or may not result in a renegotiated Franchise, the party giving the notice of termination shall be responsible for the costs of any resulting franchise election to renew this franchise or adopt a new franchise.

Section 8. Assignability of Franchise by Grantee The right, privilege and franchise hereby granted may be assigned by Grantee in whole or in part.

Section 9. – Franchise; Non-Exclusive: This Franchise is not exclusive, and nothing herein contained shall be construed to prevent Municipality from granting other like or similar grants or privileges to any other person, firm or corporation.

Section 10. – Conflicting Ordinances: All ordinances and parts of ordinances in conflict with the provisions hereof are, to the extent applicable to a franchised water public service corporation, are hereby superseded by the terms of this Franchise.

Section 11. – Independent Provisions: If any section, paragraph, subdivision, clause, phrase or provision of this Franchise Agreement, other than Section 5, shall be adjudged invalid or unconstitutional, the same shall not affect the validity of this Franchise as a whole or any part of the provisions hereof other than the part so adjudged to be invalid or unconstitutional. If Section 5 shall be adjudged invalid or unconstitutional in whole or in part by a final judgment, this Franchise shall immediately terminate and shall be of no further force or effect.

Section 12. – Notices: Any notice required or permitted to be given hereunder shall be in writing, unless otherwise expressly permitted or required, and shall be deemed effective either (i) upon hand delivery to the person then holding the office shown below, or, if such office is vacant or no longer exists, to a person holding a comparable office, or (ii) on the third business day following its deposit with the United States Postal Service, first class and certified or registered mail, return receipt requested, postage prepaid, addressed as follows:

(a) To the City:

City Clerk
City of Casa Grande
510 East Florence Blvd
Casa Grande, Arizona 85222

With a copy to:

Casa Grande City Attorney
510 East Florence Blvd
Casa Grande, Arizona 85222

(b) To Arizona Water Company: P.O. Box 29006

Phoenix, AZ 85038-9006

Section 13. Avowal. We, the undersigned, have executed this document in accordance with the results of the City of Casa Grande Special Election held on September 13th, 2005, on the dates below written.

CITY OF CASA GRANDE, an Arizona Municipal Corporation

By _____
Charles T. Walton, Mayor

On behalf of the City of Casa Grande
Date: May 18, 2005

ARIZONA WATER COMPANY, an Arizona Corporation

By William M Garfield
WILLIAM M. GARFIELD
PRESIDENT

Date: 9-27-2005

ATTEST:

Gloria Leija

Gloria Leija, Casa Grande City Clerk

CASA GRANDE, ARIZONA • CITY OF CASA GRANDE INCORPORATED 1915

APPROVED AS TO FORM:

_____
Casa Grande City Attorney

State of Arizona)
maricopa) ss
County of ~~Pinal~~)

Arizona Water Company
Acknowledgment

On this 27th day of September, 2005, William M Garfield, who acknowledged himself/herself to be the President of Arizona Water Company personally appeared bef the undersigned and that he/she, as such officer, being authorized to do so, executed the document in the capacity therein stated and for the purposes therein contained by signing his/her name.

IN WITNESS WHEREOF, I have hereunto set my hand and official seal.

Jackie R. Craig
Notary Public

My commission expires: 1-19-2009

"OFFICIAL SEAL"
Jackie R. Craig
Notary Public-Arizona
Maricopa County
My Commission Expires 1/19/2009

RESOLUTION NO. 3614

A RESOLUTION OF THE MAYOR AND COUNCIL OF THE CITY OF CASA GRANDE, PINAL COUNTY, ARIZONA, DECLARING THAT SAID COUNCIL DEEMS THAT GRANTING OF A CERTAIN WATER FRANCHISE BENEFICIAL FOR THE CITY OF CASA GRANDE; ORDERING A SPECIAL ELECTION TO BE HELD ON THE 13TH DAY OF SEPTEMBER, 2005, AT WHICH ELECTION THERE SHALL BE SUBMITTED TO THE VOTERS OF SAID CITY THE QUESTION AS TO WHETHER OR NOT SAID FRANCHISE SHALL BE GRANTED TO ARIZONA WATER COMPANY; DESIGNATING ELECTION TO BE BY MAIL BALLOT PROCESS.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF CASA GRANDE, PINAL COUNT, ARIZONA, AS FOLLOWS:

Section 1. That the Mayor and City Council of the City of Casa Grande deem the granting of the Franchise Agreement (identified in City records as C.G. No. 505-13, which is incorporated by this reference herein as if fully set forth herein) is beneficial to the City of Casa Grande.

Section 2. That an election is hereby called and ordered to be held in the City of Casa Grande on the 13th day of September, 2005, for the purpose of submitting to a vote of the qualified electors of the City of Casa Grande, the question as to whether the franchise under the terms and conditions of the above-referenced agreement shall be granted to Arizona Water Company.

Section 3. That the notice of said election shall be given by the City of Casa Grande by causing a copy of the resolution to be published in full according to law in the proper publication, namely, the Casa Grande Dispatch, a daily newspaper of general circulation printed and published in the City of Casa Grande, Pinal County, State of Arizona, affording not less than thirty (30) days notice prior to the date of the election. The publication shall be in English and Spanish.

Section 4. The City shall utilize the mail ballot election process. Casa Grande City Hall, 510 E. Florence Boulevard, Casa Grande, shall be designated as a re-issue center and drop-off site.

Section 5. That the ballots to be used at said election shall be substantially in the form set forth in Exhibit A, attached hereto and incorporated herein by this reference.

Further, the voter shall indicate his of her vote "For the franchise" or "Against the franchise" by inserting an "X" or other proper indication of their vote in the square opposite the phrase.

PASSED, ADOPTED AND APPROVED by the Mayor and Council of the City of Casa Grande, Arizona, by a majority of the members present and voting this 16th day of May 2005.

Mayor, City of Casa Grande

ATTEST:

City Clerk, City of Casa Grande

CITY OF CASA GRANDE INCORPORATED 1915 CASA GRANDE, ARIZONA

APPROVED AS TO FORM:

City Attorney, City of Casa Grande

EXHIBIT 9

STATE OF ARIZONA

Office of the
CORPORATION COMMISSION

CERTIFICATE OF GOOD STANDING

To all to whom these presents shall come, greeting:

I, Brian C. McNeil, Executive Director of the Arizona Corporation Commission, do hereby certify that

******ARIZONA WATER COMPANY******

a domestic corporation organized under the laws of the State of Arizona, did incorporate on December 15, 1954.

I further certify that according to the records of the Arizona Corporation Commission, as of the date set forth hereunder, the said corporation is not administratively dissolved for failure to comply with the provisions of the Arizona Business Corporation Act; and that its most recent Annual Report, subject to the provisions of A.R.S. sections 10-122, 10-123, 10-125 & 10-1622, has been delivered to the Arizona Corporation Commission for filing; and that the said corporation has not filed Articles of Dissolution as of the date of this certificate.

This certificate relates only to the legal existence of the above named entity as of the date issued. This certificate is not to be construed as an endorsement, recommendation, or notice of approval of the entity's condition or business activities and practices.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of the Arizona Corporation Commission. Done at Phoenix, the Capital, this 7th Day of November, 2005, A. D.

SEAL OF THE ARIZONA CORPORATION COMMISSION
DITAT DEUS
1912

EXECUTIVE SECRETARY

BY: _____

WATER USE DATA SHEET

NAME OF COMPANY →	ARIZONA WATER COMPANY - Casa Grande
ADEQ Public Water System No. →	11-009

MONTH/YEAR (LAST 13 MONTHS)	NUMBER OF CUSTOMERS	GALLONS SOLD (Thousands)	GALLONS PUMPED	GALLONS PURCHASED
December-05	19,089	285,407	280,927	0
November-05	18,895	327,561	330,540	0
October-05	18,670	375,638	383,468	0
September-05	18,314	398,883	412,325	0
August-05	18,181	366,708	384,751	0
July-05	18,006	441,704	469,839	0
June-05	17,707	368,906	432,347	0
May-05	17,432	305,825	398,079	0
April-05	17,225	263,983	312,576	0
March-05	16,945	193,240	261,175	0
February-05	16,737	198,930	211,109	0
January-05	16,645	217,348	223,065	0
December-04	16,483	228,443	234,177	0

STORAGE TANK CAPACITY (Gallons)	NUMBER OF EACH	ARIZONA DEPT. OF WATER RESOURCES WELL I.D. NUMBER	WELL PRODUCTION (Gallons per Minute)
Burgess Peak 2,000,000	1	D(6-6)21bbc - Casa Grande #10	1,040
Casa Grande Mtn 5,000,000	1	D(6-6)23cbb – Casa Grande #19	1,560
Cottonwood 1,000,000	1	D(6-6)22ddd – Singh/Quaid #22	1,000
Golf Course 115,000	1	D(6-6)22bda – Casa Grande #25	1,320
Indian Hills 100,000	1	D(6-6)21bbb – Cottonwood Lane #14	250
North Park 650,000	1	D(6-6)22bad – Casa Grande #20	1,110
North Park 35,000	1	D(6-6)22baa – Casa Grande #23	1,550
Scott Drive 110,000	1	D(6-6)15cdd – Casa Grande #26	1,400
Scott Drive 5,000,000	1	D(7-6)35ddd – AZ City/Battaglia #28	1,620
Tierra Grande #1 10,000	1	D(6-6)15ccb – Casa Grande #17	850
Tierra Grande #1 250,000	1	D(6-6)22cdc – Casa Grande #21	740
		D(6-6)22cdd – Casa Grande #24	950
		D(6-7)5baa – Lake-in-the-Desert #27	550
		D(6-6)25dcd - Casa Grande #29	1,380

Other Water Sources in Gallons per Minute →	GPM 0
Fire Hydrants on System →	YES (circled) NO
Total Water Pumped Last 13 Months (Gallons in Thousands) →	4,334,378

Arizona Department of Environmental Quality

Water Quality Compliance Assurance Unit
1110 W. Washington Street, 5415B-1
Phoenix, AZ 85007

Drinking Water Compliance Status Report

Public Water System Name: Arizona Water Co.-Casa Grande

Public Water System ID #: 11-009

Public Water System Type: [X] CO [] Non-transient Non-community [] Transient Non-community

Overall Compliance Status: [X] No Major Deficiencies [ ] Major Deficiencies

Monitoring and Reporting Status: [X] No Major Deficiencies [ ] Major Deficiencies
Comments:

Operation and Maintenance Status: [X] No Major Deficiencies [ ] Major Deficiencies
Comments:

Major unresolved/ongoing operation and maintenance deficiencies:

[ ] unable to maintain 20psi
[ ] cross connection/backflow problems
[ ] treatment deficiencies
[ ] certified operator
[ ] inadequate storage
[ ] surface water treatment rule
[ ] approval of construction
[ ] other

Date of last inspection / sanitary survey: 3-12-01

Administrative Orders:
Is an ADEQ administrative order in effect? [ ] Yes [X] No
Comments:

System information:

Number of Points of Entry 8 Number of Sources 13 Population Served 46264

Service Connections 14107 Initial Monitoring Year 1993 Initial MAP Year N/A

Evaluation completed by: **Jim Puckett**

Phone: 602-771-4649 **Date: 9-28-05**

Based upon data submitted by the water system, ADEQ has determined that this system is currently delivering water that meets water quality standards required by Arizona Administrative Code, Title 18, Chapter 4. This compliance status report does not guarantee the water quality for this system in the future. This compliance status report does not reflect the status of any other water system owned by this utility company.

WATER RATES

ORIGINAL

ARIZONA WATER COMPANY		A.C.C. No.	476
Phoenix, Arizona		Cancelling A.C.C. No.	418
Filed by:	William M. Garfield	*Tariff* or Schedule No.	WG-103
Title:	President	Filed:	November 30, 2005
Date of Original Filing:	4-1-55	Effective:	For all service rendered on or after December 1, 2005
System:	CASA GRANDE		

GENERAL SERVICE

AVAILABILITY:

In Casa Grande and environs at all points where facilities of adequate capacity and pressure are adjacent to the premises served.

APPLICATION:

To all water service required when such service is supplied at one premise through one point of delivery and measured through one meter. Not applicable to temporary, standby, supplementary or resale service.

		Commodity Rate Per 100 Gallons Consumed								
Meter Size	Monthly Minimum	0-3,000 Gallons	3,001-10,000 Gallons	10,001-67,000 Gallons	67,001-296,000 Gallons	296,001-552,000 Gallons	552,001-1,195,000 Gallons	1,195,001-2,160,000 Gallons	2,160,001-7,292,000 Gallons	Over 7,292,000 Gallons
⅝" x ¾"	$ 10.48	$.10000	$.14869	$.16500	$.16500	$.16500	$.16500	$.16500	$.16500	$.16500
1"	$ 25.20	$.14869	$.14869	$.14869	$.16500	$.16500	$.16500	$.16500	$.16500	$.16500
2"	$ 63.10	$.14869	$.14869	$.14869	$.14869	$.16500	$.16500	$.16500	$.16500	$.16500
3"	$ 105.15	$.14869	$.14869	$.14869	$.14869	$.14869	$.16500	$.16500	$.16500	$.16500
4"	$ 210.25	$.14869	$.14869	$.14869	$.14869	$.14869	$.14869	$.16500	$.16500	$.16500
6"	$ 367.90	$.14869	$.14869	$.14869	$.14869	$.14869	$.14869	$.14869	$.16500	$.16500
8"	$ 367.90	$.14869	$.14869	$.14869	$.14869	$.14869	$.14869	$.14869	$.16500	$.16500
10"	$1,205.20	$.14869	$.14869	$.14869	$.14869	$.14869	$.14869	$.14869	$.14869	$.16500

Adjustment: Plus the applicable proportionate part of any taxes or governmental impositions which are or may in the future be assessed on the basis of the gross revenues of the Company and/or the price or revenue from the water or service sold and/or the volume of water pumped or purchased for sale and/or sold hereunder and any tax or similar assessment based on the withdrawal, delivery or use of water. In the event of any increase or decrease in taxes or other governmental impositions, rates shall be adjusted to reflect such increase or decrease.

SPECIAL PROVISIONS:

Subject to the Company's Tariff Schedule SC-265.

TERMS AND CONDITIONS:

Subject to the Company's Tariff Schedule TC-243.

APPROVED FOR FILING
DECISION #: 68302

0000062672

ORIGINAL

57

ARIZONA WATER COMPANY
Robert W. Geake (No. 009695)
Vice President and General Counsel
3805 Black Canyon Highway
Phoenix, AZ 85015-5351
Telephone: (602) 240-6860

FENNEMORE CRAIG
A Professional Corporation
Norman D. James (No. 006901)
Jay L. Shapiro (No. 014650)
3003 North Central Avenue
Suite 2600
Phoenix, AZ 85012-2913
Telephone: (602) 916-5000

Attorneys for *Arizona Water Company*

Arizona Corporation Commission
DOCKETED
DEC 29 2006
DOCKETED BY

RECEIVED
2006 DEC 29 P 12 02
AZ CORP COMMISSION
DOCUMENT CONTROL

BEFORE THE ARIZONA CORPORATION COMMISSION

IN THE MATTER OF THE APPLICATION OF ARIZONA WATER COMPANY, AN ARIZONA CORPORATION, FOR ADJUSTMENTS TO ITS RATES AND CHARGES FOR UTILITY SERVICE FURNISHED BY ITS WESTERN GROUP AND FOR CERTAIN RELATED APPROVALS	**DOCKET NO. W-01445A-04-0650** **CERTIFICATE OF FILING CAP WATER USE PLAN**

Decision No. 68302 of the Arizona Corporation Commission in the above-captioned docket provides, among other things, that Arizona Water Company (the "Company") shall develop and submit for Staff approval a Central Arizona Project Water Use Plan which is attached hereto as Attachment "A" and incorporated herein by reference.

IT IS HEREBY CERTIFIED THAT on the day 29th of December, 2006, Arizona Water Company filed with the Arizona Corporation Commission, Docket Control Division, at its main office located at 1200 West Washington Street, Phoenix, Arizona, an original and thirteen (13) copies of a Central Arizona Project Water Use Plan.

U:\RATECASE\2004_WESTERN GROUP\CORRESPONDENCE\CAP WATER USE PLAN_COFF_122806.DOC
RWG:J | 07:30 12/29/06

ORIGINAL

RESPECTFULLY SUBMITTED this 29th day of December, 2006.

ARIZONA WATER COMPANY

By: Robert W. Geake

Robert W. Geake
Vice President and General Counsel
Arizona Water Company
P. O. Box 29006
Phoenix, AZ 85038
Attorney for Applicant

AN ORIGINAL and thirteen (13) copies of the foregoing filed this 29th day of December, 2006 with:

Docket Control
Arizona Corporation Commission
1200 W. Washington
Phoenix, AZ 85007

And copies of the foregoing, mailed/delivered this 29th day of December, 2006, to:

Norman D. James
Jay L. Shapiro
FENNEMORE CRAIG
3003 N. Central Avenue, Suite 2600
Phoenix, AZ 85012
Attorneys for Arizona Water Company

A copy of the foregoing was delivered/mailed this 29th day of December, 2006, to:

Teena Wolfe, Administrative Law Judge
Hearing Division
Arizona Corporation Commission
1200 West Washington
Phoenix, AZ 85007

Mr. Ernest G. Johnson, Director
Utilities Division
Arizona Corporation Commission
1200 West Washington
Phoenix, AZ 85007

Mr. Christopher Kempley, Chief Counsel
Legal Division
Arizona Corporation Commission
1200 West Washington
Phoenix, AZ 85007

Mr. Daniel Pozefsky, Staff Counsel
Residential Utility Consumer Office
1110 W. Washington Street, Suite 200
Phoenix, AZ 85007

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SNELL & WILMER, LLP
One Arizona Center
400 E. Van Buren
Phoenix, AZ 85004-2202
Attorneys for Pivotal Group, Inc.

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SACKS TIERNEY, P.A.
4230 N. Drinkwater Blvd., 4th Floor
Scottsdale, AZ 85251

Joan S. Burke
OSBORN MALEDON, P.A.
2929 N. Central Avenue, Ste. 2100
Phoenix, AZ 85012
Attorneys for the City of Casa Grande

By: Robert W. Geake

ARIZONA WATER COMPANY

3805 N. BLACK CANYON HIGHWAY, PHOENIX, ARIZONA 85015-5351 • P.O. BOX 29006, PHOENIX, ARIZONA 85038-9006
PHONE: (602) 240-6860 • FAX: (602) 240-6878 • WWW.AZWATER.COM

December 29, 2006

Mr. Steve Olea
Assistant Director, Utilities Division
Arizona Corporation Commission
1200 West Washington
Phoenix, AZ 85007-2996

Re: Central Arizona Project Water Use Plan – Docket No. W-01445A-04-0650
ACC Decision No. 68302

Dear Mr. Olea:

We are submitting for approval the Arizona Water Company ("AWC") Central Arizona Project ("CAP") Water Use Plan as required by Arizona Corporation Commission ("Commission") Decision No. 68302. The CAP Water Use Plan addresses how CAP water will be used within AWC's Pinal Valley water systems and within its White Tank water system; and all of the other issues that Decision directed us to address.

We met with representatives from the cities of Casa Grande and Coolidge ("Cities") on numerous occasions during the preparation of the CAP Water Use Plan and received their input. Specifically we discussed all aspects of the CAP Water Use Plan, including water demand planning projections, planned CAP water treatment facilities, CAP water use integration, the impact on arsenic treatment, and cost projections. The Cities' representatives voiced general support for the CAP Water Use Plan. We will have further meetings with the Cities' representatives concerning the availability of reclaimed water for use by AWC to supplement the existing water supplies of AWC's Pinal Valley Water System.

We would appreciate Staff's prompt review and approval of the CAP Water Use Plan. If you have any questions on the CAP Water Use Plan, please let me know. Thank you.

Very truly yours,

William M. Garfield

William M. Garfield
President

jrc

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ARIZONA WATER COMPANY

Central Arizona Project Water Use Plan

Casa Grande, Coolidge, Stanfield, and White Tank Systems

Submitted by: William M. Garfield
Date: December 29, 2006

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CHAPTER 1

PLAN OBJECTIVES AND OVERVIEW

1.1 Plan Objectives

Arizona Water Company ("AWC") prepared this Central Arizona Project Water Use Plan ("Water Use Plan" or "Plan") pursuant to the Arizona Corporation Commission (the "Commission") Decision No. 68302. The Commission required AWC to develop this Water Use Plan to show how Central Arizona Project Water ("CAP") will be used to supply AWC's Casa Grande, Coolidge, Stanfield and White Tank service areas. This Plan also reviews steps already taken toward direct use of CAP water, and examines other current and future water sources potentially available to meet future customer water service needs in AWC's service areas. Pursuant to Decision No. 68302, the Company also met and conferred with and had input from the cities of Casa Grande and Coolidge in the development of this Water Use Plan.

1.2 Plan Scope and Overview

In Decision No. 68302, the Commission directed that this Water Use Plan address the following:

- Existing water supplies and demand patterns for the last two years (such information as required on the Water Use Data Sheet).

- Future water supplies and demand patterns demonstrating how and when CAP water will be used in each area through the year 2025. All future water sources that the Company plans to use other than CAP water should be discussed. All assumptions used to make projections should be clearly explained.

- All major infrastructure components required to use CAP water through the year 2025 should be listed and described in as much detail as possible. These would include such items as, but not be limited to treatment plants, transmission mains, storage tanks, pumping stations, etc.

- Projected capital and Operation and Maintenance costs for all future water supplies (including CAP water) through the year 2025 should be listed in as much detail as possible. All assumptions used to make these projections should be clearly explained.

- How CAP water will be used to address the arsenic issue (if it will be).

The Plan also provides an overview of assumptions used to make projections related to planning and provides preliminary cost estimates for existing and future supplies potentially

available to the AWC service areas. Preliminary engineering design for the Pinal Valley CAP Water Treatment Plant, which will treat the Company's Casa Grande and Coolidge CAP water allocations, is planned in 2007. When completed, the preliminary engineering design will provide detailed and accurate data on facility costs and water treatment methods. As with any long-range water supply plan, many assumptions are necessary to project future growth, water demands and infrastructure costs. The assumptions included in this Plan are the best estimates available.[1]

1.3 Background

AWC holds the following CAP water allocations that are the subject of this plan:

Water System	CAP Water Allocation (AF/Yr)	Annual Use For 2006 (AF/Yr)	Summary of Direct Uses (AF/Yr)
Casa Grande	8,884	2,966	SRP Desert Basin Generating Station (2,000)
			Casa Grande Golf Course (56)
			Francisco Grande Golf Course (910)
Coolidge	2,000	0	0
White Tank	968	0	0

This Plan assumes that within five years, AWC will deliver reclaimed water to these existing customers obtained from wastewater facilities operated by the City of Casa Grande or others, to replace CAP water use, freeing up the full CAP water allocation amount for treatment and potable delivery to other AWC customers.

AWC's plans call for construction of a new CAP water treatment plant ("CAP Treatment Plant") to treat AWC's Casa Grande and Coolidge CAP water allocations for direct potable use within a fully integrated water system serving Casa Grande, Coolidge, Tierra Grande, Arizona City and Stanfield (referred to herein as the Pinal Valley Water System ("Pinal Valley Water System"). AWC purchased a 60-acre site near the CAP canal in 2005 for the purpose of constructing the first phase of the CAP Treatment Plant, a surface water treatment plant, to be completed, placed in service, and capable of delivering 10 million gallons per day ("MGD") to the Pinal Valley Water System by 2012. Along with construction of the CAP Treatment Plant, AWC will construct the necessary pump stations and water transmission mains to deliver treated CAP water to the Pinal Valley Water System.

AWC plans to begin preliminary engineering design for the first phase of the CAP Treatment Plant in 2007. A detailed schedule of activities related to plant design and construction is provided later in this Plan. AWC will design and construct future phases of the CAP Treatment Plant as additional CAP or other surface water allocations are obtained or become available when agricultural lands receiving surface water supplies convert from agricultural uses to municipal and industrial uses.

[1] This Plan does not include AWC's Ajo Water System since it lies outside of the CAP service territory, does not have a CAP water allocation, and has not had significant customer growth over the past forty years.

AWC has also been actively pursuing alternatives for obtaining delivery and treatment of its White Tank water system CAP water allocation. In 2005, AWC representatives met with Arizona American Water Company ("Arizona-American") representatives regarding AWC securing treatment capacity in Arizona-American's planned White Tank Water Treatment Plant. Also, as an alternative to securing such treatment plant capacity with Arizona-American, AWC is investigating the possibility of obtaining capacity in the water treatment plant the Maricopa Water District ("MWD") is now planning to construct just north of AWC's White Tank water system to provide treated water to cities and private water companies located within or near MWD lands. AWC will continue to evaluate both of these projects as a viable means of using its White Tank water system CAP water allocation. This Plan provides updated cost estimates and projected schedules for both of these water treatment plant projects.

Groundwater is the primary source of supply currently in use and it will continue to be a principal reliable source of supply for meeting future customer water supply needs. But this Plan also discusses the availability and estimated costs of other current and future water supplies for AWC, which become available or have the potential to become available, and which AWC plans to use to meet customer water supply needs in the future. Other potential future sources of supply discussed in this Plan include:

- Additional CAP water allocations
- Gila River surface water available through the San Carlos Irrigation and Drainage District for lands located within its service area which convert from agricultural uses to municipal and industrial uses.
- Reclaimed water available from wastewater treatment facilities operated by entities such as the cities of Casa Grande and Coolidge.

CHAPTER 2
SERVICE AREA WATER DEMANDS – PAST AND PROJECTED

2.1 Casa Grande, Coolidge, Stanfield Systems

2.1.1 Water Demand Planning Assumptions

AWC plans to fully integrate the Casa Grande, Coolidge and Stanfield water systems into the Pinal Valley Water System prior to treated CAP water becoming available in 2012 as part of its regional planning and system consolidation efforts. Therefore, the water demand projections presented in this Plan are presented as an integrated service area water demand projection for the Pinal Valley Water System planning area.

Future water demands for the Pinal Valley Water System planning area are based on the following assumptions:

- Residential zoning will comprise 80.4 percent of the planning area and non-residential zoning will comprise 19.6 percent of the planning area. The overall housing unit density projections from the General Land Use Plans for Coolidge and Casa Grande were used to calculate the number of housing units expected in the integrated Pinal Valley Water System at build out of the planning area (Figure 2.1). An average of 2.8 dwelling units per acre are assumed through buildout.

- 3.0 persons per household average.

- Residential water use will average 125 gallons per capita per day (gpcd) for new housing units.

- In 2005, non-residential use was approximately 65 percent of residential use, however, non-residential use as it relates to residential use is assumed to decline at an even rate over the 2007 to 2019 period from 65 percent of residential use to 30 percent of residential use as residential use increases at a higher rate than non-residential use.

- Lost and unaccounted-for water will not be more than 10 percent of total water produced.

- The distribution of annual demand by month for the planning area in the future will follow approximately the same pattern exhibited in 2005 for the Casa Grande and Coolidge systems.

- The number of residential customers will grow at a rate of 10 percent annually for the time period from 2007 through 2025. For 2006, the actual rate of growth in the number of customers through August was extrapolated to the end of the year. This 10 percent growth rate is based on the growth rate within the Pinal Valley

Water System as a whole during the 2003-2006 time period. In addition, historical growth rates in the nearby cities of Gilbert and Chandler during the time period from 1980 through 2005 were researched to provide a historical perspective. These utilities had a 10.4 percent annual growth rate in new housing units and population during this period, which represents a growth rate similar to the Pinal Valley Water System and supports the assumptions used in preparing this Plan.

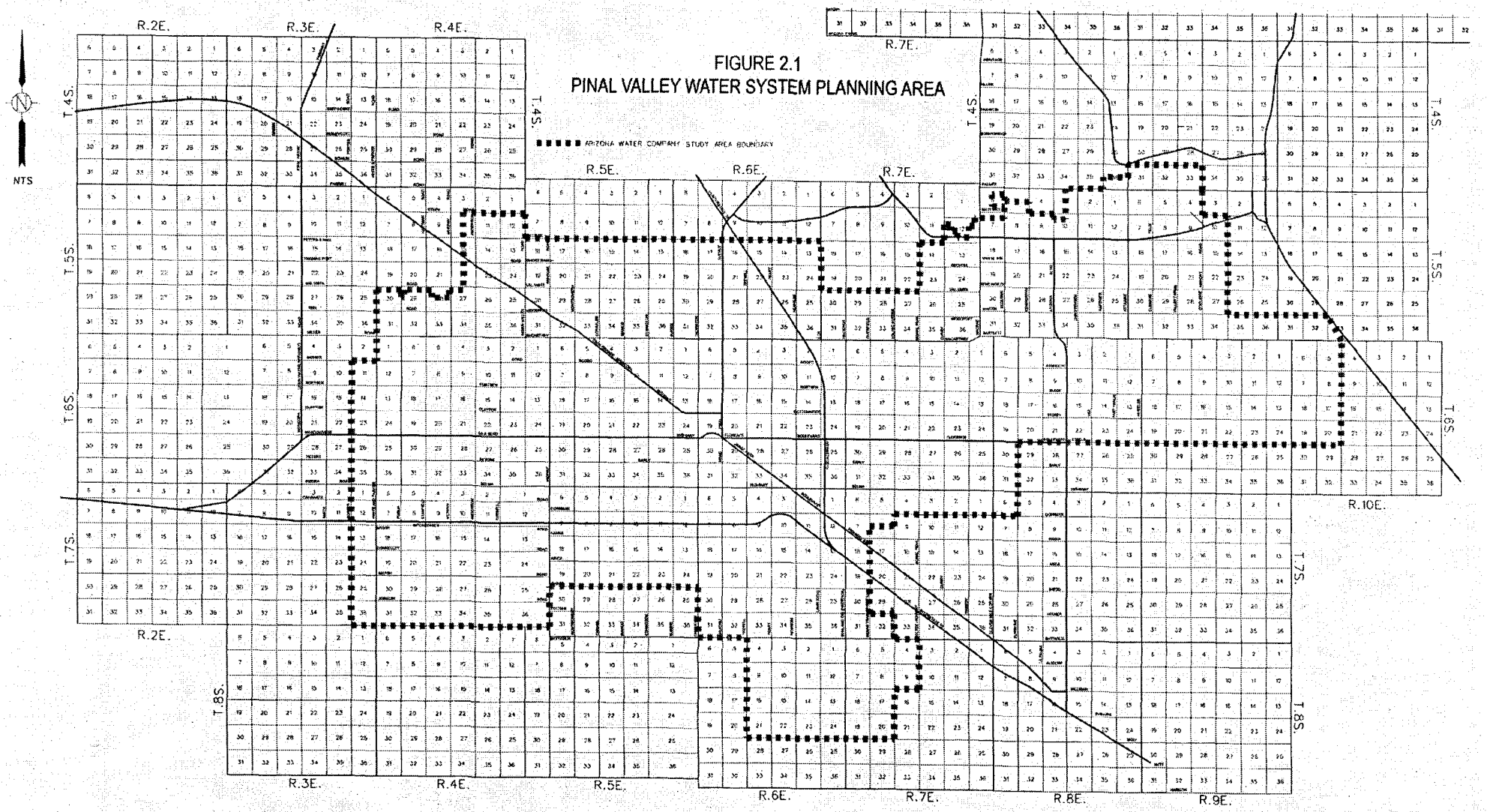


FIGURE 2.1
PINAL VALLEY WATER SYSTEM PLANNING AREA

2.1.2 Historical Demand – Casa Grande, Coolidge, and Stanfield Systems

An annual summary of water demands for the Pinal Valley Water System sub-systems for the time period from 2001 through 2005 are shown in Tables 2.1 through 2.3 below. Water Use Data Sheets are also provided for years 2004 and 2005 in Appendix 1. As shown by water sales and customer counts, the Casa Grande and Coolidge water systems are experiencing rapid development and higher customer growth than shown in historic averages. Growth in residential customers and water use through August 2006 has kept pace with growth rates in 2004 and 2005. Rapid residential customer growth is expected to continue within these areas for the foreseeable future. This is discussed in more detail in Section 2.2.

Table 2.1
Casa Grande Water System Historical Water Use*

	2001	2002	2003	2004	2005
			(thousand gallons)		
Casa Grande					
Res. Sales	1,836,497.1	1,981,908.4	2,034,520.3	2,062,070.2	2,201,807.7
(Percent of Total)	57.7	58.3	59.2	58.9	58.8
Comm. Sales	753,952.1	834,185.2	846,776.3	855,988.5	865,986.4
(Percent of Total)	23.7	24.5	24.6	24.4	23.1
Ind. Sales	541,794.7	511,866.3	500,126.2	502,277.9	541,225.1
(Percent of Total)	17.0	15.1	14.6	14.3	14.5
Other Sales	52,762.4	71,117.5	54,275.2	83,394.7	135,203.6
(Percent of Total)	1.7	2.1	1.6	2.4	3.6
Total Sales	3,185,006.3	3,399,077.4	3,435,698.0	3,503,731.3	3,744,132.8
Total Production	3,467,214.6	3,661,463.2	3,750,381.4	3,808,270.7	4,100,200.4
Unsold	263,618.2	246,547.7	294,706.6	280,481.0	327,501.3
Percent Unsold	7.6	6.7	7.9	7.4	8.0
Customers					
Residential	11658	12612	13760	15190	17718
Commercial	996	984	1012	1055	1089
Industrial	27	27	27	26	29
Fire	123	130	145	163	171
Other	36	36	37	49	82
Total Customers	12840	13789	14981	16483	19089

*Includes Tierra Grande Water System

Table 2.2
Coolidge Water System Historical Water Use

	2001	2002	2003	2004	2005
			(thousand gallons)		
Coolidge					
Res. Sales	348,616.6	358,411.0	353,919.0	341,954.3	357,386.1
(Percent of Total)	79.4	77.9	75.1	75.9	73.9
Comm. Sales	83,850.7	94,169.0	103,403.0	96,535.3	107,602.5
(Percent of Total)	19.1	20.5	21.9	21.4	22.3
Ind. Sales	2,592.8	2,138.8	1,881.7	1,478.5	2,681.3
(Percent of Total)	0.6	0.5	0.4	0.3	0.6
Other Sales	3,730.9	5,579.6	12,305.3	10,361.3	15,891.1
(Percent of Total)	0.9	1.2	2.6	2.3	3.3
Total Sales	438,791.0	460,298.4	471,509.0	450,329.4	483,561.0
Total Production	535,458.3	547,080.1	550,871.6	521,655.9	546,872.2
Unsold	80,516.5	65,428.0	57,945.7	52,947.6	47,151.7
Percent Unsold	15.0	11.9	10.5	10.2	8.6
Customers					
Residential	2696	2710	2730	2856	3591
Commercial	277	281	280	291	299
Industrial	8	7	7	7	7
Fire	15	16	20	21	21
Other	7	4	12	20	26
Total Customers	3003	3018	3049	3195	3944

Table 2.3
Stanfield Water System Historical Water Use

	2001	2002	2003	2004	2005
			(thousand gallons)		
Stanfield					
Res. Sales	19,991.5	20,917.2	20,915.4	19,457.0	19,034.0
(Percent of Total)	64.6	65.7	67.2	70.1	68.7
Comm. Sales	6,472.0	6,348.7	5,871.7	4,705.8	4,819.2
(Percent of Total)	20.9	19.9	18.9	17.0	17.4
Ind. Sales	0.0	0.0	0.0	0.0	0.0
(Percent of Total)	0.0	0.0	0.0	0.0	0.0
Other Sales	4,478.8	4,559.0	4,360.1	3,588.6	3,842.5
(Percent of Total)	14.5	14.3	14.0	12.9	13.9
Total Sales	30,942.3	31,824.9	31,147.2	27,751.4	27,695.7
Total Production	35,424.6	35,423.3	33,437.1	30,074.1	31,646.6
Unsold	3,964.3	3,262.9	341.5	1,878.2	3,471.4
Percent Unsold	11.3	9.2	5.8	6.3	11.0
Customers					
Residential	172	178	180	175	174
Commercial	37	36	37	36	34
Industrial	0	0	0	0	0
Fire	0	0	0	0	0
Other	1	1	1	1	1
Total Customers	210	215	218	212	209

2.1.3 Monthly Distribution of Annual Demand

The following monthly distribution percentages were used to distribute the annual demand projections in this Plan to monthly levels for use in planning for treated CAP water use. This distribution is based on a composite of the 2005 monthly distribution for the Casa Grande and Coolidge water systems shown in Table 2.4 below. This distribution was applied to projected demands for the Pinal Valley Water System planning area.

Table 2.4

Monthly Distribution of Annual Demand

	Percent of Annual Demand
Jan	5.5
Feb	5.0
Mar	6.4
April	7.8
May	9.8
June	10.5
July	11.4
Aug	9.5
Sept	10.0
Oct	9.0
Nov	8.1
Dec	7.0

2.1.4 Pinal Valley Water System Planning Area Water Demand Projections Through 2025

In order to plan for future use of CAP water in the Pinal Valley Water System planning area, annual and monthly water demand projections were developed. These projections are presented in Table 2.5 for the time period from 2005 to 2025. The monthly distribution of demand in selected planning years is presented in Chapter 5 of this CAP Water Use Plan.

Pinal County is in the beginning stage of accelerated long-term development activity similar to that in southeastern Maricopa County which began in 1980 and which has continued over the past 26 years. The projections of future housing units, population and water demands presented below assume that service area population and water demand in the Pinal Valley Water System planning area will, in a similar fashion, increase significantly over the planning period of this Plan. AWC projects water demand will rise from approximately 18,000 acre feet per year ("AF/YR") in 2006 to almost 90,000 AF/YR by 2025. This level of growth in water demand underscores the importance of designing and constructing water treatment transmission facilities to treat and deliver AWC's current CAP water allocations and other surface water supplies obtained in the future.

Table 2.5

Annual Housing Unit, Population, and Water Demand Projections (2)

In The Pinal Valley Water System Planning Area

Year	Residential Units	Population	Residential Deliveries AF/YR	Non-Res. Deliveries AF/YR (3)	Total Deliveries AF/YR	Total Demand AF/YR (1)
2005	21,483	64,449	7,912	5,149	13,059	14,618
2006	24,491	73,472	10,287	6,430	16,717	18,389
2007	26,940	80,819	11,316	6,790	18,106	19,916
2008	29,634	88,901	12,448	7,157	19,605	21,566
2009	32,597	97,791	13,693	7,531	21,223	23,346
2010	35,857	107,570	15,062	7,907	22,969	25,266
2011	39,442	118,327	16,568	8,284	24,852	27,337
2012	43,387	130,160	18,225	8,657	26,881	29,570
2013	47,725	143,176	20,047	9,021	29,068	31,975
2014	52,498	157,493	22,052	9,372	31,424	34,566
2015	57,748	173,243	24,257	9,703	33,960	37,356
2016	63,522	190,567	26,683	10,006	36,689	40,358
2017	69,875	209,624	29,351	10,273	39,624	43,586
2018	76,862	230,586	32,286	10,493	42,779	47,057
2019	84,548	253,645	35,515	10,654	46,169	50,786
2020	93,003	279,009	39,066	11,720	50,786	55,865
2021	102,303	306,910	42,973	12,892	55,865	61,451
2022	112,534	337,601	47,270	14,181	61,451	67,596
2023	123,787	371,361	51,997	15,599	67,596	74,356
2024	136,166	408,497	57,197	17,159	74,356	81,792
2025	149,782	449,347	62,917	18,875	81,792	89,971

(1) Includes 10 percent lost and unaccounted-for water

(2) 2005 Delivery and Demand figures are actual

(3) 2005 Non-Residential percentage of Residential adjusted to 30 percent over 2005 to 2025 time period

2.2 White Tank System Water Demand Planning Projections

The White Tank water system, located in a fast-growing area of western Maricopa County, is comprised of 6,513 acres. This area is also on the cusp of a significant increase in development activity. At the end of 2005, the White Tank water system had 1,555 customers and added 111 new residential units from the end of 2004. However, eleven subdivisions totaling 2,830 acres are already under construction or are currently in various stages of development planning with AWC's Engineering Department. The developers of these subdivisions expect to add over 6,900 new residential units over the next 10 to 15 years. An additional 1,420 acres of undeveloped, unplanned land within the White Tank service area is

expected to support new residential customer growth through 2025 and beyond. Table 2.6 presents a summary of projected new housing units within the White Tank service area.

2.2.1 White Tank Service Area - Water Demand Planning Assumptions

- Build out housing unit projections are based on housing densities planned for 11 new subdivisions totaling 2,830 acres and 6,853 units. The density and housing unit assumptions are shown in Table 2.6 below. The average housing density of 2.6 units per acre in new subdivisions is assumed in the future for currently undeveloped and unplanned areas.

- 3.0 persons per household

- Overall residential water use will average 128 gpcd in the future. In 2005, residential use averaged about 145 gpcd. New housing units are assumed to be a mix with some units using 125 gpcd and others using the current 145 gpcd. At buildout, 13.7 percent of housing units are assumed to be one-acre lots having the higher water use rate of 145 gpcd. Overall gpcd rates are projected to decrease from the current rate of 145 gpcd to 128 gpcd (weighted average) over the 2007 to 2025 time period.

- Future non-residential water use is expected to increase to 20 percent of residential use over the 2007 to 2025 time period from the 2005 non-residential use of 13.6 percent of residential use.

- The lost and unaccounted-for water percentage will not be more than 10 percent of total water produced.

- The distribution of annual demand by month in the future is based on the pattern exhibited in 2005 for the White Tank water system.

Table 2.6

White Tank Water System Buildout Housing Unit Projections

	Acres	Avg. Density	Total Units	Existing Units	Potential New Units
Area of Existing Mains	1,760	1.0	1,760	1164	596
Area of Proposed New Develop.	2,830	2.6	7,358	456	6,902
Area Not Planned or Subdivided	1,420	2.6	3,692	0	3,692
ADOT I-10 R.O.W	183	0.0	0	0	0
Area Not Planned Commercial	320				
Total	**6,513**		**12,810**	**1,620**	**11,190**

2.2.2 Historical Demand – White Tank System

An annual summary of water demands for the White Tank water system for years 2001 through 2005 is shown in Table 2.7 below. Annual residential customer growth has ranged between 8 percent and 11 percent over this time period. However, as discussed above, several large, medium-density subdivisions are now breaking ground and AWC expects a significant increase in the number of new units constructed annually. Water Use Data Sheets for 2004 and 2005 are also provided in Appendix 2.

Table 2.7
White Tank Water System Historical Water Use

	2001	2002	2003	2004	2005
			(thousand gallons)		
Res. Sales	167,541.0	184,943.4	192,187.2	213,762.5	234,247.3
(Percent of Total)	90.2	92.6	89.6	87.7	88.0
Comm. Sales	12,397.5	12,089.7	16,109.1	17,035.4	22,967.0
(Percent of Total)	6.7	6.1	7.5	7.0	8.6
Ind. Sales	1,533.8	2,183.3	3,118.1	2,482.2	3,686.1
(Percent of Total)	0.8	1.1	1.5	1.0	1.4
Other Sales	4,266.5	410.9	3,079.0	10,419.2	5,190.7
(Percent of Total)	2.3	0.2	1.4	4.3	2.0
Total Sales	185,738.8	199,627.3	214,493.4	243,699.3	266,091.1
Total Production	199,319.5	210,067.9	225,867.2	259,829.4	294,241.3
Unsold	13,269.7	9,700.1	10,765.3	15,407.1	27,606.2
Percent Unsold	6.7	4.6	4.8	5.9	9.4
Customers					
Residential	1,137	1,188	1,316	1,444	1,555
Commercial	17	16	17	19	23
Industrial	1	2	2	2	3
Fire	2	2	2	2	4
Other	2	5	0	7	7
Total Customers	1,159	1,213	1,337	1,474	1,592

2.2.3 White Tank Water System Water Demand Projections Through 2025

The annual water demand projections presented in Table 2.8 assume that the residential customer growth rate in the White Tank water system beginning in 2007 will be significantly higher than recent years. Demand projections are based on the following residential growth assumptions:

- 10-year buildout of 6,853 units in currently planned subdivisions.
- 20-year buildout of 4,288 units in unplanned areas and residential infill areas.
- Increased non-residential use expressed as a percentage of residential use as the service area matures from 13.6 percent to 20 percent from 2007 to 2025.

Table 2.8

Annual Housing Unit, Population, and Water Demand Projections (2)

White Tank Water System

Year	Residential Units	Population	Residential Deliveries (Ac-Ft)	Non-Res. Deliveries (Ac-Ft)(3)	Total Deliveries. (Ac-Ft)	Total Demand. (1) (Ac-Ft)
2005	1,555	4,665	719	98	817	903
2006	1,621	4,863	790	103	893	982
2007	2,521	7,563	1,220	165	1,385	1,523
2008	3,421	10,263	1,644	230	1,874	2,061
2009	4,321	12,963	2,062	299	2,361	2,597
2010	5,221	15,663	2,474	371	2,845	3,129
2011	6,121	18,363	2,880	446	3,326	3,659
2012	7,021	21,063	3,280	525	3,804	4,185
2013	7,921	23,763	3,673	606	4,279	4,707
2014	8,821	26,463	4,061	690	4,751	5,227
2015	9,721	29,163	4,443	777	5,220	5,742
2016	10,621	31,863	4,818	867	5,686	6,254
2017	10,831	32,493	4,877	902	5,779	6,357
2018	11,041	33,123	4,935	938	5,872	6,459
2019	11,251	33,753	4,991	973	5,964	6,560
2020	11,461	34,383	5,045	1,009	6,054	6,660
2021	11,671	35,013	5,099	1,020	6,118	6,730
2022	11,881	35,643	5,150	1,030	6,180	6,798
2023	12,091	36,273	5,201	1,040	6,241	6,865
2024	12,301	36,903	5,291	1,058	6,349	6,984
2025	12,511	37,533	5,381	1,076	6,458	7,103

Notes:

1. Includes 10% lost and unaccounted for water
2. 2005 Delivery and Demand figures are actual
3. Non-Residential demand assumed to be 20 percent of residential demand in the long-term. 2005 non-residential demand of 13.6% of residential demand adjusted to 20% over the 2007 to 2025 period.

CHAPTER 3
EXISTING WATER SUPPLIES

3.1 Existing Water Supplies - Pinal Valley Water System

3.1.1 Groundwater

AWC currently provides water to customers in the Pinal Valley Water System service areas from groundwater pumped from 22 wells with a total production capacity of 19,410 gallons per minute ("gpm") (27.7 MGD). More detailed information can be found on wells in each Pinal Valley Water System sub-system in the Water Use Data Sheets for 2004 and 2005 provided in Appendix 1. With the largest well (1,620 gpm) out of service, there currently exists 17,790 gpm of production capacity within those sub-systems. In 2005, peak day demand for the Pinal Valley Water System sub-systems was estimated to be 14,700 gpm. Existing well capacity was sufficient to meet peak-day demand through the summer 2006. In 2007 and 2008, to keep pace with growing demands in the service area, AWC plans to drill and equip six new wells. At the assumed annual new customer growth rate of 10 percent, peak day demand within the Pinal Valley Water System planning area is expected to increase by approximately 1,500 gpm (2.1 MGD) per year. Assuming an average new well production rate of 1,000 gpm, an average of two new wells per year will be required to meet demands until the CAP Treatment Plant is placed in service in 2012.

3.1.2 Arsenic Treatment Facilities

In 2005 and 2006, AWC contracted for the construction of arsenic treatment facilities having a total treatment capacity of 15,050 gpm to treat groundwater to comply with the new arsenic drinking water standard of 10 parts per billion ("ppb"). All of the supply wells in service in Coolidge and Tierra Grande comply with the new standard, but because of pervasive arsenic concentrations above the standard in groundwater around Casa Grande and neighboring areas, AWC must assume conservatively for planning purposes that all new wells in the Pinal Valley Water System Planning Area will require treatment facilities for arsenic removal. Planning assumptions and cost estimates for future groundwater treatment facilities are discussed in Chapter 6.

3.2 Existing Water Supplies – White Tank Water System

3.2.1 Groundwater

AWC currently provides water to customers in the White Tank service area from groundwater pumped from 4 wells. These wells have a total production capacity of 850 gpm (1.22 MGD) and provide water to the system. More detailed information can be found on wells in the system in the Water Use Data Sheets for 2004 and 2005 provided in Appendix 2. In addition, an inter-connection with Arizona-American is available to provide approximately 350 gpm of supplemental supply during peak summer demand periods. In 2005, peak-day demand for the system was estimated to be about 900 gpm, based on a 1.2 peak-day to peak-month ratio.

Existing well capacity was sufficient to meet peak-day demand through the summer of 2006. Beginning with 2006, and continuing through 2008, three new wells are planned or under construction to meet growing demands in the service area. In addition, AWC is arranging for the design and construction of two water treatment plants for arsenic removal to increase current equipped well capacity to 1,200 gpm (1.73 MGD). Over the next 10 years, at the projected growth rate of 690 new residential customers per year, peak-day demand within the service area is expected to increase by approximately 500 gpm (0.7 MGD) per year. Assuming an average new well production rate of 500 gpm, an average of one new well per year will be required to meet demands until the CAP water treatment plant is placed in service in 2009 or 2010.

3.2.2 Arsenic Blending and Treatment Plant

White Tank Well #8 exceeds the arsenic standard of 10 ppb. Water from Well #8 will be combined with water from other White Tank wells with lower concentrations of arsenic, transported to, and processed at, a centralized arsenic blending and treatment plant.

CHAPTER 4
CAP TREATMENT PLANT AND OTHER FACILITIES

4.1 CAP Treatment Plant and Other Facilities

4.1.1 CAP Treatment Plant and Other Facilities Overview

In 2005, AWC purchased a 60-acre parcel of land on which to construct its CAP Treatment Plant. The plant site location is shown in Figure 4.1a and Figure 4.1b. The site is located east of Coolidge on the north side of Storey Road, west of Wheeler Road, and is approximately 3500 feet west of the CAP canal. It is also adjacent to the Casa Grande-Florence Canal, a major surface water supply canal owned by the San Carlos Irrigation and Drainage District. This site was selected because of its close proximity to the canals and because it is well located to enable delivery of treated water to the Pinal Valley Water System. The 60-acre site is sufficiently large to support future plant phases as discussed in Chapter 7.

A canal turnout structure and a 36-inch gravity flow raw water transmission main from the CAP canal to the CAP Treatment Plant are planned for construction with the first phase of the CAP Treatment Plant. This line size is conceptual and may change during the preliminary engineering study to be conducted in 2007. A 15.5-mile long, 24-inch treated water transmission main is planned in the Kleck Road alignment to convey treated water from the CAP Treatment Plant to the existing Casa Grande distribution system. A 12-inch or larger main will branch north from the 24-inch main in the La Palma Road alignment to convey treated water to the Coolidge distribution system (Figure 4.1.).

4.1.2 CAP Treatment Plant Design and Construction Schedule

AWC is planning to design and construct the CAP Treatment Plant with a Phase 1 treatment capacity of 10 MGD. This CAP Treatment Plant will enable AWC to treat its combined 10.884 AF of CAP water allocations in compliance with surface water treatment rules, recently adopted by the U.S. Environmental Protection Agency and the Arizona Department of Environmental Quality. The schedule for plant design and construction is as follows:

	Start Date	End Date
Pre-Design Treatment Process/Planning Study	Q1-2007	Q3-2007
Detailed Plant and Transmission System Design	Q1-2008	Q4-2008
Plant Construction	Q2-2009	Q2-2011
Plant Commissioning, Regulatory Agency Permit Approval and Start-up	Q2-2011	Q4-2011

FIGURE 4.1a

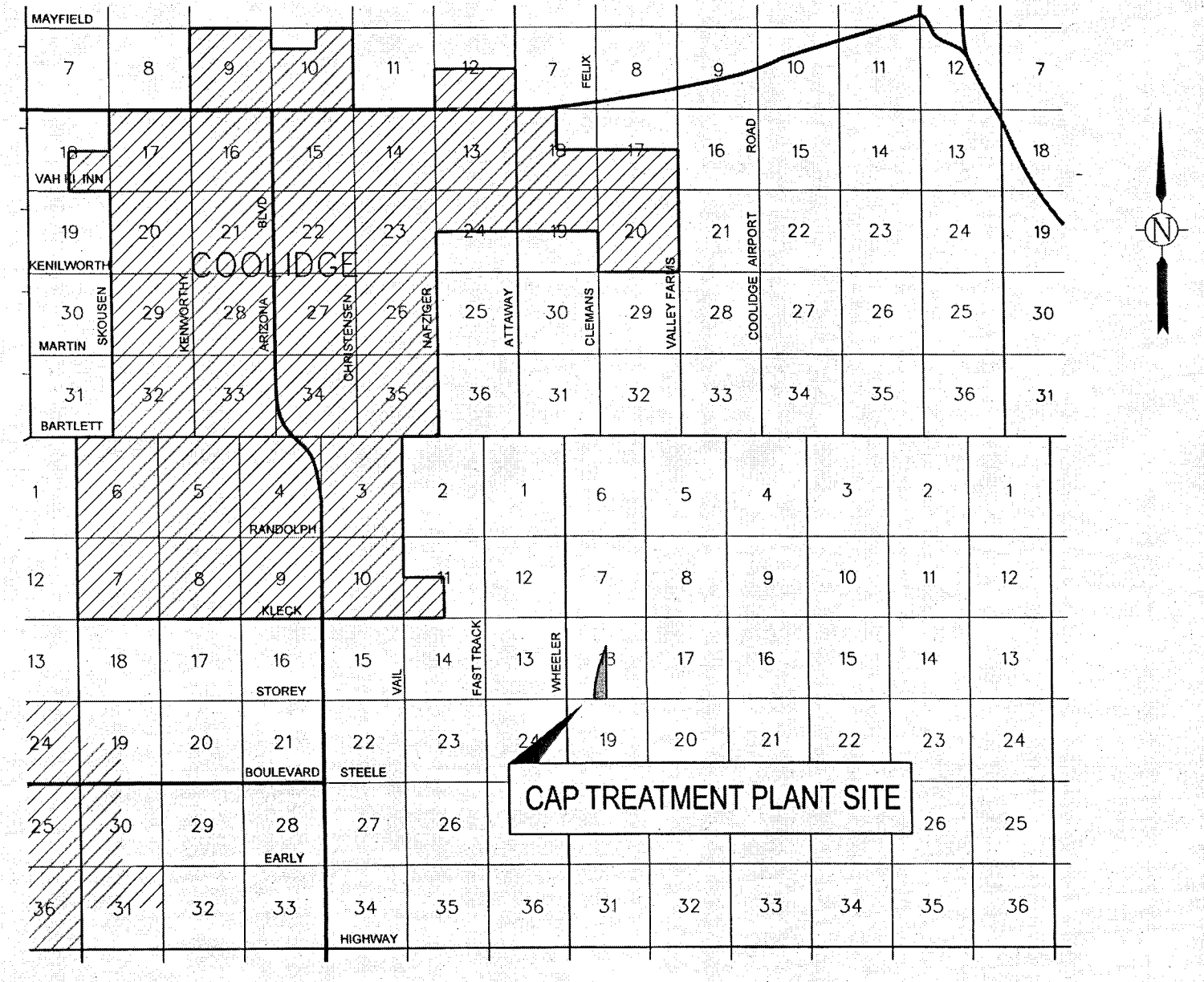
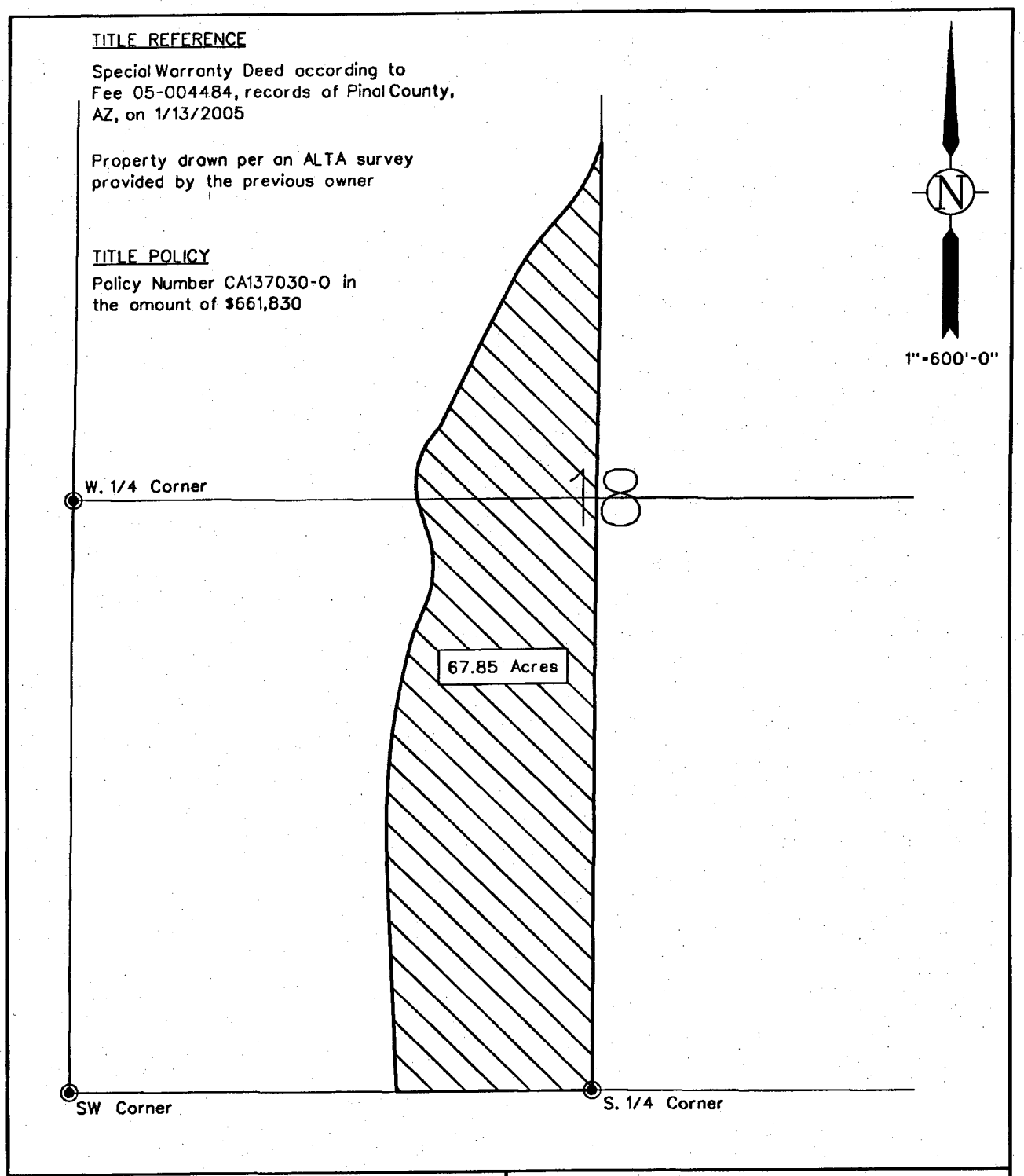

MAYFIELD
VAH EL INN
KENILWORTH
MARTIN
BARTLETT
COOLIDGE
SKOUSEN
KENWORTHY
ARIZONA BLVD
CHRISTENSEN
NAFZIGER
ATTAWAY
CLEMANS
VALLEY FARMS
COOLIDGE AIRPORT ROAD
FELIX
RANDOLPH
KLECK
STOREY
BOULEVARD
EARLY
HIGHWAY
STEELE
VAIL
FAST TRACK
WHEELER
CAP TREATMENT PLANT SITE
N

FIGURE 4.1b



DESIGNATION CAP Treatment Plant	ARIZONA WATER COMPANY
INDENTURE No. 20.12	PROPERTY PLAT
PLEDGED TO BOND SERIES	PART OF West half of Section 18, T.6S.,R.9E.
TAX ASSESSMENT No. 400-01-006C	COUNTY OF Pinal
Drawn CB / Checked / Approved MW	SCALE 1"=600'-0" DATE 10.25.2005

4.1.3 CAP Treatment Plant Preliminary Construction Cost Estimates

The objective of the preliminary engineering design study to be completed in 2007 will be to analyze treatment process alternatives, determine selected treatment processes, and develop preliminary cost estimates for the CAP Treatment Plant and water transmission system. An Engineer's Cost Estimate will be developed as part of a detailed design in 2008. Final costs will not be known until project bids are obtained in early 2009.

In order to provide a range of estimated construction costs for this Plan, information was gathered on actual costs of surface water treatment plants built in Arizona within the last 6 years, or for which detailed design and engineer's estimates are available. This data shows that the range of cost per gallon of daily treatment capacity in 2006 dollars is expected to be $1.50 to $4 per gallon for membrane or conventional process treatment plants. For a 10 MGD plant, this results in a cost range of from $15 million to $40 million. Plant costs vary depending on raw water quality characteristics, treatment sub-process type and to what degree raw water and treated water storage and pumping are included in the project. The construction cost estimates for the CAP Treatment Plant provided in this Plan do not include treated water pumping or water transmission costs, which are provided separately.

4.1.4 CAP Treatment Plant and Transmission and Pumping Facilities Cost Estimates

Planning level design and construction cost estimates for the facilities needed to treat and deliver the current CAP water allocations are shown below in Table 4.1.

Table 4.1
CAP Treatment Plant
Range of Estimated Capital Costs

	Low Estimate	High Estimate
Land		
WTP Land - Purchase Price	$670,000	$670,000
Pipeline R.O.W (ASLD Lease)	$300,000	$350,000
CAP Canal Turnout Structure	$422,000	$506,400
Plant Construction Cost	$15,000,000	$40,000,000
Design, Bidding, Const. Mgmt., Internal Costs @18%	$2,700,000	$7,291,152
Transmission Mains		
Raw Water - CAP canal to plant (3500 ft, 36")	$525,000	$630,000
Finished Water - Plant to Casa Grande (81,840 ft., 24")	$10,639,200	$12,767,040
Finished Water - Coolidge Line (3960 ft., 12")	$237,600	$285,120
Design, Bidding, Const. Mgmt., Internal Costs @18%	$2,052,324	$2,462,789
Treated Water Pump Station		
Construction Cost	$1,000,000	$1,200,000
Design, Bidding, Const. Mgmt., Internal Costs @18%	$180,000	$216,000
Total Phase I Estimated Project Costs	$33,725924	$66,378,501
Cost Per Gallon of Capacity	$3.40	$6.60

4.2 White Tank Water System – CAP Treatment Plant and Other Facilities

4.2.1 CAP Treatment Plant and Other Facilities Overview

The White Tank water system is located adjacent to Arizona-American's Agua Fria District and is partially within the boundaries of MWD. MWD is an agricultural water district (a municipal entity of the State of Arizona) whose boundaries include 37,614 acres of land in western Maricopa County. MWD owns and operates the Beardsley Canal, which is connected to the CAP canal near Lake Pleasant. MWD currently takes delivery of CAP water into its system and delivers the water to agricultural and urban irrigation customers in its operation of a Groundwater Savings Facility. MWD controls Agua Fria River water rights that are appurtenant to lands within MWD. This water is captured in storage space MWD controls in Lake Pleasant. Long-term records of MWD's Agua Fria River water deliveries show that the average annual amount of water available to MWD lands is approximately 0.85 AF/Acre. Agua Fria River water could potentially provide an additional 816 AF/YR of surface water supply for treatment and delivery to the White Tank water system customers (960 acres x 0.85 AF/Acre). A water supply and use agreement between AWC and MWD would be needed to enable AWC to have MWD treat and deliver the water for potable use within the White Tank service area. AWC plans to initiate discussions with MWD regarding this potential supply in the near future.

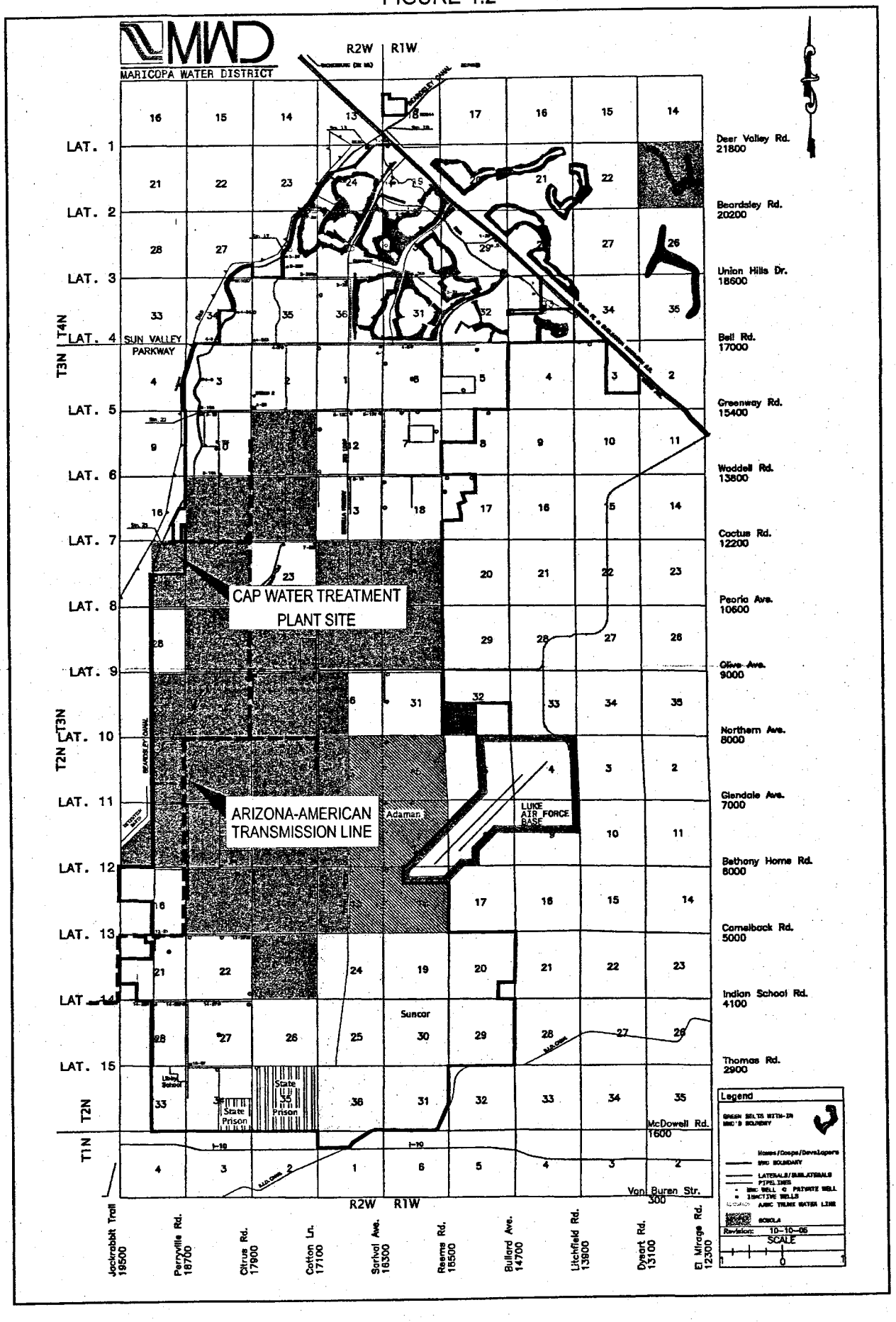
Arizona-American and MWD are each developing plans to construct regional surface water treatment plants located on the Beardsley Canal to provide service to nearby water companies and municipalities. It is AWC's intention to enter into a long-term agreement with either Arizona-American or MWD that would provide approximately 1.0 MGD of CAP water treatment capacity for AWC's White Tank service area's CAP water allocation. Each entity's project is discussed below, including a design and construction schedule and current project cost estimates as provided by Arizona-American and MWD. AWC's decision on which water treatment plant to participate in will likely be made in 2007 or 2008, depending in large part on the progress of each entity in moving toward plant construction.

4.2.2 Arizona-American - White Tank Treatment Plant

Arizona-American has completed the detailed design plans and specifications for a 13.5 MGD water treatment plant located at Cactus and Perryville Road. Arizona-American also recently filed with the Commission for a hook-up fee tariff to fund construction of the plant. In 2006, Arizona-American completed construction of 9 miles of the CAP treated water transmission main that could be used to convey AWC's treated CAP water allocation from the plant to AWC's White Tank water system. This transmission main is capable of delivering treated CAP water throughout Arizona-American's service area and to those entities partnering with Arizona-American on the White Tank Water Treatment Plant. A 24" main is located adjacent to AWC's White Tank water system in the Indian School and Jackrabbit Road alignments. The location of the White Tank Water Treatment Plant and the alignment of the treated water main are shown in Figure 4.2. In partnering with Arizona-American, AWC would construct a connection to the 24-inch main along the Indian School Road alignment west of Jackrabbit Road to deliver water to AWC's White Tank water system.

AWC staff met with Arizona-American staff in 2005 to discuss the terms of a 40-year water supply agreement. Arizona-American plans to begin construction of the plant in 2005 were deferred pending Arizona-American's execution of a funding agreement with MWD. A meeting was held with Arizona-American representatives in November 2006 to discuss the schedule of the White Tank Water Treatment Plant construction and to resume contractual discussions regarding AWC's need for 1.0 MGD of plant capacity. Arizona-American expressed a desire to resume discussions toward a long-term water supply agreement with AWC. In November 2006, Arizona-American issued a request for bids that are due in January 2007. Arizona-American plans to begin construction in 2007 and complete construction by May of 2009. A long-term lease or wholesale water supply contract with Arizona-American would be for 1.0 MGD of treatment and treated water transmission capacity. Contractual discussions will be under way in early 2007.

FIGURE 4.2


MWD
MARICOPA WATER DISTRICT
R2W
R1W
LAT. 1
LAT. 2
LAT. 3
LAT. 4
LAT. 5
LAT. 6
LAT. 7
LAT. 8
LAT. 9
LAT. 10
LAT. 11
LAT. 12
LAT. 13
LAT. 14
LAT. 15
T4N
T3N
T2N
T1N
SUN VALLEY PARKWAY
CAP WATER TREATMENT PLANT SITE
ARIZONA-AMERICAN TRANSMISSION LINE
Adaman
LUKE AIR FORCE BASE
Suncor
State Prison
State Prison
Deer Valley Rd. 21800
Beardsley Rd. 20200
Union Hills Dr. 18600
Bell Rd. 17000
Greenway Rd. 15400
Waddell Rd. 13800
Cactus Rd. 12200
Peoria Ave. 10600
Olive Ave. 9000
Northern Ave. 8000
Glendale Ave. 7000
Bethany Home Rd. 6000
Camelback Rd. 5000
Indian School Rd. 4100
Thomas Rd. 2900
McDowell Rd. 1600
Van Buren Str. 300
I-10
Jackrabbit Trail 19500
Perryville Rd. 18700
Citrus Rd. 17900
Cotton Ln. 17100
Sarival Ave. 16300
Reems Rd. 15500
Bullard Ave. 14700
Litchfield Rd. 13800
Dysart Rd. 13100
El Mirage Rd. 12300
Legend
Revision: 10-10-05
SCALE

4.2.2.1 Arizona-American - White Tank Water Treatment Plant – Cost Estimates

The plant cost estimates provided in Table 4.2 are from Arizona-American recent filing with the Commission. Costs are based on engineering estimates made in 2005 adjusted to 2006 dollars. Actual bid and construction costs may be higher due to inflation. Arizona-American's water transmission main will not have sufficient pressure to convey the treated water for use in AWC's White Tank water system; therefore the cost estimate includes costs for a pump station to boost the treated CAP water to AWC's White Tank water system. The treated CAP water will then be blended with groundwater to meet customer demands.

Table 4.2

Arizona-American - White Tank Water Treatment Plant and Treated Water Transmission Cost Estimate

	Low Estimate	High Estimate
Arizona-American Plant/ Transmission Proportional Cost (1)	$4,939,500	$5,927,400
Treated Water Transmission Connecting Mains	$782,000	$938,400
Pump Station	$200,000	$240,000
Meter Installation	$50,000	$60,000
Total Capital Cost	$5,971,500	$7,165,800
Cost Per Gallon of Capacity	$6.00	$7.20

(1) Based on 1MGD/13.5 MGD proportion of $66,682,573 Arizona-American Cost Estimate

High Estimate for Arizona-American cost-share based on 1.2 x Original Low Estimate

Also, these costs do not include Arizona-American AFUDC costs

4.2.2.1.1 Arizona-American – White Tank Water Treatment Plant Raw Water Transmission Costs Arizona-American

In order to transport its CAP water allocation to the White Tank Water Treatment Plant, AWC would need to negotiate a water wheeling contract with MWD for use of the Beardsley canal. Arizona-American has already executed such a wheeling contract with MWD at an initial rate of $25/acre-foot. This rate is subject to increase by MWD in the future to account for general inflation and future increases in canal operation and maintenance costs. MWD's position is that wheeling contracts should be standardized. Therefore, it is anticipated that AWC could negotiate a similar wheeling contract with MWD at the same cost per acre-foot.

4.2.3 MWD Water Treatment Plant

In 2006, MWD contracted with a national engineering firm to conduct a preliminary engineering study for the MWD Water Treatment Plant. The study, completed in August 2006, indicates MWD intends to construct a 20 MGD capacity plant by 2010 to provide treatment services to nearby municipalities and private water companies, like AWC, that hold CAP water allocations. While, the project is similar in scope to Arizona-American's White Tank Water Treatment Plant project, MWD intends to only treat AWC's CAP water. AWC would be responsible to convey water from the treatment plant to its White Tank water system. As a result, AWC would be required to construct the necessary pipelines and pumping stations to convey the treated CAP water from the MWD Water Treatment Plant to AWC's White Tank water system.

Ultimately, plans call for the MWD Water Treatment Plant to be expanded in several phases up to an ultimate capacity of 80 MGD as the contracting entities' demand for water grows. MWD's study recommended two potential 160-acre plant sites adjacent to the Beardsley Canal. One site is located between Northern and Glendale Avenues and the other is located between Olive and Northern Avenues. A final site selection will be made pending the completion of a public involvement process and further site investigations. The study also evaluated possible treatment processes and developed recommended process alternatives and preliminary plant cost estimates.

AWC representatives met with MWD staff in November 2006 to discuss the MWD project and to determine the feasibility of obtaining 1.0 MGD of treatment plant capacity. MWD intends to enter into long-term wholesale water treatment contracts with entities like AWC that hold CAP water allocations. Possible contracting entities in addition to AWC include Arizona-American and the cities of Avondale, Goodyear, Surprise and El Mirage.

MWD's schedule for Water Treatment Plant design and construction is as follows:

Pre-Design Treatment Process/Planning Study	2007
Detailed Plant Design	2008
Plant Construction	Q4-2008 to Q2-2010
Plant Commissioning and Start-up	Q4-2010

A more detailed project schedule is to be developed by MWD in early 2007.

4.2.3.1 MWD Water Treatment Plant - Cost Estimate

MWD's capital cost estimates for a 20 MGD Phase I water treatment plant range between $2.29 and $3.07 per gallon of treatment capacity (not including land), depending on the combination of treatment processes selected (see Table in Appendix 3). Final bid costs will not be obtained until 2008 so it is likely that costs will be on the higher end of this range, or could exceed the higher cost, due to inflation. MWD intends to price wholesale water deliveries to customers at a unit rate per 1000 gallons. MWD's preliminary estimates of unit prices for water treatment service ranges from $1.32 to $1.84 per 1000 gallons (not including costs of raw water, raw or treated water transmission mains).

4.2.3.2 MWD Water Treatment Plant - Cost of Raw and Treated Water Transmission

As with the Arizona-American alternative, AWC would need to negotiate a water-wheeling contract with MWD for transport of AWC's White Tank water system CAP water allocation to the MWD Water Treatment Plant (see section 4.2.2.1.1).

Transmission of treated CAP water from the MWD Water Treatment Plant to AWC's White Tank water system would likely be accomplished through a treated water wheeling contract with another entity contracting with MWD for treatment services, such as Arizona-American, the City of Goodyear, or the City of Avondale. As discussed in Section 4.2.2, Arizona-American has already constructed a large diameter transmission main that could be used to transport AWC's treated CAP water. This could prove to be a cost-effective alternative if a treated water wheeling agreement could be reached with Arizona-American. It is unknown at this time whether the City of Goodyear or the City of Avondale will construct their own treated water transmission mains, partner on a joint use main, or attempt to obtain treated water wheeling services from Arizona-American. In 2007, AWC will explore all feasible wheeling and partnering alternatives with these entities in order to identify a cost-effective wheeling arrangement. For planning purposes, it is assumed that treated water wheeling costs for the MWD Water Treatment Plant alternative would be similar to those shown in Section 4.2.2.1.

CHAPTER 5
CAP WATER OPERATING PLAN

5.1 CAP Water Operating Plan Overview

For both the Pinal Valley Water System and the White Tank water system, treated CAP water will be used as the primary source of water supply during all months of the year except during one month (assumed January) when treatment plants and/or canal systems are out of service for routine annual maintenance. Existing and future wells will be used to supplement CAP water supplies and meet peak summer demands. CAP water will be pumped to existing and future water storage tanks within the distribution system. From there, a blend of CAP water and groundwater will be boosted from the tanks at distribution system pressure.

5.1.1 Potential Arsenic Treatment Cost Reduction with CAP Water Use

Use of CAP water to blend with groundwater at storage tank sites to comply with the new 10 ppb safe drinking water standard for arsenic will likely enable AWC to reduce operation of its arsenic treatment facilities at some storage tanks and wells during the lower demand months, thus reducing overall arsenic treatment and water production costs. A detailed analysis of blending potential at each storage tank and booster station location in both the Pinal Valley Water System and White Tank water system is planned prior to treated CAP water becoming available. Available testing data show that CAP water contains approximately 3 ppb arsenic while the level of arsenic in existing AWC groundwater supplies is as high as 20 ppb. For example, at a groundwater concentration of 15 ppb, a 2 to 1 blend of CAP water and groundwater would be required to achieve a 7 ppb blend and thereby comply with the new safe drinking water standard of 10 ppb. The degree to which CAP water use will result in lower arsenic treatment operation and maintenance costs cannot be quantified at this time due to the variables of specific actual or planned blending operations. Even so, selection of which storage tanks CAP water will be delivered to under a variety of water demand conditions will take into account the potential for arsenic treatment cost reduction in order to maximize potential cost savings.

5.2 Pinal Valley Water System - Projected CAP Water Operating Plan By Month - 2011 to 2025

The mix of treated CAP water and groundwater projected in each month for the years 2012 (year of plant start-up), 2015, 2020, and 2025 is shown in Figures 5.1 to 5.4. As these figures show, the Pinal Valley Water System supply will rely on treated CAP water as the primary source of water supply and wells will be operated to supplement the supply as needed. This mode of operation will: 1) minimize the size of and capital costs associated with CAP water treatment and transmission facilities, 2) maximize the opportunity to reduce arsenic treatment costs through blending, and 3) maximize groundwater savings to aid in AWC's compliance with the requirements of the Groundwater Management Act.

The monthly demand and water use distributions in Figures 5.1 to 5.4 show that in 2012 at plant start-up, treated CAP water will comprise about 55 percent of the supply in the low

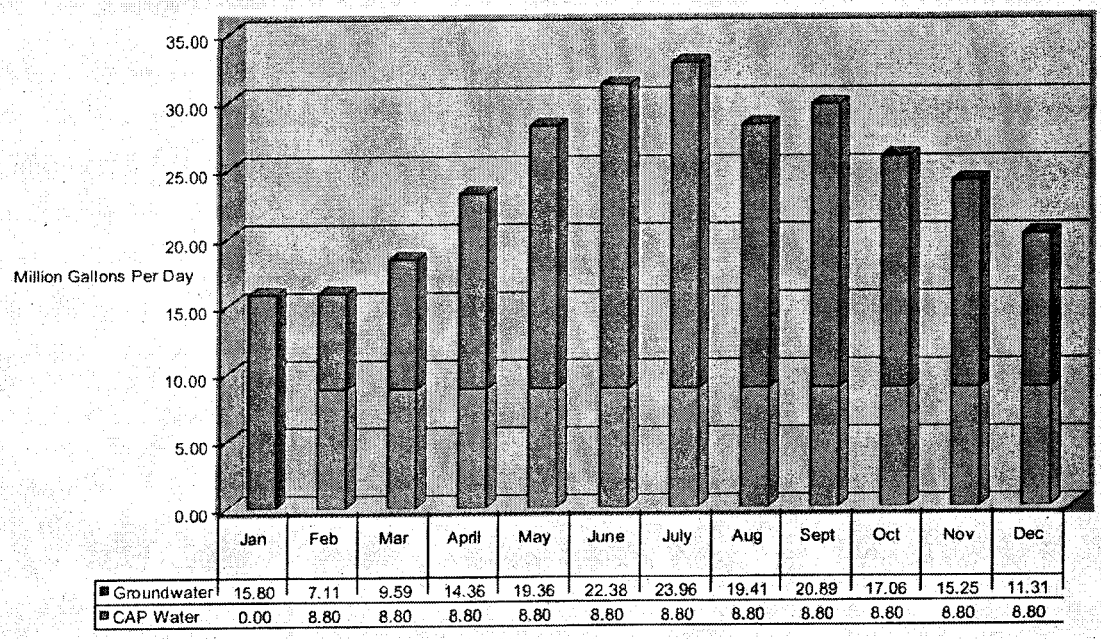
demand months and 27 percent of the supply in July. By 2025, with the rapid increase in projected water demands due to new development, the existing CAP allocation of 10,884 AF will represent a lower proportion of customer water demands throughout the year (17 percent in February and 8 percent in July). As a result AWC will need to obtain additional CAP water or other surface water supplies in the future to continue to minimize groundwater use and ensure that water use remains consistent with the state's water supply goals for the Pinal Active Management Area. Additional water supplies and future CAP water treatment plant expansions are discussed in Chapter 6.

5.3 White Tank Water System - Projected CAP Water Operating Plan by Month - 2010 to 2025

The mix of treated CAP water and groundwater planned in each month for the years 2010, 2015, 2020, and 2025 is shown in Figures 5.5 to 5.8. As in the case of the Pinal Valley Water System, the White Tank water system will rely on treated CAP water as the primary source of water supply and wells will be operated to supplement the supply as needed. This mode of operation will: 1) minimize the size of and capital costs associated with CAP water treatment and transmission facilities, 2) maximize the opportunity to reduce arsenic treatment costs through blending, and 3) maximize groundwater savings to aid in AWC's compliance with the requirements of the Groundwater Management Act.

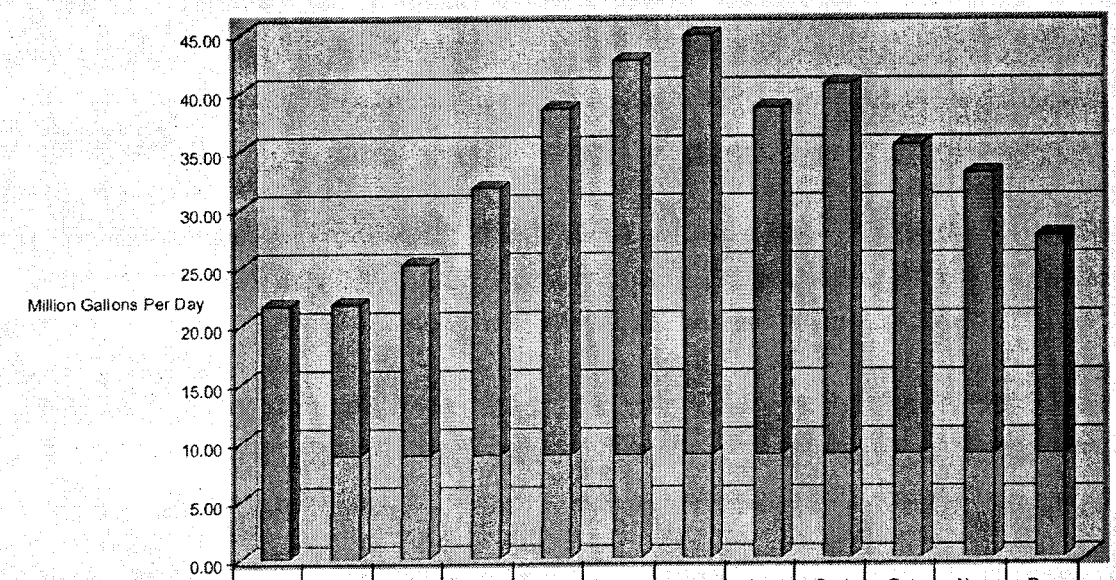
At plant start-up, assumed to be 2010, treated CAP water will comprise about 59 percent of the supply in the low demand months and 25 percent of the supply in July. By 2025, with the increase in projected water demands due to new development, the existing CAP allocation of 968 AF will provide 25 percent in February and 11 percent in July.

Figure 5.1 - PVWS
Monthly Use of Treated CAP and Groundwater - 2012



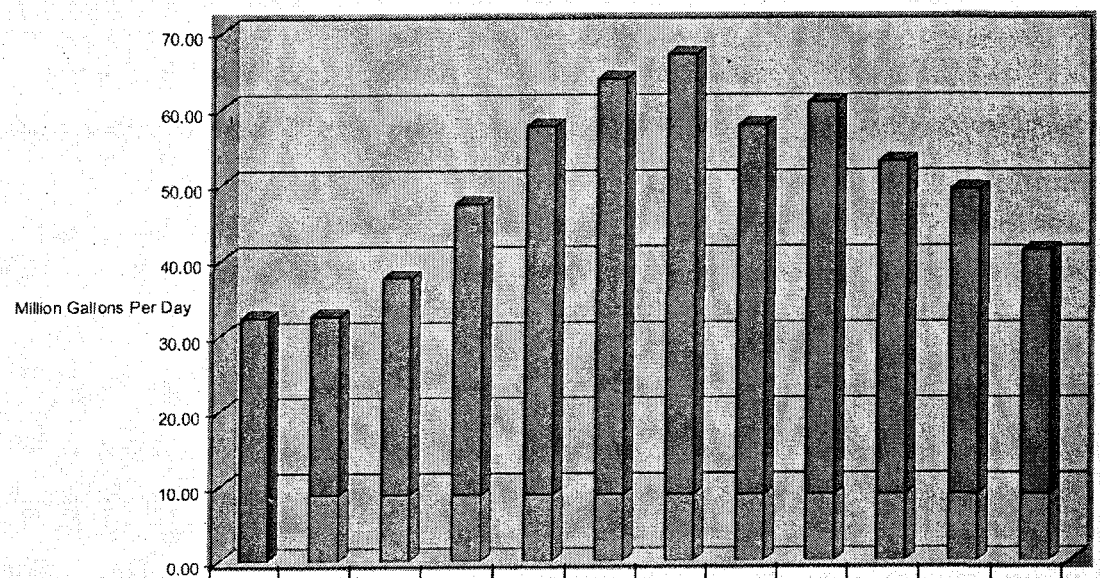
	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Groundwater	15.80	7.11	9.59	14.36	19.36	22.38	23.96	19.41	20.89	17.06	15.25	11.31
CAP Water	0.00	8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80

Figure 5.2 - PVWS
Monthly Use of Treated CAP and Groundwater - 2015



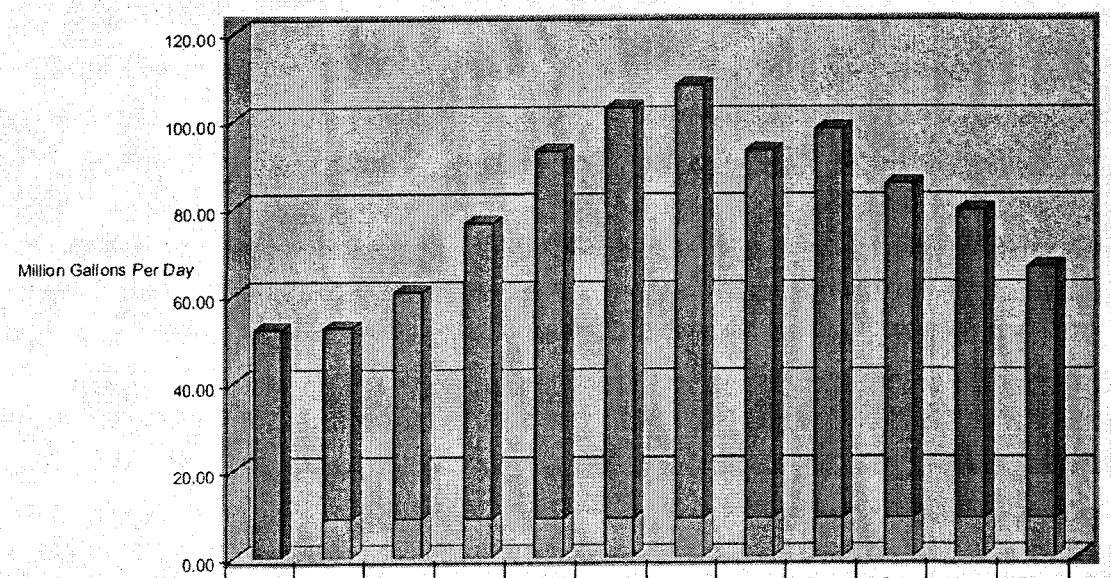
	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Groundwater	21.6	12.9	16.3	22.8	29.7	33.8	36.0	29.7	31.8	26.5	24.1	18.7
CAP Water	0.00	8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80

Figure 5.3 - PVWS
Monthly Use of Treated CAP and Groundwater - 2020



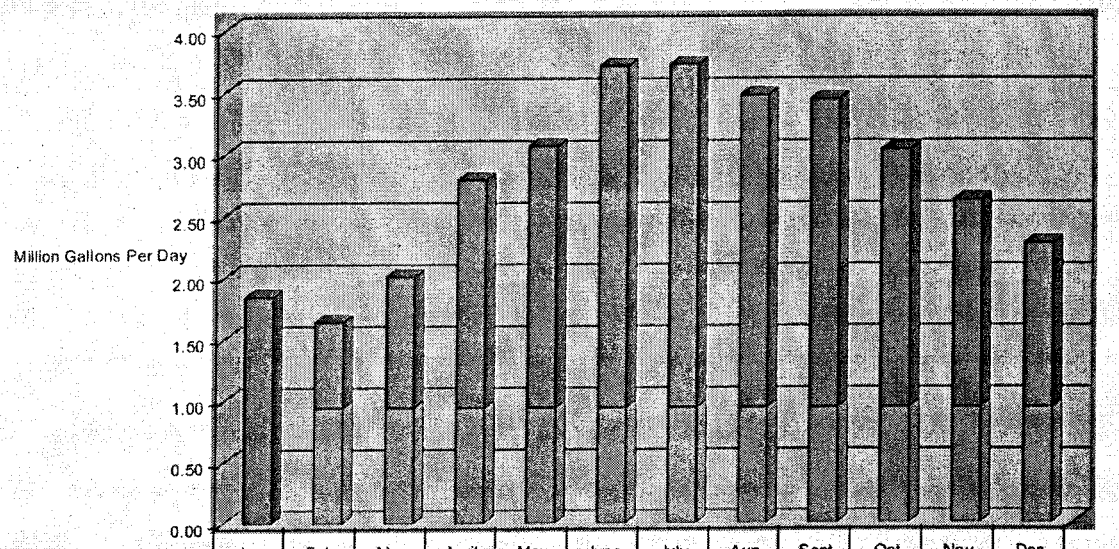
	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Groundwater	32.3	23.7	28.8	38.5	48.7	54.9	58.1	48.8	51.9	44.0	40.3	32.3
CAP Water	0.00	8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80

Figure 5.4 - PVWS
Monthly Use of Treated CAP and Groundwater - 2025



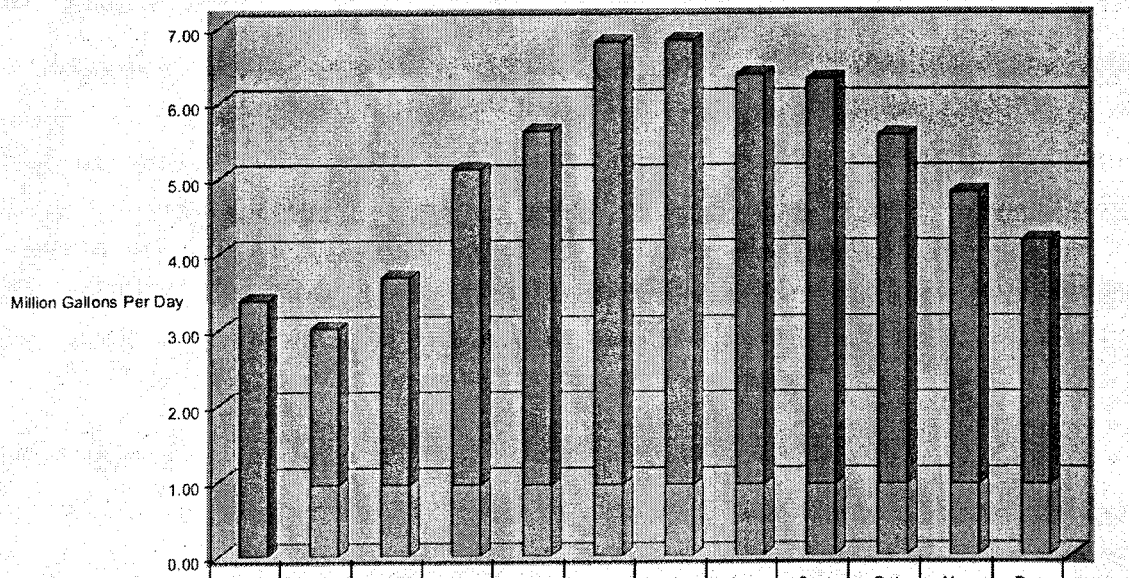
	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Groundwater	52.0	43.6	51.7	67.4	83.9	93.8	99.0	84.0	88.9	76.3	70.4	57.4
CAP Water	0.00	8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80

Figure 5.5 - White Tank Water System
Monthly Use of CAP Water and Groundwater - 2010



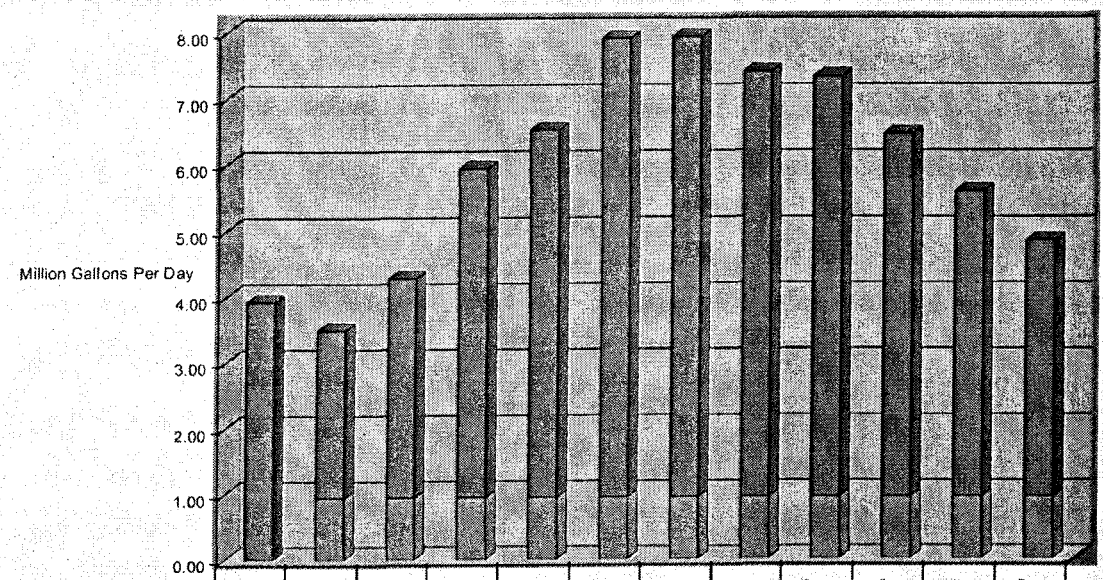
	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Groundwater	1.8	0.7	1.1	1.8	2.1	2.8	2.8	2.5	2.5	2.1	1.7	1.3
CAP Water	0.00	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94

Figure 5.6 - White Tank Water System
Monthly Use of CAP Water and Groundwater - 2015



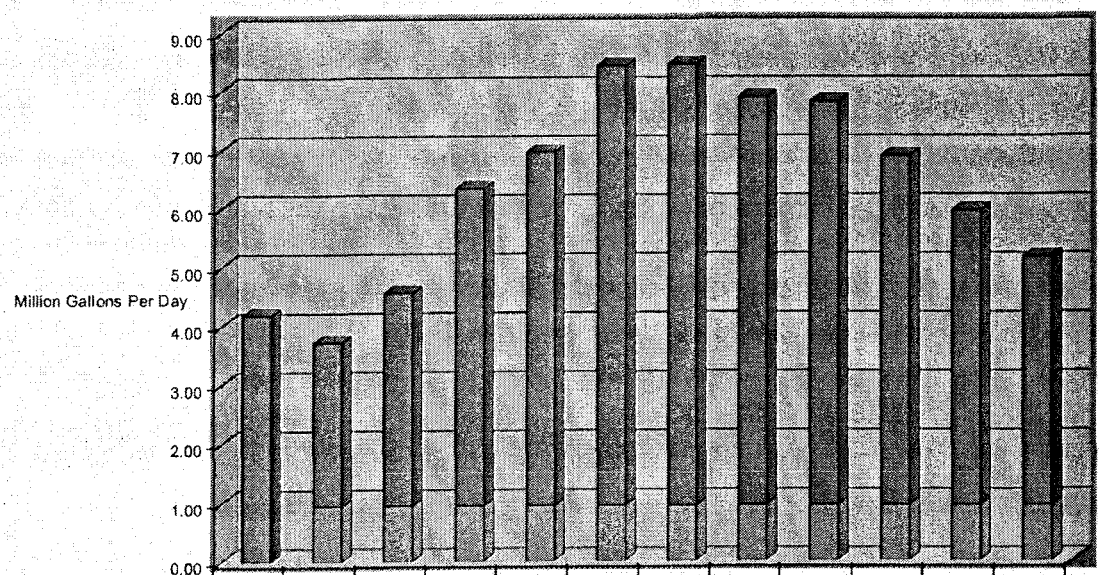
	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Groundwater	3.4	2.1	2.7	4.2	4.7	5.9	5.9	5.4	5.4	4.6	3.9	3.2
CAP Water	0.00	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94

Figure 5.7 - White Tank Water System
Monthly Use of CAP Water and Groundwater - 2020



	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Groundwater	3.9	2.5	3.3	5.0	5.6	6.9	7.0	6.4	6.4	5.5	4.6	3.9
CAP Water	0.00	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94

Figure 5.8 - White Tank Water System
Monthly Use of CAP Water and Groundwater - 2025



	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Groundwater	4.2	2.8	3.6	5.4	6.0	7.5	7.5	6.9	6.9	5.9	5.0	4.2
CAP Water	0.00	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94

CHAPTER 6
CAPITAL AND OPERATION AND MAINTENANCE COSTS OF FUTURE WATER SUPPLIES

6.1 Overview of Future Water Supplies – Pinal Valley Water System

The water demand projections presented in Chapter 2 show that additional water supplies will be needed beyond AWC's current CAP water allocations to moderate the projected rise in groundwater production. This chapter describes: 1) potential new water supplies that may be available to meet demands through 2025, and 2) the projected capital and operations costs of existing and new water supplies.

Potential new supplies for the Pinal Valley Water System include but are not limited to:

- Additional CAP water allocations and additional treatment facilities.
- Gila River surface water through the San Carlos Irrigation and Drainage District.
- Direct and indirect use of reclaimed water through agreements with local wastewater entities such as the cities of Casa Grande and Coolidge.
- Additional groundwater production facilities. New wells may lawfully pump groundwater or recover storage credits accrued through underground storage of effluent or CAP water.

6.2 Additional CAP Water Allocations

Additional CAP water for treatment and direct delivery to AWC customers in the future could be obtained through: 1) Long-term leases with Indian Communities that hold CAP allocations, 2) Additional allocations made by the State of Arizona of a portion of the remaining 97,000 AF Non-Indian Agricultural Water Pool, 3) Water Allocation purchase and transfer agreements with entities that hold CAP allocations, 4) Purchase or lease of Colorado River water from irrigation districts or Indian Communities located along the Colorado River, 5) Use of excess CAP water on a year-to-year basis, and 6) Future agreements with the Central Arizona Groundwater Replenishment District ("Replenishment District") providing for direct delivery of water in lieu of replenishing groundwater.

AWC will conduct an analysis of CAP water alternatives in 2007. The key objective of the water supply strategy is to maintain a reliable and cost-effective water supply for AWC customers. AWC intends to seek additional CAP water allocations to enable future expansion of the planned CAP Treatment Plant as the need for additional renewable supplies increases. AWC will acquire additional water supplies and expand the planned CAP Treatment Plant in conjunction with expansion of groundwater production facilities and development of other supplies as part of a balanced water supply strategy.

6.2.1 Cost of Direct Treatment and Delivery of CAP Water – Pinal Valley Water System

The estimated range of capital costs for the 10 MGD initial phase of the CAP Treatment Plant and related facilities was provided in Table 4.1. The capital cost is currently estimated to be in the range of $3.40 to $6.60 per gallon of treatment capacity. The method of funding this capital cost is not the subject of this Plan, but will be addressed in the Company's 2008 General Rate Case and other Commission filings.

Estimated CAP Treatment Plant operation and maintenance costs are based on detailed annual operating cost estimates made by Arizona-American for its proposed White Tank Water Treatment Plant in 2006. It is assumed that the CAP Treatment Plant will be similar in process design and size to the White Tank Water Treatment Plant. Therefore the Arizona-American cost estimates, detailed in Appendix 3, provide reliable estimates of future operating costs. The Arizona-American cost estimate of $0.39 per 1,000 gallons was reduced by removing outside management and overhead costs, resulting in a cost estimate of $0.31 per 1,000 gallons or $101 per AF of treated water. This cost does not include CAP water purchase costs. Currently, CAP capital and operation and maintenance ("O&M") charges are $106 per AF ($0.33 per 1,000 gallons). In 2012, when the CAP Treatment Plant start-up will occur, CAP capital and O&M charges are projected to be $123 per AF ($0.38 per 1,000 gallons) based on projections published by CAP.

Additional CAP water allocations that AWC could obtain in the future are assumed to have similar water treatment plant capital and operation and maintenance costs to those shown here. However, future plant expansions are likely to cost less per gallon of capacity than the initial Phase I plant because certain plant and water transmission system costs will already have been incurred. The capital costs built into Phase I would include land, administration building, CAP water turnout, and raw water mains, and certain plant piping and structures. However, since detailed design has not yet occurred, future plant expansion cost differential from initial plant costs cannot be determined at this time.

6.3 Future Use of Groundwater

Groundwater will continue to provide a key water supply for the Pinal Valley Water System planning area following construction of the CAP Treatment Plant. This is shown in the monthly operating plans presented in Chapter 5. However, Arizona Groundwater Management Act constraints on future groundwater use for new development may limit the use of groundwater in the future or may require greater quantities of groundwater replenishment through the Central Arizona Groundwater Replenishment District ("Replenishment District"). Compliance with Arizona Department of Water Resources ("ADWR") 100-year Assured Water Supply Rules is a condition of AWC's future use of groundwater to meet the needs of new developments. These rules require that future groundwater pumping not deplete the aquifer to a level more than 1,100 feet below land surface within a 100-year period of time. ADWR is now in the process of revising the rules for the Pinal Active Management Area and should be completed in 2007. The revisions will significantly reduce the amount of groundwater that water

providers like AWC are allowed to pump and require that much of the groundwater pumped by providers be replenished either by the provider or the Replenishment District.

In 2002, AWC filed with ADWR a hydrology study as part of an application for a Physical Availability Determination for the Pinal Valley Water System service areas. A Physical Availability Determination is used to determine how much groundwater a provider may produce over a 100 year period of time (taking into account other groundwater users in the basin) without causing water levels to decline to more than 1,100 feet below land surface. The Physical Availability Determination, which was approved by ADWR, allows AWC to pump up to 57,507 AF/YR of groundwater to meet future customer needs within the Casa Grande system, 13,510 AF/YR in the Coolidge system, and 4,786 AF/YR in the Tierra Grande system, for a total of 75,803 AF/YR. Based on the annual water demand projections presented in Table 2.5, this level of groundwater use, when coupled with the current CAP water allocations of 10,884 AF, could support the issuance of Assured Water Supply Certificates for all projected new developments in the integrated Pinal Valley Water System planning area through the year 2024.

The 2002 study was based on relatively conservative assumptions regarding aquifer characteristics and future pumping by other entities, including agriculture in Pinal County. AWC is presently working with a professional hydrologic consulting firm to update the Physical Availability Determination to include current information. AWC will resubmit an application to ADWR in early 2007 for a revised Physical Availability Determination that would apply to the entire Pinal Valley Water System planning area. AWC anticipates that the updated study will show that significantly more than 75,803 AF/YR of groundwater will be available to AWC under the Assured Water Supply Rules.

6.3.1 Central Arizona Groundwater Replenishment District Issues

To date, developers in many areas within the AWC Pinal County service areas have obtained Certificates of Assured Water Supply without enrolling the subdivisions as Member Lands of the Replenishment District. However, under the revised Assured Water Supply rules, new subdivisions on desert lands without Irrigation Grandfathered Rights will be required to enroll in the Replenishment District to provide groundwater replenishment services. Subdivisions on lands with a history of irrigation may be able to extinguish established Irrigation Grandfathered Rights to meet the Assured Water Supply Rules in the near-term, but under the new rules the availability of Extinguishment Credits will be phased out during the 2007 to 2025 period. Enrollment in the Replenishment District results in an annual replenishment tax being levied on the homeowner through the County to pay for groundwater recharge by the Replenishment District using CAP water or other renewable water supplies. In 2006, the cost to homeowners within member lands in Pinal County for this service was $192 per acre foot, or about $75 per year for the average homeowner. The CAP projects these costs to rise to $242 per acre foot by 2011.

While the Replenishment District provides a viable means today for new subdivisions in the Pinal Valley Water System planning area to meet the Assured Water Supply Rules, future enrollment of new subdivisions in the Replenishment District is not unlimited. The Replenishment District's current Plan of Operation identifies water supply acquisitions needed to

meet the future replenishment needs of new enrollment projected through the year 2015. ADWR requires that the plan be updated by 2015. The continued availability of Replenishment District replenishment services will play an important role in future AWC decisions regarding water supply acquisitions and future expansion of the CAP Treatment Plant.

6.3.2 Cost of Future Groundwater Supplies

The cost of future groundwater supplies includes the cost to acquire land, drill and equip new wells, construct advanced water treatment systems to reduce levels of arsenic or other contaminants, and water mains to convey water from the wells to storage tanks for boosting to the distribution system. The range of estimated future groundwater supply costs is shown in Table 6.1 below.

Table 6.1
New Wells with Advanced Treatment (Arsenic)
Estimated Range of Capital Costs with Design

	Low Estimate	High Estimate
Land	$15,000	$20,000
Drill/Equip New Wells	$750,000	$1,000,000
Connecting Mains (Avg. 2000 ft 8-inch)	$90,000	$108,000
Arsenic Water Treatment Facility (Cost per 1000 gpm)	$500,000	$900,000
Design, Bidding, Const. Mgmt., Internal Costs @18%	$241,200	$361,440
Total Capital Cost	$1,596,200	$2,389,440
Cost Per Gallon of Capacity	$1.1	$1.7

Notes: Assumes average well output of 1000 gpm
Low well treatment cost based on centralized treatment cost of $500,000/1000 gpm
High treatment cost based on individual wellhead treatment system for a 1000 gpm well

Well operation and maintenance costs consist of electrical costs to operate well pumps and water treatment systems, chemicals and treatment media replacement, well site maintenance, and maintenance of well pump equipment and treatment equipment. AWC anticipates these costs will remain similar to costs provided to the Commission for AWC's 2004 Western Group Rate Case (Decision No. 68302).

6.4 San Carlos Irrigation and Drainage District – Gila River Surface Water

The San Carlos Irrigation and Drainage District (the "Irrigation District") is an agricultural water district that encompasses approximately 50,000 acres in the Pinal Valley. Irrigation District delivers Gila River surface water to agricultural and urban irrigation customers through a 250-mile network of canals. The Pinal Valley Water System planning area overlays the majority of Irrigation District land. Approximately 90 percent of Irrigation District land is within the Pinal Valley Water System planning area.

Surface water deliveries to Irrigation District lands have averaged approximately 2 acre feet per acre ("AF/AC") over the past 25 years. In some years, when water surface water supplies are plentiful, deliveries have been as much as 3 AF/AC of Irrigation District land. The Irrigation District also maintains a system of wells to supplement surface water deliveries and typically delivers between 0.4 and 1.0 AF/AC of groundwater each year to its customers, depending on surface water availability. As agricultural lands within the Irrigation District continue to develop into urban uses, the Irrigation District surface water supply will play an increasingly prominent role in providing renewable water supplies for the Pinal Valley Water System planning area. A preliminary calculation of the amount of surface water potentially available for treatment and potable use by the Irrigation District lands within the Pinal Valley Water System planning area at build out shows that as much as 80,000 to 90,000 AF/YR of water could be available on an average annual basis.

AWC plans to continue its discussions with the Irrigation District in 2007 regarding the terms of a water delivery and use agreement that would allow AWC to become the delivery agent for Gila River water within AWC's Pinal Valley Water System planning area and the Irrigation District service area. Pursuant to such an agreement, Gila River water would be delivered by the Irrigation District to the CAP Treatment Plant for treatment. The cost of raw water deliveries by the Irrigation District to the CAP Treatment Plant is expected to be less than delivery charges for CAP water based on past the Irrigation District water delivery charges. CAP Treatment Plant capital and operation and maintenance costs to treat Irrigation District water would be the same as that for CAP water.

6.5 Future Use of Reclaimed Water

AWC does not provide wastewater treatment services within the Pinal Valley Water System planning area. Future direct or indirect use of reclaimed water to meet the needs of AWC's water customers would be achieved through cooperative agreements with entities that operate wastewater facilities in Pinal County, such as the cities of Casa Grande and Coolidge. AWC believes future use of reclaimed water will play an important role in the overall water supply portfolio of the Pinal Valley Water System planning area. The future generation of wastewater flows within the Pinal Valley Water System planning area by the year 2025, assuming a future service area population of 449,347 and 80 gallons per capita per day wastewater flow generation, is 40,267 acre feet per year ("AF/YR"). This water may be used for direct irrigation use by golf courses, parks, and schools, and other non-potable uses by power plants and others; and for groundwater recharge and recovery by AWC.

Entities that currently operate wastewater facilities within the Pinal Valley Water System planning area include the cities of Casa Grande, Coolidge and Eloy, and the Arizona City Sanitary District. In 2007, the Company plans to meet with these providers regarding each provider's plans for future wastewater treatment capacities and opportunities to maximize the beneficial use of reclaimed water. AWC will explore ways to partner with wastewater providers on projects that maximize the use of reclaimed water. Of particular importance in maximizing the use of AWC's existing CAP water allocation will be expediting use of reclaimed water by the SRP Desert Basin Generating Station and local golf courses that currently use untreated CAP water. This will free up the supply of CAP water for treatment at the CAP Treatment Plant.

Another feasible reuse alternative for wastewater providers is to construct underground water storage facilities for recharge of effluent for long-term water storage credits and sale or exchange of those long-term water storage credits to AWC for beneficial use by AWC's customers. Underground storage of reclaimed water will provide a significant benefit to the aquifer and allow AWC to develop additional groundwater production capacity under the state's Assured Water Supply Rules. AWC will include a component of effluent reuse in its upcoming application to ADWR for a revised Physical Availability Determination (see Section 6.3). The future cost of projects for direct or indirect use of reclaimed water is difficult to project at this point in time. The cost of these supplies will be specific to individual projects and wastewater providers.

6.6 White Tank Water System Cost of Direct Treatment and Delivery of CAP Water

Arizona-American's White Tank Water Treatment Plant represents the most likely option for direct treatment and delivery of AWC's existing 968 AF CAP water allocation. Projected capital costs for a 1.0 MGD proportional share of the 13.5 MGD of the White Tank Water Treatment Plant was provided Table 4.2. The estimated range of capital costs is $6.00 to $7.20 per gallon of treatment capacity. AWC intends to seek a long-term lease of capacity or wholesale water delivery agreement with Arizona-American. The detailed financial terms of this agreement are yet to be developed, but will be based on the actual costs incurred by Arizona-American to construct the facilities. The estimated operation and maintenance costs for delivery of water from Arizona-American's plant to AWC's White Tank water system are presented in Section 6.2.1.

6.7 White Tank Water System Cost of Future Groundwater Supplies

The estimated capital cost of future groundwater supplies for the White Tank water system is approximately twice that shown in Table 6.1. The reason is that expected well yields in the White Tank area are only 500 gpm instead of 1000 gpm in the Pinal Valley Water System planning area. Therefore, the range of estimated future capital costs in the White Tank water system is $2.20 to $3.40 per gallon of capacity, including costs for advanced treatment required for arsenic or other contaminants. For the same reasons, operation and maintenance costs per gallon of capacity for wells are expected to be proportionally higher as well.

CHAPTER 7
FUTURE EXPANSIONS OF THE CAP TREATMENT PLANT WATER TREATMENT CAPACITY

7.1 CAP Treatment Plant – Future Expansions

The 60-acre parcel purchased by AWC for the CAP Treatment Plant can potentially support a conventional water treatment plant with a capacity to meet AWC's projected needs. AWC purchased the site to enable future plant expansion beyond the initial 10 MGD plant, as the need to treat additional surface water supplies for the Pinal Valley Water System planning area develops. The parcel is also sufficiently large to provide water treatment services for other municipalities and private water companies in the region.

The need for and timing of future CAP Treatment Plant expansions will depend on: 1) the growth of customer water demands, 2) the availability and costs of additional groundwater production capacity to meet new demands, and 3) the availability and cost of acquiring additional allocations of long-term surface water supplies.

The water demand projections for the Pinal Valley Water System planning area presented in Chapter 2, and shown in Figures 5.1 to 5.4, show that between 2012 and 2020, average day water demand is expected to increase each year. By 2020 the peak-day demand will go up by more than 4 MGD per year. Those figures show that average peak day water demands in the Pinal Valley Water System planning area will increase to more than 30 MGD in 2012, 45 MGD in 2015, 65 MGD in 2020, and more than 100 MGD in 2025. These projections are based on a peak-day to peak-month ratio of 1.2. The initial capacity, 10 MGD, of the CAP Treatment Plant will provide for about 5 years of projected growth in average day demand. Based only on the projected increase in peak-day and average day demand, an additional CAP Treatment Plant module would be required by 2016. However, because additional groundwater well capacity will also be needed between now and 2012 to meet peak-day demands, well production capacity could be available to allow the next CAP Treatment Plant expansion to be deferred to approximately 2020. At that time, a 20-MGD plant expansion module would provide for approximately 5 years of projected growth in average-day demand between 2020 and 2025. It should be emphasized however, that the timing of the first CAP Treatment Plant expansion would depend on the availability and cost of additional groundwater production capacity, and the availability of additional long-term surface water supplies.

When the first CAP Treatment Plant expansion is constructed, the treated water transmission main system will need to be expanded beyond the 24" main to be constructed with Phase I of the CAP Treatment Plant. The sizing and alignment of future transmission systems will be evaluated during future planning studies. In 2007 AWC plans to further its study of water resources for the Pinal Valley Water System planning area. The objective of that study will be to: 1) identify the most cost-effective and viable long-term water resource strategies for the area, 2) develop an action plan for acquiring additional surface water and groundwater supplies, and 3) develop a projected schedule for the CAP Treatment Plant expansion phasing.

7.2 White Tank Service Area – CAP Water Treatment Plant Future Phases

The initial 1.0 MGD capacity commitment AWC plans to acquire in either the Arizona-American White Tank Water Treatment Plant or the proposed MWD Water Treatment Plant will be sufficient to treat AWC's current CAP water allocation of 968 AF. Any future expansions of AWC's surface water treatment capacity would be secured through additional capacity agreements with one of these entities. Both entities' plans call for constructing water treatment plants that are expandable to 80 MGD. The need for and timing of future water treatment plant capacity agreements for AWC's White Tank service area will depend on: 1) the growth of customer water demands, 2) the availability and costs of additional groundwater production capacity to meet new demands, and 3) the availability and cost of acquiring additional allocations of long-term surface water supplies. The most likely next source of surface water supply is from the Agua Fria River which could be obtained through an agreement with MWD (described in Section 4.2.1). This potential supply of up to 816 AF per year could require slightly less than 1 MGD of additional surface water treatment plant capacity. AWC intends in the future to explore the necessary delivery agreement with MWD. Additional CAP water allocations for the White Tank service area will also be explored in the future.

APPENDIX 1

WATER USE DATA SHEET

NAME OF COMPANY →	ARIZONA WATER COMPANY - Casa Grande *
ADEQ Public Water System No. →	11-009 - 11-076 2005

*Includes Tierra Grande

MONTH/YEAR (LAST 13 MONTHS)	NUMBER OF CUSTOMERS	GALLONS SOLD (Thousands)	GALLONS PUMPED	GALLONS PURCHASED
January-06	19,213	269,149	305,254	0
December-05	19,089	285,407	280,927	0
November-05	18,895	327,561	330,540	0
October-05	18,670	375,638	383,468	0
September-05	18,314	398,883	412,325	0
August-05	18,181	366,708	384,751	0
July-05	18,006	441,704	469,839	0
June-05	17,707	368,906	432,347	0
May-05	17,432	305,825	398,079	0
April-05	17,225	263,983	312,576	0
March-05	16,945	193,240	261,175	0
February-05	16,737	198,930	211,109	0
January-05	16,645	217,348	223,065	0

STORAGE TANK CAPACITY (Gallons)	NUMBER OF EACH	ARIZONA DEPT. OF WATER RESOURCES WELL I.D. NUMBER	WELL PRODUCTION (Gallons per Minute)
Burgess Peak 2,000,000	1	D(6-6)21bbc - Casa Grande #10	1,040
Casa Grande Mtn 5,000,000	1	D(6-6)23cbb – Casa Grande #19	1,560
Cottonwood 1,000,000	1	D(6-6)22ddd – Singh/Quaid #22	1,000
Golf Course 115,000	1	D(6-6)22bda – Casa Grande #25	1,320
Indian Hills 100,000	1	D(6-6)21bbb – Cottonwood Lane #14	250
North Park 650,000	1	D(6-6)22bad – Casa Grande #20	1,110
North Park 35,000	1	D(6-6)22baa – Casa Grande #23	1,550
Scott Drive 110,000	1	D(6-6)15cdd – Casa Grande #26	1,400
Scott Drive 5,000,000	1	D(7-6)35ddd – AZ City/Battaglia #28	1,620
Tierra Grande #1 10,000	1	D(6-6)15ccb – Casa Grande #17	850
Tierra Grande #1 250,000	1	D(6-6)22cdc – Casa Grande #21	740
		D(6-6)22cdd – Casa Grande #24	950
		D(6-7)5baa – Lake-in-the-Desert #27	550
		D(6-6)25dcd - Casa Grande #29	1,380
		D(6-7)36add - Tierra Grande #1	420
		D(6-7)36add - Tierra Grande #3	95

Other Water Sources in Gallons per Minute (Non-Potable CAP Water) →	GPM 1583
Fire Hydrants on System →	YES NO
Total Water Pumped Last 13 Months (Gallons in Thousands) →	4,405,455

APPENDIX 1

WATER USE DATA SHEET

NAME OF COMPANY →	ARIZONA WATER COMPANY - Casa Grande *
ADEQ Public Water System No. →	11-009 - 11-076 2004

*Includes Tierra Grande

MONTH/YEAR (LAST 13 MONTHS)	NUMBER OF CUSTOMERS	GALLONS SOLD (Thousands)	GALLONS PUMPED	GALLONS PURCHASED
January-05	16,645	217,348	233,065	0
December-04	16,483	228,443	234,177	0
November-04	16,371	266,273	277,570	0
October-04	16,208	326,011	306,643	0
September-04	16,129	349,118	354,934	0
August-04	15,901	362,086	380,803	0
July-04	15,850	417,421	411,243	0
June-04	15,653	353,436	460,882	0
May-04	15,575	306,946	343,629	0
April-04	15,473	269,118	279,158	0
March-04	15,284	189,937	303,751	0
February-04	15,185	212,036	212,775	0
January-04	15,074	222,907	242,706	0

STORAGE TANK CAPACITY (Gallons)	NUMBER OF EACH	ARIZONA DEPT. OF WATER RESOURCES WELL I.D. NUMBER	WELL PRODUCTION (Gallons per Minute)
Burgess Peak 2,000,000	1	D(6-6)21bbc - Casa Grande #10	1,040
Casa Grande Mtn 5,000,000	1	D(6-6)23cbb – Casa Grande #19	1,560
Cottonwood 1,000,000	1	D(6-6)22ddd – Singh/Quaid #22	1,000
Golf Course 115,000	1	D(6-6)22bda – Casa Grande #25	1,320
Indian Hills 100,000	1	D(6-6)21bbb – Cottonwood Lane #14	250
North Park 650,000	1	D(6-6)22bad – Casa Grande #20	1,110
North Park 35,000	1	D(6-6)22baa – Casa Grande #23	1,550
Scott Drive 110,000	1	D(6-6)15cdd – Casa Grande #26	1,400
Scott Drive 5,000,000	1	D(7-6)35ddd – AZ City/Battaglia #28	1,620
Tierra Grande #1 10,000	1	D(6-6)15ccb – Casa Grande #17	850
Tierra Grande #1 250,000	1	D(6-6)22cdc – Casa Grande #21	740
		D(6-6)22cdd – Casa Grande #24	950
		D(6-7)5baa – Lake-in-the-Desert #27	550
		D(6-6)25dcd - Casa Grande #29	1,380
		D(6-7)36add - Tierra Grande #1	420
		D(6-7)36add - Tierra Grande #3	95

Other Water Sources in Gallons per Minute (Non-Potable CAP Water) →	GPM 1583
Fire Hydrants on System →	YES NO
Total Water Pumped Last 13 Months (Gallons in Thousands) →	4,041,336

APPENDIX 1

WATER USE DATA SHEET

NAME OF COMPANY →	ARIZONA WATER COMPANY - Coolidge
ADEQ Public Water System No. →	11-014 2004

MONTH/YEAR (LAST 13 MONTHS)	NUMBER OF CUSTOMERS	GALLONS SOLD (Thousands)	GALLONS PUMPED	GALLONS PURCHASED
January-05	3,241	30,529	32,012	0
December-04	3,195	27,706	30,576	0
November-04	3,188	30,797	35,949	0
October-04	3,175	43,800	41,776	0
September-04	3,156	48,108	53,650	0
August-04	3,145	46,848	53,809	0
July-04	3,138	54,128	55,434	0
June-04	3,110	45,281	63,474	0
May-04	3,105	40,799	47,142	0
April-04	3,098	34,389	40,276	0
March-04	3,065	24,388	38,802	0
February-04	3,048	25,652	29,772	0
January-04	3,059	28,433	30,996	0

STORAGE TANK CAPACITY (Gallons)	NUMBER OF EACH	ARIZONA DEPT. OF WATER RESOURCES WELL I.D. NUMBER	WELL PRODUCTION (Gallons per Minute)
Valley Farms 15,000	1	D(5-8)22 caa - Coolidge #7	1,625
Well 7 100,000	1	D(5-9)17-1 cdc - Valley Farms #1	240
Well 7 500,000	1	D(5-8)10-1 bca - Coolidge #9	1,300
Well 7 1,000,000	1	D(5-9)17-2 cdc - Valley Farms #1	312
Well 9 & 10 35,500	1	D(5-8)10-2 bca - Coolidge #10	1,200
Well 9 & 10 116,000	1		

Other Water Sources in Gallons per Minute →	GPM 0
Fire Hydrants on System →	YES NO
Total Water Pumped Last 13 Months (Gallons in Thousands) →	553,668

APPENDIX 1

WATER USE DATA SHEET

NAME OF COMPANY →	ARIZONA WATER COMPANY - Coolidge
ADEQ Public Water System No. →	11-014 2005

MONTH/YEAR (LAST 13 MONTHS)	NUMBER OF CUSTOMERS	GALLONS SOLD (Thousands)	GALLONS PUMPED	GALLONS PURCHASED
January-06	3,962	32,388	57,319	0
December-05	3,944	38,244	38,557	0
November-05	3,922	41,480	45,177	0
October-05	3,871	46,877	49,354	0
September-05	3,840	51,344	54,272	0
August-05	3,785	43,414	51,794	0
July-05	3,745	58,721	59,903	0
June-05	3,635	49,291	57,514	0
May-05	3,545	41,603	54,956	0
April-05	3,436	36,650	42,226	0
March-05	3,330	22,435	34,345	0
February-05	3,267	22,975	26,763	0
January-05	3,241	30,529	32,012	0

STORAGE TANK CAPACITY (Gallons)	NUMBER OF EACH	ARIZONA DEPT. OF WATER RESOURCES WELL I.D. NUMBER	WELL PRODUCTION (Gallons per Minute)
Valley Farms 15,000	1	D(5-8)22 caa - Coolidge #7	1,625
Well 7 100,000	1	D(5-9)17-1 cdc - Valley Farms #1	240
Well 7 500,000	1	D(5-8)10-1 bca - Coolidge #9	1,300
Well 7 1,000,000	1	D(5-9)17-2 cdc - Valley Farms #1	312
Well 9 & 10 35,500	1	D(5-8)10-2 bca - Coolidge #10	1,200
Well 9 & 10 116,000	1		

Other Water Sources in Gallons per Minute →	GPM 0
Fire Hydrants on System →	YES NO
Total Water Pumped Last 13 Months (Gallons in Thousands) →	604,192

APPENDIX 1

WATER USE DATA SHEET

NAME OF COMPANY →	ARIZONA WATER COMPANY - Stanfield
ADEQ Public Water System No. →	11-012 2004

MONTH/YEAR (LAST 13 MONTHS)	NUMBER OF CUSTOMERS	GALLONS SOLD (Thousands)	GALLONS PUMPED	GALLONS PURCHASED
January-05	214	1,727	1,777	0
December-04	212	1,539	1,793	0
November-04	218	1,823	1,946	0
October-04	217	2,469	2,268	0
September-04	214	2,648	2,705	0
August-04	213	2,945	3,115	0
July-04	214	3,512	3,392	0
June-04	214	2,846	3,758	0
May-04	213	2,612	2,756	0
April-04	214	2,343	2,500	0
March-04	215	1,483	2,386	0
February-04	217	1,607	1,601	0
January-04	218	1,926	1,855	0

STORAGE TANK CAPACITY (Gallons)	NUMBER OF EACH	ARIZONA DEPT. OF WATER RESOURCES WELL I.D. NUMBER	WELL PRODUCTION (Gallons per Minute)
Stanfield 100,000	1	D(6-4)20ccc – Stanfield #1	340
Stanfield 20,000	1	D(6-4)19adc – Tabletop #2	175
Tabletop 16,000	1		

Other Water Sources in Gallons per Minute →	GPM 0
Fire Hydrants on System →	YES NO
Total Water Pumped Last 13 Months (Gallons in Thousands) →	30,075

APPENDIX 1

WATER USE DATA SHEET

NAME OF COMPANY →	ARIZONA WATER COMPANY - Stanfield
ADEQ Public Water System No. →	11-012 2005

MONTH/YEAR (LAST 13 MONTHS)	NUMBER OF CUSTOMERS	GALLONS SOLD (Thousands)	GALLONS PUMPED	GALLONS PURCHASED
January-06	211	2,146	2,118	0
December-05	209	2,043	2,178	0
November-05	209	2,164	2,434	0
October-05	212	2,822	2,922	0
September-05	211	3,087	3,199	0
August-05	210	2,730	3,225	0
July-05	218	3,501	3,575	0
June-05	214	2,852	3,453	0
May-05	214	2,170	2,934	0
April-05	215	2,213	2,591	0
March-05	218	1,096	1,929	0
February-05	214	1,292	1,429	0
January-05	214	1,727	1,777	0

STORAGE TANK CAPACITY (Gallons)	NUMBER OF EACH	ARIZONA DEPT. OF WATER RESOURCES WELL I.D. NUMBER	WELL PRODUCTION (Gallons per Minute)
Stanfield 100,000	1	D(6-4)20ccc – Stanfield #1	340
Stanfield 20,000	1	D(6-4)19adc – Tabletop #2	175
Tabletop 16,000	1		

Other Water Sources in Gallons per Minute →	GPM 0
Fire Hydrants on System →	YES NO
Total Water Pumped Last 13 Months (Gallons in Thousands) →	33,764

APPENDIX 2

WATER USE DATA SHEET

NAME OF COMPANY →	ARIZONA WATER COMPANY - White Tank
ADEQ Public Water System No. →	07-128 2004

MONTH/YEAR (LAST 13 MONTHS)	NUMBER OF CUSTOMERS	GALLONS SOLD (Thousands)	GALLONS PUMPED	GALLONS PURCHASED
January-05	1,482	11,776	12,357	0
December-04	1,474	19,594	20,772	0
November-04	1,439	20,011	15,958	0
October-04	1,434	24,578	21,814	0
September-04	1,430	26,523	27,882	0
August-04	1,410	27,402	29,964	0
July-04	1,405	27,280	29,500	0
June-04	1,405	28,523	33,318	0
May-04	1,380	19,110	22,325	0
April-04	1,372	15,093	17,700	0
March-04	1,367	12,174	16,512	0
February-04	1,340	10,639	11,834	0
January-04	1,342	12,772	12,252	0

STORAGE TANK CAPACITY (Gallons)	NUMBER OF EACH	ARIZONA DEPT. OF WATER RESOURCES WELL I.D. NUMBER	WELL PRODUCTION (Gallons per Minute)
Beautiful AZ Estates 500,000	1	B(2-2)33 cbd – White Tank #2	165
Beautiful AZ Estates 1,000,000	1	B(2-2)33 cbd – White Tank #4	460
Monte Vista 50,000	1	B(2-2)32 abb – Pasqualetti #8	175
Monte Vista 100,000	1	B(1-2)3 bbb – Golightly #7	60

Interconnect w/Arizona American Water Co. →	GPM 150
Fire Hydrants on System →	(YES) NO
Total Water Pumped Last 13 Months (Gallons in Thousands) →	272,188

WATER USE DATA SHEET.WT-04 MJW:KD | 08:11 | 11/28/05

APPENDIX 2

WATER USE DATA SHEET

NAME OF COMPANY →	ARIZONA WATER COMPANY - White Tank
ADEQ Public Water System No. →	07-128 2005

MONTH/YEAR (LAST 13 MONTHS)	NUMBER OF CUSTOMERS	GALLONS SOLD (Thousands)	GALLONS PUMPED	GALLONS PURCHASED
January-06	1,586	18,247	20,792	0
December-05	1,592	20,471	19,688	0
November-05	1,588	23,252	23,145	0
October-05	1,580	28,138	28,109	0
September-05	1,573	29,957	30,730	0
August-05	1,563	29,094	30,363	0
July-05	1,547	33,472	33,241	0
June-05	1,536	30,032	34,998	0
May-05	1,525	21,772	31,982	0
April-05	1,519	16,352	23,203	0
March-05	1,487	10,653	16,048	0
February-05	1,490	11,122	10,377	0
January-05	1,482	11,776	12,357	0

STORAGE TANK CAPACITY (Gallons)	NUMBER OF EACH	ARIZONA DEPT. OF WATER RESOURCES WELL I.D. NUMBER	WELL PRODUCTION (Gallons per Minute)
Beautiful AZ Estates 500,000	1	B(2-2)33 cbd – White Tank #2	165
Beautiful AZ Estates 1,000,000	1	B(2-2)33 cbd – White Tank #4	460
Monte Vista 50,000	1	B(2-2)32 abb – Pasqualetti #8	175
Monte Vista 100,000	1	B(1-2)3 bbb – Golightly #7	60

Interconnect w/Arizona American Water Co. →	GPM 350
Fire Hydrants on System →	YES NO
Total Water Pumped Last 13 Months (Gallons in Thousands) →	315,033

APPENDIX 3

Schedule B-4

Arizona-American Water Company - Agua Fria District
Comparison of Water Supply Options
White Tanks Regional Water Treatment Plant
Operating Cost Estimate
Prepared by ARICOR Water Solutions
9/12/2005

Annual Operating Cost Estimate				
Constructed Capacity		20.00	MGD	
Plant Utilization Factor		80%		
Annual Average Daily (AAD) Flow		16.00	MGD	
Annual Average Daily (AAD) Flow		5,840,000,000	gallons	
				Arizona American Cost Estimate
Fixed Costs				
Labor				$ 644,741
Vehicle Expense				2,996
Leased Auto				25,656
Telephone and Telemetery				20,662
Misc. Expense				49,324
Safety Supplies				4,250
Misc. Contract Services				96,445
Contract Lab				39,015
Replacements				118,854
Maintenance				106,755
Total Fixed Cost				$ 1,108,699
Variable Costs	Unit Cost per 1,000 gallon			
Treatment Chemicals	$	0.0530	$	309,236
UV Royalty	$	0.0150		87,600
Sludge Chemicals	$	0.0012		7,175
Sludge Hauling	$	0.0128		74,867
Electric Power	$	0.0426		248,525
Total Variable Costs			$	727,403
Management and Overhead Costs				
Contract Operator		15.0%	$	275,415
Maricopa Water District		10.0%		183,610
Total Management and Overhead Costs			$	459,026
Total Estimated Operating Costs			$	2,295,128
Total Cost per 1,000 gallons			$	0.3930

COOPERATIVE SERVICE AGREEMENT

THIS AGREEMENT is made and entered into as of the 18th day of November, 2002 by and between ARIZONA WATER COMPANY, an Arizona corporation, (the "Company"), and Southwest Water Company, a Delaware corporation, ("Southwest").

RECITALS

A. The Company is a public service corporation that owns and operates water systems and provides water service in various cities, towns, and communities located in eight counties in Arizona under and subject to the jurisdiction of the Arizona Corporation Commission (the "Commission").

B. Southwest owns and operates sewer/wastewater treatment facilities and provides sewer/wastewater service in various cities, towns and communities within the U.S. These facilities are operated under and subject to the jurisdiction of various state and local regulatory agencies.

C. The parties are interested in a cooperative arrangement whereby: (1) the Company may invite Southwest to provide all sewer/wastewater service to developments to which the Company intends to provide water service in its existing service areas or in additions to its service areas; and (2) Southwest may invite the Company to provide all water service to developments to which Southwest intends to provide sewer/wastewater service in its existing service areas or in additions to its service areas.

In consideration of the mutual agreements, covenants, promises, representations and understandings contained in this Agreement and other good and valuable consideration, the parties hereto have entered into the following Agreement:

1. Cooperation. The Company and Southwest agree to cooperate as follows:

a. The Company from time to time plans to provide water service to developments within its existing service areas and to additional service areas and may invite Southwest to participate in providing sewer/wastewater service to such developments.

b. Southwest from time to time plans to provide sewer/wastewater service to developments within its existing service areas and to additional service areas and may invite the Company to participate in providing water service to such developments.

c. The parties will notify each other of the invitations to participate in providing service to developments by sending a letter in the form attached as Exhibit A hereto. A party may accept or decline to participate by checking the appropriate box and returning the copy of the letter to the other party within ten (10) days of receipt of the letter.

d. The parties agree to cooperate fully in connection with the planning for their respective services to such developments, including, if necessary, to support each other's efforts to obtain Commission approval for such services and, if necessary, such additional service areas.

2. Covenant not to Compete.

a. The Company will not offer or provide any type of sewer/wastewater service, including, but not limited to, the collection or treatment of wastewater within any of Southwest's service areas or within any area to which Southwest invites the Company to provide water service; and the Company will not solicit or assist any other person or entity to provide sewer/wastewater service in such areas.

b. Southwest will not offer or provide, sell or deliver any type of water service, including, but not limited to, any effluent or reclaimed water service of any type (except wholesale service to the Company) within any of the Company's service areas or within any area which the Company invites Southwest to provide sewer/wastewater service; and Southwest will not solicit or assist any other person or entity to provide water service in such areas.

c. The limitations in paragraphs 2.a. and 2.b., above, shall not apply for any development in which a party has undertaken steps to provide service to such development prior to the date of the invitation to participate.

3. Non-Disclosure.

3.1 a. Each party agrees that it shall not disclose any of the information disclosed, shared, provided by, or obtained from the other party, because any such disclosure will prejudice such other party's ability to successfully conduct its business; and such disclosure will cause irreparable harm. Exceptions to the foregoing include information which:

- at the time of disclosure was readily available to the public;
- becomes readily available to the public, other than through a breach of this Agreement;
- either party can establish was in its possession prior to the date of disclosure of such information; or
- is required to be disclosed in accordance with the order or decree of a court of competent jurisdiction or by applicable law or regulation, provided that both parties agree to give each other adequate advance notice prior to disclosure in order that the affected party may seek a protective order or other appropriate relief.

b. Each party further agrees that the joint or cooperative disclosure of such information in connection with the developments referred to in paragraph 1, above, or with the written consent of the parties, will not violate the terms of this paragraph.

4. Time is of the Essence. The Company and Southwest agree that time is of the essence and that each will diligently perform its obligations hereunder in a timely fashion in accordance with the provisions of this Agreement.

5. Changes or Modifications. The parties hereto may change or modify this Agreement only upon written consent of the parties hereto.

6. Notice Provisions. Written notices to any party to this Agreement concerning this Agreement shall be sent by certified mail or by courier (such as for example by Federal Express), or by hand-delivery addressed as follows:

To the Company:	Arizona Water Company 3805 North Black Canyon Highway Phoenix, Arizona 85015-5351 Post Office Box 29006 Phoenix, Arizona 85038-9006 Attention: President
To Southwest:	Southwest Water Company 225 North Barranca Avenue Suite 200 West Covina, California 91791-1605 Attention: Maurice W. Gallarda, P.E.

or to such other address or addresses as either party may designate by written notice to the other party. Notices shall be deemed given, received and effective on the date of delivery, if hand-delivered or delivered by courier, or two business days after deposit in the U.S. Mail, postage prepaid, if sent by certified mail.

7. Execution in Counterparts. This Agreement may be executed in any number of counterparts and each executed counterpart shall have the same force and effect as an original instrument.

8. Succession. This Agreement shall be binding upon and shall inure to the benefit of the successors and assigns of the parties hereto. Any such assignment requires the non-assigning party's prior written approval, which shall not be unreasonably withheld. As a condition precedent to the non-assigning party's approval of any assignment, the assignee must be acceptable to the non-assigning party, and satisfy the non-assigning party of the assignee's ability to fully perform hereunder and the assignee shall assume any further obligations of the

assigning party hereunder and, upon the non-assigning party's written approval the assigning party shall be released from any further obligation hereunder.

9. Complete Agreement. This instrument contains the entire agreement between the parties with respect to the subject matter contained herein and no amendment or modification shall be binding unless made in the manner provided for in writing and signed by duly authorized representatives of the parties hereto.

10. Headings. Headings on each paragraph or subparagraph are merely for convenience and shall under no circumstances be used to interpret or construe this Agreement.

11. Duration. This Agreement shall remain in effect until terminated by the mutual agreement of the parties hereto.

12. Attorney's Fees. In the event any claim, controversy, or legal action arises out of this Agreement, the prevailing party shall be entitled to recover from the other party in such action all costs, expenses and fees incurred therein by said prevailing party (including such attorney's fees as shall be fixed by the court).

13. Further Instruments. The Company and Southwest agree that they shall execute any further instruments and perform any further acts, which are or may become reasonably necessary to carry out the terms of this Agreement.

14. Waiver. No waiver hereunder, expressed or implied, shall imply any other waiver, at the same or subsequent time, whether of the same obligation or of any other obligation. No waiver hereunder shall be deemed effective unless expressly set forth in writing.

IN WITNESS WHEREOF, each of the parties hereto has caused this instrument to be executed by their respective officers theretofore duly authorized as of the date first written above.

ARIZONA WATER COMPANY,
an Arizona corporation

By: _____
James R. Livingston

Its: President

SOUTHWEST WATER COMPANY,
a Delaware corporation

By: _____
Maurice W. Gallarda

Its: Vice President, New Business

EXHIBIT A

[*sender's letterhead*]

[*name and address of recipient*]

Subject: Notice of Invitation to Participate
in Providing Service to a Proposed Development

Gentlemen:

In accordance with that certain Cooperative Service Agreement dated _____, 2002, [*Arizona Water Company*] [_____] by this letter notifies you of its invitation for you to participate in providing [*sewer/wastewater service*] [*water service*] to the following proposed development:

[*describe development and its location*]

Please indicate whether you accept or decline this invitation to participate in the foregoing development by checking the appropriate box below and signing and returning the copy of this letter. If you accept this invitation to participate in the development, we should meet and discuss how best for our two entities to cooperate in providing our respective services to the development. We will also need to discuss our plans with the developer. If you accept the invitation, we will call you to schedule a meeting to discuss this further in more detail.

Very truly yours,

[*Name and Title*]

RESPONSE TO INVITATION

____ I accept the foregoing invitation to participate
in providing service to the above-described development.

____ I decline the foregoing invitation to participate
in providing service to the above-described development.

[ARIZONA WATER COMPANY]

or

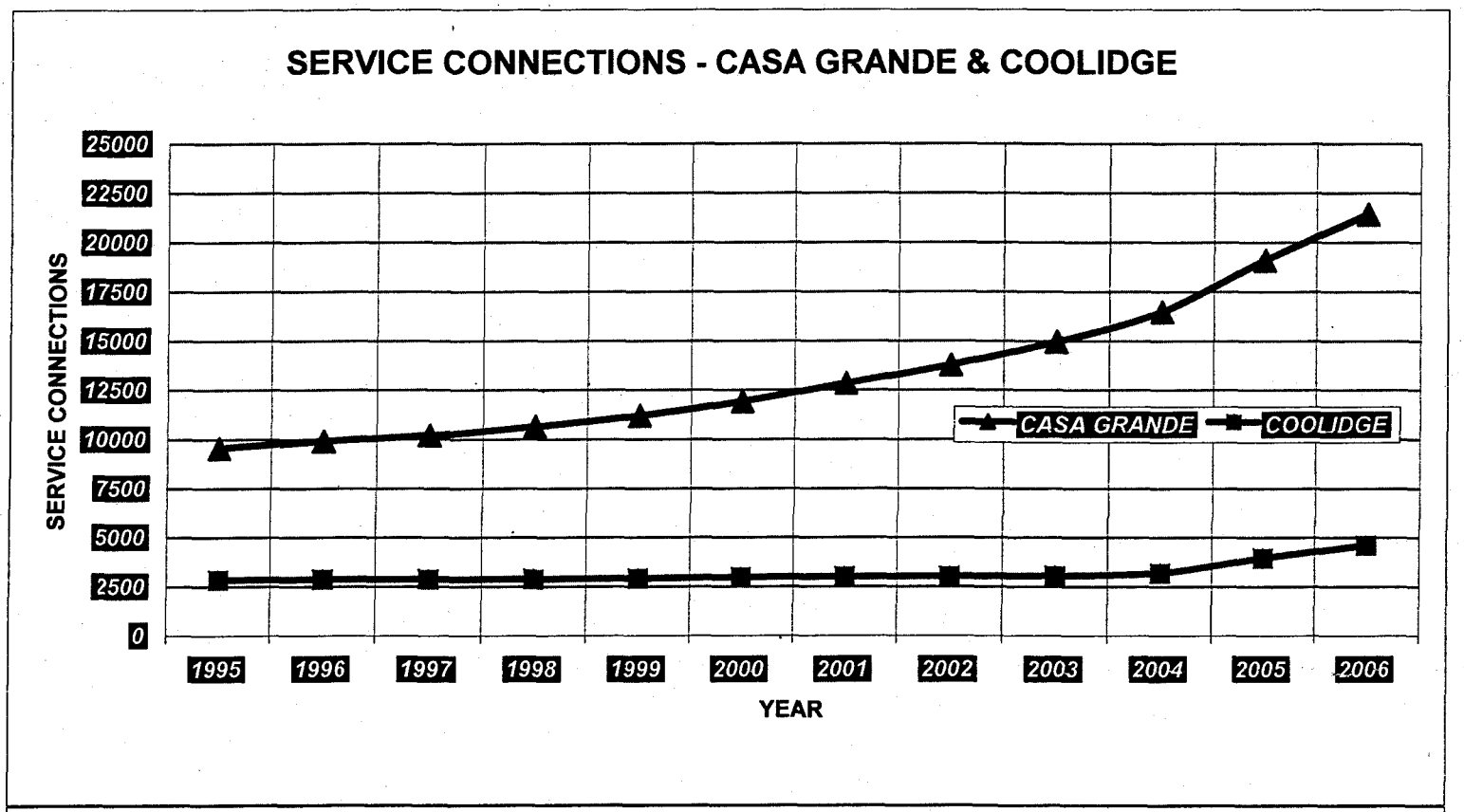
[_____]

By: _____

Name: _____

Title: _____

Date: _____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15000
12500
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CASA GRANDE
COOLIDGE
1995
1996
1997
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2001
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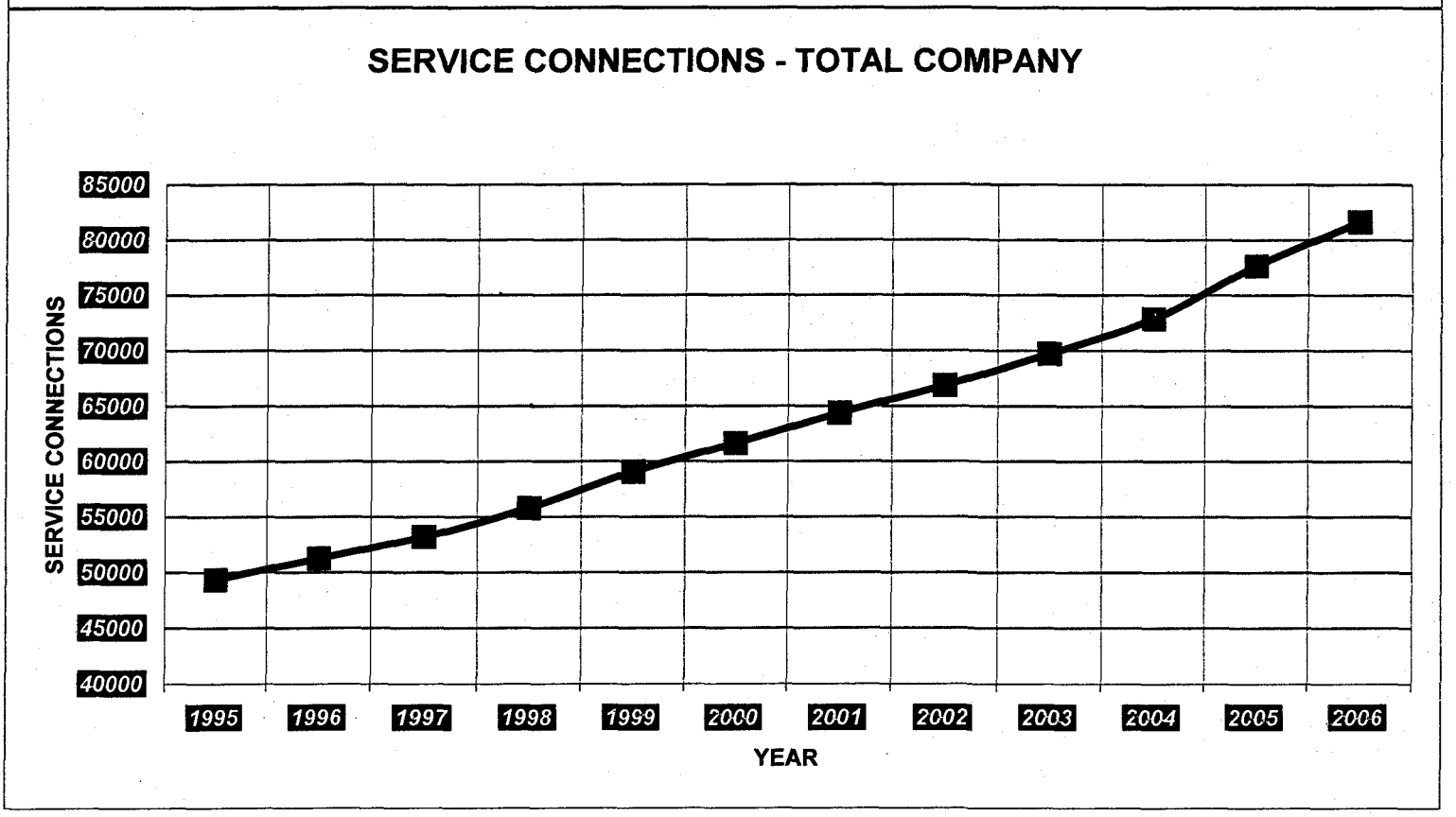
2003
2004
2005
2006
YEAR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SERVICE CONNECTIONS
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40000
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1996
1997
1998
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2000
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2002
2003
2004
2005
2006
YEAR

COMMISSIONERS

Jeff Hatch-Miller, Chairman
William A. Mundell
Mike Gleason
Kristin K. Mayes
Gary Pierce

BEFORE THE ARIZONA CORPORATION COMMISSION

IN THE MATTER OF THE APPLICATION OF ARIZONA WATER COMPANY, AN ARIZONA CORPORATION, TO EXTEND ITS EXISTING CERTIFICATE OF CONVENIENCE AND NECESSITY IN THE CITY OF CASA GRANDE AND IN PINAL COUNTY, ARIZONA.	Docket No. W-01445A-06-0199
IN THE MATTER OF THE APPLICATION OF PALO VERDE UTILITIES COMPANY FOR AN EXTENSION OF ITS EXISTING CERTIFICATE OF CONVENIENCE AND NECESSITY.	Docket No. SW-03575A-05-0926
IN THE MATTER OF THE APPLICATION OF SANTA CRUZ WATER COMPANY FOR AN EXTENSION OF ITS EXISTING CERTIFICATE OF CONVENIENCE AND NECESSITY.	Docket No. W-03576A-05-0926

PRE-FILED DIRECT TESTIMONY OF MICHAEL J. WHITEHEAD

ON BEHALF OF ARIZONA WATER COMPANY

JANUARY 26, 2007

Bryan Cave LLP
Two North Central Avenue, Suite 2200
Phoenix, Arizona 85004-4406
(602) 364-7000

Q. What are your name, employer and occupation?

A. My name is Michael J. Whitehead. I am employed by Arizona Water Company (the "Company") as Vice President – Engineering.

Q. Please describe your work experience, educational background and professional affiliations.

A. I was employed by Arizona Water Company in September 1980 as an engineer. I was promoted to Senior Engineer in 1985, to Engineering Manager in 1989, and in 1996 became Vice President – Engineering. As Vice President - Engineering, I am involved in master planning for the Company and its utility systems, overseeing the planning and development of the Company's systems to meet utility service needs during the next 10 to 25 years. I am also involved in overseeing and preparing the Company's construction budget and sequencing the build out for various projects, as well as the drilling of wells and construction of various facilities.

I completed my college degree at Arizona State University and received a B.S.M.E. I became a Certified Professional Engineer in 1985. I am a member of the American Water Works Association and the Arizona Water Pollution Control Association.

Q. What is the purpose of your testimony?

A. I will discuss how the requested extension area fits into Arizona Water Company's master plan for its water system in the Pinal Valley area, and how Arizona Water Company plans to meet the water utility service needs of the requested extension area.

Bryan Cave LLP
Two North Central Avenue, Suite 2200
Phoenix, Arizona 85004-4406
(602) 364-7000

Q. Will you be sponsoring any exhibits with your direct testimony?

A. Yes. I will be sponsoring the exhibits listed on the attached Exhibit List, with the exhibits themselves following the Exhibit List in tabbed order:

1. Pinal Valley Water System Master Plan
2. Design Report provided in response to Insufficiency Letter

These documents are true and accurate copies of documents from the Company's business records, or were prepared directly by me or our staff.

Q. Please discuss Arizona Water Company's master plan for providing water utility service in the Pinal Valley.

A. Attached to my testimony as Exhibit MJW1 is Arizona Water Company's Pinal Valley Water System Master Plan (the "Master Plan") for the provision of water service to the Pinal Valley, which includes the area at issue in this request for an extension of Arizona Water Company's CCN. The Master Plan shows Arizona Water Company's existing and planned pipelines, treatment plants, storage tanks, wells and booster stations. The various pressure zones are also identified. The Master Plan also shows the planned interconnection of the Casa Grande, Coolidge and Stanfield water systems, and the location of Arizona Water Company's planned surface water treatment plant for Central Arizona Project ("CAP") water. Arizona Water Company has been working on this Master Plan for many years and continues to update and revise the Master Plan as necessary for planning purposes. Arizona Water Company has invested a considerable amount of time and effort because of the Commission's requirement that the Company undertake a comprehensive estimation

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of likely growth in customers in Pinal County and the corresponding need for additions to existing sources of supply, water treatment facilities, storage tanks, distribution pipelines, and other utility plant in that region to assure reliable water sources to those customers.

Q. Please discuss how the requested extension area is an important part of Arizona Water Company's regional planning and its plans to interconnect the Pinal Valley water systems.

A. The Master Plan reflects the natural westward growth of Arizona Water Company's Casa Grande water system. The requested area is contiguous to the existing Casa Grande CCN area. This contrasts with the "leap-frog" and resulting patchwork pattern of growth that Global seems to favor for its Santa Cruz Water Company affiliate. Arizona Water Company has not sought to cherry-pick selected developments. On the contrary, the Company has expanded its Casa Grande water system in a logical and orderly westward direction to ensure that water service can be readily extended when new subdivisions are developed. Unquestionably, water service is needed in this area, as demonstrated by the requests for service. Parcels without current requests for service are nonetheless contiguous to, and are logical extensions of, the existing CCN and the areas for which there are requests for water service.

Second, the requested extension area would allow Arizona Water Company to interconnect its Casa Grande and Stanfield water systems, as development occurs, thereby improving the reliability of both systems. If the requested area were granted to Global rather than Arizona Water Company, the Stanfield water system would continue to be isolated, permanently cut off from the larger Casa Grande water

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system, and permanently deprived of the considerable operating efficiencies and economies of scale that a fully integrated and interconnected water system would provide to the public.

Finally, granting the requested CCN extension area to Arizona Water Company will greatly facilitate the provision of water service to the areas along Highway 387 northwest of the existing Casa Grande water system. This area has poor water resources, both in terms of the quantity and quality of groundwater. Adding the area to Arizona Water Company's CCN will allow the Company to provide service to the area from the much broader array of water resources of its Casa Grande water system. Because of Arizona Water Company's greater resources, the Company will be able to serve the area by blending water, including renewable sources like CAP water treated by the Company's planned treatment plant. In contrast, if the Commission grants the requested CCN extension to Global's Santa Cruz Water Company affiliate, this area would become a patchwork of isolated fragments of CCNs, with each provider forced to rely on the much more limited water resources of the area in the immediate vicinity of those fragmented areas. Clearly the area would benefit from Arizona Water Company naturally expanding its existing Casa Grande water system to ensure that area has access to the reliable, cost effective water service that Arizona Water Company's Casa Grande water system, with its interconnected and fully integrated water services, can offer.

Q. Please explain why, from an engineering perspective, it is better to have an integrated grid rather than separate, small systems that are not interconnected.

A. Creating a regional, fully integrated pipeline grid clearly allows for better water system reliability and efficiency. Each well becomes a back-up for all the other wells, and each storage facility becomes a back-up for the other storage facilities. By

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integrating and interconnecting all of these resources together in a planned regional water system, economies of scale can be achieved that could not be achieved with a number of separate, isolated systems. Moreover, with a large integrated grid, a far greater number and variety of locations are available to drill wells, thereby allowing the Company to be more efficient and selective about drilling where the best water quality and quantity can be produced.

Q. Please discuss Arizona Water Company's plans for construction of its planned surface water treatment plant.

A. Yes. Arizona Water Company plans to construct a surface water treatment plant in Section 18, T.6S, R 9E in the southeastern part of the Pinal Valley Master Plan area. Arizona Water Company plans to place this treatment plant in service by 2012, with an initial water treatment capacity of 10 million gallons per day. This will be expanded when additional supplies become available. Initially, the plant would have sufficient capacity to treat Arizona Water Company's 10,884 acre-feet allocation of CAP water.

Q. Please discuss the drinking water design reports provided with Arizona Water Company's July 7, 2006 response to the insufficiency letter.

A. July is typically the peak month for the Casa Grande water system. In July 2005, the Casa Grande water system had approximately 18,000 customers, and approximately 860 customers were being added per year based on a long-term average. For purposes of the design report, the Company assumed that it would add 8,600 customers every decade and that the requested extension area would also add 8,600 customers every decade, beginning in 2005. Thus, by 2055, the Casa Grande system

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will add approximately 86,000 customers, for a total of approximately 104,000 customers. The Company also assumed the peak day demand would be 1.2 times the average day demand and, for supply planning purposes, that its largest well would be out of service.

Using these assumptions, the Company calculated the total demands, the production, and the storage needed to serve the proposed expansion area, and the costs of designing and constructing the required infrastructure. For example, by 2015, the Company will have added 13,400 gpm of water production capacity, including four new water sources, the largest of which would be treated CAP water. By 2055, the Company will have added 34 new water sources, five new water storage tanks with a total storage capacity of 25 million gallons and 29 more water wells. In addition, the Company will have constructed and expanded its surface water treatment plant and will have expanded and filled out its water transmission main grid with thirty-five miles of additional 16-inch water transmission mains and 65 miles of additional 12-inch water transmission mains.

Q. Has Arizona Water Company calculated the estimated cost of allowing this infrastructure through the year 2055?

A. Yes. The cost of 29 new wells would be $23 million. The cost of construction and possible expansion of its planned surface water treatment plant would be $77 million. The cost of the new water storage tanks would be $12 million. The cost of the expanded grid system would be $28 million. All of these estimates are based on 2005 dollars.

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Q. Please discuss Arizona Water Company's plans to solve any issues related to arsenic treatment that may arise in the proposed expansion area.

A. To date, Arizona Water Company has constructed six arsenic treatment plants in its Casa Grande water system to treat water production from 15 wells. These plants will be placed in service by April 2007.

Arizona Water Company has gained considerable experience constructing and operating arsenic treatment plants and is confident that, if water produced from any well drilled in the expansion area needs to be treated for arsenic, Arizona Water Company can provide the necessary arsenic treatment.

Over the last four years, Arizona Water Company has drilled five new wells in its Casa Grande water system. The five new wells have also provided Arizona Water Company with the opportunity to develop new drilling technologies and specifications to significantly reduce arsenic levels. This experience could result in a reduction in the size and cost of additional arsenic treatment plants and could even eliminate the need for arsenic treatment.

Q. Has Arizona Water Company calculated the costs associated with arsenic treatment for the extension area?

A. No. There are too many uncertainties at this time to calculate the number of arsenic treatment plants that might be needed and the costs associated with that treatment. We would not know the arsenic levels of new wells until they are drilled. However, the Company would maximize the efficiency of its water system operations to keep those costs as low as possible. For example, Arizona Water Company could minimize the need for costly wellhead arsenic treatment by locating new

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groundwater supplies near the planned surface water treatment plant, or near an existing centralized arsenic treatment facility.

Q. How would the utility plant and infrastructure for the extension area be financed if Arizona Water Company is awarded the CCN?

A. Arizona Water Company has its own Company funded construction budget for upgrading its water system to meet increasing customer demands and complying with all applicable regulations. In addition, much of the new utility plant would be financed by developers through advances for construction under the Commission's main extension rule. As subdivisions are built out, and new customers receive service, the initial advances by the developer would be refunded.. This financing method ensures that the Company and its existing customers are shielded from the cost of infrastructure needed to serve new developments in the extension area and that the Company ensures the financial viability of its operations by investing in utility plant. The risk of new development remains with the developer, rather than the Company and its existing customers.

Q. Please discuss the location and capacity of the water storage tanks that will serve the CCN expansion area.

A. The Master Plan shows the anticipated location of the water storage tanks to serve the area. All of these issues are discussed in the design report provided by Arizona Water Company in response to the Staff's insufficiency letter, a copy of which is attached to my testimony as Exhibit MJW2.

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Q. Please discuss other planned and proposed developments in the area, and how Arizona Water Company plans to serve them.

A. The Company has not yet received detailed plans from any of the relevant developers and therefore is not yet in a position to discuss the particular needs of each development. However, the Company is ready to meet with any of the developers who have made requests for service and to respond to all of their water service needs. Based on our knowledge and expertise, and with the aid of our Master Plan, we will be able to develop all necessary plans and cost estimates to serve those developments and complete the construction of facilities needed to serve such developments.

Q. Did Santa Cruz Water Company provide a comparable design report for its proposed extension areas?

A. No, Santa Cruz has not provided any such report, and to our knowledge no such design report exists.

Q. Please discuss Arizona Water Company's plans for provision of water for fire protection in the requested extension area.

A. Arizona Water Company's Casa Grande water system is large enough, with significant, multiple water supply sources, water storage capacity, and mains designed with sufficient flow capacity, that it can readily provide water for fire protection needs within the requested extension area. Small systems often lack the ability to provide water in sufficient quantities and rates of flow for fire protection purposes.

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Q. Does this complete your prepared direct testimony?

A. Yes, it does.

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EXHIBITS

MJW1. Arizona Water Company's Pinal Valley Water System Master Plan

MJW2 Design Report.

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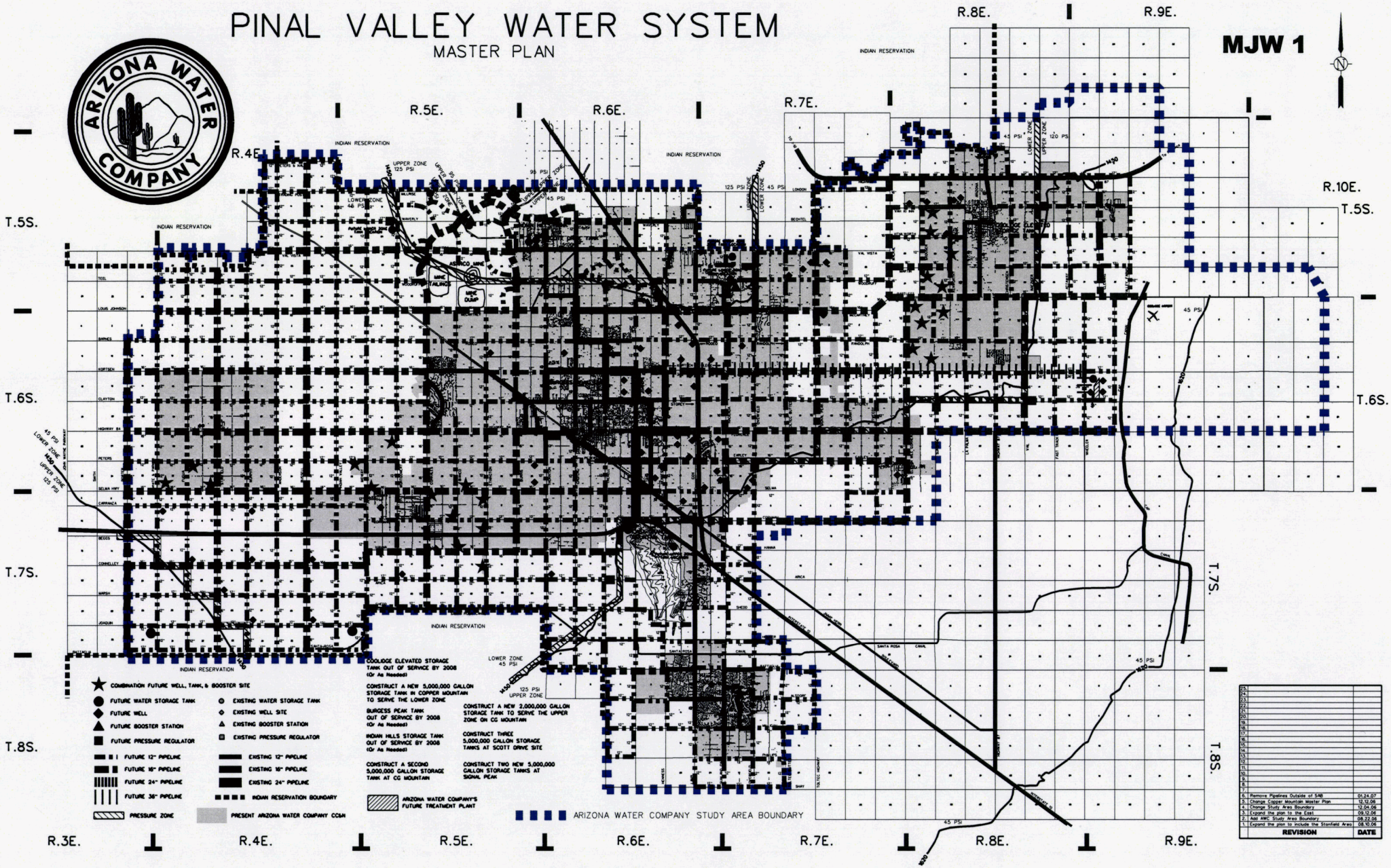
PINAL VALLEY WATER SYSTEM

MASTER PLAN

MJW 1



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6.	Remove Pipelines Outside of SAB	01.24.07
5.	Change Copper Mountain Master Plan	12.12.06
4.	Change Study Area Boundary	12.04.06
3.	Expand the plan to the East	09.12.06
2.	Add AWC Study Area Boundary	08.22.06
1.	Expand the plan to include the Stanfield Area	08.10.06

Design Report
for
Proposed CC&N Extension
Docket No: W-01445A-06-0199
Docket No: SW-03575A-05-0926
Docket No: W-03576A-05-0926

Prepared by:

Arizona Water Company
P.O. Box 29006
Phoenix, AZ 85038-9006

ATTACHMENT A

July 7, 2006

A. Introduction

The area that Arizona Water Company (the "Company") seeks to add by its application to extend its Certificate of Convenience and Necessity (CC&N) is located westerly of the Company's existing Casa Grande CC&N and includes approximately 111 sections of land. That area is shown in Exhibit 2 of the Company's application.

The purpose of this Design Report is to provide an estimate of the projected water demands this area will require and identify the major infrastructure (i.e. tanks, wells, water treatment plants, and transmission lines) required to satisfy the estimated demands.

The CC&N expansion area is a natural extension of the Company's Casa Grande water distribution system. Annual growth rates and daily demands have been estimated based on Casa Grande's historic growth rates and customer demands.

Over the last seven years, Casa Grande has grown at the rate of approximately 860 customers per year. As of July 2005, Casa Grande had 18,006 customers. The July customer count was chosen because July is typically Casa Grande's peak month. Historically, Casa Grande's residential, commercial and industrial customers use an average of 850 gallons per day for the peak month. Although Casa Grande's residential customers use an average of less than 350 gallons per dwelling unit per day, for the purpose of this Design Report the Company will use the more conservative demand estimates of 850 gallons per customer per day which includes the combined estimated maximum daily demand of all customers, including industrial and commercial customers and provides a reserve for fire protection.

B. Infrastructure

The infrastructure needed to serve the expansion area is divided into ten year intervals and is estimated for a period of fifty years. The Company's standard design statement and analysis for calculating required storage and production is detailed in Exhibit 1. The following table lists the required infrastructure.

Year	*Customers added to both Casa Grande & Expansion Area*	*Wells*	*Treatment Plant*	*Tanks (Gallons)*
2015	17,200	3	CAP Treatment Plant	5 Million
2025	17,200	4	Expansion	5 Million
2035	17,200	6	Expansion	5 Million
2045	17,200	6	Expansion	5 Million
2055	17,200	7	Expansion	5 Million
Total	86,000	26	60 MGD	25 Million

The following table provides the estimated cost by decade of the required infrastructure.

Year	*Wells*	*Treatment Plant*	*Tanks*
2005-2015	$2,400,000	$25,000,000	$2,500,000
2015-2025	3,200,000	17,000,000	2,500,000
2025-2035	5,600,000	13,000,000	2,500,000
2035-2045	5,600,000	13,000,000	2,500,000
2045-2055	6,400,000	9,000,000	2,500,000
50 Years	$23,200,000	$77,000,000	$12,500,000

Note: The Unit Cost of a Well is estimated at $800,000 (Based on 2005 Dollars)

Based on a uniform progressive build-out pattern and at densities of four units per acre, approximately 20 miles of 12-inch and larger transmission mains would be constructed every ten years. The installation of transmission mains will be determined by actual development needs. The Company will follow its design criteria and will install 12-inch mains on section lines except on every third section line, the Company will install a 16-inch main. As a result, approximately 7 miles (36,960 ft.) of 16-inch transmission mains and 13 miles (68,640 ft.) of 12-inch transmission mains will be built every 10 years.

The estimated quantities and costs to create an adequate grid distribution system in the CC&N expansion area are:

68,640 ft. of 12-inch D.I.P. & related fitting @ $50/ft. = $ 3,432,000

36,960 ft. of 16-inch D.I.P. & related fitting @ $60/ft. = $ 2,217,600

The pipe line grid distribution system for the CC&N expansion area is shown on the Pinal Valley Water Distribution System Map (Exhibit 2).

The flow model (Exhibit 3) for the Casa Grande system, including the CC&N expansion area assumes that the entire grid system for the expansion area is complete, and the peak demands and production for year 2055 are uniformly distributed. All production sources are placed in known locations or locations that we believe would be most probable based on aquifer characteristics.

The flow model clearly shows that the proposed grid system is adequately sized to serve the entire Casa Grande system, including the proposed CC&N expansion area.

C. Arsenic

The Company will complete construction of the arsenic treatment facilities needed in Casa Grande for its existing water supplies prior to year-end 2006 to comply with EPA's new standard of 10 parts per billion for arsenic.

The Company's experience has shown that wells drilled in or around Casa Grande may require treatment facilities to remove arsenic. No cost estimates have been included for arsenic treatment in the Cost for Infrastructure Table because of this uncertainty. The Company will maximize its system operations by placing groundwater supplies near surface water and centralized treatment facilities, thereby minimizing capital costs and assuring operational efficiency, redundancy and water supply and water quality reliability.

ARIZONA WATER COMPANY

JULY 2005
CASA GRANDE
PINAL COUNTY, ARIZONA

Calculation to determine Average Day Peak Month demand (ADPM)

July was the peak month for 2005 with a total production of 469,839,000 gallons produced over 31 days.

$$\text{ADPM} = \frac{469{,}839{,}000 \text{ gal.}}{31 \text{ days}} = 15{,}156{,}097 \text{ gal./day}$$

In July 2005 Casa Grande had 18006 customers, the average demand per customer for the peak month is:

$$\text{Ave. Demand per customer} = \frac{15{,}156{,}097 \text{ gal./day}}{18{,}006 \text{ customers}} = 850 \text{ gal./day/cust.}$$

The average growth rate for Casa Grande over the last 7 years was 860 cust./yr.

ARIZONA WATER COMPANY

CASA GRANDE

SYSTEM	MONTH (2005)	ADPM AVERAGE DAY PEAK MONTH (gpm)	PEAKING FACTOR	PDPM PEAK DAY PEAK MONTH (gpm)	MAXIMUM PRODUCTION (gpm) LESS ONE WELL	NET GAIN or (LOSS) (gpm)
CG	July	10,525	1.2	12,630	16,630	4,000

Source of Supply	Production (gpm)	Tank Name	Storage (gal)
#9 - Casa Grande	1000	Cottonwood	1,000,000
#10 - Casa Grande	850	Burgess Peak	2,000,000
#14 - Casa Grande	150	Casa Grande Mtn.	5,000,000
#17 - Casa Grande	730	Scott Drive #1	110,000
#19 - Casa Grande	1400	Scott Drive #2	5,000,000
#20 - Casa Grande	1120	North Park	625,000
#21 - Casa Grande	610	North Park	35,000
#23 - Casa Grande	1240		
#24 - Casa Grande	960		
#25 - Casa Grande	1320		
#26 - Casa Grande	1420		
#27 - Casa Grande	450		
#28 - Casa Grande	1620		
#29 - Casa Grande	1380		
#30 - Casa Grande	1000		
#31 - Casa Grande	1500		
#34 - Del Rio	1500		
TOTAL PRODUCTION:	18,250	TOTAL STORAGE:	13,770,000

Out-of-Service

Design Statement for Well Production:

The water distribution system must have sufficient *capacity to meet the demand* of three consecutive peak days with the largest well out of service. Total storage must never fall below 50% while maintaining the three consecutive peak days.

1 ADPM - Average day demand during the peak month as calculated on page 1
2 PDPM - Peak day demand during the peak month - ADPM x Peaking Factor
3 Maximum Production - Total of all wells minus the largest producer.
4 *Net Gain/(Loss) - (3) Maximum Production minus (2) PDPM*

ARIZONA WATER COMPANY

DAY ONE
STORAGE CALCULATIONS
SYSTEM - *Casa Grande*

* MAXIMUM PRODUCTION (gpm) =	16,630
* MAXIMUM PRODUCTION (gph) =	997800
PDPM (gpd) =	12,630
PDPM (gph)=	757,805

TIME	% OF AVERAGE HOUR	THOUSAND GALLONS PER HOUR			STORAGE IN 1,000 GALLONS
		USE	FROM SOURCE	TO STORAGE	
8-9 am	40	303.12	997.8	694.68	13770.00
9-10 am	110	833.59	997.8	164.21	13770.00
10-11 am	135	1023.04	997.8	-25.24	13744.76
11-12 noon	110	833.59	997.8	164.21	13770.00
12-1 am	100	757.80	997.8	240.00	13770.00
1-2 pm	100	757.80	997.8	240.00	13770.00
2-3 pm	110	833.59	997.8	164.21	13770.00
3-4 pm	115	871.48	997.8	126.32	13770.00
4-5 pm	145	1098.82	997.8	-101.02	13668.98
5-6 pm	240	1818.73	997.8	-820.93	12848.05
6-7 pm	285	2159.74	997.8	-1161.94	11686.11
7-8 pm	275	2083.96	997.8	-1086.16	10599.94
8-9 pm	200	1515.61	997.8	-517.81	10082.13
9-10 pm	110	833.59	997.8	164.21	10246.35
10-11 pm	60	454.68	997.8	543.12	10789.47
11-12 mid.	40	303.12	997.8	694.68	11484.14
12-1 am	20	151.56	997.8	846.24	12330.38
1-2 am	10	75.78	997.8	922.02	13252.40
2-3 am	20	151.56	997.8	846.24	13770.00
3-4 am	25	189.45	997.8	808.35	13770.00
4-5 am	35	265.23	997.8	732.57	13770.00
5-6 am	35	265.23	997.8	732.57	13770.00
6-7 am	40	303.12	997.8	694.68	13770.00
7-8 am	40	303.12	997.8	694.68	13770.00
TOTAL	2,400	18,187			

ARIZONA WATER COMPANY

DAY TWO
STORAGE CALCULATIONS
SYSTEM - Casa Grande

* MAXIMUM PRODUCTION (gpd) =	16,630
* MAXIMUM PRODUCTION (gph) =	997,800
PDPM (gpd) =	12,630
PDPM (gph)=	757,805

TIME	% OF AVERAGE HOUR	THOUSAND GALLONS PER HOUR			STORAGE IN 1,000 GALLONS
		USE	FROM SOURCE	TO STORAGE	
8-9 am	40	303.12	997.8	694.68	13770.00
9-10 am	110	833.59	997.8	164.21	13770.00
10-11 am	135	1023.04	997.8	-25.24	13744.76
11-12 noon	110	833.59	997.8	164.21	13770.00
12-1 am	100	757.80	997.8	240.00	13770.00
1-2 pm	100	757.80	997.8	240.00	13770.00
2-3 pm	110	833.59	997.8	164.21	13770.00
3-4 pm	115	871.48	997.8	126.32	13770.00
4-5 pm	145	1098.82	997.8	-101.02	13668.98
5-6 pm	240	1818.73	997.8	-820.93	12848.05
6-7 pm	285	2159.74	997.8	-1161.94	11686.11
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11-12 mid.	40	303.12	997.8	694.68	11484.14
12-1 am	20	151.56	997.8	846.24	12330.38
1-2 am	10	75.78	997.8	922.02	13252.40
2-3 am	20	151.56	997.8	846.24	13770.00
3-4 am	25	189.45	997.8	808.35	13770.00
4-5 am	35	265.23	997.8	732.57	13770.00
5-6 am	35	265.23	997.8	732.57	13770.00
6-7 am	40	303.12	997.8	694.68	13770.00
7-8 am	40	303.12	997.8	694.68	13770.00
TOTAL	2,400	18,187			

ARIZONA WATER COMPANY

DAY THREE
STORAGE CALCULATIONS
SYSTEM - Casa Grande

• MAXIMUM PRODUCTION (gpd) =	16,630
• MAXIMUM PRODUCTION (gph) =	997,800
PDPM (gpd) =	12,630
PDPM (gph)=	757,805

TIME	% OF AVERAGE HOUR	THOUSAND GALLONS PER HOUR			STORAGE IN 1,000 GALLONS
		USE	FROM SOURCE	TO STORAGE	
8-9 am	40	303.12	997.8	694.68	13770.00
9-10 am	110	833.59	997.8	164.21	13770.00
10-11 am	135	1023.04	997.8	-25.24	13744.76
11-12 noon	110	833.59	997.8	164.21	13770.00
12-1 am	100	757.80	997.8	240.00	13770.00
1-2 pm	100	757.80	997.8	240.00	13770.00
2-3 pm	110	833.59	997.8	164.21	13770.00
3-4 pm	115	871.48	997.8	126.32	13770.00
4-5 pm	145	1098.82	997.8	-101.02	13668.98
5-6 pm	240	1818.73	997.8	-820.93	12848.05
6-7 pm	285	2159.74	997.8	-1161.94	11686.11
7-8 pm	275	2083.96	997.8	-1086.16	10599.94
8-9 pm	200	1515.61	997.8	-517.81	10082.13
9-10 pm	110	833.59	997.8	164.21	10246.35
10-11 pm	60	454.68	997.8	543.12	10789.47
11-12 mid.	40	303.12	997.8	694.68	11484.14
12-1 am	20	151.56	997.8	846.24	12330.38
1-2 am	10	75.78	997.8	922.02	13252.40
2-3 am	20	151.56	997.8	846.24	13770.00
3-4 am	25	189.45	997.8	808.35	13770.00
4-5 am	35	265.23	997.8	732.57	13770.00
5-6 am	35	265.23	997.8	732.57	13770.00
6-7 am	40	303.12	997.8	694.68	13770.00
7-8 am	40	303.12	997.8	694.68	13770.00
TOTAL	2,400	18,187			

MINIMUM STORAGE REQUIRED	10,572,866	Gallons
TOTAL STORAGE	13,770,000	Gallons
ADDITIONAL STORAGE REQUIRED	0	Gallons

ARIZONA WATER COMPANY

JULY 2015
CASA GRANDE
PINAL COUNTY, ARIZONA

Calculation to determine Average Day Peak Month demand (ADPM)

Casa Grande (2005)	18,006	Customers
Casa Grande existing CC&N (2005 - 2015) = 860 * 10	8,600	Customers
Casa Grande proposed CC&N Extension (2005 - 2015) = 860 * 10	8,600	Customers
Total Customer Count (2015) =	35,200	Customers

ADPM (2015) = 35,200 * 850 = 29,920,000 gal./day

Assumptions:

1. Casa Grande's growth rate will remain the same.
2. The growth rate for the teritory within the company's CC&N extension will be the same as Casa Grande
3. The demand rate for Casa Grande and the CC&N extension will remain the same.

ARIZONA WATER COMPANY

CASA GRANDE

SYSTEM	MONTH (2015)	ADPM AVERAGE DAY PEAK MONTH (gpm)	PEAKING FACTOR	PDPM PEAK DAY PEAK MONTH (gpm)	MAXIMUM PRODUCTION (gpm) LESS ONE WELL	NET GAIN or (LOSS) (gpm)
CG	July	20,778	1.2	24,933	30,030	5,097

Source of Supply	Production (gpm)	Tank Name	Storage (gal)
#9 - Casa Grande	1000	Cottonwood	1,000,000
#10 - Casa Grande	850	Burgess Peak	2,000,000
#14 - Casa Grande	150	Casa Grande Mtn.	5,000,000
#17 - Casa Grande	730	Scott Drive #1	110,000
#19 - Casa Grande	1400	Scott Drive #2	5,000,000
#20 - Casa Grande	1120	North Park	625,000
#21 - Casa Grande	610	North Park	35,000
#23 - Casa Grande	1240	Signal Peak (2015)	5,000,000
#24 - Casa Grande	960		
#25 - Casa Grande	1320		
#26 - Casa Grande	1420		
#27 - Casa Grande	450		
#28 - Casa Grande	1620		
#29 - Casa Grande	1380		
#30 - Casa Grande	1000		
#31 - Casa Grande	1500		
#34 - Del Rio	1500		
#32 - Mission Royale 1	1500		
#33 - Mission Royale 2	1500		
#35 - Lowes	1500		
CAP	8900		
TOTAL PRODUCTION:	31,650	TOTAL STORAGE:	18,770,000

2015

Out-of-Service

Design Statement for Well Production:

The water distribution system must have sufficient capacity to meet the demand of three consecutive peak days with the largest well out of service.
Total storage must never fall below 50% while maintaining the three consecutive peak days.

1 ADPM - Average day demand during the peak month as calculated on page 1
2 PDPM - Peak day demand during the peak month - ADPM x Peaking Factor
3 Maximum Production - *Total of all wells minus the largest producer.*
4 Net Gain/(Loss) - (3) Maximum Production minus (2) PDPM

ARIZONA WATER COMPANY

DAY ONE
STORAGE CALCULATIONS
SYSTEM - Casa Grande

• MAXIMUM PRODUCTION (gpm) =	30,030
• MAXIMUM PRODUCTION (gph) =	1801800
PDPM (gpd) =	24,933
PDPM (gph)=	1,496,000

TIME	% OF AVERAGE HOUR	THOUSAND GALLONS PER HOUR			STORAGE IN 1,000 GALLONS
		USE	FROM SOURCE	TO STORAGE	
8-9 am	40	598.40	1801.8	1203.40	18770.00
9-10 am	110	1645.60	1801.8	156.20	18770.00
10-11 am	135	2019.60	1801.8	-217.80	18552.20
11-12 noon	110	1645.60	1801.8	156.20	18708.40
12-1 am	100	1496.00	1801.8	305.80	18770.00
1-2 pm	100	1496.00	1801.8	305.80	18770.00
2-3 pm	110	1645.60	1801.8	156.20	18770.00
3-4 pm	115	1720.40	1801.8	81.40	18770.00
4-5 pm	145	2169.20	1801.8	-367.40	18402.60
5-6 pm	240	3590.40	1801.8	-1788.60	16614.00
6-7 pm	285	4263.60	1801.8	-2461.80	14152.20
7-8 pm	275	4114.00	1801.8	-2312.20	11840.00
8-9 pm	200	2992.00	1801.8	-1190.20	10649.80
9-10 pm	110	1645.60	1801.8	156.20	10806.00
10-11 pm	60	897.60	1801.8	904.20	11710.20
11-12 mid.	40	598.40	1801.8	1203.40	12913.60
12-1 am	20	299.20	1801.8	1502.60	14416.20
1-2 am	10	149.60	1801.8	1652.20	16068.40
2-3 am	20	299.20	1801.8	1502.60	17571.00
3-4 am	25	374.00	1801.8	1427.80	18770.00
4-5 am	35	523.60	1801.8	1278.20	18770.00
5-6 am	35	523.60	1801.8	1278.20	18770.00
6-7 am	40	598.40	1801.8	1203.40	18770.00
7-8 am	40	598.40	1801.8	1203.40	18770.00
TOTAL	2,400	35,904			

ARIZONA WATER COMPANY

DAY TWO
STORAGE CALCULATIONS
SYSTEM - Casa Grande

*MAXIMUM PRODUCTION (gpd) =	30,030
*MAXIMUM PRODUCTION (gph) =	1,801,800
PDPM (gpd) =	24,933
PDPM (gph)=	1,496,000

TIME	% OF AVERAGE HOUR	THOUSAND GALLONS PER HOUR			STORAGE IN 1,000 GALLONS
		USE	FROM SOURCE	TO STORAGE	
8-9 am	40	598.40	1801.8	1203.40	18770.00
9-10 am	110	1645.60	1801.8	156.20	18770.00
10-11 am	135	2019.60	1801.8	-217.80	18552.20
11-12 noon	110	1645.60	1801.8	156.20	18708.40
12-1 am	100	1496.00	1801.8	305.80	18770.00
1-2 pm	100	1496.00	1801.8	305.80	18770.00
2-3 pm	110	1645.60	1801.8	156.20	18770.00
3-4 pm	115	1720.40	1801.8	81.40	18770.00
4-5 pm	145	2169.20	1801.8	-367.40	18402.60
5-6 pm	240	3590.40	1801.8	-1788.60	16614.00
6-7 pm	285	4263.60	1801.8	-2461.80	14152.20
7-8 pm	275	4114.00	1801.8	-2312.20	11840.00
8-9 pm	200	2992.00	1801.8	-1190.20	10649.80
9-10 pm	110	1645.60	1801.8	156.20	10806.00
10-11 pm	60	897.60	1801.8	904.20	11710.20
11-12 mid.	40	598.40	1801.8	1203.40	12913.60
12-1 am	20	299.20	1801.8	1502.60	14416.20
1-2 am	10	149.60	1801.8	1652.20	16068.40
2-3 am	20	299.20	1801.8	1502.60	17571.00
3-4 am	25	374.00	1801.8	1427.80	18770.00
4-5 am	35	523.60	1801.8	1278.20	18770.00
5-6 am	35	523.60	1801.8	1278.20	18770.00
6-7 am	40	598.40	1801.8	1203.40	18770.00
7-8 am	40	598.40	1801.8	1203.40	18770.00
TOTAL	2,400	35,904			

ARIZONA WATER COMPANY

DAY THREE
STORAGE CALCULATIONS
SYSTEM - Casa Grande

* MAXIMUM PRODUCTION (gpd) =	30,030
* MAXIMUM PRODUCTION (gph) =	1,801,800
PDPM (gpd) =	24,933
PDPM (gph)=	1,496,000

TIME	% OF AVERAGE HOUR	THOUSAND GALLONS PER HOUR			STORAGE IN 1,000 GALLONS
		USE	FROM SOURCE	TO STORAGE	
8-9 am	40	598.40	1801.8	1203.40	18770.00
9-10 am	110	1645.60	1801.8	156.20	18770.00
10-11 am	135	2019.60	1801.8	-217.80	18552.20
11-12 noon	110	1645.60	1801.8	156.20	18708.40
12-1 am	100	1496.00	1801.8	305.80	18770.00
1-2 pm	100	1496.00	1801.8	305.80	18770.00
2-3 pm	110	1645.60	1801.8	156.20	18770.00
3-4 pm	115	1720.40	1801.8	81.40	18770.00
4-5 pm	145	2169.20	1801.8	-367.40	18402.60
5-6 pm	240	3590.40	1801.8	-1788.60	16614.00
6-7 pm	285	4263.60	1801.8	-2461.80	14152.20
7-8 pm	275	4114.00	1801.8	-2312.20	11840.00
8-9 pm	200	2992.00	1801.8	-1190.20	10649.80
9-10 pm	110	1645.60	1801.8	156.20	10806.00
10-11 pm	60	897.60	1801.8	904.20	11710.20
11-12 mid.	40	598.40	1801.8	1203.40	12913.60
12-1 am	20	299.20	1801.8	1502.60	14416.20
1-2 am	10	149.60	1801.8	1652.20	16068.40
2-3 am	20	299.20	1801.8	1502.60	17571.00
3-4 am	25	374.00	1801.8	1427.80	18770.00
4-5 am	35	523.60	1801.8	1278.20	18770.00
5-6 am	35	523.60	1801.8	1278.20	18770.00
6-7 am	40	598.40	1801.8	1203.40	18770.00
7-8 am	40	598.40	1801.8	1203.40	18770.00
TOTAL	2,400	35,904			

MINIMUM STORAGE REQUIRED	17,505,200	Gallons
TOTAL STORAGE	18,770,000	Gallons
ADDITIONAL STORAGE REQUIRED	0	Gallons

ARIZONA WATER COMPANY

JULY 2025
CASA GRANDE
PINAL COUNTY, ARIZONA

Calculation to determine Average Day Peak Month demand (ADPM)

Casa Grande (2015)	35,200	Customers
Casa Grande existing CC&N (2015 - 2025) = 860 • 10	8,600	Customers
Casa Grande proposed CC&N Extension (2015 - 2025) = 860 • 10	8,600	Customers
Total Customer Count (2025) =	52,400	Customers

ADPM (2025) = 35,200 • 850 = 44,540,000 gal./day

Assumptions:

1. Casa Grande's growth rate will remain the same.
2. The growth rate for the teritory within the company's CC&N extension will be the same as Casa Grande
3. The demand rate for Casa Grande and the CC&N extension will remain the same.

ARIZONA WATER COMPANY

CASA GRANDE

SYSTEM	MONTH (2025)	ADPM AVERAGE DAY PEAK MONTH (gpm)	PEAKING FACTOR	PDPM PEAK DAY PEAK MONTH (gpm)	MAXIMUM PRODUCTION (gpm) LESS ONE WELL	NET GAIN or (LOSS) (gpm)
CG	July	30,931	1.2	37,117	45,030	7,913

Source of Supply	Production (gpm)		Tank Name	Storage (gal)
#9 - Casa Grande	1000		Cottonwood	1,000,000
#10 - Casa Grande	850		Burgess Peak	2,000,000
#14 - Casa Grande	150		*Casa Grande Mtn.*	5,000,000
#17 - Casa Grande	730		Scott Drive #1	110,000
#19 - Casa Grande	1400		Scott Drive #2	5,000,000
#20 - Casa Grande	1120		North Park	625,000
#21 - Casa Grande	610		North Park	35,000
#23 - Casa Grande	1240		*Signal Peak (2015)*	5,000,000
#24 - Casa Grande	960		Scott Drive #3 (2025)	5,000,000
#25 - Casa Grande	1320			
#26 - Casa Grande	1420			
#27 - Casa Grande	450			
#28 - Casa Grande	1620			
#29 - Casa Grande	1380			
#30 - Casa Grande	1000			
#31 - Casa Grande	1500			
#34 - Del Rio	1500			
#32 - Mission Royale 1	1500	2015		
#33 - Mission Royale 2	1500	2015		
#35 - Lowes	1500	2015		
CAP	8900	2015		
#36 - Carlton Commons 1	1500	2025		
#37 - Carlton Commons 2	1500	2025		
#38 - Cox Rd.	1500	2025		
#39 - Pearl Rd.	1500	2025		
Additional Surface Water	*9000*	2025		
TOTAL PRODUCTION:	46,650		**TOTAL STORAGE:**	23,770,000

Out-of-Service

Design Statement for Well Production:

The water distribution system must have sufficient capacity to meet the demand of three consecutive peak days with the largest well out of service. Total storage must never fall below 50% while maintaining the three consecutive peak days.

1 ADPM - Average day demand during the peak month as calculated on page 1
2 PDPM - Peak day demand during the peak month - ADPM x Peaking Factor
3 Maximum Production - Total of all wells minus the largest producer.
4 Net Gain/(Loss) - (3) Maximum Production minus (2) PDPM

ARIZONA WATER COMPANY

DAY ONE
STORAGE CALCULATIONS
SYSTEM - Casa Grande

* MAXIMUM PRODUCTION (gpm) =	45,030
* MAXIMUM PRODUCTION (gph) =	2701800
PDPM (gpd) =	37,117
PDPM (gph)=	2,227,000

TIME	% OF AVERAGE HOUR	THOUSAND GALLONS PER HOUR			STORAGE IN 1,000 GALLONS
		USE	FROM SOURCE	TO STORAGE	
8-9 am	40	890.80	2701.8	1811.00	23770.00
9-10 am	110	2449.70	2701.8	252.10	23770.00
10-11 am	135	3006.45	2701.8	-304.65	23465.35
11-12 noon	110	2449.70	2701.8	252.10	23717.45
12-1 am	100	2227.00	2701.8	474.80	23770.00
1-2 pm	100	2227.00	2701.8	474.80	23770.00
2-3 pm	110	2449.70	2701.8	252.10	23770.00
3-4 pm	115	2561.05	2701.8	140.75	23770.00
4-5 pm	145	3229.15	2701.8	-527.35	23242.65
5-6 pm	240	5344.80	2701.8	-2643.00	20599.65
6-7 pm	285	6346.95	2701.8	-3645.15	16954.50
7-8 pm	275	6124.25	2701.8	-3422.45	13532.05
8-9 pm	200	4454.00	2701.8	-1752.20	11779.85
9-10 pm	110	2449.70	2701.8	252.10	12031.95
10-11 pm	60	1336.20	2701.8	1365.60	13397.55
11-12 mid.	40	890.80	2701.8	1811.00	15208.55
12-1 am	20	445.40	2701.8	2256.40	17464.95
1-2 am	10	222.70	2701.8	2479.10	19944.05
2-3 am	20	445.40	2701.8	2256.40	22200.45
3-4 am	25	556.75	2701.8	2145.05	23770.00
4-5 am	35	779.45	2701.8	1922.35	23770.00
5-6 am	35	779.45	2701.8	1922.35	23770.00
6-7 am	40	890.80	2701.8	1811.00	23770.00
7-8 am	40	890.80	2701.8	1811.00	23770.00
TOTAL	2,400	53,448			

ARIZONA WATER COMPANY

DAY TWO
STORAGE CALCULATIONS
SYSTEM - Casa Grande

* MAXIMUM PRODUCTION (gpd) =	45,030
* MAXIMUM PRODUCTION (gph) =	2,701,800
PDPM (gpd) =	37,117
PDPM (gph)=	2,227,000

TIME	% OF AVERAGE HOUR	THOUSAND GALLONS PER HOUR			STORAGE IN 1,000 GALLONS
		USE	FROM SOURCE	TO STORAGE	
8-9 am	40	890.80	2701.8	1811.00	23770.00
9-10 am	110	2449.70	2701.8	252.10	23770.00
10-11 am	135	3006.45	2701.8	-304.65	23465.35
11-12 noon	110	2449.70	2701.8	252.10	23717.45
12-1 am	100	2227.00	2701.8	474.80	23770.00
1-2 pm	100	2227.00	2701.8	474.80	23770.00
2-3 pm	110	2449.70	2701.8	252.10	23770.00
3-4 pm	115	2561.05	2701.8	140.75	23770.00
4-5 pm	145	3229.15	2701.8	-527.35	23242.65
5-6 pm	240	5344.80	2701.8	-2643.00	20599.65
6-7 pm	285	6346.95	2701.8	-3645.15	16954.50
7-8 pm	275	6124.25	2701.8	-3422.45	13532.05
8-9 pm	200	4454.00	2701.8	-1752.20	11779.85
9-10 pm	110	2449.70	2701.8	252.10	12031.95
10-11 pm	60	1336.20	2701.8	1365.60	13397.55
11-12 mid.	40	890.80	2701.8	1811.00	15208.55
12-1 am	20	445.40	2701.8	2256.40	17464.95
1-2 am	10	222.70	2701.8	2479.10	19944.05
2-3 am	20	445.40	2701.8	2256.40	22200.45
3-4 am	25	556.75	2701.8	2145.05	23770.00
4-5 am	35	779.45	2701.8	1922.35	23770.00
5-6 am	35	779.45	2701.8	1922.35	23770.00
6-7 am	40	890.80	2701.8	1811.00	23770.00
7-8 am	40	890.80	2701.8	1811.00	23770.00
TOTAL	2,400	53,448			

ARIZONA WATER COMPANY

DAY THREE
STORAGE CALCULATIONS
SYSTEM - Casa Grande

* MAXIMUM PRODUCTION (gpd) =	45,030
* MAXIMUM PRODUCTION (gph) =	2,701,800
PDPM (gpd) =	37,117
PDPM (gph)=	2,227,000

TIME	% OF AVERAGE HOUR	THOUSAND GALLONS PER HOUR			STORAGE IN 1,000 GALLONS
		USE	FROM SOURCE	TO STORAGE	
8-9 am	40	890.80	2701.8	1811.00	23770.00
9-10 am	110	2449.70	2701.8	252.10	23770.00
10-11 am	135	3006.45	2701.8	-304.65	23465.35
11-12 noon	110	2449.70	2701.8	252.10	23717.45
12-1 am	100	2227.00	2701.8	474.80	23770.00
1-2 pm	100	2227.00	2701.8	474.80	23770.00
2-3 pm	110	2449.70	2701.8	252.10	23770.00
3-4 pm	115	2561.05	2701.8	140.75	23770.00
4-5 pm	145	3229.15	2701.8	-527.35	23242.65
5-6 pm	240	5344.80	2701.8	-2643.00	20599.65
6-7 pm	285	6346.95	2701.8	-3645.15	16954.50
7-8 pm	275	6124.25	2701.8	-3422.45	13532.05
8-9 pm	200	4454.00	2701.8	-1752.20	11779.85
9-10 pm	110	2449.70	2701.8	252.10	12031.95
10-11 pm	60	1336.20	2701.8	1365.60	13397.55
11-12 mid.	40	890.80	2701.8	1811.00	15208.55
12-1 am	20	445.40	2701.8	2256.40	17464.95
1-2 am	10	222.70	2701.8	2479.10	19944.05
2-3 am	20	445.40	2701.8	2256.40	22200.45
3-4 am	25	556.75	2701.8	2145.05	23770.00
4-5 am	35	779.45	2701.8	1922.35	23770.00
5-6 am	35	779.45	2701.8	1922.35	23770.00
6-7 am	40	890.80	2701.8	1811.00	23770.00
7-8 am	40	890.80	2701.8	1811.00	23770.00
TOTAL	2,400	53,448			

MINIMUM STORAGE REQUIRED	23,875,150 Gallons
TOTAL STORAGE	23,770,000 Gallons
ADDITIONAL STORAGE REQUIRED	105,150 Gallons

ARIZONA WATER COMPANY

JULY 2035
CASA GRANDE
PINAL COUNTY, ARIZONA

Calculation to determine Average Day Peak Month demand (ADPM)

Casa Grande (2025)	52,400	Customers
Casa Grande existing CC&N (2025 - 2035) = 860 * 10	8,600	Customers
Casa Grande proposed CC&N Extension (2025 - 2035) = 860 * 10	8,600	Customers
Total Customer Count (2035) =	69,600	Customers

ADPM (2035) = 35,200 * 850 = 59,160,000 gal./day

Assumptions:

1. Casa Grande's growth rate will remain the same.
2. The growth rate for the teritory within the company's CC&N extension will be the same as Casa Grande
3. The demand rate for Casa Grande and the CC&N extension will remain the same.

ARIZONA WATER COMPANY

CASA GRANDE

SYSTEM	MONTH (2035)	ADPM AVERAGE DAY PEAK MONTH (gpm)	PEAKING FACTOR	PDPM PEAK DAY PEAK MONTH (gpm)	MAXIMUM PRODUCTION (gpm) LESS ONE WELL	NET GAIN or (LOSS) (gpm)
CG	July	41,083	1.2	49,300	61,030	11,730

Source of Supply	Production (gpm)		Tank Name	Storage (gal)
#9 - Casa Grande	1000		Cottonwood	1,000,000
#10 - Casa Grande	850		Burgess Peak	2,000,000
#14 - Casa Grande	150		Casa Grande Mtn.	5,000,000
#17 - Casa Grande	730		Scott Drive #1	110,000
#19 - Casa Grande	1400		Scott Drive #2	5,000,000
#20 - Casa Grande	1120		North Park	625,000
#21 - Casa Grande	610		North Park	35,000
#23 - Casa Grande	1240		Signal Peak (2015)	5,000,000
#24 - Casa Grande	960		Scott Drive #3 (2025)	5,000,000
#25 - Casa Grande	1320		Casa Grande Mtn. (2035)	5,000,000
#26 - Casa Grande	1420			
#27 - Casa Grande	450			
#28 - Casa Grande	1620	Out-of-Service		
#29 - Casa Grande	1380			
#30 - Casa Grande	1000			
#31 - Casa Grande	1500			
#34 - Del Rio	1500	2015		
#32 - Mission Royale 1	1500	2015		
#33 - Mission Royale 2	1500	2015		
#35 - Lowes	1500	2015		
CAP	8900	2015		
#36 - Carlton Commons 1	1500	2025		
#37 - Carlton Commons 2	1500	2025		
#38 - Cox Rd.	1500	2025		
#39 - Pearl Rd.	1500	2025		
Additional Surface Water	9000	2025		
Wells 40 - 46	9000	2035		
Additonal Surface Water	7000	2035		
TOTAL PRODUCTION:	62,650		TOTAL STORAGE:	28,770,000

Design Statement for Well Production:

The water distribution system must have sufficient capacity to meet the demand of three consecutive peak days with the largest well out of service. Total storage must never fall below 50% while maintaining the three consecutive peak days.

1 ADPM - Average day demand during the peak month as calculated on page 1
2 PDPM - Peak day demand during the peak month - ADPM x Peaking Factor
3 Maximum Production - Total of all wells minus the largest producer.
4 Net Gain/(Loss) - (3) Maximum Production minus (2) PDPM

ARIZONA WATER COMPANY

DAY ONE
STORAGE CALCULATIONS
SYSTEM - Casa Grande

• MAXIMUM PRODUCTION (gpm) =	61,030
• MAXIMUM PRODUCTION (gph) =	3661800
PDPM (gpd) =	49,300
PDPM (gph)=	2,958,000

TIME	% OF AVERAGE HOUR	THOUSAND GALLONS PER HOUR			STORAGE IN 1,000 GALLONS
		USE	FROM SOURCE	TO STORAGE	
8-9 am	40	1183.20	3661.8	2478.60	28770.00
9-10 am	110	3253.80	3661.8	408.00	28770.00
10-11 am	135	3993.30	3661.8	-331.50	28438.50
11-12 noon	110	3253.80	3661.8	408.00	28770.00
12-1 am	100	2958.00	3661.8	703.80	28770.00
1-2 pm	100	2958.00	3661.8	703.80	28770.00
2-3 pm	110	3253.80	3661.8	408.00	28770.00
3-4 pm	115	3401.70	3661.8	260.10	28770.00
4-5 pm	145	4289.10	3661.8	-627.30	28142.70
5-6 pm	240	7099.20	3661.8	-3437.40	24705.30
6-7 pm	285	8430.30	3661.8	-4768.50	19936.80
7-8 pm	275	8134.50	3661.8	-4472.70	15464.10
8-9 pm	200	5916.00	3661.8	-2254.20	13209.90
9-10 pm	110	3253.80	3661.8	408.00	13617.90
10-11 pm	60	1774.80	3661.8	1887.00	15504.90
11-12 mid.	40	1183.20	3661.8	2478.60	17983.50
12-1 am	20	591.60	3661.8	3070.20	21053.70
1-2 am	10	295.80	3661.8	3366.00	24419.70
2-3 am	20	591.60	3661.8	3070.20	27489.90
3-4 am	25	739.50	3661.8	2922.30	28770.00
4-5 am	35	1035.30	3661.8	2626.50	28770.00
5-6 am	35	1035.30	3661.8	2626.50	28770.00
6-7 am	40	1183.20	3661.8	2478.60	28770.00
7-8 am	40	1183.20	3661.8	2478.60	28770.00
TOTAL	2,400	70,992			

ARIZONA WATER COMPANY

DAY TWO
STORAGE CALCULATIONS
SYSTEM - Casa Grande

*MAXIMUM PRODUCTION (gpd) =	61,030
*MAXIMUM PRODUCTION (gph) =	3,661,800
PDPM (gpd) =	49,300
PDPM (gph)=	2,958,000

TIME	% OF AVERAGE HOUR	THOUSAND GALLONS PER HOUR			STORAGE IN 1,000 GALLONS
		USE	FROM SOURCE	TO STORAGE	
8-9 am	40	1183.20	3661.8	2478.60	28770.00
9-10 am	110	3253.80	3661.8	408.00	28770.00
10-11 am	135	3993.30	3661.8	-331.50	28438.50
11-12 noon	110	3253.80	3661.8	408.00	28770.00
12-1 am	100	2958.00	3661.8	703.80	28770.00
1-2 pm	100	2958.00	3661.8	703.80	28770.00
2-3 pm	110	3253.80	3661.8	408.00	28770.00
3-4 pm	115	3401.70	3661.8	260.10	28770.00
4-5 pm	145	4289.10	3661.8	-627.30	28142.70
5-6 pm	240	7099.20	3661.8	-3437.40	24705.30
6-7 pm	285	8430.30	3661.8	-4768.50	19936.80
7-8 pm	275	8134.50	3661.8	-4472.70	15464.10
8-9 pm	200	5916.00	3661.8	-2254.20	13209.90
9-10 pm	110	3253.80	3661.8	408.00	13617.90
10-11 pm	60	1774.80	3661.8	1887.00	15504.90
11-12 mid.	40	1183.20	3661.8	2478.60	17983.50
12-1 am	20	591.60	3661.8	3070.20	21053.70
1-2 am	10	295.80	3661.8	3366.00	24419.70
2-3 am	20	591.60	3661.8	3070.20	27489.90
3-4 am	25	739.50	3661.8	2922.30	28770.00
4-5 am	35	1035.30	3661.8	2626.50	28770.00
5-6 am	35	1035.30	3661.8	2626.50	28770.00
6-7 am	40	1183.20	3661.8	2478.60	28770.00
7-8 am	40	1183.20	3661.8	2478.60	28770.00
TOTAL	2,400	70,992			

ARIZONA WATER COMPANY

DAY THREE
STORAGE CALCULATIONS
SYSTEM - Casa Grande

* MAXIMUM PRODUCTION (gpd) =	61,030
* MAXIMUM PRODUCTION (gph) =	3,661,800
PDPM (gpd) =	49,300
PDPM (gph)=	2,958,000

TIME	% OF AVERAGE HOUR	THOUSAND GALLONS PER HOUR			STORAGE IN 1,000 GALLONS
		USE	FROM SOURCE	TO STORAGE	
8-9 am	40	1183.20	3661.8	2478.60	28770.00
9-10 am	110	3253.80	3661.8	408.00	28770.00
10-11 am	135	3993.30	3661.8	-331.50	28438.50
11-12 noon	110	3253.80	3661.8	408.00	28770.00
12-1 am	100	2958.00	3661.8	703.80	28770.00
1-2 pm	100	2958.00	3661.8	703.80	28770.00
2-3 pm	110	3253.80	3661.8	408.00	28770.00
3-4 pm	115	3401.70	3661.8	260.10	28770.00
4-5 pm	145	4289.10	3661.8	-627.30	28142.70
5-6 pm	240	7099.20	3661.8	-3437.40	24705.30
6-7 pm	285	8430.30	3661.8	-4768.50	19936.80
7-8 pm	275	8134.50	3661.8	-4472.70	15464.10
8-9 pm	200	5916.00	3661.8	-2254.20	13209.90
9-10 pm	110	3253.80	3661.8	408.00	13617.90
10-11 pm	60	1774.80	3661.8	1887.00	15504.90
11-12 mid.	40	1183.20	3661.8	2478.60	17983.50
12-1 am	20	591.60	3661.8	3070.20	21053.70
1-2 am	10	295.80	3661.8	3366.00	24419.70
2-3 am	20	591.60	3661.8	3070.20	27489.90
3-4 am	25	739.50	3661.8	2922.30	28770.00
4-5 am	35	1035.30	3661.8	2626.50	28770.00
5-6 am	35	1035.30	3661.8	2626.50	28770.00
6-7 am	40	1183.20	3661.8	2478.60	28770.00
7-8 am	40	1183.20	3661.8	2478.60	28770.00
TOTAL	2,400	70,992			

MINIMUM STORAGE REQUIRED	29,945,100 Gallons
TOTAL STORAGE	28,770,000 Gallons
ADDITIONAL STORAGE REQUIRED	1,175,100 Gallons

ARIZONA WATER COMPANY

JULY 2045
CASA GRANDE
PINAL COUNTY, ARIZONA

Calculation to determine Average Day Peak Month demand (ADPM)

Casa Grande (2035)	69,600	Customers
Casa Grande existing CC&N (2035 - 20045) = 860 * 10	8,600	Customers
Casa Grande proposed CC&N Extension (2035 - 20045) = 860 * 10	8,600	Customers
Total Customer Count (2034) =	86,800	Customers

ADPM (2045) = 35,200 * 850 = 73,780,000 gal./day

Assumptions:

1. Casa Grande's growth rate will remain the same.
2. The growth rate for the teritory within the company's CC&N extension will be the same as Casa Grande
3. The demand rate for Casa Grande and the CC&N extension will remain the same.

ARIZONA WATER COMPANY

CASA GRANDE

SYSTEM	MONTH (2045)	ADPM AVERAGE DAY PEAK MONTH (gpm)	PEAKING FACTOR	PDPM PEAK DAY PEAK MONTH (gpm)	MAXIMUM PRODUCTION (gpm) LESS ONE WELL	NET GAIN or (LOSS) (gpm)
CG	July	51,236	1.2	61,483	77,030	15,547

Source of Supply	Production (gpm)	
#9 - Casa Grande	1000	
#10 - Casa Grande	850	
#14 - Casa Grande	150	
#17 - Casa Grande	730	
#19 - Casa Grande	1400	
#20 - Casa Grande	1120	
#21 - Casa Grande	610	
#23 - Casa Grande	1240	
#24 - Casa Grande	960	
#25 - Casa Grande	1320	
#26 - Casa Grande	1420	
#27 - Casa Grande	450	
#28 - Casa Grande	1620	Out-of-Service
#29 - Casa Grande	1380	
#30 - Casa Grande	1000	
#31 - Casa Grande	1500	
#34 - Del Rio	1500	
#32 - Mission Royale 1	1500	2015
#33 - Mission Royale 2	1500	2015
#35 - Lowes	1500	2015
CAP	8900	2015
#36 - Carlton Commons 1	1500	2025
#37 - Carlton Commons 2	1500	2025
#38 - Cox Rd.	1500	2025
#39 - Peart Rd.	1500	2025
Additional Surface Water	9000	2025
Wells 40 - 46	9000	2035
Additonal Surface Water	7000	2035
Wells 47 - 53	9000	2045
Additional Surface Water	7000	2045
TOTAL PRODUCTION:	78,650	

Tank Name	Storage (gal)
Cottonwood	1,000,000
Burgess Peak	2,000,000
Casa Grande Mtn.	5,000,000
Scott Drive #1	110,000
Scott Drive #2	5,000,000
North Park	625,000
North Park	35,000
Signal Peak (2015)	5,000,000
Scott Drive #3 (2025)	5,000,000
Casa Grande Mtn. (2035)	5,000,000
Copper SW (2045)	5,000,000
TOTAL STORAGE:	33,770,000

Design Statement for Well Production:

The water distribution system must have sufficient capacity to meet the demand of three consecutive peak days with the largest well out of service. Total storage must never fall below 50% while maintaining the three consecutive peak days.

1 ADPM - Average day demand during the peak month as calculated on page 1
2 PDPM - Peak day demand during the peak month - ADPM x Peaking Factor
3 Maximum Production - Total of all wells minus the largest producer.
4 Net Gain/(Loss) - (3) Maximum Production minus (2) PDPM

ARIZONA WATER COMPANY

DAY ONE
STORAGE CALCULATIONS
SYSTEM - Casa Grande

* MAXIMUM PRODUCTION (gpm) =	77,030
* MAXIMUM PRODUCTION (gph) =	4621800
PDPM (gpd) =	61,483
PDPM (gph)=	3,689,000

TIME	% OF AVERAGE HOUR	THOUSAND GALLONS PER HOUR			STORAGE IN 1,000 GALLONS
		USE	FROM SOURCE	TO STORAGE	
8-9 am	40	1475.60	4621.8	3146.20	33770.00
9-10 am	110	4057.90	4621.8	563.90	33770.00
10-11 am	135	4980.15	4621.8	-358.35	33411.65
11-12 noon	110	4057.90	4621.8	563.90	33770.00
12-1 am	100	3689.00	4621.8	932.80	33770.00
1-2 pm	100	3689.00	4621.8	932.80	33770.00
2-3 pm	110	4057.90	4621.8	563.90	33770.00
3-4 pm	115	4242.35	4621.8	379.45	33770.00
4-5 pm	145	5349.05	4621.8	-727.25	33042.75
5-6 pm	240	8853.60	4621.8	-4231.80	28810.95
6-7 pm	285	10513.65	4621.8	-5891.85	22919.10
7-8 pm	275	10144.75	4621.8	-5522.95	17396.15
8-9 pm	200	7378.00	4621.8	-2756.20	14639.95
9-10 pm	110	4057.90	4621.8	563.90	15203.85
10-11 pm	60	2213.40	4621.8	2408.40	17612.25
11-12 mid.	40	1475.60	4621.8	3146.20	20758.45
12-1 am	20	737.80	4621.8	3884.00	24642.45
1-2 am	10	368.90	4621.8	4252.90	28895.35
2-3 am	20	737.80	4621.8	3884.00	32779.35
3-4 am	25	922.25	4621.8	3699.55	33770.00
4-5 am	35	1291.15	4621.8	3330.65	33770.00
5-6 am	35	1291.15	4621.8	3330.65	33770.00
6-7 am	40	1475.60	4621.8	3146.20	33770.00
7-8 am	40	1475.60	4621.8	3146.20	33770.00
TOTAL	2,400	88,536			

ARIZONA WATER COMPANY

DAY TWO
STORAGE CALCULATIONS
SYSTEM - Casa Grande

*MAXIMUM PRODUCTION (gpd) =	77,030
*MAXIMUM PRODUCTION (gph) =	4,621,800
PDPM (gpd) =	61,483
PDPM (gph)=	3,689,000

TIME	% OF AVERAGE HOUR	THOUSAND GALLONS PER HOUR			STORAGE IN 1,000 GALLONS
		USE	FROM SOURCE	TO STORAGE	
8-9 am	40	1475.60	4621.8	3146.20	33770.00
9-10 am	110	4057.90	4621.8	563.90	33770.00
10-11 am	135	4980.15	4621.8	-358.35	33411.65
11-12 noon	110	4057.90	4621.8	563.90	33770.00
12-1 am	100	3689.00	4621.8	932.80	33770.00
1-2 pm	100	3689.00	4621.8	932.80	33770.00
2-3 pm	110	4057.90	4621.8	563.90	33770.00
3-4 pm	115	4242.35	4621.8	379.45	33770.00
4-5 pm	145	5349.05	4621.8	-727.25	33042.75
5-6 pm	240	8853.60	4621.8	-4231.80	28810.95
6-7 pm	285	10513.65	4621.8	-5891.85	22919.10
7-8 pm	275	10144.75	4621.8	-5522.95	17396.15
8-9 pm	200	7378.00	4621.8	-2756.20	14639.95
9-10 pm	110	4057.90	4621.8	563.90	15203.85
10-11 pm	60	2213.40	4621.8	2408.40	17612.25
11-12 mid.	40	1475.60	4621.8	3146.20	20758.45
12-1 am	20	737.80	4621.8	3884.00	24642.45
1-2 am	10	368.90	4621.8	4252.90	28895.35
2-3 am	20	737.80	4621.8	3884.00	32779.35
3-4 am	25	922.25	4621.8	3699.55	33770.00
4-5 am	35	1291.15	4621.8	3330.65	33770.00
5-6 am	35	1291.15	4621.8	3330.65	33770.00
6-7 am	40	1475.60	4621.8	3146.20	33770.00
7-8 am	40	1475.60	4621.8	3146.20	33770.00
TOTAL	2,400	88,536			

ARIZONA WATER COMPANY

DAY THREE
STORAGE CALCULATIONS
SYSTEM - Casa Grande

* MAXIMUM PRODUCTION (gpd) =	77,030
* MAXIMUM PRODUCTION (gph) =	4,621,800
PDPM (gpd) =	61,483
PDPM (gph)=	3,689,000

TIME	% OF AVERAGE HOUR	THOUSAND GALLONS PER HOUR			STORAGE IN 1,000 GALLONS
		USE	FROM SOURCE	TO STORAGE	
8-9 am	40	1475.60	4621.8	3146.20	33770.00
9-10 am	110	4057.90	4621.8	563.90	33770.00
10-11 am	135	4980.15	4621.8	-358.35	33411.65
11-12 noon	110	4057.90	4621.8	563.90	33770.00
12-1 am	100	3689.00	4621.8	932.80	33770.00
1-2 pm	100	3689.00	4621.8	932.80	33770.00
2-3 pm	110	4057.90	4621.8	563.90	33770.00
3-4 pm	115	4242.35	4621.8	379.45	33770.00
4-5 pm	145	5349.05	4621.8	-727.25	33042.75
5-6 pm	240	8853.60	4621.8	-4231.80	28810.95
6-7 pm	285	10513.65	4621.8	-5891.85	22919.10
7-8 pm	275	10144.75	4621.8	-5522.95	17396.15
8-9 pm	200	7378.00	4621.8	-2756.20	14639.95
9-10 pm	110	4057.90	4621.8	563.90	15203.85
10-11 pm	60	2213.40	4621.8	2408.40	17612.25
11-12 mid.	40	1475.60	4621.8	3146.20	20758.45
12-1 am	20	737.80	4621.8	3884.00	24642.45
1-2 am	10	368.90	4621.8	4252.90	28895.35
2-3 am	20	737.80	4621.8	3884.00	32779.35
3-4 am	25	922.25	4621.8	3699.55	33770.00
4-5 am	35	1291.15	4621.8	3330.65	33770.00
5-6 am	35	1291.15	4621.8	3330.65	33770.00
6-7 am	40	1475.60	4621.8	3146.20	33770.00
7-8 am	40	1475.60	4621.8	3146.20	33770.00
TOTAL	2,400	88,536			

MINIMUM STORAGE REQUIRED	36,015,050	Gallons
TOTAL STORAGE	33,770,000	Gallons
ADDITIONAL STORAGE REQUIRED	2,245,050	Gallons

ARIZONA WATER COMPANY

JULY 2055
CASA GRANDE
PINAL COUNTY, ARIZONA

Calculation to determine Average Day Peak Month demand (ADPM)

Casa Grande (2045)	86,800	Customers
Casa Grande existing CC&N (2045 - 2055) = 860 * 10	8,600	Customers
Casa Grande proposed CC&N Extension (2045 - 2055) = 860 * 10	8,600	Customers
Total Customer Count (2055) =	104,000	Customers

ADPM (2055) = 35,200 * 850 = 88,400,000 gal./day

Assumptions:

1. Casa Grande's growth rate will remain the same.
2. The growth rate for the teritory within the company's CC&N extension will be the same as Casa Grande
3. The demand rate for Casa Grande and the CC&N extension will remain the same.

ARIZONA WATER COMPANY

CASA GRANDE

SYSTEM	MONTH (2055)	ADPM AVERAGE DAY PEAK MONTH (gpm)	PEAKING FACTOR	PDPM PEAK DAY PEAK MONTH (gpm)	MAXIMUM PRODUCTION (gpm) LESS ONE WELL	NET GAIN or (LOSS) (gpm)
CG	July	61,389	1.5	92,083	92,530	447

Source of Supply	Production (gpm)		Tank Name	Storage (gal)
#9 - Casa Grande	1000		Cottonwood	1,000,000
#10 - Casa Grande	850		Burgess Peak	2,000,000
#14 - Casa Grande	150		Casa Grande Mtn.	5,000,000
#17 - Casa Grande	730		Scott Drive #1	110,000
#19 - Casa Grande	1400		Scott Drive #2	5,000,000
#20 - Casa Grande	1120		North Park	625,000
#21 - Casa Grande	610		North Park	35,000
#23 - Casa Grande	1240		Signal Peak (2015)	5,000,000
#24 - Casa Grande	960		Scott Drive #3 (2025)	5,000,000
#25 - Casa Grande	1320		Casa Grande Mtn. (2035)	5,000,000
#26 - Casa Grande	1420		Copper SW (2045)	5,000,000
#27 - Casa Grande	450		Section 36 (2055)	5,000,000
#28 - Casa Grande	1620			
#29 - Casa Grande	1380			
#30 - Casa Grande	1000			
#31 - Casa Grande	1500			
#34 - Del Rio	1500			
#32 - Mission Royale 1	1500			
#33 - Mission Royale 2	1500	2015		
#35 - Lowes	1500			
CAP	8900			
#36 - Carlton Commons 1	1500			
#37 - Carlton Commons 2	1500			
#38 - Cox Rd.	1500	2025		
#39 - Peart Rd.	1500			
Additional Surface Water	9000			
Wells 40 - 46	9000			
Additonal Surface Water	7000	2035		
Wells 47 - 53	9000			
Additional Surface Water	7000	2045		
Wells 54 - 61	10500			
Additional Surface Water	5000	2055		
TOTAL PRODUCTION:	94,150		TOTAL STORAGE:	38,770,000

Out-of-Service

Design Statement for Well Production:

The water distribution system must have sufficient capacity to meet the demand of three consecutive peak days with the largest well out of service
Total storage must never fall below 50% while maintaining the three consecutive peak days.

1 ADPM - Average day demand during the peak month as calculated on page 1
2 PDPM - Peak day demand during the peak month - ADPM x Peaking Factor
3 Maximum Production - Total of all wells minus the largest producer.
4 Net Gain/(Loss) - (3) Maximum Production minus (2) PDPM

ARIZONA WATER COMPANY

DAY ONE
STORAGE CALCULATIONS
SYSTEM - Casa Grande

• MAXIMUM PRODUCTION (gpm) =	92,530
• MAXIMUM PRODUCTION (gph) =	5551800
PDPM (gpd) =	92,083
PDPM (gph)=	5,525,000

TIME	% OF AVERAGE HOUR	THOUSAND GALLONS PER HOUR			STORAGE IN 1,000 GALLONS
		USE	FROM SOURCE	TO STORAGE	
8-9 am	40	2210.00	5551.8	3341.80	38770.00
9-10 am	110	6077.50	5551.8	-525.70	38244.30
10-11 am	135	7458.75	5551.8	-1906.95	36337.35
11-12 noon	110	6077.50	5551.8	-525.70	35811.65
12-1 am	100	5525.00	5551.8	26.80	35838.45
1-2 pm	100	5525.00	5551.8	26.80	35865.25
2-3 pm	110	6077.50	5551.8	-525.70	35339.55
3-4 pm	115	6353.75	5551.8	-801.95	34537.60
4-5 pm	145	8011.25	5551.8	-2459.45	32078.15
5-6 pm	240	13260.00	5551.8	-7708.20	24369.95
6-7 pm	285	15746.25	5551.8	-10194.45	14175.50
7-8 pm	275	15193.75	5551.8	-9641.95	4533.55
8-9 pm	200	11050.00	5551.8	-5498.20	-964.65
9-10 pm	110	6077.50	5551.8	-525.70	-1490.35
10-11 pm	60	3315.00	5551.8	2236.80	746.45
11-12 mid.	40	2210.00	5551.8	3341.80	4088.25
12-1 am	20	1105.00	5551.8	4446.80	8535.05
1-2 am	10	552.50	5551.8	4999.30	13534.35
2-3 am	20	1105.00	5551.8	4446.80	17981.15
3-4 am	25	1381.25	5551.8	4170.55	22151.70
4-5 am	35	1933.75	5551.8	3618.05	25769.75
5-6 am	35	1933.75	5551.8	3618.05	29387.80
6-7 am	40	2210.00	5551.8	3341.80	32729.60
7-8 am	40	2210.00	5551.8	3341.80	36071.40
TOTAL	2,400	132,600			

ARIZONA WATER COMPANY

DAY TWO
STORAGE CALCULATIONS
SYSTEM - Casa Grande

* MAXIMUM PRODUCTION (gpd) =	92,530
* MAXIMUM PRODUCTION (gph) =	5,551,800
PDPM (gpd) =	92,083
PDPM (gph)=	5,525,000

TIME	% OF AVERAGE HOUR	THOUSAND GALLONS PER HOUR			STORAGE IN 1,000 GALLONS
		USE	FROM SOURCE	TO STORAGE	
8-9 am	40	2210.00	5551.8	3341.80	38770.00
9-10 am	110	6077.50	5551.8	-525.70	38244.30
10-11 am	135	7458.75	5551.8	-1906.95	36337.35
11-12 noon	110	6077.50	5551.8	-525.70	35811.65
12-1 am	100	5525.00	5551.8	26.80	35838.45
1-2 pm	100	5525.00	5551.8	26.80	35865.25
2-3 pm	110	6077.50	5551.8	-525.70	35339.55
3-4 pm	115	6353.75	5551.8	-801.95	34537.60
4-5 pm	145	8011.25	5551.8	-2459.45	32078.15
5-6 pm	240	13260.00	5551.8	-7708.20	24369.95
6-7 pm	285	15746.25	5551.8	-10194.45	14175.50
7-8 pm	275	15193.75	5551.8	-9641.95	4533.55
8-9 pm	200	11050.00	5551.8	-5498.20	-964.65
9-10 pm	110	6077.50	5551.8	-525.70	-1490.35
10-11 pm	60	3315.00	5551.8	2236.80	746.45
11-12 mid.	40	2210.00	5551.8	3341.80	4088.25
12-1 am	20	1105.00	5551.8	4446.80	8535.05
1-2 am	10	552.50	5551.8	4999.30	13534.35
2-3 am	20	1105.00	5551.8	4446.80	17981.15
3-4 am	25	1381.25	5551.8	4170.55	22151.70
4-5 am	35	1933.75	5551.8	3618.05	25769.75
5-6 am	35	1933.75	5551.8	3618.05	29387.80
6-7 am	40	2210.00	5551.8	3341.80	32729.60
7-8 am	40	2210.00	5551.8	3341.80	36071.40
TOTAL	2,400	132,600			

ARIZONA WATER COMPANY

DAY THREE
STORAGE CALCULATIONS
SYSTEM - Casa Grande

- MAXIMUM PRODUCTION (gpd) = 92,530
- MAXIMUM PRODUCTION (gph) = 5,551,800

PDPM (gpd) = 92,083
PDPM (gph)= 5,525,000

TIME	% OF AVERAGE HOUR	THOUSAND GALLONS PER HOUR			STORAGE IN 1,000 GALLONS
		USE	FROM SOURCE	TO STORAGE	
8-9 am	40	2210.00	5551.8	3341.80	38770.00
9-10 am	110	6077.50	5551.8	-525.70	38244.30
10-11 am	135	7458.75	5551.8	-1906.95	36337.35
11-12 noon	110	6077.50	5551.8	-525.70	35811.65
12-1 am	100	5525.00	5551.8	26.80	35838.45
1-2 pm	100	5525.00	5551.8	26.80	35865.25
2-3 pm	110	6077.50	5551.8	-525.70	35339.55
3-4 pm	115	6353.75	5551.8	-801.95	34537.60
4-5 pm	145	8011.25	5551.8	-2459.45	32078.15
5-6 pm	240	13260.00	5551.8	-7708.20	24369.95
6-7 pm	285	15746.25	5551.8	-10194.45	14175.50
7-8 pm	275	15193.75	5551.8	-9641.95	4533.55
8-9 pm	200	11050.00	5551.8	-5498.20	-964.65
9-10 pm	110	6077.50	5551.8	-525.70	-1490.35
10-11 pm	60	3315.00	5551.8	2236.80	746.45
11-12 mid.	40	2210.00	5551.8	3341.80	4088.25
12-1 am	20	1105.00	5551.8	4446.80	8535.05
1-2 am	10	552.50	5551.8	4999.30	13534.35
2-3 am	20	1105.00	5551.8	4446.80	17981.15
3-4 am	25	1381.25	5551.8	4170.55	22151.70
4-5 am	35	1933.75	5551.8	3618.05	25769.75
5-6 am	35	1933.75	5551.8	3618.05	29387.80
6-7 am	40	2210.00	5551.8	3341.80	32729.60
7-8 am	40	2210.00	5551.8	3341.80	36071.40
TOTAL	2,400	132,600			

MINIMUM STORAGE REQUIRED 40,260,350 Gallons

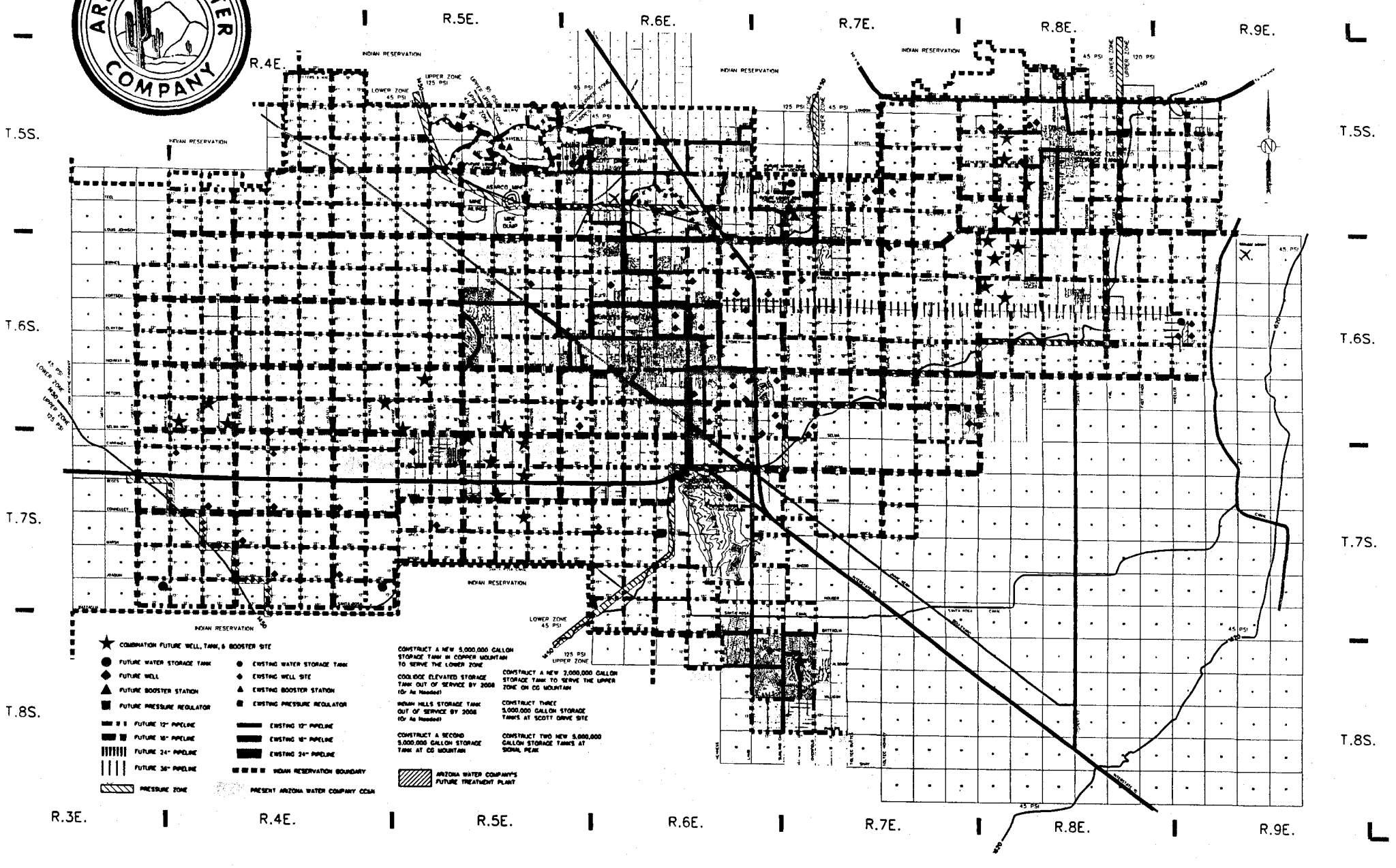
TOTAL STORAGE 38,770,000 Gallons

ADDITIONAL STORAGE REQUIRED 1,490,350 Gallons

PINAL VALLEY WATER SYSTEM

MASTER PLAN

EXHIBIT 2



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*    University of Kentucky Network Modeling Software     *
*                                                         *
*              Copyrighted by KPFS 1998                   *
*             Version 1.200 - 01/26/2000                  *
*                                                         *
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te & Time: Fri Jul 07 15:01:44 2006

INPUT DATA FILENAME ---------- H:\PIPE20~1\CG2055.DT2
TABULATED OUTPUT FILENAME +------- H:\PIPE20~1\CG2055.OT2
POSTPROCESSOR RESULTS FILENAME --- H:\PIPE20~1\CG2055.RS2

S U M M A R Y O F O R I G I N A L D A T A

N I T S S P E C I F I E D

FLOWRATE ..... = gallons/minute
HEAD (HGL) ..... = feet
PRESSURE ..... = psig

R E G U L A T I N G V A L V E D A T A

VALVE LABEL	VALVE TYPE	VALVE SETTING (ft or gpm)
RV-2	PSV	1654.62

I P E L I N E D A T A

STATUS CODE: XX -CLOSED PIPE CV -CHECK VALVE

PIPE NAME	NODE NAMES #1	#2	LENGTH (ft)	DIAMETER (in)	ROUGHNESS COEFF.	MINOR LOSS COEFF.
P-1	Well 19	J-2	281.02	16.00	139.9298	0.00
P-10	J-10	J-12	5223.46	16.00	139.9298	0.00
P-100	J-74	J-17	66.00	12.00	139.9298	0.00
P-101	J-74	J-75	216.32	12.00	139.9298	0.00
P-102	J-75	J-76	47.65	24.00	139.9298	0.00
P-103	J-75	J-77	596.48	24.00	139.9298	0.00
P-104	J-75	J-80	2472.79	12.00	139.9298	0.00
P-105	J-76	J-79	2554.53	24.00	139.9298	0.00
P-106	J-79	J-81	431.37	24.00	139.9298	0.00
P-107	J-44	J-80	79.67	12.00	139.9298	0.00
P-108	J-44	J-79	42.10	12.00	139.9298	0.00
P-109	J-44	J-78	146.83	12.00	139.9298	0.00
P-11	J-6	J-11	2665.96	24.00	139.9298	0.00
P-110	J-78	J-84	76.89	12.00	139.9298	0.00
P-111	J-78	J-83	272.86	12.00	139.9298	0.00
P-112	J-84	J-477	4060.27	12.00	139.9298	0.00
P-113	J-84	J-85	86.02	24.00	139.9298	0.00
P-114	J-63	J-93	700.92	12.00	139.9298	0.00
P-115	J-11	J-86	77.13	12.00	139.9298	0.00
P-116	J-86	J-87	725.16	12.00	139.9298	0.00
P-117	J-86	J-88	1824.45	12.00	139.9298	0.00
P-118	J-11	J-94	873.19	12.00	139.9298	0.00

P-119	J-93	J-94	2451.79	8.00	139.9298	0.00
P-12	J-2	J-13	882.66	12.00	139.9298	0.00
P-120	J-107	J-451	2078.16	16.00	139.9298	0.00
P-121	J-43	J-107	5283.78	12.00	139.9298	0.00
P-122	J-110	J-109	5233.14	16.00	139.9298	0.00
P-124	J-93	J-11	1160.69	12.00	139.9298	0.00
P-127	J-68	J-110	5328.29	12.00	139.9298	0.00
P-128	J-51	J-109	5283.95	12.00	139.9298	0.00
P-129	J-83	J-97	1407.53	12.00	139.9298	0.00
P-13	J-1	J-15	2132.76	8.00	139.9298	0.00
P-130	J-103	J-132	5233.30	16.00	139.9298	0.00
P-131	J-97	J-98	844.57	12.00	139.9298	0.00
P-132	J-98	J-95	582.60	6.00	139.9298	0.00
P-133	J-98	J-102	92.17	12.00	139.9298	0.00
P-134	J-111	J-137	5265.49	16.00	139.9298	0.00
P-135	J-99	J-101	928.43	8.00	139.9298	0.00
P-136	J-102	J-99	94.88	8.00	139.9298	0.00
P-137	J-102	J-127	928.38	12.00	139.9298	0.00
P-138	J-95	J-131	1354.75	6.00	139.9298	0.00
P-139	J-95	J-105	2034.87	8.00	139.9298	0.00
P-14	J-13	J-1	441.59	12.00	139.9298	0.00
P-141	J-112	J-441	4763.25	16.00	139.9298	0.00
P-142	J-114	J-201	5308.13	16.00	139.9298	0.00
P-143	J-72	J-187	5308.87	16.00	139.9298	0.00
P-144	J-178	J-113	4663.06	16.00	139.9298	0.00
P-145	J-172	J-173	5268.86	12.00	139.9298	0.00
P-15	J-15	J-28	1175.55	8.00	139.9298	0.00
P-150	J-117	J-118	5240.21	16.00	139.9298	0.00
P-151	J-117	J-120	5256.42	12.00	139.9298	0.00
P-152	J-118	J-124	5340.95	16.00	139.9298	0.00
P-153	J-119	J-118	5378.32	12.00	139.9298	0.00
P-154	J-120	J-509	5290.99	12.00	139.9298	0.00
P-155	J-119	J-120	5257.41	12.00	139.9298	0.00
P-156	J-111	J-135	2683.04	12.00	139.9298	0.00
P-157	J-122	J-119	5256.86	12.00	139.9298	0.00
P-158	J-121	J-123	2662.34	12.00	139.9298	0.00
P-159	J-121	J-136	5256.86	12.00	139.9298	0.00
P-16	J-15	J-17	1449.18	12.00	139.9298	0.00
P-160	J-124	J-112	5208.84	16.00	139.9298	0.00
P-161	J-123	J-122	2731.46	12.00	139.9298	0.00
P-162	J-123	J-126	5258.19	12.00	139.9298	0.00
P-163	J-126	J-109	5283.09	12.00	139.9298	0.00
P-164	J-126	J-128	5382.67	12.00	139.9298	0.00
P-165	J-132	J-206	5218.91	16.00	139.9298	0.00
P-166	J-128	J-132	5213.94	12.00	139.9298	0.00
P-168	J-135	J-121	2525.81	12.00	139.9298	0.00
P-169	J-128	J-135	5273.76	12.00	139.9298	0.00
P-17	J-82	J-53	2603.80	16.00	139.9298	0.00
P-170	J-128	J-110	5220.50	12.00	139.9298	0.00
P-171	J-136	J-124	5290.99	12.00	139.9298	0.00
P-172	J-127	J-101	87.42	8.00	139.9298	0.00
P-173	J-127	J-129	334.24	12.00	139.9298	0.00
P-174	J-129	J-130	396.39	10.00	139.9298	0.00
P-175	J-129	J-131	579.92	10.00	139.9298	0.00
P-177	J-137	J-112	5286.90	16.00	139.9298	0.00
P-178	J-131	J-160	1273.32	6.00	139.9298	0.00
P-179	J-105	J-106	682.28	8.00	139.9298	0.00
P-18	J-57	J-453	2061.65	12.00	139.9298	0.00
P-180	J-136	J-137	5319.93	12.00	139.9298	0.00
P-181	J-119	J-136	5256.86	12.00	139.9298	0.00
P-182	J-118	J-146	5287.52	12.00	139.9298	0.00
P-183	J-141	J-142	5256.53	16.00	139.9298	0.00
P-184	J-113	J-435	1167.16	16.00	139.9298	0.00
P-186	J-142	J-154	5271.36	12.00	139.9298	0.00
P-187	J-105	J-151	3081.87	8.00	139.9298	0.00
P-188	J-145	J-117	5326.43	16.00	139.9298	0.00
P-19	J-19	J-37	2645.16	12.00	139.9298	0.00
P-190	J-146	J-157	5242.45	12.00	139.9298	0.00
P-191	J-145	J-146	5391.60	12.00	139.9298	0.00
P-193	J-147	J-124	5307.64	12.00	139.9298	0.00
P-195	J-146	J-147	5242.45	12.00	139.9298	0.00
P-196	J-148	J-149	5308.13	16.00	139.9298	0.00

P-197	J-147	J-148	5292.46	12.00	139.9298	0.00
P-198	J-113	J-429	5322.06	8.00	139.9298	0.00
P-199	J-154	J-147	5276.38	12.00	139.9298	0.00
P-2	J-2	J-376	2674.98	16.00	139.9298	0.00
P-20	J-25	J-19	2687.13	12.00	139.9298	0.00
P-200	J-149	J-154	5258.60	12.00	139.9298	0.00
P-201	J-157	J-141	5271.01	12.00	139.9298	0.00
P-202	J-154	J-157	5276.38	12.00	139.9298	0.00
P-203	J-158	J-145	5188.15	16.00	139.9298	0.00
P-206	J-157	J-158	5391.69	12.00	139.9298	0.00
P-207	J-153	J-160	909.60	4.00	139.9298	0.00
P-21	J-20	J-25	5206.36	12.00	139.9298	0.00
P-218	J-160	J-162	494.24	8.00	139.9298	0.00
P-219	J-162	J-161	293.38	6.00	139.9298	0.00
P-22	J-31	J-192	2634.04	12.00	139.9298	0.00
P-220	J-162	J-164	194.44	6.00	139.9298	0.00
P-221	J-164	J-153	1025.41	6.00	139.9298	0.00
P-222	J-164	J-165	151.61	6.00	139.9298	0.00
P-223	J-153	J-163	668.13	6.00	139.9298	0.00
P-224	J-153	J-166	328.73	6.00	139.9298	0.00
P-225	J-88	J-167	782.70	12.00	139.9298	0.00
P-227	J-105	J-170	1001.35	8.00	139.9298	0.00
P-228	J-172	J-142	5213.90	12.00	139.9298	0.00
P-23	J-1	J-24	3070.93	8.00	139.9298	0.00
P-230	J-173	J-434	4756.11	12.00	139.9298	0.00
P-231	J-173	J-174	5268.83	16.00	139.9298	0.00
P-233	J-175	J-172	5347.57	12.00	139.9298	0.00
P-236	J-175	Section 36	6107.51	12.00	139.9298	0.00
P-239	J-178	J-72	2608.21	16.00	139.9298	0.00
P-240	J-151	J-180	2677.88	10.00	139.9298	0.00
P-242	J-180	J-12	58.04	12.00	139.9298	0.00
P-243	J-180	J-181	609.88	12.00	139.9298	0.00
P-244	J-12	J-181	659.93	16.00	139.9298	0.00
P-245	J-181	J-185	74.12	12.00	139.9298	0.00
P-246	J-178	J-188	5284.57	12.00	139.9298	0.00
P-247	J-182	J-35	2610.33	16.00	139.9298	0.00
P-249	J-183	J-182	5239.56	12.00	139.9298	0.00
P-250	J-183	J-431	4666.84	12.00	139.9298	0.00
P-251	J-185	J-167	2006.19	12.00	139.9298	0.00
P-253	J-187	J-199	5292.61	16.00	139.9298	0.00
P-254	J-188	J-183	5325.04	12.00	139.9298	0.00
P-255	J-187	J-188	2618.26	12.00	139.9298	0.00
P-256	J-188	J-429	4648.97	12.00	139.9298	0.00
P-258	J-180	J-317	2624.46	12.00	139.9298	0.00
P-259	J-189	J-191	2529.46	16.00	139.9298	0.00
P-260	J-191	Burgess Pe	762.65	16.00	139.9298	0.00
P-261	J-191	J-326	2754.93	16.00	139.9298	0.00
P-262	J-181	Cottonwood	158.67	24.00	139.9298	0.00
P-263	J-82	CG Tank	468.34	12.00	139.9298	0.00
P-264	J-192	J-82	2646.05	12.00	139.9298	0.00
P-265	CG Tank	J-383	481.57	24.00	139.9298	0.00
P-266	J-193	J-271	3310.65	24.00	139.9298	0.00
P-267	J-193	J-194	3282.06	12.00	139.9298	0.00
P-268	J-194	J-475	2608.03	12.00	139.9298	0.00
P-269	J-195	J-189	5260.31	12.00	139.9298	0.00
P-27	J-20	J-31	5327.73	16.00	139.9298	0.00
P-270	J-212	J-108	185.86	10.00	139.9298	0.00
P-271	J-197	J-10	5270.03	16.00	139.9298	0.00
P-272	J-199	J-35	5344.30	16.00	139.9298	0.00
P-273	J-183	J-199	2617.55	12.00	139.9298	0.00
P-274	J-196	J-472	214.16	10.00	139.9298	0.00
P-275	J-200	J-72	5201.11	16.00	139.9298	0.00
P-276	J-200	J-202	2629.04	12.00	139.9298	0.00
P-277	J-201	J-200	5308.30	16.00	139.9298	0.00
P-278	J-201	J-203	2574.71	12.00	139.9298	0.00
P-279	J-202	J-428	4642.45	12.00	139.9298	0.00
P-280	J-178	J-202	5277.13	12.00	139.9298	0.00
P-281	J-197	J-198	5251.64	12.00	139.9298	0.00
P-282	J-203	J-443	4663.85	12.00	139.9298	0.00
P-283	J-202	J-203	5270.92	12.00	139.9298	0.00
P-284	J-204	J-114	2565.27	16.00	139.9298	0.00
P-285	J-203	J-204	5282.80	12.00	139.9298	0.00

P-286	J-205	J-208	5265.49	16.00	139.9298	0.00
P-287	J-205	J-433	5281.28	12.00	139.9298	0.00
P-288	J-206	J-111	2678.65	16.00	139.9298	0.00
P-289	J-206	J-440	2101.29	12.00	139.9298	0.00
P-29	J-33	J-193	1969.21	24.00	139.9298	0.00
P-290	J-208	J-210	5308.30	16.00	139.9298	0.00
P-291	J-207	J-208	2529.11	12.00	139.9298	0.00
P-292	J-207	J-209	5272.20	12.00	139.9298	0.00
P-293	J-210	J-114	5265.49	16.00	139.9298	0.00
P-294	J-209	J-210	2616.39	12.00	139.9298	0.00
P-295	J-198	J-216	5316.92	16.00	139.9298	0.00
P-296	J-198	J-213	5291.47	16.00	139.9298	0.00
P-297	J-213	J-214	2590.74	16.00	139.9298	0.00
P-298	J-213	J-215	5287.91	16.00	139.9298	0.00
P-299	J-216	J-490	1202.99	16.00	139.9298	0.00
P-3	J-4	J-3	630.56	24.00	139.9298	0.00
P-30	J-31	J-33	18.81	12.00	139.9298	0.00
P-300	J-215	J-216	5275.92	12.00	139.9298	0.00
P-301	J-214	J-506	5255.52	12.00	139.9298	0.00
P-302	J-194	J-269	9275.05	12.00	139.9298	0.00
P-303	J-267	J-14	842.97	12.00	139.9298	0.00
P-304	J-14	Well #28	226.63	12.00	139.9298	0.00
P-305	Tanger Boo	J-267	333.74	12.00	139.9298	0.00
P-306	J-14	Well #34	244.97	12.00	139.9298	0.00
P-307	J-281	J-234	5194.03	16.00	139.9298	0.00
P-308	J-217	J-240	5262.66	16.00	139.9298	0.00
P-309	J-217	J-246	5257.48	16.00	139.9298	0.00
P-310	J-218	J-244	5192.58	16.00	139.9298	0.00
P-311	J-218	J-235	5354.94	16.00	139.9298	0.00
P-312	J-219	J-228	5301.06	16.00	139.9298	0.00
P-313	J-219	J-232	5306.45	16.00	139.9298	0.00
P-314	J-220	J-226	5246.81	16.00	139.9298	0.00
P-315	J-220	J-225	5289.18	16.00	139.9298	0.00
P-316	J-221	J-342	5211.86	16.00	139.9298	0.00
P-317	J-222	J-221	5263.87	16.00	139.9298	0.00
P-318	J-222	J-223	5256.07	12.00	139.9298	0.00
P-319	J-223	J-224	5257.48	12.00	139.9298	0.00
P-32	J-24	J-28	917.56	8.00	139.9298	0.00
P-320	J-223	J-227	5257.48	12.00	139.9298	0.00
P-321	J-226	J-284	5306.25	16.00	139.9298	0.00
P-322	J-225	J-224	5290.69	16.00	139.9298	0.00
P-323	J-227	J-226	5322.41	12.00	139.9298	0.00
P-324	J-225	J-227	5257.59	12.00	139.9298	0.00
P-325	J-227	J-341	5294.06	12.00	139.9298	0.00
P-326	J-223	J-342	5295.67	12.00	139.9298	0.00
P-327	J-226	J-229	5322.40	12.00	139.9298	0.00
P-328	J-228	J-282	5346.82	16.00	139.9298	0.00
P-329	J-229	J-231	5257.88	12.00	139.9298	0.00
P-330	J-337	J-229	5295.65	12.00	139.9298	0.00
P-331	J-230	J-220	5322.39	16.00	139.9298	0.00
P-332	J-229	J-230	5257.48	12.00	139.9298	0.00
P-333	J-231	J-228	5252.37	12.00	139.9298	0.00
P-334	J-339	J-231	5190.09	12.00	139.9298	0.00
P-335	J-232	J-230	5192.58	16.00	139.9298	0.00
P-336	J-231	J-232	5322.79	12.00	139.9298	0.00
P-337	J-228	J-238	5316.02	12.00	139.9298	0.00
P-338	J-234	J-218	5257.88	16.00	139.9298	0.00
P-339	J-233	J-234	5248.85	12.00	139.9298	0.00
P-340	J-328	J-233	5276.00	12.00	139.9298	0.00
P-341	J-235	J-237	5257.59	16.00	139.9298	0.00
P-342	J-233	J-235	5246.10	12.00	139.9298	0.00
P-343	J-236	J-233	5320.88	12.00	139.9298	0.00
P-344	J-329	J-236	5276.20	12.00	139.9298	0.00
P-345	J-237	J-239	5192.98	16.00	139.9298	0.00
P-346	J-236	J-237	5212.26	12.00	139.9298	0.00
P-347	J-238	J-236	5214.46	12.00	139.9298	0.00
P-348	J-330	J-238	5208.49	12.00	139.9298	0.00
P-349	J-239	J-219	5370.92	16.00	139.9298	0.00
P-350	J-238	J-239	5277.30	12.00	139.9298	0.00
P-351	J-234	J-243	5273.74	12.00	139.9298	0.00
P-352	J-240	J-325	5292.45	16.00	139.9298	0.00
P-353	J-241	J-240	5277.35	12.00	139.9298	0.00

P-354	J-321	J-492	3126.06	12.00	139.9298	0.00
P-355	J-242	J-217	5192.58	16.00	139.9298	0.00
P-356	J-241	J-242	5266.12	12.00	139.9298	0.00
P-357	J-243	J-241	5312.94	12.00	139.9298	0.00
P-358	J-322	J-243	5315.35	12.00	139.9298	0.00
P-359	J-244	J-242	5387.30	16.00	139.9298	0.00
P-36	J-28	J-36	856.73	8.00	139.9298	0.00
P-360	J-243	J-244	5237.90	12.00	139.9298	0.00
P-361	J-326	J-245	5270.25	12.00	139.9298	0.00
P-362	J-246	J-213	5304.66	16.00	139.9298	0.00
P-363	J-245	J-246	5287.20	12.00	139.9298	0.00
P-364	J-240	J-245	5258.45	12.00	139.9298	0.00
P-365	J-245	J-491	2659.19	12.00	139.9298	0.00
P-366	J-220	J-357	5260.88	16.00	139.9298	0.00
P-367	J-219	J-358	5272.26	16.00	139.9298	0.00
P-368	J-247	J-260	5273.33	16.00	139.9298	0.00
P-369	J-247	J-261	5248.88	16.00	139.9298	0.00
P-37	J-34	J-20	5205.85	16.00	139.9298	0.00
P-370	J-247	J-348	5292.60	16.00	139.9298	0.00
P-371	J-251	J-255	5287.37	16.00	139.9298	0.00
P-372	J-251	J-510	10566.17	16.00	139.9298	0.00
P-373	J-252	J-254	5273.47	16.00	139.9298	0.00
P-374	J-253	Scott Dr.	1637.80	12.00	139.9298	0.00
P-375	J-252	J-253	5296.63	12.00	139.9298	0.00
P-376	J-267	RV-2	236.00	12.00	139.9298	0.00
P-377-CV	J-269	Tanger Boo	377.64	12.00	139.9298	0.00
P-378	@~RV-2	J-269	585.94	12.00	139.9298	0.00
P-379	J-209	J-204	5278.32	12.00	139.9298	0.00
P-38	J-34	J-39	5296.65	16.00	139.9298	0.00
P-380	J-209	J-445	4700.80	12.00	139.9298	0.00
P-381	J-35	J-290	5243.90	16.00	139.9298	0.00
P-382	J-268	J-31	5280.50	12.00	139.9298	0.00
P-383	J-270	J-318	6117.38	16.00	139.9298	0.00
P-384	J-272	J-274	2368.35	16.00	139.9298	0.00
P-385	J-270	J-268	4062.44	16.00	139.9298	0.00
P-386	J-271	J-81	4861.48	24.00	139.9298	0.00
P-387	J-268	J-271	18.29	16.00	139.9298	0.00
P-388	J-272	J-320	5323.31	12.00	139.9298	0.00
P-389	J-274	J-303	1305.02	16.00	139.9298	0.00
P-39	J-38	J-39	5265.49	12.00	139.9298	0.00
P-390	J-273	J-274	6679.06	12.00	139.9298	0.00
P-391	J-273	J-189	3026.24	12.00	139.9298	0.00
P-392	J-273	J-327	2721.30	12.00	139.9298	0.00
P-393	J-276	J-311	4504.62	16.00	139.9298	0.00
P-394	J-275	J-276	1564.27	12.00	139.9298	0.00
P-395	J-72	J-285	5290.47	16.00	139.9298	0.00
P-396	J-278	J-295	5264.25	16.00	139.9298	0.00
P-397	J-114	J-291	5317.06	16.00	139.9298	0.00
P-398	J-279	J-302	5312.75	16.00	139.9298	0.00
P-399	J-96	J-297	5263.99	16.00	139.9298	0.00
P-4	J-5	J-4	2616.78	16.00	139.9298	0.00
P-400	J-280	J-276	775.83	16.00	139.9298	0.00
P-401	J-277	J-275	9616.88	12.00	139.9298	0.00
P-402	J-280	J-335	5278.91	16.00	139.9298	0.00
P-403	J-281	J-277	982.04	12.00	139.9298	0.00
P-404	J-281	J-328	5280.52	16.00	139.9298	0.00
P-405	J-282	J-331	5211.86	16.00	139.9298	0.00
P-406	J-282	J-339	5246.82	16.00	139.9298	0.00
P-407	J-283	J-286	5280.45	16.00	139.9298	0.00
P-408	J-283	J-343	5293.81	16.00	139.9298	0.00
P-409	J-284	J-336	5260.40	16.00	139.9298	0.00
P-41	J-37	J-38	5297.58	12.00	139.9298	0.00
P-410	J-199	J-289	5280.10	12.00	139.9298	0.00
P-411	J-286	J-287	5312.75	16.00	139.9298	0.00
P-412	J-187	J-288	5279.37	12.00	139.9298	0.00
P-413	J-287	J-278	5280.36	16.00	139.9298	0.00
P-414	J-285	J-278	5233.46	16.00	139.9298	0.00
P-415	J-288	J-287	5252.73	12.00	139.9298	0.00
P-416	J-285	J-288	5310.59	12.00	139.9298	0.00
P-417	J-289	J-286	5243.82	12.00	139.9298	0.00
P-418	J-288	J-289	5286.89	12.00	139.9298	0.00
P-419	J-290	J-283	5312.75	16.00	139.9298	0.00

P-42	J-39	J-71	5308.30	16.00	139.9298	0.00
P-420	J-289	J-290	5279.27	12.00	139.9298	0.00
P-421	J-285	J-294	5277.23	12.00	139.9298	0.00
P-422	J-291	J-279	5282.09	16.00	139.9298	0.00
P-423	J-292	J-291	5288.57	12.00	139.9298	0.00
P-424	J-293	J-279	5264.25	16.00	139.9298	0.00
P-425	J-292	J-293	5336.62	12.00	139.9298	0.00
P-426	J-292	J-201	5294.94	12.00	139.9298	0.00
P-427	J-294	J-292	5245.23	12.00	139.9298	0.00
P-428	J-295	J-293	5280.45	16.00	139.9298	0.00
P-429	J-294	J-295	5248.27	12.00	139.9298	0.00
P-43	J-38	J-89	5265.32	12.00	139.9298	0.00
P-430	J-294	J-200	5308.49	12.00	139.9298	0.00
P-431	J-291	J-301	5304.98	12.00	139.9298	0.00
P-432	J-297	J-280	5260.06	16.00	139.9298	0.00
P-433	J-296	J-280	5296.94	16.00	139.9298	0.00
P-434	J-298	J-297	5279.28	12.00	139.9298	0.00
P-435	J-296	J-500	943.11	12.00	139.9298	0.00
P-436	J-298	J-205	5257.27	12.00	139.9298	0.00
P-437	J-299	J-298	5287.98	12.00	139.9298	0.00
P-438	J-208	J-299	5300.16	12.00	139.9298	0.00
P-439	J-300	J-296	5247.96	16.00	139.9298	0.00
P-44	J-36	J-42	947.94	8.00	139.9298	0.00
P-440	J-299	J-300	5331.45	12.00	139.9298	0.00
P-441	J-301	J-499	3436.65	12.00	139.9298	0.00
P-442	J-210	J-301	5257.32	12.00	139.9298	0.00
P-443	J-302	J-300	5264.25	16.00	139.9298	0.00
P-444	J-301	J-302	5299.05	12.00	139.9298	0.00
P-445	J-303	J-211	5280.45	16.00	139.9298	0.00
P-446	J-303	J-304	5306.85	12.00	139.9298	0.00
P-447	J-305	J-272	1623.17	16.00	139.9298	0.00
P-448	J-305	J-306	5281.72	16.00	139.9298	0.00
P-449	J-297	J-310	5302.00	12.00	139.9298	0.00
P-45	J-46	J-96	5222.69	16.00	139.9298	0.00
P-450	J-306	J-71	5231.79	16.00	139.9298	0.00
P-451	J-307	J-305	5280.35	16.00	139.9298	0.00
P-452	J-308	J-306	5266.79	12.00	139.9298	0.00
P-453	J-307	J-308	5246.46	12.00	139.9298	0.00
P-454	J-309	J-497	3689.38	16.00	139.9298	0.00
P-455	J-308	J-309	5309.86	12.00	139.9298	0.00
P-456	J-310	J-308	5239.74	12.00	139.9298	0.00
P-457	J-46	J-310	5326.24	12.00	139.9298	0.00
P-458	J-311	J-307	5264.15	16.00	139.9298	0.00
P-459	J-310	J-311	5273.15	12.00	139.9298	0.00
P-46	J-46	J-43	5222.51	12.00	139.9298	0.00
P-460	J-312	J-43	5329.53	12.00	139.9298	0.00
P-461	J-62	J-455	2063.88	12.00	139.9298	0.00
P-462	J-312	J-496	4000.44	12.00	139.9298	0.00
P-464	J-313	J-421	2112.78	12.00	139.9298	0.00
P-465	J-20	J-315	5258.68	12.00	139.9298	0.00
P-466	J-315	J-270	1210.82	12.00	139.9298	0.00
P-467	J-315	J-316	5282.47	12.00	139.9298	0.00
P-468	J-316	J-34	5297.73	12.00	139.9298	0.00
P-469	J-316	J-211	5202.59	12.00	139.9298	0.00
P-47	J-43	J-450	2093.47	12.00	139.9298	0.00
P-470	J-34	J-37	5247.83	12.00	139.9298	0.00
P-471	J-304	J-39	5249.47	12.00	139.9298	0.00
P-472	J-306	J-304	5307.84	12.00	139.9298	0.00
P-473	J-304	J-316	5278.39	12.00	139.9298	0.00
P-474	J-317	J-195	2658.69	12.00	139.9298	0.00
P-475	J-317	J-319	5330.48	12.00	139.9298	0.00
P-476	J-318	J-211	2231.85	16.00	139.9298	0.00
P-477	J-319	J-318	1645.24	12.00	139.9298	0.00
P-478	J-320	J-273	372.28	12.00	139.9298	0.00
P-479	J-320	J-507	1835.50	12.00	139.9298	0.00
P-48	J-48	J-70	2583.97	12.00	139.9298	0.00
P-480	J-322	J-281	5314.36	12.00	139.9298	0.00
P-481	J-321	J-322	5262.73	12.00	139.9298	0.00
P-482	J-323	J-324	5279.86	12.00	139.9298	0.00
P-483	J-321	J-323	5360.30	12.00	139.9298	0.00
P-484	J-323	J-307	5246.36	12.00	139.9298	0.00
P-485	J-324	J-322	5230.55	12.00	139.9298	0.00

P-486	J-311	J-324	5342.33	12.00	139.9298	0.00
P-487	J-321	J-325	5268.00	12.00	139.9298	0.00
P-488	J-326	J-197	5281.86	16.00	139.9298	0.00
P-489	J-325	J-326	5286.05	12.00	139.9298	0.00
P-49	J-48	J-62	5308.59	16.00	139.9298	0.00
P-490	J-327	J-321	6504.61	12.00	139.9298	0.00
P-491	J-325	J-327	3734.33	12.00	139.9298	0.00
P-492	J-328	J-329	5347.23	16.00	139.9298	0.00
P-493	J-328	J-334	5278.44	12.00	139.9298	0.00
P-494	J-329	J-330	5212.30	16.00	139.9298	0.00
P-495	J-329	J-333	5278.87	12.00	139.9298	0.00
P-496	J-330	J-282	5281.28	16.00	139.9298	0.00
P-497	J-330	J-332	5346.13	12.00	139.9298	0.00
P-498	J-331	J-279	5293.24	16.00	139.9298	0.00
P-499	J-332	J-302	5294.45	12.00	139.9298	0.00
P-5	J-3	J-7	2019.75	12.00	139.9298	0.00
P-50	J-18	J-49	2673.21	16.00	139.9298	0.00
P-500	J-331	J-332	5279.50	12.00	139.9298	0.00
P-501	J-333	J-300	5261.98	12.00	139.9298	0.00
P-502	J-332	J-333	5278.99	12.00	139.9298	0.00
P-503	J-334	J-296	5261.96	12.00	139.9298	0.00
P-504	J-333	J-334	5278.99	12.00	139.9298	0.00
P-505	J-335	J-277	4446.39	16.00	139.9298	0.00
P-506	J-334	J-335	5301.08	12.00	139.9298	0.00
P-507	J-331	J-340	5206.70	12.00	139.9298	0.00
P-508	J-336	J-278	5345.83	16.00	139.9298	0.00
P-509	J-337	J-284	5279.54	16.00	139.9298	0.00
P-51	J-50	J-18	2592.34	16.00	139.9298	0.00
P-510	J-338	J-336	5347.63	12.00	139.9298	0.00
P-511	J-337	J-338	5278.45	12.00	139.9298	0.00
P-512	J-338	J-295	5294.35	12.00	139.9298	0.00
P-513	J-339	J-337	5279.70	16.00	139.9298	0.00
P-514	J-340	J-338	5327.20	12.00	139.9298	0.00
P-515	J-339	J-340	5367.14	12.00	139.9298	0.00
P-516	J-340	J-293	5214.26	12.00	139.9298	0.00
P-517	J-341	J-284	5347.23	16.00	139.9298	0.00
P-518	J-341	J-345	5230.58	12.00	139.9298	0.00
P-519	J-342	J-341	5279.54	16.00	139.9298	0.00
P-52	J-40	J-41	1016.48	12.00	139.9298	0.00
P-520	J-342	J-344	5230.58	12.00	139.9298	0.00
P-521	J-343	J-221	5280.81	16.00	139.9298	0.00
P-522	J-344	J-286	5374.73	12.00	139.9298	0.00
P-523	J-343	J-344	5364.89	12.00	139.9298	0.00
P-524	J-345	J-287	5365.95	12.00	139.9298	0.00
P-525	J-344	J-345	5278.99	12.00	139.9298	0.00
P-526	J-345	J-336	5234.45	12.00	139.9298	0.00
P-527	J-254	J-217	5299.60	16.00	139.9298	0.00
P-528	J-254	J-257	5311.96	12.00	139.9298	0.00
P-529	J-255	J-218	5338.14	16.00	139.9298	0.00
P-53	J-42	J-40	658.77	12.00	139.9298	0.00
P-530	J-142	Well #90	895.51	12.00	139.9298	0.00
P-531	J-157	Well #89	1185.21	12.00	139.9298	0.00
P-532	J-173	Well #91	1211.74	12.00	139.9298	0.00
P-533	J-257	J-242	5261.33	12.00	139.9298	0.00
P-534	J-258	J-253	5241.38	12.00	139.9298	0.00
P-535	J-254	J-258	5214.30	12.00	139.9298	0.00
P-536	J-250	J-264	5281.30	12.00	139.9298	0.00
P-537	J-259	J-249	5251.03	12.00	139.9298	0.00
P-538	J-259	J-262	2597.84	12.00	139.9298	0.00
P-539	J-261	J-265	5312.38	16.00	139.9298	0.00
P-54	J-50	J-58	5222.51	12.00	139.9298	0.00
P-540	J-260	J-249	2700.53	16.00	139.9298	0.00
P-541	J-262	J-261	5357.55	12.00	139.9298	0.00
P-542	J-260	J-262	5288.56	12.00	139.9298	0.00
P-543	J-262	J-263	5270.97	12.00	139.9298	0.00
P-544	J-264	J-513	2636.29	12.00	139.9298	0.00
P-545	J-263	J-264	5308.21	12.00	139.9298	0.00
P-546	J-265	J-250	5287.37	16.00	139.9298	0.00
P-547	J-263	J-265	5205.13	12.00	139.9298	0.00
P-548	J-250	J-512	5297.55	12.00	139.9298	0.00
P-549	J-266	J-265	5298.24	12.00	139.9298	0.00
P-55	J-41	J-44	928.81	12.00	139.9298	0.00

P-550	J-266	J-350	5326.90	12.00	139.9298	0.00
P-551	J-347	J-251	5331.21	16.00	139.9298	0.00
P-552	J-346	J-347	5275.34	12.00	139.9298	0.00
P-553	J-346	J-351	5270.57	12.00	139.9298	0.00
P-554	J-348	J-352	5273.47	16.00	139.9298	0.00
P-555	J-349	J-261	5202.29	12.00	139.9298	0.00
P-556	J-348	J-349	5237.07	12.00	139.9298	0.00
P-557	J-349	J-266	5270.47	12.00	139.9298	0.00
P-558	J-82	J-383	19.63	12.00	139.9298	0.00
P-559	J-351	J-349	5345.86	12.00	139.9298	0.00
P-560	J-350	J-351	5232.79	12.00	139.9298	0.00
P-561	J-352	J-347	5273.33	16.00	139.9298	0.00
P-562	J-351	J-352	5312.99	12.00	139.9298	0.00
P-563	J-353	J-259	5270.43	12.00	139.9298	0.00
P-564	J-263	J-353	2673.13	12.00	139.9298	0.00
P-565	J-224	J-355	5272.51	12.00	139.9298	0.00
P-566	J-354	J-248	5270.99	12.00	139.9298	0.00
P-567	J-354	J-356	2630.79	12.00	139.9298	0.00
P-568	J-355	J-515	2698.24	12.00	139.9298	0.00
P-569	J-356	J-225	5307.74	12.00	139.9298	0.00
P-57	J-49	J-52	2696.87	16.00	139.9298	0.00
P-570	J-355	J-356	5295.41	12.00	139.9298	0.00
P-571	J-357	J-248	2656.19	16.00	139.9298	0.00
P-572	J-356	J-357	5309.64	12.00	139.9298	0.00
P-573	J-248	J-359	5285.95	12.00	139.9298	0.00
P-574	J-230	J-361	5306.44	12.00	139.9298	0.00
P-575	J-359	J-514	2630.79	12.00	139.9298	0.00
P-576	J-260	J-360	5305.07	12.00	139.9298	0.00
P-577	J-358	J-247	5311.83	16.00	139.9298	0.00
P-578	J-360	J-232	5306.49	12.00	139.9298	0.00
P-579	J-358	J-360	5241.15	12.00	139.9298	0.00
P-580	J-361	J-359	2597.12	12.00	139.9298	0.00
P-581	J-360	J-361	5295.30	12.00	139.9298	0.00
P-582	J-361	J-357	5264.50	12.00	139.9298	0.00
P-583	J-358	J-364	5290.51	12.00	139.9298	0.00
P-584	J-362	J-255	5319.16	12.00	139.9298	0.00
P-585	J-235	J-362	5269.97	12.00	139.9298	0.00
P-586	J-362	J-347	5347.90	12.00	139.9298	0.00
P-587	J-363	J-362	5261.69	12.00	139.9298	0.00
P-588	J-352	J-363	5314.13	12.00	139.9298	0.00
P-589	J-363	J-237	5337.44	12.00	139.9298	0.00
P-59	J-53	J-25	2640.40	12.00	139.9298	0.00
P-590	J-364	J-363	5261.58	12.00	139.9298	0.00
P-591	J-239	J-364	5273.28	12.00	139.9298	0.00
P-592	J-364	J-348	5352.60	12.00	139.9298	0.00
P-593	J-215	J-370	5269.21	16.00	139.9298	0.00
P-594	J-314	J-391	2658.10	16.00	139.9298	0.00
P-595	J-314	Well #81	1000.90	12.00	139.9298	0.00
P-596	J-314	Well #80	933.68	12.00	139.9298	0.00
P-597	J-366	J-493	1978.45	16.00	139.9298	0.00
P-598	J-369	J-4	5295.75	16.00	139.9298	0.00
P-599	J-369	J-371	5295.52	12.00	139.9298	0.00
P-6	J-7	J-8	2632.12	12.00	139.9298	0.00
P-60	J-53	J-52	5256.25	16.00	139.9298	0.00
P-600	J-370	J-366	5307.81	16.00	139.9298	0.00
P-601	J-371	J-216	5265.05	12.00	139.9298	0.00
P-602	J-370	J-371	5342.73	12.00	139.9298	0.00
P-603	J-371	J-489	1195.16	12.00	139.9298	0.00
P-604	J-4	J-488	2618.88	36.00	140.0000	0.00
P-605	J-214	J-505	2715.38	12.00	139.9298	0.00
P-606	J-372	J-215	5263.87	12.00	139.9298	0.00
P-607	J-372	J-374	5283.99	12.00	139.9298	0.00
P-608	J-374	J-370	5241.41	12.00	139.9298	0.00
P-609	J-374	J-366	9050.99	12.00	139.9298	0.00
P-61	J-54	J-49	5308.30	12.00	139.9298	0.00
P-610	J-369	J-375	5025.04	12.00	139.9298	0.00
P-611	J-376	J-5	2686.10	16.00	139.9298	0.00
P-612	J-376	J-377	5110.89	12.00	139.9298	0.00
P-613	J-77	J-378	2065.62	24.00	139.9298	0.00
P-614	J-378	J-480	2395.91	24.00	139.9298	0.00
P-615	J-378	J-13	1704.35	12.00	139.9298	0.00
P-616	J-379	J-465	1458.62	16.00	139.9298	0.00

P-617	J-378	J-481	2190.50	12.00	139.9298	0.00
P-618	J-381	J-479	4065.57	12.00	139.9298	0.00
P-619	J-381	J-385	5308.88	12.00	139.9298	0.00
P-62	J-54	J-502	5247.13	12.00	139.9298	0.00
P-620	J-383	J-33	5281.31	24.00	139.9298	0.00
P-621	J-384	J-383	5254.93	12.00	139.9298	0.00
P-622	J-384	J-269	4993.18	12.00	139.9298	0.00
P-623	J-385	J-384	5285.15	12.00	139.9298	0.00
P-624	J-385	J-474	2675.75	12.00	139.9298	0.00
P-625	J-366	J-468	5361.18	16.00	139.9298	0.00
P-626	J-388	J-404	5304.10	36.00	140.0000	0.00
P-627	J-387	J-402	5261.52	16.00	139.9298	0.00
P-628	J-387	J-392	5312.04	16.00	139.9298	0.00
P-629	J-389	J-373	5211.59	36.00	140.0000	0.00
P-63	J-55	J-54	5308.16	12.00	139.9298	0.00
P-630	J-390	J-399	5254.55	16.00	139.9298	0.00
P-631	J-390	J-397	5254.55	16.00	139.9298	0.00
P-632	J-392	J-471	2614.94	16.00	139.9298	0.00
P-633	J-391	J-393	5262.53	12.00	139.9298	0.00
P-634	J-393	J-504	5250.75	12.00	139.9298	0.00
P-635	J-393	J-396	5296.21	12.00	139.9298	0.00
P-636	J-395	J-390	5254.55	16.00	139.9298	0.00
P-637	J-394	J-392	5285.98	12.00	139.9298	0.00
P-638	J-396	J-395	5285.82	12.00	139.9298	0.00
P-639	J-394	J-396	5296.16	12.00	139.9298	0.00
P-64	J-55	J-59	5222.51	12.00	139.9298	0.00
P-640	J-397	J-314	2656.70	16.00	139.9298	0.00
P-641	J-396	J-368	3682.48	12.00	139.9298	0.00
P-642	J-391	J-503	5272.54	12.00	139.9298	0.00
P-643	J-398	J-373	5254.96	12.00	139.9298	0.00
P-644	J-399	J-389	5309.44	16.00	139.9298	0.00
P-645	J-398	J-399	5297.67	12.00	139.9298	0.00
P-646	J-400	J-398	5305.71	12.00	139.9298	0.00
P-647	J-400	J-390	5297.37	12.00	139.9298	0.00
P-648	J-401	J-400	5266.27	12.00	139.9298	0.00
P-649	J-401	J-397	5336.97	12.00	139.9298	0.00
P-65	J-57	J-50	5277.53	16.00	139.9298	0.00
P-650	J-399	J-406	5254.71	12.00	139.9298	0.00
P-651	J-402	J-388	5287.72	16.00	139.9298	0.00
P-652	J-403	J-486	2601.83	12.00	139.9298	0.00
P-653	J-392	J-403	5272.12	12.00	139.9298	0.00
P-654	J-404	J-405	5304.10	36.00	140.0000	0.00
P-655	J-403	J-404	5291.72	12.00	139.9298	0.00
P-656	J-405	J-389	5304.10	36.00	140.0000	0.00
P-657	J-406	J-403	5305.86	12.00	139.9298	0.00
P-658	J-405	J-406	5331.30	12.00	139.9298	0.00
P-659	J-395	J-406	5232.27	12.00	139.9298	0.00
P-66	J-56	J-57	5297.51	12.00	139.9298	0.00
P-660	J-389	J-411	5285.69	16.00	139.9298	0.00
P-661	J-407	J-415	5270.52	16.00	139.9298	0.00
P-662	J-407	J-427	2068.49	12.00	139.9298	0.00
P-663	J-409	J-407	5211.96	16.00	139.9298	0.00
P-664	J-409	J-416	5329.40	12.00	139.9298	0.00
P-665	J-410	J-409	5329.08	16.00	139.9298	0.00
P-666	J-410	J-417	5270.52	12.00	139.9298	0.00
P-667	J-411	J-418	5270.84	16.00	139.9298	0.00
P-668	J-412	J-405	5227.90	12.00	139.9298	0.00
P-669	J-411	J-412	5387.96	12.00	139.9298	0.00
P-67	J-58	J-54	5308.30	12.00	139.9298	0.00
P-670	J-413	J-404	5227.12	12.00	139.9298	0.00
P-671	J-412	J-413	5211.96	12.00	139.9298	0.00
P-672	J-414	J-388	5227.24	16.00	139.9298	0.00
P-673	J-413	J-414	5270.52	12.00	139.9298	0.00
P-674	J-415	J-414	5329.08	16.00	139.9298	0.00
P-675	J-416	J-413	5270.52	12.00	139.9298	0.00
P-676	J-415	J-416	5270.84	12.00	139.9298	0.00
P-677	J-417	J-412	5329.40	12.00	139.9298	0.00
P-678	J-416	J-417	5270.84	12.00	139.9298	0.00
P-679	J-418	J-422	5270.52	16.00	139.9298	0.00
P-68	J-56	J-58	5273.04	12.00	139.9298	0.00
P-680	J-417	J-418	5270.52	12.00	139.9298	0.00
P-681	J-418	J-420	5270.52	12.00	139.9298	0.00

P-682	J-419	J-373	5298.41	12.00	139.9298	0.00
P-683	J-419	J-411	5231.09	12.00	139.9298	0.00
P-684	J-420	J-419	5254.99	12.00	139.9298	0.00
P-685	J-380	Well #29	313.21	12.00	139.9298	0.00
P-686	J-422	J-410	5270.52	16.00	139.9298	0.00
P-687	J-407	J-313	3157.74	12.00	139.9298	0.00
P-688	J-380	J-424	326.52	12.00	139.9298	0.00
P-689	J-386	J-473	803.18	12.00	139.9298	0.00
P-69	J-59	J-60	5308.30	12.00	139.9298	0.00
P-690	J-424	J-408	3550.61	12.00	139.9298	0.00
P-691	J-424	J-423	3213.71	12.00	139.9298	0.00
P-692	J-423	J-470	1387.59	12.00	139.9298	0.00
P-693	J-423	J-427	2829.26	12.00	139.9298	0.00
P-694	J-427	J-408	2395.13	12.00	139.9298	0.00
P-696	J-387	Signal Pea	5312.60	16.00	139.9298	0.00
P-697	Signal Pea	J-394	5292.91	12.00	139.9298	0.00
P-698	J-251	Copper SW	855.65	24.00	139.9298	0.00
P-699	J-415	J-463	2840.65	12.00	139.9298	0.00
P-7	J-8	J-484	2064.89	24.00	139.9298	0.00
P-70	J-58	J-59	5351.36	12.00	139.9298	0.00
P-700	J-447	J-132	2190.14	12.00	139.9298	0.00
P-701	J-428	J-113	5223.87	8.00	139.9298	0.00
P-702	J-430	J-182	4683.94	16.00	139.9298	0.00
P-703	J-431	J-429	5307.39	8.00	139.9298	0.00
P-704	J-430	J-431	5243.97	8.00	139.9298	0.00
P-705	J-174	J-432	4745.87	12.00	139.9298	0.00
P-706	J-437	J-142	5274.11	16.00	139.9298	0.00
P-707	J-313	Well #35	606.49	12.00	139.9298	0.00
P-709	J-434	J-432	5362.37	8.00	139.9298	0.00
P-71	J-60	J-56	5331.85	12.00	139.9298	0.00
P-710	J-435	J-437	4764.99	16.00	139.9298	0.00
P-711	J-435	J-434	5282.32	8.00	139.9298	0.00
P-712	J-436	J-149	4749.29	12.00	139.9298	0.00
P-713	J-436	J-435	5247.93	8.00	139.9298	0.00
P-714	J-173	J-437	5280.76	16.00	139.9298	0.00
P-715	J-437	J-149	5250.43	16.00	139.9298	0.00
P-716	J-433	J-452	2041.55	12.00	139.9298	0.00
P-717	J-107	J-498	1651.64	12.00	139.9298	0.00
P-718	J-438	J-207	2709.85	12.00	139.9298	0.00
P-719	J-433	J-438	5300.23	12.00	139.9298	0.00
P-72	J-60	J-64	5308.30	12.00	139.9298	0.00
P-720	J-439	J-137	4738.45	12.00	139.9298	0.00
P-721	J-440	J-447	5271.76	8.00	139.9298	0.00
P-722	J-439	J-440	5314.81	8.00	139.9298	0.00
P-723	J-441	J-444	1140.37	16.00	139.9298	0.00
P-724	J-439	J-441	5271.01	8.00	139.9298	0.00
P-725	J-442	J-148	4727.69	12.00	139.9298	0.00
P-726	J-441	J-442	5284.53	8.00	139.9298	0.00
P-727	J-442	J-436	5283.01	8.00	139.9298	0.00
P-728	J-448	J-103	2119.91	16.00	139.9298	0.00
P-729	J-428	J-443	5335.28	8.00	139.9298	0.00
P-73	J-62	J-61	5265.49	16.00	139.9298	0.00
P-730	J-444	J-204	4688.63	16.00	139.9298	0.00
P-731	J-443	J-444	5263.14	8.00	139.9298	0.00
P-732	J-447	J-448	5260.13	8.00	139.9298	0.00
P-733	J-444	J-445	5255.89	8.00	139.9298	0.00
P-734	J-446	J-438	2093.34	12.00	139.9298	0.00
P-735	J-445	J-446	5319.25	8.00	139.9298	0.00
P-736	J-449	J-48	2141.47	12.00	139.9298	0.00
P-737	J-448	J-449	5270.77	8.00	139.9298	0.00
P-738	J-37	J-459	2122.78	12.00	139.9298	0.00
P-739	J-451	J-448	1079.25	16.00	139.9298	0.00
P-74	J-61	J-57	5274.55	16.00	139.9298	0.00
P-740	J-450	J-451	5322.79	8.00	139.9298	0.00
P-741	J-38	J-454	2094.08	12.00	139.9298	0.00
P-742	J-451	J-452	5238.73	8.00	139.9298	0.00
P-743	J-452	J-446	5265.99	8.00	139.9298	0.00
P-744	J-402	J-461	4974.80	12.00	139.9298	0.00
P-745	J-449	J-455	5285.03	8.00	139.9298	0.00
P-746	J-456	J-61	2078.53	16.00	139.9298	0.00
P-747	J-455	J-456	5297.40	8.00	139.9298	0.00
P-748	J-457	J-312	2097.42	12.00	139.9298	0.00

P-749	J-450	J-457	5299.68	8.00	139.9298	0.00
P-75	J-61	J-66	5222.51	12.00	139.9298	0.00
P-750	J-458	J-456	1098.86	16.00	139.9298	0.00
P-751	J-457	J-458	5229.82	8.00	139.9298	0.00
P-752	J-458	J-454	5279.70	8.00	139.9298	0.00
P-753	J-459	J-460	1124.64	12.00	139.9298	0.00
P-754	J-454	J-459	5280.56	8.00	139.9298	0.00
P-755	J-460	J-50	2074.67	12.00	139.9298	0.00
P-756	J-460	J-453	5270.22	8.00	139.9298	0.00
P-757	J-453	J-456	5265.86	8.00	139.9298	0.00
P-758	J-414	J-462	5020.44	12.00	139.9298	0.00
P-759	J-463	J-470	1516.86	12.00	139.9298	0.00
P-76	J-65	J-495	2659.20	12.00	139.9298	0.00
P-760	J-463	J-464	2159.18	12.00	139.9298	0.00
P-761	J-465	J-478	2050.47	16.00	139.9298	0.00
P-762	J-465	J-377	5274.56	8.00	139.9298	0.00
P-763	J-464	J-462	5274.09	8.00	139.9298	0.00
P-764	J-466	J-487	1053.11	36.00	140.0000	0.00
P-765	J-462	J-466	5287.30	8.00	139.9298	0.00
P-766	J-467	J-466	497.49	36.00	140.0000	0.00
P-767	J-377	J-483	2654.22	8.00	139.9298	0.00
P-768	J-467	J-375	5297.26	8.00	139.9298	0.00
P-769	J-466	J-461	5314.09	8.00	139.9298	0.00
P-77	J-64	J-67	5308.82	12.00	139.9298	0.00
P-770	J-468	J-387	5197.10	16.00	139.9298	0.00
P-771	J-461	J-468	5273.54	12.00	139.9298	0.00
P-773	J-427	Well #32	1276.66	12.00	139.9298	0.00
P-775	J-470	Well #33	245.92	12.00	140.0000	0.00
P-776	J-73	J-376	2639.46	12.00	139.9298	0.00
P-777	J-73	Well #31	828.44	12.00	139.9298	0.00
P-778	J-471	J-395	2639.61	16.00	139.9298	0.00
P-779	J-471	Well #27	510.07	8.00	139.9298	0.00
P-78	J-66	J-65	5308.82	12.00	139.9298	0.00
P-780	J-373	CAP Plant	20.00	36.00	140.0000	0.00
P-781	J-368	J-397	1572.16	12.00	139.9298	0.00
P-782	J-473	J-421	4741.43	12.00	139.9298	0.00
P-783	J-473	Well #36	591,64	12.00	139.9298	0.00
P-784	J-474	J-386	2346.46	12.00	139.9298	0.00
P-785	J-474	Well #37	1113.57	12.00	139.9298	0.00
P-786	J-475	J-476	2655.18	12.00	139.9298	0.00
P-787	J-475	Well #38	705.47	12.00	139.9298	0.00
P-788	J-381	Well #39	577.77	12.00	139.9298	0.00
P-789	J-476	J-76	5284.64	12.00	139.9298	0.00
P-79	J-64	J-66	5350.93	12.00	139.9298	0.00
P-790	J-271	J-476	2639.13	12.00	139.9298	0.00
P-791	J-476	J-381	2628.28	12.00	139.9298	0.00
P-792	J-477	J-268	1236.57	12.00	139.9298	0.00
P-793	J-477	Well #40	508.98	12.00	139.9298	0.00
P-794	J-478	J-380	381.07	16.00	139.9298	0.00
P-795	J-478	Well #41	242.56	12.00	139.9298	0.00
P-796	J-479	J-382	762.39	12.00	139.9298	0.00
P-797	J-479	Well #42	394.09	12.00	139.9298	0.00
P-798	J-480	J-379	1206.39	24.00	139.9298	0.00
P-799	J-480	Well #43	729.49	12.00	139.9298	0.00
P-8	J-8	J-485	1706.51	24.00	139.9298	0.00
P-80	J-66	J-56	5276.52	12.00	139.9298	0.00
P-800	J-481	J-381	3080.32	12.00	139.9298	0.00
P-801	J-481	Well #62	982.44	12.00	139.9298	0.00
P-802	J-482	J-467	560.43	36.00	140.0000	0.00
P-803	J-482	Well #63	704.34	12.00	140.0000	0.00
P-804	J-483	J-467	2626.70	8.00	139.9298	0.00
P-805	J-483	Well #64	501.19	12.00	139.9298	0.00
P-806	J-484	J-6	520.43	24.00	139.9298	0.00
P-807	J-484	Well #65	692.90	12.00	139.9298	0.00
P-808	J-88	Well #66	1162.63	12.00	139.9298	0.00
P-809	J-485	J-10	3585.82	24.00	139.9298	0.00
P-81	J-67	J-65	5179.70	12.00	139.9298	0.00
P-810	J-485	Well #67	781.16	12.00	139.9298	0.00
P-811	J-486	J-402	2654.85	12.00	139.9298	0.00
P-812	J-486	Well #68	580.83	12.00	139.9298	0.00
P-813	J-487	J-388	3928.71	36.00	140.0000	0.00
P-814	J-487	Well #69	829.01	12.00	140.0000	0.00

P-815	J-488	J-482	1881.25	36.00	140.0000	0.00
P-816	J-488	Well #70	983.45	12.00	140.0000	0.00
P-817	J-375	Well #71	758.86	12.00	140.0000	0.00
P-818	J-489	J-8	4064.26	12.00	139.9298	0.00
P-819	J-489	Well #72	754.97	12.00	139.9298	0.00
P-82	J-67	J-51	5268.53	12.00	139.9298	0.00
P-820	J-490	J-9	3837.48	16.00	139.9298	0.00
P-821	J-490	Well #73	797.76	12.00	139.9298	0.00
P-822	J-491	J-198	2607.68	12.00	139.9298	0.00
P-823	J-491	Well #74	1503.03	12.00	139.9298	0.00
P-824	J-492	J-241	2127.35	12.00	139.9298	0.00
P-825	J-492	Well #75	702.54	12.00	139.9298	0.00
P-826	J-493	J-369	3268.74	16.00	139.9298	0.00
P-827	J-493	Well #76	2169.39	12.00	139.9298	0.00
P-828	J-83	Well #77	735.64	12.00	139.9298	0.00
P-83	J-68	J-51	5265.32	12.00	139.9298	0.00
P-830	J-103	Well #58	548.04	12.00	139.9298	0.00
P-831	J-494	J-48	3858.09	16.00	139.9298	0.00
P-832	J-494	Well #59	362.11	12.00	139.9298	0.00
P-833	J-48	Well #60	472.13	12.00	139.9298	0.00
P-834	J-495	J-62	2691.88	12.00	139.9298	0.00
P-835	J-495	Well #61	658.02	12.00	139.9298	0.00
P-836	J-457	Well #57	544.40	12.00	139.9298	0.00
P-837	J-496	J-309	1265.05	12.00	139.9298	0.00
P-838	J-496	Well #56	729.63	12.00	139.9298	0.00
P-839	J-497	J-46	1597.52	16.00	139.9298	0.00
P-84	J-65	J-68	5269.23	12.00	139.9298	0.00
P-840	J-497	Well #55	451.09	12.00	139.9298	0.00
P-841	J-43	Well #54	809.54	12.00	139.9298	0.00
P-842	J-96	Well #53	777.43	12.00	139.9298	0.00
P-843	J-498	J-433	3588.30	12.00	139.9298	0.00
P-844	J-498	Well #51	567.42	12.00	139.9298	0.00
P-845	J-207	Well #50	1844.59	12.00	139.9298	0.00
P-846	J-107	Well #52	802.57	12.00	139.9298	0.00
P-847	J-208	Well #49	880.79	12.00	139.9298	0.00
P-848	J-499	J-299	1817.93	12.00	139.9298	0.00
P-849	J-499	Well #48	999.00	12.00	139.9298	0.00
P-85	J-70	J-68	2611.19	12.00	139.9298	0.00
P-850	J-500	J-298	4388.40	12.00	139.9298	0.00
P-851	J-500	Well #47	1094.11	12.00	139.9298	0.00
P-852	J-199	Well #44	925.42	12.00	139.9298	0.00
P-853	J-288	Well #45	759.90	12.00	139.9298	0.00
P-854	J-72	Well #46	680.68	12.00	139.9298	0.00
P-855	J-501	J-55	5351.11	12.00	139.9298	0.00
P-856	J-502	J-501	5351.62	12.00	139.9298	0.00
P-857	J-503	J-401	5306.30	12.00	139.9298	0.00
P-858	J-504	J-394	5273.48	12.00	139.9298	0.00
P-859	J-505	J-372	6350.43	12.00	139.9298	0.00
P-86	J-100	J-110	2645.58	16.00	139.9298	0.00
P-860	J-506	J-258	3093.01	12.00	139.9298	0.00
P-861	J-507	J-323	5327.20	12.00	139.9298	0.00
P-863	J-509	J-122	5120.34	12.00	139.9298	0.00
P-864	J-510	J-252	5234.84	16.00	139.9298	0.00
P-865	J-42	J-94	1801.30	12.00	139.9298	0.00
P-866	J-512	J-266	5270.57	12.00	139.9298	0.00
P-867	J-513	J-353	5270.43	12.00	139.9298	0.00
P-868	J-514	J-249	2580.61	12.00	139.9298	0.00
P-869	J-515	J-354	5295.41	12.00	139.9298	0.00
P-87	J-71	J-309	5265.49	16.00	139.9298	0.00
P-870	J-368	Well #79	787.75	12.00	139.9298	0.00
P-871	J-396	Well #78	1094.00	12.00	139.9298	0.00
P-872	J-257	J-510	5311.96	12.00	139.9298	0.00
P-873	J-129	J-161	1343.68	12.00	139.9298	0.00
P-874	J-161	J-319	2675.65	12.00	139.9298	0.00
P-875	J-319	J-211	2603.09	12.00	139.9298	0.00
P-876	J-108	J-197	1192.32	10.00	139.9298	0.00
P-877	J-472	J-195	2649.48	10.00	139.9298	0.00
P-878	J-108	J-472	1433.22	12.00	139.9298	0.00
P-879	J-420	J-511	20.00	12.00	139.9298	0.00
P-88	J-89	J-312	5222.51	12.00	139.9298	0.00
P-880	J-419	J-516	20.00	12.00	139.9298	0.00
P-881	J-398	J-517	20.00	12.00	139.9298	0.00

P-882	J-400	J-518	20.00	12.00	139.9298	0.00
P-883	J-56	Well #82	554.40	12.00	140.0000	0.00
P-884	J-128	Well #83	515.26	12.00	140.0000	0.00
P-885	J-118	Well #84	789.64	12.00	140.0000	0.00
P-886	J-112	Well #85	646.45	12.00	140.0000	0.00
P-887	J-149	WEll #86	663.27	12.00	140.0000	0.00
P-888	J-202	Well #87	325.87	12.00	140.0000	0.00
P-889	J-183	Well #88	706.55	12.00	140.0000	0.00
P-89	J-71	J-89	5308.13	16.00	139.9298	0.00
P-9	J-10	J-9	207.77	16.00	139.9298	0.00
P-90	J-89	J-458	2103.73	16.00	139.9298	0.00
P-91	J-96	J-205	5308.13	16.00	139.9298	0.00
P-92	J-96	J-107	5274.92	16.00	139.9298	0.00
P-93	J-112	J-148	5265.32	16.00	139.9298	0.00
P-94	J-69	J-36	116.01	8.00	139.9298	0.00
P-95	J-103	J-100	2649.01	16.00	139.9298	0.00
P-96	J-103	J-494	1425.74	16.00	139.9298	0.00
P-97	J-63	J-73	688.23	12.00	139.9298	0.00
P-98	J-73	J-24	2673.64	12.00	139.9298	0.00
P-99	J-24	J-74	2385.58	12.00	139.9298	0.00

N D N O D E D A T A

NODE NAME	NODE TITLE	EXTERNAL DEMAND (gpm)	JUNCTION ELEVATION (ft)	EXTERNAL GRADE (ft)
Burgess Pe		----	1566.00	1566.00
AP Plant		-29400.00	1426.00	
CG Tank		----	1566.00	1566.00
Copper SW		----	1566.00	1566.00
Cottonwood		-5170.00	1397.00	
J-1		0.00	1415.00	
J-10		507.00	1389.00	
J-100		0.00	1385.00	
J-101		0.00	1408.00	
J-102		0.00	1409.00	
J-103		148.00	1381.00	
J-105		0.00	1404.00	
J-106		0.00	1404.00	
J-107		254.00	1374.00	
J-108		0.00	1385.00	
J-109		148.00	1396.00	
J-11		507.00	1402.00	
J-110		296.00	1389.00	
J-111		296.00	1368.00	
J-112		296.00	1353.00	
J-113		148.00	1350.00	
J-114		148.00	1330.00	
J-117		148.00	1379.00	
J-118		296.00	1370.00	
J-119		296.00	1375.00	
J-12		0.00	1397.00	
J-120		148.00	1380.00	
J-121		296.00	1375.00	
J-122		148.00	1382.00	
J-123		148.00	1378.00	
J-124		296.00	1360.00	
J-126		148.00	1385.00	
J-127		0.00	1408.00	
J-128		296.00	1381.00	
J-129		0.00	1408.00	
J-13		0.00	1415.00	
J-130		0.00	1408.00	
J-131		0.00	1408.00	
J-132		148.00	1369.00	
J-135		296.00	1372.00	
J-136		296.00	1367.00	
J-137		296.00	1360.00	

J-14	0.00	1520.00
J-141	296.00	1450.00
J-142	296.00	1420.00
J-145	148.00	1402.00
J-146	296.00	1378.00
J-147	296.00	1360.00
J-148	296.00	1349.00
J-149	296.00	1357.00
J-15	0.00	1410.00
J-151	0.00	1400.00
J-153	0.00	1402.00
J-154	296.00	1390.00
J-157	296.00	1415.00
J-158	148.00	1437.00
J-160	0.00	1405.00
J-161	507.00	1406.00
J-162	0.00	1406.00
J-163	0.00	1401.00
J-164	0.00	1406.00
J-165	0.00	1406.00
J-166	0.00	1402.00
J-167	0.00	1399.00
J-17	0.00	1412.00
J-170	0.00	1402.00
J-172	296.00	1461.00
J-173	296.00	1424.00
J-174	296.00	1460.00
J-175	296.00	1500.00
J-178	296.00	1330.00
J-18	0.00	1430.00
J-180	507.00	1397.00
J-181	0.00	1397.00
J-182	148.00	1400.00
J-183	296.00	1388.00
J-185	0.00	1397.00
J-187	296.00	1337.00
J-188	296.00	1360.00
J-189	507.00	1379.00
J-19	0.00	1422.00
J-191	0.00	1377.00
J-192	0.00	1435.00
J-193	0.00	1426.00
J-194	0.00	1450.00
J-195	507.00	1390.00
J-196	0.00	1387.00
J-197	507.00	1383.00
J-198	507.00	1390.00
J-199	296.00	1364.00
J-2	0.00	1412.00
J-20	507.00	1419.00
J-200	296.00	1320.00
J-201	148.00	1332.00
J-202	296.00	1328.00
J-203	296.00	1330.00
J-204	148.00	1335.00
J-205	507.00	1357.00
J-206	148.00	1360.00
J-207	507.00	1354.00
J-208	254.00	1347.00
J-209	507.00	1345.00
J-210	254.00	1343.00
J-211	507.00	1395.00
J-212	0.00	1385.00
J-213	507.00	1414.00
J-214	254.00	1430.00
J-215	507.00	1420.00
J-216	507.00	1394.00
J-217	148.00	1400.00
J-218	148.00	1360.00
J-219	296.00	1283.00
J-220	296.00	1265.00
J-221	148.00	1270.00

J-222	148.00	1260.00
J-223	148.00	1269.00
J-224	148.00	1254.00
J-225	296.00	1260.00
J-226	296.00	1275.00
J-227	296.00	1274.00
J-228	296.00	1293.00
J-229	296.00	1278.00
J-230	296.00	1270.00
J-231	296.00	1286.00
J-232	296.00	1280.00
J-233	296.00	1312.00
J-234	148.00	1324.00
J-235	296.00	1336.00
J-236	296.00	1305.00
J-237	296.00	1310.00
J-238	296.00	1298.00
J-239	296.00	1290.00
J-24	0.00	1410.00
J-240	507.00	1368.00
J-241	507.00	1352.00
J-242	148.00	1393.00
J-243	60.00	1340.00
J-244	148.00	1375.00
J-245	507.00	1378.00
J-246	507.00	1410.00
J-247	296.00	1288.00
J-248	148.00	1255.00
J-249	148.00	1258.00
J-25	0.00	1426.00
J-250	148.00	1315.00
J-251	148.00	1458.00
J-252	148.00	1522.00
J-253	254.00	1500.00
J-254	148.00	1450.00
J-255	296.00	1402.00
J-257	296.00	1449.00
J-258	254.00	1449.00
J-259	148.00	1250.00
J-260	296.00	1260.00
J-261	296.00	1307.00
J-262	296.00	1265.00
J-263	296.00	1270.00
J-264	148.00	1270.00
J-265	296.00	1311.00
J-266	148.00	1355.00
J-267	0.00	1470.00
J-268	0.00	1421.00
J-269	0.00	1470.00
J-270	0.00	1414.00
J-271	507.00	1421.00
J-272	0.00	1380.00
J-273	0.00	1370.00
J-274	0.00	1380.00
J-275	0.00	1349.00
J-276	0.00	1349.00
J-277	0.00	1330.00
J-278	296.00	1306.00
J-279	0.00	1315.00
J-28	0.00	1410.00
J-280	254.00	1349.00
J-281	148.00	1330.00
J-282	148.00	1299.00
J-283	148.00	1320.00
J-284	296.00	1285.00
J-285	296.00	1312.00
J-286	296.00	1308.00
J-287	296.00	1305.00
J-288	296.00	1310.00
J-289	296.00	1332.00
J-290	148.00	1355.00
J-291	0.00	1328.00

J-292	148.00	1315.00
J-293	148.00	1306.00
J-294	296.00	1310.00
J-295	296.00	1310.00
J-296	254.00	1340.00
J-297	254.00	1357.00
J-298	254.00	1349.00
J-299	254.00	1339.00
J-3	0.00	1403.00
J-300	254.00	1336.00
J-301	0.00	1330.00
J-302	0.00	1326.00
J-303	507.00	1385.00
J-304	507.00	1393.00
J-305	507.00	1375.00
J-306	507.00	1383.00
J-307	507.00	1369.00
J-308	507.00	1368.00
J-309	507.00	1375.00
J-31	0.00	1428.00
J-310	507.00	1362.00
J-311	507.00	1352.00
J-312	254.00	1388.00
J-313	0.00	1433.00
J-314	0.00	1393.00
J-315	507.00	1414.00
J-316	507.00	1402.00
J-317	0.00	1393.00
J-318	0.00	1400.00
J-319	0.00	1400.00
J-320	0.00	1370.00
J-321	507.00	1349.00
J-322	507.00	1340.00
J-323	507.00	1360.00
J-324	507.00	1351.00
J-325	507.00	1361.00
J-326	507.00	1375.00
J-327	0.00	1361.00
J-328	148.00	1326.00
J-329	148.00	1312.00
J-33	507.00	1428.00
J-330	148.00	1307.00
J-331	0.00	1305.00
J-332	0.00	1315.00
J-333	0.00	1324.00
J-334	254.00	1329.00
J-335	507.00	1341.00
J-336	296.00	1293.00
J-337	296.00	1285.00
J-338	296.00	1392.00
J-339	148.00	1292.00
J-34	507.00	1410.00
J-340	148.00	1299.00
J-341	296.00	1285.00
J-342	296.00	1278.00
J-343	148.00	1281.00
J-344	296.00	1288.00
J-345	296.00	1295.00
J-346	148.00	1440.00
J-347	148.00	1412.00
J-348	296.00	1325.00
J-349	296.00	1345.00
J-35	148.00	1385.00
J-350	148.00	1410.00
J-351	296.00	1388.00
J-352	296.00	1365.00
J-353	148.00	1253.00
J-354	148.00	1243.00
J-355	148.00	1245.00
J-356	296.00	1250.00
J-357	296.00	1260.00
J-358	296.00	1275.00

J-359	148.00	1255.00
J-36	0.00	1408.00
J-360	296.00	1269.00
J-361	296.00	1265.00
J-362	296.00	1373.00
J-363	296.00	1335.00
J-364	296.00	1300.00
J-366	254.00	1433.00
J-368	0.00	1395.00
J-369	507.00	1407.00
J-37	507.00	1418.00
J-370	507.00	1425.00
J-371	507.00	1400.00
J-372	254.00	1454.00
J-373	254.00	1426.00
J-374	254.00	1468.00
J-375	0.00	1410.00
J-376	507.00	1407.00
J-377	0.00	1440.00
J-378	507.00	1417.00
J-379	0.00	1444.00
J-38	254.00	1408.00
J-380	0.00	1440.00
J-381	507.00	1425.00
J-382	507.00	1430.00
J-383	0.00	1445.00
J-384	254.00	1448.00
J-385	507.00	1437.00
J-386	0.00	1443.00
J-387	254.00	1444.00
J-388	507.00	1414.00
J-389	507.00	1426.00
J-39	507.00	1401.00
J-390	507.00	1406.00
J-391	254.00	1389.00
J-392	507.00	1415.00
J-393	254.00	1384.00
J-394	254.00	1440.00
J-395	507.00	1403.00
J-396	507.00	1394.00
J-397	507.00	1396.00
J-398	254.00	1416.00
J-399	507.00	1415.00
J-4	507.00	1403.00
J-40	0.00	1405.00
J-400	254.00	1409.00
J-401	254.00	1399.00
J-402	507.00	1410.00
J-403	507.00	1405.00
J-404	507.00	1414.00
J-405	507.00	1421.00
J-406	507.00	1412.00
J-407	254.00	1435.00
J-408	0.00	1430.00
J-409	254.00	1440.00
J-41	0.00	1408.00
J-410	254.00	1445.00
J-411	507.00	1437.00
J-412	507.00	1434.00
J-413	507.00	1423.00
J-414	507.00	1422.00
J-415	507.00	1430.00
J-416	507.00	1439.00
J-417	507.00	1440.00
J-418	254.00	1448.00
J-419	254.00	1441.00
J-42	0.00	1405.00
J-420	254.00	1452.00
J-421	254.00	1440.00
J-422	254.00	1455.00
J-423	0.00	1440.00
J-424	0.00	1440.00

J-427	0.00	1433.00
J-428	148.00	1335.00
J-429	148.00	1389.00
J-43	254.00	1382.00
J-430	148.00	1430.00
J-431	148.00	1410.00
J-432	148.00	1410.00
J-433	254.00	1368.00
J-434	148.00	1389.00
J-435	148.00	1350.00
J-436	148.00	1335.00
J-437	296.00	1389.00
J-438	254.00	1355.00
J-439	148.00	1347.00
J-44	0.00	1412.00
J-440	0.00	1359.00
J-441	148.00	1343.00
J-442	148.00	1338.00
J-443	148.00	1338.00
J-444	148.00	1343.00
J-445	148.00	1347.00
J-446	0.00	1359.00
J-447	0.00	1369.00
J-448	0.00	1378.00
J-449	0.00	1388.00
J-450	0.00	1388.00
J-451	0.00	1378.00
J-452	0.00	1368.00
J-453	0.00	1411.00
J-454	0.00	1411.00
J-455	0.00	1394.00
J-456	0.00	1400.00
J-457	0.00	1394.00
J-458	0.00	1400.00
J-459	0.00	1422.00
J-46	507.00	1370.00
J-460	0.00	1422.00
J-461	0.00	1410.00
J-462	0.00	1440.00
J-463	0.00	1444.00
J-464	0.00	1444.00
J-465	0.00	1444.00
J-466	0.00	1408.00
J-467	0.00	1408.00
J-468	254.00	1447.00
J-470	0.00	1442.00
J-471	0.00	1410.00
J-472	0.00	1387.00
J-473	254.00	1441.00
J-474	0.00	1435.00
J-475	0.00	1428.00
J-476	0.00	1423.00
J-477	0.00	1419.00
J-478	0.00	1439.00
J-479	0.00	1428.00
J-48	148.00	1392.00
J-480	0.00	1427.00
J-481	0.00	1422.00
J-482	0.00	1407.00
J-483	0.00	1444.00
J-484	0.00	1399.00
J-485	0.00	1393.00
J-486	0.00	1407.00
J-487	0.00	1409.00
J-488	0.00	1405.00
J-489	0.00	1399.00
J-49	254.00	1435.00
J-490	0.00	1392.00
J-491	0.00	1384.00
J-492	0.00	1351.00
J-493	0.00	1418.00
J-494	0.00	1385.00

J-495	0.00	1405.00
J-496	0.00	1379.00
J-497	0.00	1373.00
J-498	0.00	1373.00
J-499	0.00	1336.00
J-5	0.00	1405.00
J-50	507.00	1425.00
J-500	0.00	1343.00
J-501	254.00	1463.00
J-502	254.00	1455.00
J-503	254.00	1391.00
J-504	254.00	1466.00
J-505	254.00	1449.00
J-506	254.00	1435.00
J-507	507.00	1365.00
J-509	148.00	1389.00
J-51	148.00	1406.00
J-510	148.00	1500.00
J-511	0.00	1452.00
J-512	148.00	1335.00
J-513	148.00	1255.00
J-514	148.00	1262.00
J-515	148.00	1243.00
J-516	0.00	1441.00
J-517	0.00	1416.00
J-518	0.00	1409.00
J-52	0.00	1440.00
J-53	254.00	1435.00
J-54	254.00	1448.00
J-55	254.00	1455.00
J-56	148.00	1425.00
J-57	148.00	1414.00
J-58	507.00	1438.00
J-59	254.00	1441.00
J-6	0.00	1400.00
J-60	148.00	1433.00
J-61	148.00	1404.00
J-62	148.00	1400.00
J-63	0.00	1404.00
J-64	148.00	1426.00
J-65	296.00	1409.00
J-66	296.00	1417.00
J-67	148.00	1417.00
J-68	296.00	1399.00
J-69	0.00	1408.00
J-7	0.00	1400.00
J-70	0.00	1396.00
J-71	507.00	1386.00
J-72	296.00	1320.00
J-73	0.00	1405.00
J-74	0.00	1412.00
J-75	0.00	1412.00
J-76	0.00	1412.00
J-77	0.00	1412.00
J-78	507.00	1412.00
J-79	0.00	1412.00
J-8	507.00	1396.00
J-80	0.00	1412.00
J-81	0.00	1415.00
J-82	0.00	1445.00
J-83	0.00	1412.00
J-84	0.00	1412.00
J-85	0.00	1412.00
J-86	0.00	1402.00
J-87	0.00	1402.00
J-88	0.00	1400.00
J-89	254.00	1396.00
J-9	0.00	1389.00
J-93	0.00	1403.00
J-94	0.00	1402.00
J-95	0.00	1408.00
J-96	507.00	1364.00

J-97	0.00	1410.00	
J-98	0.00	1409.00	
J-99	0.00	1409.00	
RV-2	----	1470.00	1654.62
Scott Dr.	----	1566.00	1566.00
ection 36	----	1566.00	1566.00
ignal Pea	----	1566.00	1566.00
Tanger Boo	0.00	1470.00	
Well #27	0.00	1410.00	
Well #28	-1500.00	1520.00	
Well #29	-1500.00	1440.00	
Well #31	-1500.00	1403.00	
Well #32	0.00	1433.00	
Well #33	0.00	1442.00	
Well #34	-1500.00	1520.00	
Well #35	0.00	1433.00	
Well #36	0.00	1441.00	
Well #37	-1500.00	1435.00	
Well #38	-1500.00	1428.00	
Well #39	-1500.00	1427.00	
Well #40	-1500.00	1420.00	
Well #41	-1500.00	1438.00	
Well #42	-1500.00	1428.00	
Well #43	-1500.00	1427.00	
Well #44	-1500.00	1364.00	
Well #45	-1500.00	1310.00	
Well #46	-1500.00	1320.00	
Well #47	-1500.00	1343.00	
Well #48	-1500.00	1336.00	
Well #49	-1500.00	1347.00	
Well #50	-1500.00	1360.00	
Well #51	-1500.00	1371.00	
Well #52	-1500.00	1374.00	
Well #53	-1500.00	1364.00	
Well #54	-1500.00	1382.00	
Well #55	-1500.00	1373.00	
Well #56	-1500.00	1379.00	
Well #57	-1500.00	1394.00	
Well #58	-1500.00	1381.00	
Well #59	-1500.00	1385.00	
Well #60	-1500.00	1392.00	
Well #61	-1500.00	1404.00	
Well #62	0.00	1422.00	
Well #63	0.00	1406.00	
Well #64	0.00	1444.00	
Well #65	0.00	1399.00	
Well #66	0.00	1400.00	
Well #67	0.00	1393.00	
Well #68	0.00	1408.00	
Well #69	0.00	1409.00	
Well #70	0.00	1405.00	
Well #71	0.00	1409.00	
Well #72	0.00	1399.00	
Well #73	0.00	1392.00	
Well #74	0.00	1382.00	
Well #75	0.00	1351.00	
Well #76	0.00	1422.00	
Well #77	0.00	1410.00	
Well #78	0.00	1394.00	
Well #79	0.00	1395.00	
Well #80	0.00	1393.00	
Well #81	0.00	1393.00	
Well #82	-1500.00	1425.00	
Well #83	-1500.00	1381.00	
Well #84	-1500.00	1370.00	
Well #85	-1500.00	1353.00	
WEll #86	-1500.00	1357.00	
Well #87	-1500.00	1328.00	
Well #88	-1500.00	1388.00	
Well #89	0.00	1415.00	
Well #90	0.00	1420.00	
Well #91	0.00	1424.00	

Well 19 -4250.00 1412.00

U T P U T O P T I O N D A T A

TPUT SELECTION: ALL RESULTS ARE INCLUDED IN THE TABULATED OUTPUT

Y S T E M C O N F I G U R A T I O N

NUMBER OF PIPES .....(p) = 834
NUMBER OF END NODES .....(j) = 541
NUMBER OF PRIMARY LOOPS .....(l) = 288
NUMBER OF SUPPLY NODES .....(f) = 6
NUMBER OF SUPPLY ZONES .....(z) = 1

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e: 0

SULTS OBTAINED AFTER 6 TRIALS: ACCURACY = 0.00051

I M U L A T I O N D E S C R I P T I O N (L A B E L)

I P E L I N E R E S U L T S

STATUS CODE: XX -CLOSED PIPE CV -CHECK VALVE

PIPE NAME	NODE NUMBERS #1	#2	FLOWRATE (gpm)	HEAD LOSS (ft)	MINOR LOSS (ft)	LINE VELO. (ft/s)	HL/ 1000 (ft/ft)
P-1	Well 19	J-2	4250.00	2.23	0.00	6.78	7.95
P-10	J-10	J-12	-1797.30	8.43	0.00	2.87	1.61
P-100	J-74	J-17	-537.09	0.05	0.00	1.52	0.70
P-101	J-74	J-75	1464.41	0.97	0.00	4.15	4.48
P-102	J-75	J-76	7159.93	0.14	0.00	5.08	2.90
P-103	J-75	J-77	-6912.85	1.62	0.00	4.90	2.72
P-104	J-75	J-80	1217.33	7.88	0.00	3.45	3.18
P-105	J-76	J-79	7412.29	7.90	0.00	5.26	3.09
P-106	J-79	J-81	6396.31	1.01	0.00	4.54	2.35
P-107	J-44	J-80	-1217.33	0.25	0.00	3.45	3.18
P-108	J-44	J-79	-1015.98	0.10	0.00	2.88	2.28
P-109	J-44	J-78	2300.32	1.52	0.00	6.53	10.35
P-11	J-6	J-11	-2822.74	1.38	0.00	2.00	0.52
P-110	J-78	J-84	412.73	0.03	0.00	1.17	0.43
P-111	J-78	J-83	1380.59	1.10	0.00	3.92	4.02
P-112	J-84	J-477	412.73	1.74	0.00	1.17	0.43
P-113	J-84	J-85	0.00	0.00	0.00	0.00	0.00
P-114	J-63	J-93	2242.60	6.92	0.00	6.36	9.87
P-115	J-11	J-86	-591.20	0.06	0.00	1.68	0.84
P-116	J-86	J-87	0.00	0.00	0.00	0.00	0.00
P-117	J-86	J-88	-591.20	1.53	0.00	1.68	0.84
P-118	J-11	J-94	-878.32	1.52	0.00	2.49	1.74
P-119	J-93	J-94	382.38	6.59	0.00	2.44	2.69
P-12	J-2	J-13	2753.38	12.75	0.00	7.81	14.44
P-120	J-107	J-451	404.24	0.21	0.00	0.65	0.10
P-121	J-43	J-107	447.03	2.63	0.00	1.27	0.50
P-122	J-110	J-109	573.27	1.02	0.00	0.91	0.19
P-124	J-93	J-11	1860.22	8.11	0.00	5.28	6.98
P-127	J-68	J-110	255.39	0.94	0.00	0.72	0.18
P-128	J-51	J-109	266.34	1.01	0.00	0.76	0.19
P-129	J-83	J-97	1380.59	5.66	0.00	3.92	4.02
P-13	J-1	J-15	622.20	14.12	0.00	3.97	6.62

P-130	J-103	J-132	1760.51	8.13	0.00	2.81	1.55
P-131	J-97	J-98	1380.59	3.40	0.00	3.92	4.02
P-132	J-98	J-95	-82.21	0.37	0.00	0.93	0.63
P-133	J-98	J-102	1462.81	0.41	0.00	4.15	4.48
P-134	J-111	J-137	1411.74	5.44	0.00	2.25	1.03
P-135	J-99	J-101	348.32	2.10	0.00	2.22	2.26
P-136	J-102	J-99	348.32	0.21	0.00	2.22	2.26
P-137	J-102	J-127	1114.49	2.51	0.00	3.16	2.70
P-138	J-95	J-131	208.08	4.79	0.00	2.36	3.53
P-139	J-95	J-105	-290.30	3.28	0.00	1.85	1.61
P-14	J-13	J-1	1059.70	1.09	0.00	3.01	2.46
P-141	J-112	J-441	786.25	1.66	0.00	1.25	0.35
P-142	J-114	J-201	976.74	2.77	0.00	1.56	0.52
P-143	J-72	J-187	543.52	0.94	0.00	0.87	0.18
P-144	J-178	J-113	-419.07	0.51	0.00	0.67	0.11
P-145	J-172	J-173	433.81	2.48	0.00	1.23	0.47
P-15	J-15	J-28	85.11	0.20	0.00	0.54	0.17
P-150	J-117	J-118	-613.07	1.15	0.00	0.98	0.22
P-151	J-117	J-120	-210.59	0.65	0.00	0.60	0.12
P-152	J-118	J-124	181.57	0.12	0.00	0.29	0.02
P-153	J-119	J-118	52.31	0.05	0.00	0.15	0.01
P-154	J-120	J-509	-165.17	0.42	0.00	0.47	0.08
P-155	J-119	J-120	193.43	0.56	0.00	0.55	0.11
P-156	J-111	J-135	-55.35	0.03	0.00	0.16	0.01
P-157	J-122	J-119	290.85	1.18	0.00	0.83	0.22
P-158	J-121	J-123	-134.33	0.14	0.00	0.38	0.05
P-159	J-121	J-136	539.17	3.71	0.00	1.53	0.70
P-16	J-15	J-17	537.09	1.01	0.00	1.52	0.70
P-160	J-124	J-112	-288.38	0.28	0.00	0.46	0.05
P-161	J-123	J-122	752.02	3.57	0.00	2.13	1.31
P-162	J-123	J-126	-1034.35	12.39	0.00	2.93	2.36
P-163	J-126	J-109	-691.61	5.91	0.00	1.96	1.12
P-164	J-126	J-128	-490.74	3.19	0.00	1.39	0.59
P-165	J-132	J-206	1810.16	8.54	0.00	2.89	1.64
P-166	J-128	J-132	204.70	0.61	0.00	0.58	0.12
P-168	J-135	J-121	700.84	2.89	0.00	1.99	1.15
P-169	J-128	J-135	1052.19	12.82	0.00	2.98	2.43
P-17	J-82	J-53	1587.72	3.34	0.00	2.53	1.28
P-170	J-128	J-110	-543.63	3.74	0.00	1.54	0.72
P-171	J-136	J-124	275.08	1.07	0.00	0.78	0.20
P-172	J-127	J-101	-348.32	0.20	0.00	2.22	2.26
P-173	J-127	J-129	1462.81	1.50	0.00	4.15	4.48
P-174	J-129	J-130	0.00	0.00	0.00	0.00	0.00
P-175	J-129	J-131	1.98	0.00	0.00	0.01	0.00
P-177	J-137	J-112	803.89	1.92	0.00	1.28	0.36
P-178	J-131	J-160	210.06	4.58	0.00	2.38	3.60
P-179	J-105	J-106	0.00	0.00	0.00	0.00	0.00
P-18	J-57	J-453	-1.20	0.00	0.00	0.00	0.00
P-180	J-136	J-137	-282.80	1.13	0.00	0.80	0.21
P-181	J-119	J-136	-250.89	0.90	0.00	0.71	0.17
P-182	J-118	J-146	461.67	2.80	0.00	1.31	0.53
P-183	J-141	J-142	-6.23	0.00	0.00	0.01	0.00
P-184	J-113	J-435	-592.05	0.24	0.00	0.94	0.21
P-186	J-142	J-154	-291.14	1.19	0.00	0.83	0.23
P-187	J-105	J-151	-290.30	4.97	0.00	1.85	1.61
P-188	J-145	J-117	-675.67	1.40	0.00	1.08	0.26
P-19	J-19	J-37	628.82	2.48	0.00	1.78	0.94
P-190	J-146	J-157	303.77	1.28	0.00	0.86	0.24
P-191	J-145	J-146	120.53	0.24	0.00	0.34	0.04
P-193	J-147	J-124	-449.03	2.67	0.00	1.27	0.50
P-195	J-146	J-147	-17.57	0.01	0.00	0.05	0.00
P-196	J-148	J-149	336.16	0.38	0.00	0.54	0.07
P-197	J-147	J-148	-166.71	0.42	0.00	0.47	0.08
P-198	J-113	J-429	115.08	1.55	0.00	0.73	0.29
P-199	J-154	J-147	-302.17	1.27	0.00	0.86	0.24
P-2	J-2	J-376	1496.62	3.08	0.00	2.39	1.15
P-20	J-25	J-19	628.82	2.52	0.00	1.78	0.94
P-200	J-149	J-154	307.83	1.31	0.00	0.87	0.25
P-201	J-157	J-141	289.77	1.18	0.00	0.82	0.22
P-202	J-154	J-157	22.86	0.01	0.00	0.06	0.00
P-203	J-158	J-145	-407.14	0.54	0.00	0.65	0.10
P-206	J-157	J-158	-259.14	0.98	0.00	0.74	0.18

-207	J-153	J-160	-20.14	0.31	0.00	0.51	0.34
[redacted]21	J-20	J-25	416.80	2.28	0.00	1.18	0.44
[redacted]18	J-160	J-162	189.92	0.36	0.00	1.21	0.74
-219	J-162	J-161	210.06	1.06	0.00	2.38	3.60
[redacted]22	J-31	J-192	897.99	4.78	0.00	2.55	1.81
[redacted]20	J-162	J-164	-20.14	0.01	0.00	0.23	0.05
[redacted]21	J-164	J-153	-20.14	0.05	0.00	0.23	0.05
-222	J-164	J-165	0.00	0.00	0.00	0.00	0.00
[redacted]23	J-153	J-163	0.00	0.00	0.00	0.00	0.00
[redacted]24	J-153	J-166	0.00	0.00	0.00	0.00	0.00
-225	J-88	J-167	-591.20	0.65	0.00	1.68	0.84
-227	J-105	J-170	0.00	0.00	0.00	0.00	0.00
[redacted]28	J-172	J-142	333.74	1.51	0.00	0.95	0.29
[redacted]23	J-1	J-24	437.50	10.59	0.00	2.79	3.45
-230	J-173	J-434	173.88	0.41	0.00	0.49	0.09
-231	J-173	J-174	399.38	0.52	0.00	0.64	0.10
[redacted]33	J-175	J-172	1063.55	13.26	0.00	3.02	2.48
[redacted]36	J-175	Section 36	-1359.55	23.87	0.00	3.86	3.91
-239	J-178	J-72	242.53	0.10	0.00	0.39	0.04
-240	J-151	J-180	-290.30	1.46	0.00	1.19	0.54
[redacted]42	J-180	J-12	-1240.19	0.19	0.00	3.52	3.30
[redacted]43	J-180	J-181	-1541.31	3.01	0.00	4.37	4.93
-244	J-12	J-181	-3037.49	2.82	0.00	4.85	4.27
-245	J-181	J-185	591.20	0.06	0.00	1.68	0.84
[redacted]46	J-178	J-188	260.93	0.97	0.00	0.74	0.18
[redacted]47	J-182	J-35	301.98	0.15	0.00	0.48	0.06
-249	J-183	J-182	464.12	2.80	0.00	1.32	0.53
-250	J-183	J-431	248.15	0.78	0.00	0.70	0.17
[redacted]51	J-185	J-167	591.20	1.68	0.00	1.68	0.84
[redacted]53	J-187	J-199	-6.46	0.00	0.00	0.01	0.00
-254	J-188	J-183	-192.02	0.55	0.00	0.54	0.10
[redacted]55	J-187	J-188	-90.32	0.07	0.00	0.26	0.03
[redacted]56	J-188	J-429	66.63	0.07	0.00	0.19	0.01
[redacted]58	J-180	J-317	1984.20	20.66	0.00	5.63	7.87
-259	J-189	J-191	-986.63	1.34	0.00	1.57	0.53
[redacted]60	J-191	Burgess Pe	-1458.96	0.84	0.00	2.33	1.10
[redacted]61	J-191	J-326	472.33	0.37	0.00	0.75	0.14
-262	J-181	Cottonwood	-5170.00	0.25	0.00	3.67	1.59
-263	J-82	CG Tank	947.80	0.94	0.00	2.69	2.00
[redacted]64	J-192	J-82	897.99	4.80	0.00	2.55	1.81
[redacted]65	CG Tank	J-383	-6128.83	1.05	0.00	4.35	2.17
-266	J-193	J-271	-5860.38	6.62	0.00	4.16	2.00
-267	J-193	J-194	-2071.41	27.98	0.00	5.88	8.52
[redacted]68	J-194	J-475	-747.97	3.37	0.00	2.12	1.29
[redacted]69	J-195	J-189	834.18	8.32	0.00	2.37	1.58
-27	J-20	J-31	-2049.16	10.97	0.00	3.27	2.06
-270	J-212	J-108	0.00	0.00	0.00	0.00	0.00
[redacted]71	J-197	J-10	-2838.51	19.83	0.00	4.53	3.76
[redacted]72	J-199	J-35	886.55	2.33	0.00	1.41	0.44
273	J-183	J-199	299.71	0.62	0.00	0.85	0.24
274	J-196	J-472	0.00	0.00	0.00	0.00	0.00
[redacted]75	J-200	J-72	278.85	0.27	0.00	0.44	0.05
[redacted]76	J-200	J-202	-528.61	1.79	0.00	1.50	0.68
277	J-201	J-200	604.10	1.14	0.00	0.96	0.21
278	J-201	J-203	-260.55	0.47	0.00	0.74	0.18
[redacted]79	J-202	J-428	190.59	0.48	0.00	0.54	0.10
280	J-178	J-202	-380.40	1.95	0.00	1.08	0.37
281	J-197	J-198	437.60	2.51	0.00	1.24	0.48
282	J-203	J-443	9.61	0.00	0.00	0.03	0.00
[redacted]83	J-202	J-203	104.40	0.18	0.00	0.30	0.03
284	J-204	J-114	571.33	0.50	0.00	0.91	0.19
285	J-203	J-204	-461.75	2.79	0.00	1.31	0.53
[redacted]86	J-205	J-208	939.94	2.56	0.00	1.50	0.49
[redacted]87	J-205	J-433	-447.99	2.64	0.00	1.27	0.50
288	J-206	J-111	1652.39	3.70	0.00	2.64	1.38
289	J-206	J-440	9.77	0.00	0.00	0.03	0.00
[redacted]29	J-33	J-193	-7931.78	6.90	0.00	5.62	3.50
[redacted]90	J-208	J-210	2005.08	10.49	0.00	3.20	1.98
291	J-207	J-208	236.04	0.39	0.00	0.67	0.15
292	J-207	J-209	970.33	11.03	0.00	2.75	2.09
[redacted]93	J-210	J-114	1388.19	5.27	0.00	2.21	1.00
[redacted]94	J-209	J-210	-140.12	0.15	0.00	0.40	0.06

P-295	J-198	J-216	-1990.90	10.37	0.00	3.18	1.95
P-296	J-198	J-213	978.13	2.77	0.00	1.56	0.52
P-297	J-213	J-214	516.65	0.42	0.00	0.82	0.16
P-298	J-213	J-215	-1830.01	8.83	0.00	2.92	1.67
P-299	J-216	J-490	-2166.32	2.74	0.00	3.46	2.28
P-3	J-4	J-3	2136.41	0.19	0.00	1.52	0.31
P-30	J-31	J-33	-1861.00	0.13	0.00	5.28	6.99
P-300	J-215	J-216	-584.34	4.32	0.00	1.66	0.82
P-301	J-214	J-506	722.51	6.37	0.00	2.05	1.21
P-302	J-194	J-269	-1323.44	34.49	0.00	3.75	3.72
P-303	J-267	J-14	-3000.00	14.27	0.00	8.51	16.93
P-304	J-14	Well #28	-1500.00	1.06	0.00	4.25	4.69
P-305	Tanger Boo	J-267	0.00	0.00	0.00	0.00	0.00
P-306	J-14	Well #34	-1500.00	1.15	0.00	4.25	4.69
P-307	J-281	J-234	-390.44	0.50	0.00	0.62	0.10
P-308	J-217	J-240	694.41	1.46	0.00	1.11	0.28
P-309	J-217	J-246	-1505.81	6.12	0.00	2.40	1.16
P-310	J-218	J-244	-1179.51	3.84	0.00	1.88	0.74
P-311	J-218	J-235	1803.34	8.70	0.00	2.88	1.62
P-312	J-219	J-228	-883.30	2.30	0.00	1.41	0.43
P-313	J-219	J-232	935.16	2.55	0.00	1.49	0.48
P-314	J-220	J-226	-707.03	1.50	0.00	1.13	0.29
P-315	J-220	J-225	242.85	0.21	0.00	0.39	0.04
P-316	J-221	J-342	235.69	0.20	0.00	0.38	0.04
P-317	J-222	J-221	-459.45	0.68	0.00	0.73	0.13
P-318	J-222	J-223	311.45	1.34	0.00	0.88	0.26
P-319	J-223	J-224	380.18	1.94	0.00	1.08	0.37
P-32	J-24	J-28	477.84	3.73	0.00	3.05	4.06
P-320	J-223	J-227	149.63	0.35	0.00	0.42	0.07
P-321	J-226	J-284	-902.84	2.39	0.00	1.44	0.45
P-322	J-225	J-224	28.25	0.00	0.00	0.05	0.00
P-323	J-227	J-226	-85.28	0.12	0.00	0.24	0.02
P-324	J-225	J-227	-341.59	1.59	0.00	0.97	0.30
P-325	J-227	J-341	-402.68	2.17	0.00	1.14	0.41
P-326	J-223	J-342	-366.37	1.82	0.00	1.04	0.34
P-327	J-226	J-229	-185.47	0.52	0.00	0.53	0.10
P-328	J-228	J-282	-1139.94	3.71	0.00	1.82	0.69
P-329	J-229	J-231	-345.97	1.63	0.00	0.98	0.31
P-330	J-337	J-229	469.24	2.89	0.00	1.33	0.54
P-331	J-230	J-220	387.20	0.50	0.00	0.62	0.09
P-332	J-229	J-230	333.74	1.52	0.00	0.95	0.29
P-333	J-231	J-228	-481.25	3.00	0.00	1.37	0.57
P-334	J-339	J-231	528.98	3.53	0.00	1.50	0.68
P-335	J-232	J-230	657.46	1.30	0.00	1.05	0.25
P-336	J-231	J-232	368.26	1.85	0.00	1.04	0.35
P-337	J-228	J-238	-520.61	3.51	0.00	1.48	0.66
P-338	J-234	J-218	-702.27	1.49	0.00	1.12	0.28
P-339	J-233	J-234	-770.44	7.17	0.00	2.19	1.37
P-340	J-328	J-233	325.08	1.46	0.00	0.92	0.28
P-341	J-235	J-237	1767.92	8.23	0.00	2.82	1.57
P-342	J-233	J-235	49.69	0.04	0.00	0.14	0.01
P-343	J-236	J-233	-749.83	6.91	0.00	2.13	1.30
P-344	J-329	J-236	504.83	3.29	0.00	1.43	0.62
P-345	J-237	J-239	1461.05	5.71	0.00	2.33	1.10
P-346	J-236	J-237	316.53	1.37	0.00	0.90	0.26
P-347	J-238	J-236	-642.13	5.08	0.00	1.82	0.97
P-348	J-330	J-238	560.45	3.94	0.00	1.59	0.76
P-349	J-239	J-219	1152.01	3.80	0.00	1.84	0.71
P-350	J-238	J-239	385.99	2.00	0.00	1.09	0.38
P-351	J-234	J-243	-606.61	4.62	0.00	1.72	0.88
P-352	J-240	J-325	284.26	0.28	0.00	0.45	0.05
P-353	J-241	J-240	-738.32	6.66	0.00	2.09	1.26
P-354	J-321	J-492	-37.42	0.02	0.00	0.11	0.01
P-355	J-242	J-217	-1458.34	5.69	0.00	2.33	1.10
P-356	J-241	J-242	-428.47	2.43	0.00	1.22	0.46
P-357	J-243	J-241	-622.37	4.88	0.00	1.77	0.92
P-358	J-322	J-243	-176.87	0.48	0.00	0.50	0.09
P-359	J-244	J-242	-1548.63	6.60	0.00	2.47	1.23
P-36	J-28	J-36	562.95	4.71	0.00	3.59	5.50
P-360	J-243	J-244	-221.12	0.71	0.00	0.63	0.14
P-361	J-326	J-245	627.13	4.91	0.00	1.78	0.93
P-362	J-246	J-213	-1784.49	8.45	0.00	2.85	1.59

P-363	J-245	J-246	228.32	0.76	0.00	0.65	0.14
P-364	J-240	J-245	-835.17	8.34	0.00	2.37	1.59
P-365	J-245	J-491	-943.37	5.28	0.00	2.68	1.99
P-366	J-220	J-357	555.38	0.96	0.00	0.89	0.18
P-367	J-219	J-358	804.16	1.92	0.00	1.28	0.36
P-368	J-247	J-260	779.81	1.81	0.00	1.24	0.34
P-369	J-247	J-261	660.16	1.33	0.00	1.05	0.25
P-37	J-34	J-20	-1519.45	6.16	0.00	2.42	1.18
P-370	J-247	J-348	-1118.08	3.55	0.00	1.78	0.67
P-371	J-251	J-255	2869.02	20.30	0.00	4.58	3.84
P-372	J-251	J-510	1038.99	6.18	0.00	1.66	0.59
P-373	J-252	J-254	755.62	1.71	0.00	1.21	0.32
P-374	J-253	Scott Dr.	-1202.19	5.10	0.00	3.41	3.11
P-375	J-252	J-253	-582.26	4.30	0.00	1.65	0.81
P-376	J-267	RV-2	3000.00	3.99	0.00	8.51	16.93
P-377-XXCV	J-269	Tanger Boo					
P-378	RV-2	J-269	3000.00	9.92	0.00	8.51	16.93
P-379	J-209	J-204	606.15	4.62	0.00	1.72	0.88
P-38	J-34	J-39	991.08	2.84	0.00	1.58	0.54
P-380	J-209	J-445	-2.70	0.00	0.00	0.01	0.00
P-381	J-35	J-290	1040.54	3.08	0.00	1.66	0.59
P-382	J-268	J-31	1086.15	13.62	0.00	3.08	2.58
P-383	J-270	J-318	1190.39	4.60	0.00	1.90	0.75
P-384	J-272	J-274	-1225.11	1.88	0.00	1.95	0.79
P-385	J-270	J-268	-2864.59	15.55	0.00	4.57	3.83
P-386	J-271	J-81	-6396.31	11.44	0.00	4.54	2.35
P-387	J-268	J-271	-2038.01	0.04	0.00	3.25	2.04
P-388	J-272	J-320	-19.12	0.01	0.00	0.05	0.00
P-389	J-274	J-303	-1455.92	1.43	0.00	2.32	1.09
P-39	J-38	J-39	268.73	1.02	0.00	0.76	0.19
P-390	J-273	J-274	-230.82	0.98	0.00	0.65	0.15
P-391	J-273	J-189	-1313.81	11.10	0.00	3.73	3.67
P-392	J-273	J-327	499.16	1.66	0.00	1.42	0.61
P-393	J-276	J-311	-908.69	2.06	0.00	1.45	0.46
P-394	J-275	J-276	-376.58	0.57	0.00	1.07	0.36
P-395	J-72	J-285	1181.87	3.93	0.00	1.89	0.74
P-396	J-278	J-295	-633.82	1.23	0.00	1.01	0.23
P-397	J-114	J-291	834.78	2.07	0.00	1.33	0.39
P-398	J-279	J-302	-1318.16	4.83	0.00	2.10	0.91
P-399	J-96	J-297	1798.19	8.51	0.00	2.87	1.62
P-4	J-5	J-4	-789.13	0.92	0.00	1.26	0.35
P-400	J-280	J-276	-532.11	0.13	0.00	0.85	0.17
P-401	J-277	J-275	-376.58	3.49	0.00	1.07	0.36
P-402	J-280	J-335	1169.79	3.85	0.00	1.87	0.73
P-403	J-281	J-277	-529.97	0.67	0.00	1.50	0.68
P-404	J-281	J-328	1377.97	5.21	0.00	2.20	0.99
P-405	J-282	J-331	-1195.48	3.95	0.00	1.91	0.76
P-406	J-282	J-339	1059.44	3.18	0.00	1.69	0.61
P-407	J-283	J-286	-124.08	0.06	0.00	0.20	0.01
P-408	J-283	J-343	1090.78	3.39	0.00	1.74	0.64
P-409	J-284	J-336	-945.34	2.58	0.00	1.51	0.49
P-41	J-37	J-38	218.48	0.70	0.00	0.62	0.13
P-410	J-199	J-289	610.70	4.69	0.00	1.73	0.89
P-411	J-286	J-287	-368.06	0.45	0.00	0.59	0.09
P-412	J-187	J-288	344.30	1.62	0.00	0.98	0.31
P-413	J-287	J-278	-469.10	0.71	0.00	0.75	0.13
P-414	J-285	J-278	1314.01	4.73	0.00	2.10	0.90
P-415	J-288	J-287	749.38	6.81	0.00	2.13	1.30
P-416	J-285	J-288	-313.69	1.37	0.00	0.89	0.26
P-417	J-289	J-286	577.77	4.20	0.00	1.64	0.80
P-418	J-288	J-289	485.24	3.07	0.00	1.38	0.58
P-419	J-290	J-283	1114.69	3.54	0.00	1.78	0.67
P-42	J-39	J-71	428.26	0.60	0.00	0.68	0.11
P-420	J-289	J-290	222.16	0.72	0.00	0.63	0.14
P-421	J-285	J-294	-114.46	0.21	0.00	0.32	0.04
P-422	J-291	J-279	1026.80	3.02	0.00	1.64	0.57
P-423	J-292	J-291	-542.12	3.77	0.00	1.54	0.71
P-424	J-293	J-279	-1172.79	3.85	0.00	1.87	0.73
P-425	J-292	J-293	486.83	3.11	0.00	1.38	0.58
P-426	J-292	J-201	-485.19	3.07	0.00	1.38	0.58
P-427	J-294	J-292	-392.48	2.05	0.00	1.11	0.39
P-428	J-295	J-293	-955.96	2.65	0.00	1.53	0.50

P-429	J-294	J-295	539.88	3.71	0.00	1.53	0.71
P-43	J-38	J-89	-170.65	0.44	0.00	0.48	0.08
P-430	J-294	J-200	-557.85	3.99	0.00	1.58	0.75
P-431	J-291	J-301	-734.13	6.62	0.00	2.08	1.25
P-432	J-297	J-280	1474.65	5.89	0.00	2.35	1.12
P-433	J-296	J-280	-582.97	1.06	0.00	0.93	0.20
P-434	J-298	J-297	-267.58	1.02	0.00	0.76	0.19
P-435	J-296	J-500	-1687.11	5.50	0.00	4.79	5.83
P-436	J-298	J-205	-509.04	3.33	0.00	1.44	0.63
P-437	J-299	J-298	-335.51	1.55	0.00	0.95	0.29
P-438	J-208	J-299	416.90	2.32	0.00	1.18	0.44
P-439	J-300	J-296	-1307.76	4.70	0.00	2.09	0.90
P-44	J-36	J-42	562.95	5.21	0.00	3.59	5.50
P-440	J-299	J-300	868.54	9.09	0.00	2.46	1.70
P-441	J-301	J-499	-1129.87	9.53	0.00	3.21	2.77
P-442	J-210	J-301	222.76	0.72	0.00	0.63	0.14
P-443	J-302	J-300	-1293.97	4.62	0.00	2.06	0.88
P-444	J-301	J-302	618.50	4.82	0.00	1.75	0.91
P-445	J-303	J-211	-1995.62	10.35	0.00	3.18	1.96
P-446	J-303	J-304	32.70	0.02	0.00	0.09	0.00
P-447	J-305	J-272	-1244.23	1.33	0.00	1.99	0.82
P-448	J-305	J-306	-665.86	1.36	0.00	1.06	0.26
P-449	J-297	J-310	-198.04	0.58	0.00	0.56	0.11
P-45	J-46	J-96	709.57	1.51	0.00	1.13	0.29
P-450	J-306	J-71	-1216.55	4.10	0.00	1.94	0.78
P-451	J-307	J-305	-1403.09	5.39	0.00	2.24	1.02
P-452	J-308	J-306	-543.95	3.77	0.00	1.54	0.72
P-453	J-307	J-308	-479.16	2.97	0.00	1.36	0.57
P-454	J-309	J-497	-217.83	0.12	0.00	0.35	0.03
P-455	J-308	J-309	-842.81	8.56	0.00	2.39	1.61
P-456	J-310	J-308	-400.60	2.13	0.00	1.14	0.41
P-457	J-46	J-310	886.56	9.43	0.00	2.51	1.77
P-458	J-311	J-307	-1103.21	3.44	0.00	1.76	0.65
P-459	J-310	J-311	582.12	4.28	0.00	1.65	0.81
P-46	J-46	J-43	-820.96	8.02	0.00	2.33	1.54
P-460	J-312	J-43	-22.93	0.01	0.00	0.07	0.00
P-461	J-62	J-455	69.85	0.03	0.00	0.20	0.02
P-462	J-312	J-496	93.91	0.11	0.00	0.27	0.03
P-464	J-313	J-421	517.57	1.38	0.00	1.47	0.65
P-465	J-20	J-315	-394.08	2.07	0.00	1.12	0.39
P-466	J-315	J-270	-1674.20	6.96	0.00	4.75	5.75
P-467	J-315	J-316	773.12	7.26	0.00	2.19	1.37
P-468	J-316	J-34	261.07	0.97	0.00	0.74	0.18
P-469	J-316	J-211	-644.97	5.11	0.00	1.83	0.98
P-47	J-43	J-450	-44.92	0.01	0.00	0.13	0.01
P-470	J-34	J-37	282.44	1.12	0.00	0.80	0.21
P-471	J-304	J-39	-324.55	1.45	0.00	0.92	0.28
P-472	J-306	J-304	-500.27	3.26	0.00	1.42	0.61
P-473	J-304	J-316	-650.01	5.26	0.00	1.84	1.00
P-474	J-317	J-195	1190.88	8.13	0.00	3.38	3.06
P-475	J-317	J-319	793.31	7.68	0.00	2.25	1.44
P-476	J-318	J-211	2026.70	4.50	0.00	3.23	2.02
P-477	J-319	J-318	836.31	2.61	0.00	2.37	1.59
P-478	J-320	J-273	-1045.47	0.89	0.00	2.97	2.40
P-479	J-320	J-507	1026.34	4.26	0.00	2.91	2.32
P-48	J-48	J-70	601.32	2.23	0.00	1.71	0.86
P-480	J-322	J-281	605.55	4.64	0.00	1.72	0.87
P-481	J-321	J-322	655.99	5.33	0.00	1.86	1.01
P-482	J-323	J-324	517.06	3.44	0.00	1.47	0.65
P-483	J-321	J-323	232.67	0.80	0.00	0.66	0.15
P-484	J-323	J-307	-272.04	1.04	0.00	0.77	0.20
P-485	J-324	J-322	279.69	1.09	0.00	0.79	0.21
P-486	J-311	J-324	269.63	1.04	0.00	0.76	0.20
P-487	J-321	J-325	-723.65	6.40	0.00	2.05	1.22
P-488	J-326	J-197	-1743.62	8.06	0.00	2.78	1.53
P-489	J-325	J-326	-1081.81	13.53	0.00	3.07	2.56
P-49	J-48	J-62	563.24	1.00	0.00	0.90	0.19
P-490	J-327	J-321	634.59	6.20	0.00	1.80	0.95
P-491	J-325	J-327	135.43	0.20	0.00	0.38	0.05
P-492	J-328	J-329	1348.73	5.07	0.00	2.15	0.95
P-493	J-328	J-334	-443.84	2.59	0.00	1.26	0.49
P-494	J-329	J-330	1270.73	4.43	0.00	2.03	0.85

P-495	J-329	J-333	-574.82	4.19	0.00	1.63	0.79
P-496	J-330	J-282	1151.91	3.74	0.00	1.84	0.71
P-497	J-330	J-332	-589.63	4.45	0.00	1.67	0.83
P-498	J-331	J-279	-1172.17	3.87	0.00	1.87	0.73
P-499	J-332	J-302	-594.31	4.47	0.00	1.69	0.84
P-5	J-3	J-7	2136.41	18.23	0.00	6.06	9.03
P-50	J-18	J-49	-353.98	0.21	0.00	0.56	0.08
P-500	J-331	J-332	-578.07	4.23	0.00	1.64	0.80
P-501	J-333	J-300	-628.32	4.92	0.00	1.78	0.94
P-502	J-332	J-333	-573.39	4.17	0.00	1.63	0.79
P-503	J-334	J-296	-708.33	6.15	0.00	2.01	1.17
P-504	J-333	J-334	-519.89	3.48	0.00	1.47	0.66
P-505	J-335	J-277	153.39	0.08	0.00	0.24	0.02
P-506	J-334	J-335	-509.40	3.36	0.00	1.44	0.63
P-507	J-331	J-340	554.75	3.87	0.00	1.57	0.74
P-508	J-336	J-278	-1182.73	3.98	0.00	1.89	0.74
P-509	J-337	J-284	568.79	1.01	0.00	0.91	0.19
P-51	J-50	J-18	-353.98	0.21	0.00	0.56	0.08
P-510	J-338	J-336	280.87	1.13	0.00	0.80	0.21
P-511	J-337	J-338	-453.31	2.70	0.00	1.29	0.51
P-512	J-338	J-295	-566.02	4.08	0.00	1.61	0.77
P-513	J-339	J-337	880.72	2.27	0.00	1.41	0.43
P-514	J-340	J-338	464.16	2.85	0.00	1.32	0.53
P-515	J-339	J-340	-498.26	3.27	0.00	1.41	0.61
P-516	J-340	J-293	-555.66	3.89	0.00	1.58	0.75
P-517	J-341	J-284	-315.29	0.34	0.00	0.50	0.06
P-518	J-341	J-345	-409.29	2.21	0.00	1.16	0.42
P-519	J-342	J-341	-25.91	0.00	0.00	0.04	0.00
P-52	J-40	J-41	67.01	0.02	0.00	0.19	0.01
P-520	J-342	J-344	-400.77	2.13	0.00	1.14	0.41
P-521	J-343	J-221	843.14	2.10	0.00	1.35	0.40
P-522	J-344	J-286	-525.76	3.62	0.00	1.49	0.67
P-523	J-343	J-344	99.64	0.17	0.00	0.28	0.03
P-524	J-345	J-287	-554.41	3.98	0.00	1.57	0.74
P-525	J-344	J-345	-71.37	0.09	0.00	0.20	0.02
P-526	J-345	J-336	-222.25	0.71	0.00	0.63	0.14
P-527	J-254	J-217	794.93	1.89	0.00	1.27	0.36
P-528	J-254	J-257	393.13	2.09	0.00	1.12	0.39
P-529	J-255	J-218	1474.10	5.97	0.00	2.35	1.12
P-53	J-42	J-40	67.01	0.01	0.00	0.19	0.01
P-530	J-142	Well #90	0.00	0.00	0.00	0.00	0.00
P-531	J-157	Well #89	0.00	0.00	0.00	0.00	0.00
P-532	J-173	Well #91	0.00	0.00	0.00	0.00	0.00
P-533	J-257	J-242	666.76	5.50	0.00	1.89	1.04
P-534	J-258	J-253	-365.93	1.80	0.00	1.04	0.34
P-535	J-254	J-258	-580.44	4.21	0.00	1.65	0.81
P-536	J-250	J-264	218.88	0.70	0.00	0.62	0.13
P-537	J-259	J-249	-183.79	0.50	0.00	0.52	0.10
P-538	J-259	J-262	-96.22	0.08	0.00	0.27	0.03
P-539	J-261	J-265	468.53	0.71	0.00	0.75	0.13
P-54	J-50	J-58	406.36	2.18	0.00	1.15	0.42
P-540	J-260	J-249	466.56	0.36	0.00	0.74	0.13
P-541	J-262	J-261	-300.04	1.28	0.00	0.85	0.24
P-542	J-260	J-262	232.94	0.79	0.00	0.66	0.15
P-543	J-262	J-263	140.76	0.31	0.00	0.40	0.06
P-544	J-264	J-513	96.13	0.08	0.00	0.27	0.03
P-545	J-263	J-264	25.26	0.01	0.00	0.07	0.00
P-546	J-265	J-250	227.05	0.19	0.00	0.36	0.03
P-547	J-263	J-265	-248.36	0.87	0.00	0.70	0.17
P-548	J-250	J-512	-139.83	0.31	0.00	0.40	0.06
P-549	J-266	J-265	302.88	1.28	0.00	0.86	0.24
P-55	J-41	J-44	67.01	0.01	0.00	0.19	0.01
P-550	J-266	J-350	-398.85	2.15	0.00	1.13	0.40
P-551	J-347	J-251	-3691.43	32.64	0.00	5.89	6.12
P-552	J-346	J-347	-940.58	10.42	0.00	2.67	1.98
P-553	J-346	J-351	792.58	7.58	0.00	2.25	1.44
P-554	J-348	J-352	-1576.31	6.68	0.00	2.52	1.27
P-555	J-349	J-261	404.41	2.15	0.00	1.15	0.41
P-556	J-348	J-349	457.30	2.72	0.00	1.30	0.52
P-557	J-349	J-266	339.86	1.58	0.00	0.96	0.30
P-558	J-82	J-383	-1637.53	0.11	0.00	4.65	5.52
P-559	J-351	J-349	582.96	4.35	0.00	1.65	0.81

P-560	J-350	J-351	-546.85	3.79	0.00	1.55	0.72
P-561	J-352	J-347	-2255.00	12.96	0.00	3.60	2.46
P-562	J-351	J-352	-633.24	5.04	0.00	1.80	0.95
P-563	J-353	J-259	-132.01	0.27	0.00	0.37	0.05
P-564	J-263	J-353	67.86	0.04	0.00	0.19	0.02
P-565	J-224	J-355	260.43	0.97	0.00	0.74	0.18
P-566	J-354	J-248	-104.06	0.18	0.00	0.30	0.03
P-567	J-354	J-356	-85.44	0.06	0.00	0.24	0.02
P-568	J-355	J-515	106.50	0.09	0.00	0.30	0.03
P-569	J-356	J-225	-260.19	0.97	0.00	0.74	0.18
P-57	J-49	J-52	-1121.70	1.82	0.00	1.79	0.67
P-570	J-355	J-356	5.94	0.00	0.00	0.02	0.00
P-571	J-357	J-248	235.82	0.10	0.00	0.38	0.04
P-572	J-356	J-357	-115.32	0.22	0.00	0.33	0.04
P-573	J-248	J-359	-16.24	0.01	0.00	0.05	0.00
P-574	J-230	J-361	307.99	1.33	0.00	0.87	0.25
P-575	J-359	J-514	13.23	0.00	0.00	0.04	0.00
P-576	J-260	J-360	-215.69	0.69	0.00	0.61	0.13
P-577	J-358	J-247	617.88	1.19	0.00	0.99	0.22
P-578	J-360	J-232	-349.97	1.68	0.00	0.99	0.32
P-579	J-358	J-360	418.95	2.32	0.00	1.19	0.44
P-580	J-361	J-359	177.47	0.23	0.00	0.50	0.09
P-581	J-360	J-361	257.23	0.95	0.00	0.73	0.18
P-582	J-361	J-357	91.76	0.14	0.00	0.26	0.03
P-583	J-358	J-364	-528.69	3.60	0.00	1.50	0.68
P-584	J-362	J-255	-1098.92	14.02	0.00	3.12	2.64
P-585	J-235	J-362	-210.89	0.65	0.00	0.60	0.12
P-586	J-362	J-347	-347.85	1.67	0.00	0.99	0.31
P-587	J-363	J-362	-939.87	10.38	0.00	2.67	1.97
P-588	J-352	J-363	-250.55	0.91	0.00	0.71	0.17
P-589	J-363	J-237	-327.40	1.49	0.00	0.93	0.28
P-59	J-53	J-25	212.01	0.33	0.00	0.60	0.13
P-590	J-364	J-363	-720.72	6.35	0.00	2.04	1.21
P-591	J-239	J-364	399.04	2.13	0.00	1.13	0.40
P-592	J-364	J-348	295.07	1.24	0.00	0.84	0.23
P-593	J-215	J-370	-1888.94	9.33	0.00	3.01	1.77
P-594	J-314	J-391	713.43	0.78	0.00	1.14	0.29
P-595	J-314	Well #81	0.00	0.00	0.00	0.00	0.00
P-596	J-314	Well #80	0.00	0.00	0.00	0.00	0.00
P-597	J-366	J-493	-2250.01	4.84	0.00	3.59	2.45
P-598	J-369	J-4	-3513.75	29.59	0.00	5.61	5.59
P-599	J-369	J-371	1306.12	19.21	0.00	3.70	3.63
P-6	J-7	J-8	2136.41	23.76	0.00	6.06	9.03
P-60	J-53	J-52	1121.70	3.54	0.00	1.79	0.67
P-600	J-370	J-366	-2083.03	11.26	0.00	3.32	2.12
P-601	J-371	J-216	915.92	9.90	0.00	2.60	1.88
P-602	J-370	J-371	-620.83	4.89	0.00	1.76	0.92
P-603	J-371	J-489	-737.62	1.51	0.00	2.09	1.26
P-604	J-4	J-488	-6946.29	1.00	0.00	2.19	0.38
P-605	J-214	J-505	-459.86	1.43	0.00	1.30	0.52
P-606	J-372	J-215	-136.27	0.29	0.00	0.39	0.06
P-607	J-372	J-374	-831.59	8.31	0.00	2.36	1.57
P-608	J-374	J-370	-307.92	1.31	0.00	0.87	0.25
P-609	J-374	J-366	-777.67	12.57	0.00	2.21	1.39
P-61	J-54	J-49	-513.73	3.42	0.00	1.46	0.64
P-610	J-369	J-375	-549.39	3.67	0.00	1.56	0.73
P-611	J-376	J-5	-789.13	0.94	0.00	1.26	0.35
P-612	J-376	J-377	68.49	0.08	0.00	0.19	0.02
P-613	J-77	J-378	-6912.85	5.61	0.00	4.90	2.72
P-614	J-378	J-480	-5027.04	3.61	0.00	3.56	1.51
P-615	J-378	J-13	-1693.68	10.01	0.00	4.80	5.87
P-616	J-379	J-465	-3527.04	8.21	0.00	5.63	5.63
P-617	J-378	J-481	-699.14	2.50	0.00	1.98	1.14
P-618	J-381	J-479	-993.00	8.88	0.00	2.82	2.18
P-619	J-381	J-385	-222.55	0.73	0.00	0.63	0.14
P-62	J-54	J-502	297.10	1.23	0.00	0.84	0.23
P-620	J-383	J-33	-5563.78	9.60	0.00	3.95	1.82
P-621	J-384	J-383	2202.58	50.19	0.00	6.25	9.55
P-622	J-384	J-269	-1676.56	28.77	0.00	4.76	5.76
P-623	J-385	J-384	780.02	7.38	0.00	2.21	1.40
P-624	J-385	J-474	-1509.57	12.69	0.00	4.28	4.74
P-625	J-366	J-468	-864.68	2.23	0.00	1.38	0.42

P-626	J-388	J-404	-12675.59	6.14	0.00	4.00	1.16
P-627	J-387	J-402	-2749.12	18.66	0.00	4.39	3.55
P-628	J-387	J-392	-1227.63	4.23	0.00	1.96	0.80
P-629	J-389	J-373	-25203.87	21.55	0.00	7.94	4.13
P-63	J-55	J-54	-200.40	0.60	0.00	0.57	0.11
P-630	J-390	J-399	-3075.67	22.94	0.00	4.91	4.37
P-631	J-390	J-397	1649.55	7.24	0.00	2.63	1.38
P-632	J-392	J-471	-1326.64	2.41	0.00	2.12	0.92
P-633	J-391	J-393	586.69	4.34	0.00	1.66	0.82
P-634	J-393	J-504	561.88	3.99	0.00	1.59	0.76
P-635	J-393	J-396	-229.20	0.77	0.00	0.65	0.14
P-636	J-395	J-390	-1307.36	4.71	0.00	2.09	0.90
P-637	J-394	J-392	-862.65	8.90	0.00	2.45	1.68
P-638	J-396	J-395	-795.35	7.65	0.00	2.26	1.45
P-639	J-394	J-396	-701.47	6.08	0.00	1.99	1.15
P-64	J-55	J-59	-264.50	0.98	0.00	0.75	0.19
P-640	J-397	J-314	713.43	0.77	0.00	1.14	0.29
P-641	J-396	J-368	-642.31	3.59	0.00	1.82	0.97
P-642	J-391	J-503	-127.26	0.26	0.00	0.36	0.05
P-643	J-398	J-373	-2279.63	53.49	0.00	6.47	10.18
P-644	J-399	J-389	-3878.30	35.62	0.00	6.19	6.71
P-645	J-398	J-399	534.94	3.68	0.00	1.52	0.69
P-646	J-400	J-398	-1490.70	24.59	0.00	4.23	4.63
P-647	J-400	J-390	388.25	2.03	0.00	1.10	0.38
P-648	J-401	J-400	-848.45	8.59	0.00	2.41	1.63
P-649	J-401	J-397	213.19	0.67	0.00	0.60	0.13
P-65	J-57	J-50	380.86	0.48	0.00	0.61	0.09
P-650	J-399	J-406	830.57	8.24	0.00	2.36	1.57
P-651	J-402	J-388	-3295.64	26.24	0.00	5.26	4.96
P-652	J-403	J-486	542.72	1.86	0.00	1.54	0.71
P-653	J-392	J-403	-1270.66	18.18	0.00	3.60	3.45
P-654	J-404	J-405	-15460.02	8.87	0.00	4.87	1.67
P-655	J-403	J-404	-1620.59	28.63	0.00	4.60	5.41
P-656	J-405	J-389	-18542.33	12.42	0.00	5.84	2.34
P-657	J-406	J-403	699.73	6.06	0.00	1.98	1.14
P-658	J-405	J-406	1697.79	31.44	0.00	4.82	5.90
P-659	J-395	J-406	-1321.63	19.40	0.00	3.75	3.71
P-66	J-56	J-57	209.50	0.65	0.00	0.59	0.12
P-660	J-389	J-411	2276.23	13.22	0.00	3.63	2.50
P-661	J-407	J-415	-207.15	0.16	0.00	0.33	0.03
P-662	J-407	J-427	121.46	0.09	0.00	0.34	0.04
P-663	J-409	J-407	685.88	1.41	0.00	1.09	0.27
P-664	J-409	J-416	-45.18	0.04	0.00	0.13	0.01
P-665	J-410	J-409	894.71	2.36	0.00	1.43	0.44
P-666	J-410	J-417	-227.25	0.75	0.00	0.64	0.14
P-667	J-411	J-418	1563.02	6.57	0.00	2.49	1.25
P-668	J-412	J-405	-877.52	9.08	0.00	2.49	1.74
P-669	J-411	J-412	821.67	8.29	0.00	2.33	1.54
P-67	J-58	J-54	237.77	0.82	0.00	0.67	0.15
P-670	J-413	J-404	-656.83	5.31	0.00	1.86	1.02
P-671	J-412	J-413	643.63	5.10	0.00	1.83	0.98
P-672	J-414	J-388	-716.82	1.54	0.00	1.14	0.29
P-673	J-413	J-414	422.90	2.37	0.00	1.20	0.45
P-674	J-415	J-414	-492.16	0.78	0.00	0.79	0.15
P-675	J-416	J-413	-370.56	1.85	0.00	1.05	0.35
P-676	J-415	J-416	-305.29	1.30	0.00	0.87	0.25
P-677	J-417	J-412	-548.56	3.88	0.00	1.56	0.73
P-678	J-416	J-417	-486.91	3.08	0.00	1.38	0.58
P-679	J-418	J-422	1175.46	3.88	0.00	1.88	0.74
P-68	J-56	J-58	506.47	3.31	0.00	1.44	0.63
P-680	J-417	J-418	-672.60	5.59	0.00	1.91	1.06
P-681	J-418	J-420	-539.04	3.71	0.00	1.53	0.70
P-682	J-419	J-373	-1662.50	30.06	0.00	4.72	5.67
P-683	J-419	J-411	615.46	4.71	0.00	1.75	0.90
P-684	J-420	J-419	-793.04	7.57	0.00	2.25	1.44
P-685	J-380	Well #29	-1500.00	1.47	0.00	4.25	4.69
P-686	J-422	J-410	921.46	2.47	0.00	1.47	0.47
P-687	J-407	J-313	517.57	2.06	0.00	1.47	0.65
P-688	J-380	J-424	-269.05	0.06	0.00	0.76	0.19
P-689	J-386	J-473	-9.57	0.00	0.00	0.03	0.00
P-69	J-59	J-60	-350.45	1.68	0.00	0.99	0.32
P-690	J-424	J-408	-112.53	0.14	0.00	0.32	0.04

P-691	J-424	J-423	-156.51	0.23	0.00	0.44	0.07
P-692	J-423	J-470	-147.58	0.09	0.00	0.42	0.06
P-693	J-423	J-427	-8.93	0.00	0.00	0.03	0.00
P-694	J-427	J-408	112.53	0.09	0.00	0.32	0.04
P-696	J-387	Signal Pea	3733.52	33.22	0.00	5.96	6.25
P-697	Signal Pea	J-394	-1618.00	28.55	0.00	4.59	5.39
P-698	J-251	Copper SW	-7747.44	2.87	0.00	5.49	3.35
P-699	J-415	J-463	83.30	0.06	0.00	0.24	0.02
P-7	J-8	J-484	-2822.74	1.07	0.00	2.00	0.52
P-70	J-58	J-59	168.05	0.44	0.00	0.48	0.08
P-700	J-447	J-132	-7.06	0.00	0.00	0.02	0.00
P-701	J-428	J-113	90.10	0.97	0.00	0.58	0.18
P-702	J-430	J-182	-14.14	0.00	0.00	0.02	0.00
P-703	J-431	J-429	-33.71	0.16	0.00	0.22	0.03
P-704	J-430	J-431	-133.86	2.02	0.00	0.85	0.38
P-705	J-174	J-432	103.38	0.16	0.00	0.29	0.03
P-706	J-437	J-142	-322.65	0.35	0.00	0.51	0.07
P-707	J-313	Well #35	0.00	0.00	0.00	0.00	0.00
P-709	J-434	J-432	44.62	0.27	0.00	0.28	0.05
P-71	J-60	J-56	-389.78	2.06	0.00	1.11	0.39
P-710	J-435	J-437	-589.56	0.98	0.00	0.94	0.20
P-711	J-435	J-434	18.74	0.05	0.00	0.12	0.01
P-712	J-436	J-149	-233.98	0.71	0.00	0.66	0.15
P-713	J-436	J-435	169.23	3.12	0.00	1.08	0.59
P-714	J-173	J-437	-435.45	0.62	0.00	0.69	0.12
P-715	J-437	J-149	-998.35	2.85	0.00	1.59	0.54
P-716	J-433	J-452	-110.95	0.08	0.00	0.31	0.04
P-717	J-107	J-498	-314.84	0.43	0.00	0.89	0.26
P-718	J-438	J-207	213.37	0.34	0.00	0.61	0.13
P-719	J-433	J-438	594.12	4.47	0.00	1.69	0.84
P-72	J-60	J-64	-108.67	0.19	0.00	0.31	0.04
P-720	J-439	J-137	-29.05	0.01	0.00	0.08	0.00
P-721	J-440	J-447	-290.92	8.54	0.00	1.86	1.62
P-722	J-439	J-440	-300.69	9.15	0.00	1.92	1.72
P-723	J-441	J-444	723.13	0.34	0.00	1.15	0.30
P-724	J-439	J-441	181.74	3.57	0.00	1.16	0.68
P-725	J-442	J-148	-134.39	0.25	0.00	0.38	0.05
P-726	J-441	J-442	96.86	1.12	0.00	0.62	0.21
P-727	J-442	J-436	83.25	0.84	0.00	0.53	0.16
P-728	J-448	J-103	70.03	0.01	0.00	0.11	0.00
P-729	J-428	J-443	-47.51	0.30	0.00	0.30	0.06
P-73	J-62	J-61	926.97	2.49	0.00	1.48	0.47
P-730	J-444	J-204	574.94	0.92	0.00	0.92	0.20
P-731	J-443	J-444	-185.90	3.72	0.00	1.19	0.71
P-732	J-447	J-448	-283.86	8.14	0.00	1.81	1.55
P-733	J-444	J-445	-185.71	3.71	0.00	1.19	0.71
P-734	J-446	J-438	-126.75	0.10	0.00	0.36	0.05
P-735	J-445	J-446	-336.41	11.27	0.00	2.15	2.12
P-736	J-449	J-48	-191.44	0.22	0.00	0.54	0.10
P-737	J-448	J-449	-109.96	1.41	0.00	0.70	0.27
P-738	J-37	J-459	185.77	0.21	0.00	0.53	0.10
P-739	J-451	J-448	243.93	0.04	0.00	0.39	0.04
P-74	J-61	J-57	318.17	0.34	0.00	0.51	0.07
P-740	J-450	J-451	160.29	2.86	0.00	1.02	0.54
P-741	J-38	J-454	-133.59	0.11	0.00	0.38	0.05
P-742	J-451	J-452	320.60	10.16	0.00	2.05	1.94
P-743	J-452	J-446	209.65	4.65	0.00	1.34	0.88
P-744	J-402	J-461	582.22	4.04	0.00	1.65	0.81
P-745	J-449	J-455	81.48	0.81	0.00	0.52	0.15
P-746	J-456	J-61	-264.41	0.10	0.00	0.42	0.05
P-747	J-455	J-456	151.33	2.56	0.00	0.97	0.48
P-748	J-457	J-312	986.12	4.52	0.00	2.80	2.16
P-749	J-450	J-457	-205.21	4.50	0.00	1.31	0.85
P-75	J-61	J-66	196.40	0.57	0.00	0.56	0.11
P-750	J-458	J-456	-367.51	0.09	0.00	0.59	0.09
P-751	J-457	J-458	308.67	9.45	0.00	1.97	1.81
P-752	J-458	J-454	79.31	0.77	0.00	0.51	0.15
P-753	J-459	J-460	131.50	0.06	0.00	0.37	0.05
P-754	J-454	J-459	-54.28	0.38	0.00	0.35	0.07
P-755	J-460	J-50	178.52	0.19	0.00	0.51	0.09
P-756	J-460	J-453	-47.03	0.29	0.00	0.30	0.06
P-757	J-453	J-456	-48.22	0.31	0.00	0.31	0.06

P-758	J-414	J-462	140.56	0.29	0.00	0.40	0.06
P-759	J-463	J-470	147.58	0.10	0.00	0.42	0.06
P-76	J-65	J-495	-918.42	5.03	0.00	2.61	1.89
P-760	J-463	J-464	-64.28	0.03	0.00	0.18	0.01
P-761	J-465	J-478	-3269.05	10.02	0.00	5.22	4.89
P-762	J-465	J-377	-257.99	6.84	0.00	1.65	1.30
P-763	J-464	J-462	-64.28	0.52	0.00	0.41	0.10
P-764	J-466	J-487	-8156.12	0.54	0.00	2.57	0.51
P-765	J-462	J-466	76.28	0.72	0.00	0.49	0.14
P-766	J-467	J-466	-7685.18	0.23	0.00	2.42	0.46
P-767	J-377	J-483	-189.50	1.94	0.00	1.21	0.73
P-768	J-467	J-375	549.39	27.85	0.00	3.51	5.26
P-769	J-466	J-461	547.23	27.73	0.00	3.49	5.22
P-77	J-64	J-67	6.18	0.00	0.00	0.02	0.00
P-770	J-468	J-387	10.76	0.00	0.00	0.02	0.00
P-771	J-461	J-468	1129.44	14.62	0.00	3.20	2.77
P-773	J-427	Well #32	0.00	0.00	0.00	0.00	0.00
P-775	J-470	Well #33	0.00	0.00	0.00	0.00	0.00
P-776	J-73	J-376	-1710.26	15.78	0.00	4.85	5.98
P-777	J-73	Well #31	-1500.00	3.88	0.00	4.25	4.69
P-778	J-471	J-395	-1326.64	2.43	0.00	2.12	0.92
P-779	J-471	Well #27	0.00	0.00	0.00	0.00	0.00
P-78	J-66	J-65	-116.19	0.22	0.00	0.33	0.04
P-780	J-373	CAP Plant	-29400.00	0.11	0.00	9.27	5.50
P-781	J-368	J-397	-642.31	1.53	0.00	1.82	0.97
P-782	J-473	J-421	-263.57	0.89	0.00	0.75	0.19
P-783	J-473	Well #36	0.00	0.00	0.00	0.00	0.00
P-784	J-474	J-386	-9.57	0.00	0.00	0.03	0.00
P-785	J-474	Well #37	-1500.00	5.22	0.00	4.25	4.69
P-786	J-475	J-476	752.03	3.47	0.00	2.13	1.31
P-787	J-475	Well #38	-1500.00	3.31	0.00	4.25	4.69
P-788	J-381	Well #39	-1500.00	2.71	0.00	4.25	4.69
P-789	J-476	J-76	252.36	0.91	0.00	0.72	0.17
P-79	J-64	J-66	-262.85	1.00	0.00	0.75	0.19
P-790	J-271	J-476	-2009.08	21.26	0.00	5.70	8.06
P-791	J-476	J-381	-1509.41	12.47	0.00	4.28	4.74
P-792	J-477	J-268	1912.73	9.09	0.00	5.43	7.35
P-793	J-477	Well #40	-1500.00	2.39	0.00	4.25	4.69
P-794	J-478	J-380	-1769.05	0.60	0.00	2.82	1.57
P-795	J-478	Well #41	-1500.00	1.14	0.00	4.25	4.69
P-796	J-479	J-382	507.00	0.48	0.00	1.44	0.63
P-797	J-479	Well #42	-1500.00	1.85	0.00	4.25	4.69
P-798	J-480	J-379	-3527.04	0.94	0.00	2.50	0.78
P-799	J-480	Well #43	-1500.00	3.42	0.00	4.25	4.69
P-8	J-8	J-485	3714.53	1.47	0.00	2.63	0.86
P-80	J-66	J-56	-246.26	0.87	0.00	0.70	0.17
P-800	J-481	J-381	-699.14	3.51	0.00	1.98	1.14
P-801	J-481	Well #62	0.00	0.00	0.00	0.00	0.00
P-802	J-482	J-467	-6946.29	0.21	0.00	2.19	0.38
P-803	J-482	Well #63	0.00	0.00	0.00	0.00	0.00
P-804	J-483	J-467	-189.50	1.92	0.00	1.21	0.73
P-805	J-483	Well #64	0.00	0.00	0.00	0.00	0.00
P-806	J-484	J-6	-2822.74	0.27	0.00	2.00	0.52
P-807	J-484	Well #65	0.00	0.00	0.00	0.00	0.00
P-808	J-88	Well #66	0.00	0.00	0.00	0.00	0.00
P-809	J-485	J-10	3714.53	3.08	0.00	2.63	0.86
P-81	J-67	J-65	-297.78	1.22	0.00	0.84	0.23
P-810	J-485	Well #67	0.00	0.00	0.00	0.00	0.00
P-811	J-486	J-402	542.72	1.89	0.00	1.54	0.71
P-812	J-486	Well #68	0.00	0.00	0.00	0.00	0.00
P-813	J-487	J-388	-8156.12	2.01	0.00	2.57	0.51
P-814	J-487	Well #69	0.00	0.00	0.00	0.00	0.00
P-815	J-488	J-482	-6946.29	0.72	0.00	2.19	0.38
P-816	J-488	Well #70	0.00	0.00	0.00	0.00	0.00
P-817	J-375	Well #71	0.00	0.00	0.00	0.00	0.00
P-818	J-489	J-8	-737.62	5.12	0.00	2.09	1.26
P-819	J-489	Well #72	0.00	0.00	0.00	0.00	0.00
P-82	J-67	J-51	155.96	0.37	0.00	0.44	0.07
P-820	J-490	J-9	-2166.32	8.76	0.00	3.46	2.28
P-821	J-490	Well #73	0.00	0.00	0.00	0.00	0.00
P-822	J-491	J-198	-943.37	5.18	0.00	2.68	1.99
P-823	J-491	Well #74	0.00	0.00	0.00	0.00	0.00

P-824	J-492	J-241	-37.42	0.01	0.00	0.11	0.01
P-825	J-492	Well #75	0.00	0.00	0.00	0.00	0.00
P-826	J-493	J-369	-2250.01	8.00	0.00	3.59	2.45
P-827	J-493	Well #76	0.00	0.00	0.00	0.00	0.00
P-828	J-83	Well #77	0.00	0.00	0.00	0.00	0.00
P-83	J-68	J-51	258.38	0.95	0.00	0.73	0.18
P-830	J-103	Well #58	-1500.00	2.57	0.00	4.25	4.69
P-831	J-494	J-48	4.00	0.00	0.00	0.01	0.00
P-832	J-494	Well #59	-1500.00	1.70	0.00	4.25	4.69
P-833	J-48	Well #60	-1500.00	2.21	0.00	4.25	4.69
P-834	J-495	J-62	581.58	2.18	0.00	1.65	0.81
P-835	J-495	Well #61	-1500.00	3.09	0.00	4.25	4.69
P-836	J-457	Well #57	-1500.00	2.55	0.00	4.25	4.69
P-837	J-496	J-309	1593.91	6.64	0.00	4.52	5.25
P-838	J-496	Well #56	-1500.00	3.42	0.00	4.25	4.69
P-839	J-497	J-46	1282.17	1.38	0.00	2.05	0.86
P-84	J-65	J-68	208.45	0.64	0.00	0.59	0.12
P-840	J-497	Well #55	-1500.00	2.11	0.00	4.25	4.69
P-841	J-43	Well #54	-1500.00	3.80	0.00	4.25	4.69
P-842	J-96	Well #53	-1500.00	3.65	0.00	4.25	4.69
P-843	J-498	J-433	1185.16	10.88	0.00	3.36	3.03
P-844	J-498	Well #51	-1500.00	2.66	0.00	4.25	4.69
P-845	J-207	Well #50	-1500.00	8.65	0.00	4.25	4.69
P-846	J-107	Well #52	-1500.00	3.76	0.00	4.25	4.69
P-847	J-208	Well #49	-1500.00	4.13	0.00	4.25	4.69
P-848	J-499	J-299	370.13	0.64	0.00	1.05	0.35
P-849	J-499	Well #48	-1500.00	4.68	0.00	4.25	4.69
P-85	J-70	J-68	601.32	2.25	0.00	1.71	0.86
P-850	J-500	J-298	-187.11	0.44	0.00	0.53	0.10
P-851	J-500	Well #47	-1500.00	5.13	0.00	4.25	4.69
P-852	J-199	Well #44	-1500.00	4.34	0.00	4.25	4.69
P-853	J-288	Well #45	-1500.00	3.56	0.00	4.25	4.69
P-854	J-72	Well #46	-1500.00	3.19	0.00	4.25	4.69
P-855	J-501	J-55	-210.90	0.66	0.00	0.60	0.12
P-856	J-502	J-501	43.10	0.04	0.00	0.12	0.01
P-857	J-503	J-401	-381.26	1.97	0.00	1.08	0.37
P-858	J-504	J-394	307.88	1.32	0.00	0.87	0.25
P-859	J-505	J-372	-713.86	7.53	0.00	2.02	1.19
P-86	J-100	J-110	1157.52	1.89	0.00	1.85	0.71
P-860	J-506	J-258	468.51	1.68	0.00	1.33	0.54
P-861	J-507	J-323	519.34	3.50	0.00	1.47	0.66
P-863	J-509	J-122	-313.17	1.32	0.00	0.89	0.26
P-864	J-510	J-252	321.36	0.35	0.00	0.51	0.07
P-865	J-42	J-94	495.94	1.09	0.00	1.41	0.60
P-866	J-512	J-266	-287.83	1.16	0.00	0.82	0.22
P-867	J-513	J-353	-51.87	0.05	0.00	0.15	0.01
P-868	J-514	J-249	-134.77	0.14	0.00	0.38	0.05
P-869	J-515	J-354	-41.50	0.03	0.00	0.12	0.01
P-87	J-71	J-309	-461.93	0.69	0.00	0.74	0.13
P-870	J-368	Well #79	0.00	0.00	0.00	0.00	0.00
P-871	J-396	Well #78	0.00	0.00	0.00	0.00	0.00
P-872	J-257	J-510	-569.63	4.15	0.00	1.62	0.78
P-873	J-129	J-161	1460.83	6.00	0.00	4.14	4.46
P-874	J-161	J-319	1163.89	7.84	0.00	3.30	2.93
P-875	J-319	J-211	1120.89	7.12	0.00	3.18	2.73
P-876	J-108	J-197	-150.30	0.19	0.00	0.61	0.16
P-877	J-472	J-195	150.30	0.43	0.00	0.61	0.16
P-878	J-108	J-472	150.30	0.09	0.00	0.43	0.07
P-879	J-420	J-511	0.00	0.00	0.00	0.00	0.00
P-88	J-89	J-312	-661.15	5.37	0.00	1.88	1.03
P-880	J-419	J-516	0.00	0.00	0.00	0.00	0.00
P-881	J-398	J-517	0.00	0.00	0.00	0.00	0.00
P-882	J-400	J-518	0.00	0.00	0.00	0.00	0.00
P-883	J-56	Well #82	-1500.00	2.60	0.00	4.25	4.68
P-884	J-128	Well #83	-1500.00	2.41	0.00	4.25	4.68
P-885	J-118	Well #84	-1500.00	3.70	0.00	4.25	4.68
P-886	J-112	Well #85	-1500.00	3.03	0.00	4.25	4.68
P-887	J-149	WEll #86	-1500.00	3.11	0.00	4.25	4.68
P-888	J-202	Well #87	-1500.00	1.53	0.00	4.25	4.68
P-889	J-183	Well #88	-1500.00	3.31	0.00	4.25	4.68
P-89	J-71	J-89	-833.36	2.06	0.00	1.33	0.39
P-9	J-10	J-9	2166.32	0.47	0.00	3.46	2.28

P-90	J-89	J-458	-596.87	0.44	0.00	0.95	0.21
P-91	J-96	J-205	1508.00	6.19	0.00	2.41	1.17
P-92	J-96	J-107	-1603.63	6.90	0.00	2.56	1.31
P-93	J-112	J-148	933.26	2.53	0.00	1.49	0.48
P-94	J-69	J-36	0.00	0.00	0.00	0.00	0.00
P-95	J-103	J-100	1157.52	1.89	0.00	1.85	0.71
P-96	J-103	J-494	-1496.00	1.64	0.00	2.39	1.15
P-97	J-63	J-73	-2242.60	6.80	0.00	6.36	9.87
P-98	J-73	J-24	967.66	5.57	0.00	2.74	2.08
P-99	J-24	J-74	927.32	4.59	0.00	2.63	1.92

E N D N O D E R E S U L T S

NODE NAME	NODE TITLE	EXTERNAL DEMAND (gpm)	HYDRAULIC GRADE (ft)	NODE ELEVATION (ft)	PRESSURE HEAD (ft)	NODE PRESSURE (psi)
Burgess Pe		----	1566.00	1566.00	0.00	0.00
CAP Plant		-29400.00	1693.21	1426.00	267.21	115.79
CG Tank		----	1566.00	1566.00	0.00	0.00
Copper SW		----	1566.00	1566.00	0.00	0.00
Cottonwood		-5170.00	1604.19	1397.00	207.19	89.78
J-1		0.00	1626.80	1415.00	211.80	91.78
J-10		507.00	1592.68	1389.00	203.68	88.26
J-100		0.00	1558.60	1385.00	173.60	75.23
J-101		0.00	1588.12	1408.00	180.12	78.05
J-102		0.00	1590.43	1409.00	181.43	78.62
J-103		148.00	1560.50	1381.00	179.50	77.78
J-105		0.00	1594.50	1404.00	190.50	82.55
J-106		0.00	1594.50	1404.00	190.50	82.55
J-107		254.00	1560.76	1374.00	186.76	80.93
J-108		0.00	1572.66	1385.00	187.66	81.32
J-109		148.00	1555.69	1396.00	159.69	69.20
J-11		507.00	1599.95	1402.00	197.95	85.78
J-110		296.00	1556.71	1389.00	167.71	72.67
J-111		296.00	1540.12	1368.00	172.12	74.59
J-112		296.00	1532.77	1353.00	179.77	77.90
J-113		148.00	1525.79	1350.00	175.79	76.17
J-114		148.00	1529.35	1330.00	199.35	86.38
J-117		148.00	1531.45	1379.00	152.45	66.06
J-118		296.00	1532.61	1370.00	162.61	70.46
J-119		296.00	1532.66	1375.00	157.66	68.32
J-12		0.00	1601.12	1397.00	204.12	88.45
J-120		148.00	1532.10	1380.00	152.10	65.91
J-121		296.00	1537.26	1375.00	162.26	70.31
J-122		148.00	1533.84	1382.00	151.84	65.80
J-123		148.00	1537.40	1378.00	159.40	69.07
J-124		296.00	1532.48	1360.00	172.48	74.74
J-126		148.00	1549.79	1385.00	164.79	71.41
J-127		0.00	1587.92	1408.00	179.92	77.97
J-128		296.00	1552.97	1381.00	171.97	74.52
J-129		0.00	1586.43	1408.00	178.43	77.32
J-13		0.00	1627.89	1415.00	212.89	92.25
J-130		0.00	1586.43	1408.00	178.43	77.32
J-131		0.00	1586.43	1408.00	178.43	77.32
J-132		148.00	1552.36	1369.00	183.36	79.46
J-135		296.00	1540.15	1372.00	168.15	72.87
J-136		296.00	1533.55	1367.00	166.55	72.17
J-137		296.00	1534.69	1360.00	174.69	75.70
J-14		0.00	1674.18	1520.00	154.18	66.81
J-141		296.00	1527.36	1450.00	77.36	33.52
J-142		296.00	1527.36	1420.00	107.36	46.52
J-145		148.00	1530.05	1402.00	128.05	55.49
J-146		296.00	1529.81	1378.00	151.81	65.78
J-147		296.00	1529.82	1360.00	169.82	73.59
J-148		296.00	1530.24	1349.00	181.24	78.54
J-149		296.00	1529.86	1357.00	172.86	74.90
J-15		0.00	1612.68	1410.00	202.68	87.83
J-151		0.00	1599.47	1400.00	199.47	86.44
J-153		0.00	1581.54	1402.00	179.54	77.80

J-154	296.00	1528.54	1390.00	138.54	60.04
J-157	296.00	1528.53	1415.00	113.53	49.20
J-158	148.00	1529.51	1437.00	92.51	40.09
J-160	0.00	1581.85	1405.00	176.85	76.63
J-161	507.00	1580.43	1406.00	174.43	75.59
J-162	0.00	1581.48	1406.00	175.48	76.04
J-163	0.00	1581.54	1401.00	180.54	78.23
J-164	0.00	1581.49	1406.00	175.49	76.05
J-165	0.00	1581.49	1406.00	175.49	76.05
J-166	0.00	1581.54	1402.00	179.54	77.80
J-167	0.00	1602.19	1399.00	203.19	88.05
J-17	0.00	1611.66	1412.00	199.66	86.52
J-170	0.00	1594.50	1402.00	192.50	83.42
J-172	296.00	1528.87	1461.00	67.87	29.41
J-173	296.00	1526.39	1424.00	102.39	44.37
J-174	296.00	1525.86	1460.00	65.86	28.54
J-175	296.00	1542.13	1500.00	42.13	18.26
J-178	296.00	1525.28	1330.00	195.28	84.62
J-18	0.00	1558.02	1430.00	128.02	55.48
J-180	507.00	1600.93	1397.00	203.93	88.37
J-181	0.00	1603.93	1397.00	206.93	89.67
J-182	148.00	1522.06	1400.00	122.06	52.89
J-183	296.00	1524.86	1388.00	136.86	59.31
J-185	0.00	1603.87	1397.00	206.87	89.64
J-187	296.00	1524.24	1337.00	187.24	81.14
J-188	296.00	1524.31	1360.00	164.31	71.20
J-189	507.00	1563.82	1379.00	184.82	80.09
J-19	0.00	1560.75	1422.00	138.75	60.12
J-191	0.00	1565.16	1377.00	188.16	81.54
J-192	0.00	1571.74	1435.00	136.74	59.25
J-193	0.00	1583.54	1426.00	157.54	68.27
J-194	0.00	1611.52	1450.00	161.52	69.99
J-195	507.00	1572.14	1390.00	182.14	78.93
J-196	0.00	1572.56	1387.00	185.56	80.41
J-197	507.00	1572.85	1383.00	189.85	82.27
J-198	507.00	1570.34	1390.00	180.34	78.15
J-199	296.00	1524.24	1364.00	160.24	69.44
J-2	0.00	1640.63	1412.00	228.63	99.07
J-20	507.00	1565.54	1419.00	146.54	63.50
J-200	296.00	1525.44	1320.00	205.44	89.02
J-201	148.00	1526.58	1332.00	194.58	84.32
J-202	296.00	1527.23	1328.00	199.23	86.33
J-203	296.00	1527.05	1330.00	197.05	85.39
J-204	148.00	1529.84	1335.00	194.84	84.43
J-205	507.00	1547.67	1357.00	190.67	82.62
J-206	148.00	1543.83	1360.00	183.83	79.66
J-207	507.00	1545.50	1354.00	191.50	82.98
J-208	254.00	1545.11	1347.00	198.11	85.85
J-209	507.00	1534.46	1345.00	189.46	82.10
J-210	254.00	1534.62	1343.00	191.62	83.03
J-211	507.00	1565.47	1395.00	170.47	73.87
J-212	0.00	1572.66	1385.00	187.66	81.32
J-213	507.00	1567.57	1414.00	153.57	66.55
J-214	254.00	1567.15	1430.00	137.15	59.43
J-215	507.00	1576.39	1420.00	156.39	67.77
J-216	507.00	1580.71	1394.00	186.71	80.91
J-217	148.00	1553.00	1400.00	153.00	66.30
J-218	148.00	1536.86	1360.00	176.86	76.64
J-219	296.00	1510.41	1283.00	227.41	98.55
J-220	296.00	1506.06	1265.00	241.06	104.46
J-221	148.00	1509.80	1270.00	239.80	103.91
J-222	148.00	1509.12	1260.00	249.12	107.95
J-223	148.00	1507.78	1269.00	238.78	103.47
J-224	148.00	1505.84	1254.00	251.84	109.13
J-225	296.00	1505.85	1260.00	245.85	106.53
J-226	296.00	1507.56	1275.00	232.56	100.78
J-227	296.00	1507.44	1274.00	233.44	101.16
J-228	296.00	1512.71	1293.00	219.71	95.21
J-229	296.00	1508.08	1278.00	230.08	99.70
J-230	296.00	1506.56	1270.00	236.56	102.51
J-231	296.00	1509.71	1286.00	223.71	96.94
J-232	296.00	1507.86	1280.00	227.86	98.74

J-233	296.00	1528.21	1312.00	216.21	93.69
J-234	148.00	1535.37	1324.00	211.37	91.59
J-235	296.00	1528.16	1336.00	192.16	83.27
J-236	296.00	1521.30	1305.00	216.30	93.73
J-237	296.00	1519.93	1310.00	209.93	90.97
J-238	296.00	1516.22	1298.00	218.22	94.56
J-239	296.00	1514.22	1290.00	224.22	97.16
J-24	0.00	1616.21	1410.00	206.21	89.36
J-240	507.00	1551.54	1368.00	183.54	79.53
J-241	507.00	1544.88	1352.00	192.88	83.58
J-242	148.00	1547.31	1393.00	154.31	66.87
J-243	60.00	1540.00	1340.00	200.00	86.67
J-244	148.00	1540.71	1375.00	165.71	71.81
J-245	507.00	1559.87	1378.00	181.87	78.81
J-246	507.00	1559.12	1410.00	149.12	64.62
J-247	296.00	1507.31	1288.00	219.31	95.03
J-248	148.00	1504.99	1255.00	249.99	108.33
J-249	148.00	1505.13	1258.00	247.13	107.09
J-25	0.00	1563.27	1426.00	137.27	59.48
J-250	148.00	1505.08	1315.00	190.08	82.37
J-251	148.00	1563.13	1458.00	105.13	45.56
J-252	148.00	1556.60	1522.00	34.60	14.99
J-253	254.00	1560.90	1500.00	60.90	26.39
J-254	148.00	1554.89	1450.00	104.89	45.45
J-255	296.00	1542.83	1402.00	140.83	61.03
J-257	296.00	1552.80	1449.00	103.80	44.98
J-258	254.00	1559.10	1449.00	110.10	47.71
J-259	148.00	1504.63	1250.00	254.63	110.34
J-260	296.00	1505.49	1260.00	245.49	106.38
J-261	296.00	1505.98	1307.00	198.98	86.22
J-262	296.00	1504.70	1265.00	239.70	103.87
J-263	296.00	1504.40	1270.00	234.40	101.57
J-264	148.00	1504.38	1270.00	234.38	101.57
J-265	296.00	1505.27	1311.00	194.27	84.18
J-266	148.00	1506.55	1355.00	151.55	65.67
J-267	0.00	1659.92	1470.00	189.92	82.30
J-268	0.00	1590.13	1421.00	169.13	73.29
J-269	0.00	1646.00	1470.00	176.00	76.27
J-270	0.00	1574.58	1414.00	160.58	69.58
J-271	507.00	1590.16	1421.00	169.16	73.30
J-272	0.00	1551.82	1380.00	171.82	74.45
J-273	0.00	1552.72	1370.00	182.72	79.18
J-274	0.00	1553.70	1380.00	173.70	75.27
J-275	0.00	1539.03	1349.00	190.03	82.35
J-276	0.00	1539.60	1349.00	190.60	82.59
J-277	0.00	1535.55	1330.00	205.55	89.07
J-278	296.00	1516.51	1306.00	210.51	91.22
J-279	0.00	1524.25	1315.00	209.25	90.67
J-28	0.00	1612.48	1410.00	202.48	87.74
J-280	254.00	1539.47	1349.00	190.47	82.54
J-281	148.00	1534.88	1330.00	204.88	88.78
J-282	148.00	1516.42	1299.00	217.42	94.22
J-283	148.00	1515.29	1320.00	195.29	84.63
J-284	296.00	1509.95	1285.00	224.95	97.48
J-285	296.00	1521.24	1312.00	209.24	90.67
J-286	296.00	1515.35	1308.00	207.35	89.85
J-287	296.00	1515.81	1305.00	210.81	91.35
J-288	296.00	1522.62	1310.00	212.62	92.13
J-289	296.00	1519.55	1332.00	187.55	81.27
J-290	148.00	1518.83	1355.00	163.83	70.99
J-291	0.00	1527.27	1328.00	199.27	86.35
J-292	148.00	1523.51	1315.00	208.51	90.35
J-293	148.00	1520.39	1306.00	214.39	92.90
J-294	296.00	1521.46	1310.00	211.46	91.63
J-295	296.00	1517.75	1310.00	207.75	90.02
J-296	254.00	1538.41	1340.00	198.41	85.98
J-297	254.00	1545.36	1357.00	188.36	81.62
J-298	254.00	1544.34	1349.00	195.34	84.65
J-299	254.00	1542.79	1339.00	203.79	88.31
J-3	0.00	1639.22	1403.00	236.22	102.36
J-300	254.00	1533.71	1336.00	197.71	85.67
J-301	0.00	1533.90	1330.00	203.90	88.36

J-302	0.00	1529.08	1326.00	203.08	88.00
J-303	507.00	1555.12	1385.00	170.12	73.72
J-304	507.00	1555.10	1393.00	162.10	70.24
J-305	507.00	1550.49	1375.00	175.49	76.05
J-306	507.00	1551.85	1383.00	168.85	73.17
J-307	507.00	1545.10	1369.00	176.10	76.31
J-308	507.00	1548.07	1368.00	180.07	78.03
J-309	507.00	1556.63	1375.00	181.63	78.71
J-31	0.00	1576.51	1428.00	148.51	64.35
J-310	507.00	1545.94	1362.00	183.94	79.71
J-311	507.00	1541.66	1352.00	189.66	82.19
J-312	254.00	1563.38	1388.00	175.38	76.00
J-313	0.00	1639.58	1433.00	206.58	89.52
J-314	0.00	1604.98	1393.00	211.98	91.86
J-315	507.00	1567.62	1414.00	153.62	66.57
J-316	507.00	1560.36	1402.00	158.36	68.62
J-317	0.00	1580.27	1393.00	187.27	81.15
J-318	0.00	1569.97	1400.00	169.97	73.65
J-319	0.00	1572.59	1400.00	172.59	74.79
J-320	0.00	1551.82	1370.00	181.82	78.79
J-321	507.00	1544.86	1349.00	195.86	84.87
J-322	507.00	1539.52	1340.00	199.52	86.46
J-323	507.00	1544.06	1360.00	184.06	79.76
J-324	507.00	1540.61	1351.00	189.61	82.17
J-325	507.00	1551.26	1361.00	190.26	82.45
J-326	507.00	1564.79	1375.00	189.79	82.24
J-327	0.00	1551.05	1361.00	190.05	82.36
J-328	148.00	1529.66	1326.00	203.66	88.25
J-329	148.00	1524.59	1312.00	212.59	92.12
J-33	507.00	1576.64	1428.00	148.64	64.41
J-330	148.00	1520.16	1307.00	213.16	92.37
J-331	0.00	1520.38	1305.00	215.38	93.33
J-332	0.00	1524.61	1315.00	209.61	90.83
J-333	0.00	1528.78	1324.00	204.78	88.74
J-334	254.00	1532.26	1329.00	203.26	88.08
J-335	507.00	1535.62	1341.00	194.62	84.34
J-336	296.00	1512.54	1293.00	219.54	95.13
J-337	296.00	1510.97	1285.00	225.97	97.92
J-338	296.00	1513.66	1392.00	121.66	52.72
J-339	148.00	1513.24	1292.00	221.24	95.87
J-34	507.00	1559.39	1410.00	149.39	64.73
J-340	148.00	1516.51	1299.00	217.51	94.25
J-341	296.00	1509.61	1285.00	224.61	97.33
J-342	296.00	1509.61	1278.00	231.61	100.36
J-343	148.00	1511.90	1281.00	230.90	100.06
J-344	296.00	1511.74	1288.00	223.74	96.95
J-345	296.00	1511.82	1295.00	216.82	93.96
J-346	148.00	1520.07	1440.00	80.07	34.70
J-347	148.00	1530.49	1412.00	118.49	51.35
J-348	296.00	1510.85	1325.00	185.85	80.54
J-349	296.00	1508.13	1345.00	163.13	70.69
J-35	148.00	1521.91	1385.00	136.91	59.33
J-350	148.00	1508.70	1410.00	98.70	42.77
J-351	296.00	1512.49	1388.00	124.49	53.94
J-352	296.00	1517.53	1365.00	152.53	66.10
J-353	148.00	1504.36	1253.00	251.36	108.92
J-354	148.00	1504.81	1243.00	261.81	113.45
J-355	148.00	1504.88	1245.00	259.88	112.61
J-356	296.00	1504.88	1250.00	254.88	110.45
J-357	296.00	1505.09	1260.00	245.09	106.21
J-358	296.00	1508.49	1275.00	233.49	101.18
J-359	148.00	1505.00	1255.00	250.00	108.33
J-36	0.00	1607.77	1408.00	199.77	86.57
J-360	296.00	1506.18	1269.00	237.18	102.78
J-361	296.00	1505.23	1265.00	240.23	104.10
J-362	296.00	1528.82	1373.00	155.82	67.52
J-363	296.00	1518.44	1335.00	183.44	79.49
J-364	296.00	1512.09	1300.00	212.09	91.91
J-366	254.00	1596.98	1433.00	163.98	71.06
J-368	0.00	1604.22	1395.00	209.22	90.66
J-369	507.00	1609.83	1407.00	202.83	87.89
J-37	507.00	1558.27	1418.00	140.27	60.78

J-370	507.00	1585.72	1425.00	160.72	69.65
J-371	507.00	1590.61	1400.00	190.61	82.60
J-372	254.00	1576.10	1454.00	122.10	52.91
J-373	254.00	1693.10	1426.00	267.10	115.74
J-374	254.00	1584.41	1468.00	116.41	50.45
J-375	0.00	1613.49	1410.00	203.49	88.18
J-376	507.00	1637.55	1407.00	230.55	99.91
J-377	0.00	1637.47	1440.00	197.47	85.57
J-378	507.00	1617.88	1417.00	200.88	87.05
J-379	0.00	1622.43	1444.00	178.43	77.32
J-38	254.00	1557.57	1408.00	149.57	64.81
J-380	0.00	1641.26	1440.00	201.26	87.21
J-381	507.00	1623.89	1425.00	198.89	86.19
J-382	507.00	1632.29	1430.00	202.29	87.66
J-383	0.00	1567.05	1445.00	122.05	52.89
J-384	254.00	1617.23	1448.00	169.23	73.34
J-385	507.00	1624.62	1437.00	187.62	81.30
J-386	0.00	1637.31	1443.00	194.31	84.20
J-387	254.00	1599.22	1444.00	155.22	67.26
J-388	507.00	1644.12	1414.00	230.12	99.72
J-389	507.00	1671.55	1426.00	245.55	106.41
J-39	507.00	1556.55	1401.00	155.55	67.40
J-390	507.00	1612.99	1406.00	206.99	89.70
J-391	254.00	1604.20	1389.00	215.20	93.25
J-392	507.00	1603.45	1415.00	188.45	81.66
J-393	254.00	1599.86	1384.00	215.86	93.54
J-394	254.00	1594.55	1440.00	154.55	66.97
J-395	507.00	1608.28	1403.00	205.28	88.96
J-396	507.00	1600.63	1394.00	206.63	89.54
J-397	507.00	1605.75	1396.00	209.75	90.89
J-398	254.00	1639.61	1416.00	223.61	96.90
J-399	507.00	1635.93	1415.00	220.93	95.74
J-4	507.00	1639.42	1403.00	236.42	102.45
J-40	0.00	1602.55	1405.00	197.55	85.60
J-400	254.00	1615.02	1409.00	206.02	89.28
J-401	254.00	1606.43	1399.00	207.43	89.88
J-402	507.00	1617.88	1410.00	207.88	90.08
J-403	507.00	1621.63	1405.00	216.63	93.87
J-404	507.00	1650.26	1414.00	236.26	102.38
J-405	507.00	1659.13	1421.00	238.13	103.19
J-406	507.00	1627.69	1412.00	215.69	93.47
J-407	254.00	1641.64	1435.00	206.64	89.55
J-408	0.00	1641.46	1430.00	211.46	91.63
J-409	254.00	1643.06	1440.00	203.06	87.99
J-41	0.00	1602.53	1408.00	194.53	84.30
J-410	254.00	1645.42	1445.00	200.42	86.85
J-411	507.00	1658.34	1437.00	221.34	95.91
J-412	507.00	1650.05	1434.00	216.05	93.62
J-413	507.00	1644.95	1423.00	221.95	96.18
J-414	507.00	1642.58	1422.00	220.58	95.58
J-415	507.00	1641.80	1430.00	211.80	91.78
J-416	507.00	1643.09	1439.00	204.09	88.44
J-417	507.00	1646.17	1440.00	206.17	89.34
J-418	254.00	1651.77	1448.00	203.77	88.30
J-419	254.00	1663.05	1441.00	222.05	96.22
J-42	0.00	1602.56	1405.00	197.56	85.61
J-420	254.00	1655.48	1452.00	203.48	88.17
J-421	254.00	1638.20	1440.00	198.20	85.89
J-422	254.00	1647.89	1455.00	192.89	83.59
J-423	0.00	1641.55	1440.00	201.55	87.34
J-424	0.00	1641.32	1440.00	201.32	87.24
J-427	0.00	1641.55	1433.00	208.55	90.37
J-428	148.00	1526.75	1335.00	191.75	83.09
J-429	148.00	1524.24	1389.00	135.24	58.60
J-43	254.00	1563.39	1382.00	181.39	78.60
J-430	148.00	1522.06	1430.00	92.06	39.89
J-431	148.00	1524.08	1410.00	114.08	49.43
J-432	148.00	1525.70	1410.00	115.70	50.14
J-433	254.00	1550.31	1368.00	182.31	79.00
J-434	148.00	1525.97	1389.00	136.97	59.35
J-435	148.00	1526.03	1350.00	176.03	76.28
J-436	148.00	1529.14	1335.00	194.14	84.13

J-437	296.00	1527.00	1389.00	138.00	59.80
J-438	254.00	1545.85	1355.00	190.85	82.70
J-439	148.00	1534.67	1347.00	187.67	81.33
J-44	0.00	1602.52	1412.00	190.52	82.56
J-440	0.00	1543.82	1359.00	184.82	80.09
J-441	148.00	1531.10	1343.00	188.10	81.51
J-442	148.00	1529.99	1338.00	191.99	83.19
J-443	148.00	1527.05	1338.00	189.05	81.92
J-444	148.00	1530.77	1343.00	187.77	81.37
J-445	148.00	1534.48	1347.00	187.48	81.24
J-446	0.00	1545.75	1359.00	186.75	80.93
J-447	0.00	1552.36	1369.00	183.36	79.46
J-448	0.00	1560.50	1378.00	182.50	79.09
J-449	0.00	1561.91	1388.00	173.91	75.36
J-450	0.00	1563.41	1388.00	175.41	76.01
J-451	0.00	1560.55	1378.00	182.55	79.10
J-452	0.00	1550.39	1368.00	182.39	79.04
J-453	0.00	1558.30	1411.00	147.30	63.83
J-454	0.00	1557.68	1411.00	146.68	63.56
J-455	0.00	1561.10	1394.00	167.10	72.41
J-456	0.00	1558.54	1400.00	158.54	68.70
J-457	0.00	1567.90	1394.00	173.90	75.36
J-458	0.00	1558.45	1400.00	158.45	68.66
J-459	0.00	1558.06	1422.00	136.06	58.96
J-46	507.00	1555.37	1370.00	185.37	80.33
J-460	0.00	1558.00	1422.00	136.00	58.93
J-461	0.00	1613.84	1410.00	203.84	88.33
J-462	0.00	1642.29	1440.00	202.29	87.66
J-463	0.00	1641.74	1444.00	197.74	85.69
J-464	0.00	1641.77	1444.00	197.77	85.70
J-465	0.00	1630.64	1444.00	186.64	80.88
J-466	0.00	1641.57	1408.00	233.57	101.21
J-467	0.00	1641.34	1408.00	233.34	101.11
J-468	254.00	1599.22	1447.00	152.22	65.96
J-470	0.00	1641.64	1442.00	199.64	86.51
J-471	0.00	1605.86	1410.00	195.86	84.87
J-472	0.00	1572.56	1387.00	185.56	80.41
J-473	254.00	1637.31	1441.00	196.31	85.07
J-474	0.00	1637.31	1435.00	202.31	87.67
J-475	0.00	1614.89	1428.00	186.89	80.99
J-476	0.00	1611.42	1423.00	188.42	81.65
J-477	0.00	1599.22	1419.00	180.22	78.10
J-478	0.00	1640.66	1439.00	201.66	87.39
J-479	0.00	1632.77	1428.00	204.77	88.73
J-48	148.00	1562.13	1392.00	170.13	73.73
J-480	0.00	1621.49	1427.00	194.49	84.28
J-481	0.00	1620.38	1422.00	198.38	85.96
J-482	0.00	1641.13	1407.00	234.13	101.46
J-483	0.00	1639.42	1444.00	195.42	84.68
J-484	0.00	1598.30	1399.00	199.30	86.36
J-485	0.00	1595.77	1393.00	202.77	87.87
J-486	0.00	1619.77	1407.00	212.77	92.20
J-487	0.00	1642.11	1409.00	233.11	101.01
J-488	0.00	1640.41	1405.00	235.41	102.01
J-489	0.00	1592.12	1399.00	193.12	83.68
J-49	254.00	1558.23	1435.00	123.23	53.40
J-490	0.00	1583.46	1392.00	191.46	82.96
J-491	0.00	1565.16	1384.00	181.16	78.50
J-492	0.00	1544.87	1351.00	193.87	84.01
J-493	0.00	1601.83	1418.00	183.83	79.66
J-494	0.00	1562.13	1385.00	177.13	76.76
J-495	0.00	1563.32	1405.00	158.32	68.60
J-496	0.00	1563.27	1379.00	184.27	79.85
J-497	0.00	1556.75	1373.00	183.75	79.63
J-498	0.00	1561.19	1373.00	188.19	81.55
J-499	0.00	1543.43	1336.00	207.43	89.89
J-5	0.00	1638.50	1405.00	233.50	101.18
J-50	507.00	1557.81	1425.00	132.81	57.55
J-500	0.00	1543.90	1343.00	200.90	87.06
J-501	254.00	1553.55	1463.00	90.55	39.24
J-502	254.00	1553.59	1455.00	98.59	42.72
J-503	254.00	1604.46	1391.00	213.46	92.50

J-504	254.00	1595.87	1466.00	129.87	56.28
J-505	254.00	1568.58	1449.00	119.58	51.82
J-506	254.00	1560.78	1435.00	125.78	54.51
J-507	507.00	1547.56	1365.00	182.56	79.11
J-509	148.00	1532.52	1389.00	143.52	62.19
J-51	148.00	1556.70	1406.00	150.70	65.30
J-510	148.00	1556.95	1500.00	56.95	24.68
J-511	0.00	1655.48	1452.00	203.48	88.17
J-512	148.00	1505.39	1335.00	170.39	73.84
J-513	148.00	1504.31	1255.00	249.31	108.03
J-514	148.00	1504.99	1262.00	242.99	105.30
J-515	148.00	1504.78	1243.00	261.78	113.44
J-516	0.00	1663.05	1441.00	222.05	96.22
J-517	0.00	1639.61	1416.00	223.61	96.90
J-518	0.00	1615.02	1409.00	206.02	89.28
J-52	0.00	1560.05	1440.00	120.05	52.02
J-53	254.00	1563.60	1435.00	128.60	55.73
J-54	254.00	1554.81	1448.00	106.81	46.29
J-55	254.00	1554.21	1455.00	99.21	42.99
J-56	148.00	1558.94	1425.00	133.94	58.04
J-57	148.00	1558.30	1414.00	144.30	62.53
J-58	507.00	1555.63	1438.00	117.63	50.98
J-59	254.00	1555.20	1441.00	114.20	49.49
J-6	0.00	1598.57	1400.00	198.57	86.05
J-60	148.00	1556.88	1433.00	123.88	53.68
J-61	148.00	1558.64	1404.00	154.64	67.01
J-62	148.00	1561.14	1400.00	161.14	69.83
J-63	0.00	1614.98	1404.00	210.98	91.42
J-64	148.00	1557.08	1426.00	131.08	56.80
J-65	296.00	1558.29	1409.00	149.29	64.69
J-66	296.00	1558.07	1417.00	141.07	61.13
J-67	148.00	1557.08	1417.00	140.08	60.70
J-68	296.00	1557.65	1399.00	158.65	68.75
J-69	0.00	1607.77	1408.00	199.77	86.57
J-7	0.00	1620.99	1400.00	220.99	95.76
J-70	0.00	1559.91	1396.00	163.91	71.03
J-71	507.00	1555.95	1386.00	169.95	73.64
J-72	296.00	1525.17	1320.00	205.17	88.91
J-73	0.00	1621.78	1405.00	216.78	93.94
J-74	0.00	1611.62	1412.00	199.62	86.50
J-75	0.00	1610.65	1412.00	198.65	86.08
J-76	0.00	1610.51	1412.00	198.51	86.02
J-77	0.00	1612.27	1412.00	200.27	86.78
J-78	507.00	1601.00	1412.00	189.00	81.90
J-79	0.00	1602.61	1412.00	190.61	82.60
J-8	507.00	1597.23	1396.00	201.23	87.20
J-80	0.00	1602.77	1412.00	190.77	82.67
J-81	0.00	1601.60	1415.00	186.60	80.86
J-82	0.00	1566.94	1445.00	121.94	52.84
J-83	0.00	1599.90	1412.00	187.90	81.42
J-84	0.00	1600.97	1412.00	188.97	81.89
J-85	0.00	1600.97	1412.00	188.97	81.89
J-86	0.00	1600.02	1402.00	198.02	85.81
J-87	0.00	1600.02	1402.00	198.02	85.81
J-88	0.00	1601.54	1400.00	201.54	87.33
J-89	254.00	1558.01	1396.00	162.01	70.20
J-9	0.00	1592.21	1389.00	203.21	88.06
J-93	0.00	1608.06	1403.00	205.06	88.86
J-94	0.00	1601.47	1402.00	199.47	86.44
J-95	0.00	1591.22	1408.00	183.22	79.39
J-96	507.00	1553.86	1364.00	189.86	82.27
J-97	0.00	1594.24	1410.00	184.24	79.84
J-98	0.00	1590.85	1409.00	181.85	78.80
J-99	0.00	1590.22	1409.00	181.22	78.53
RV-2	----	1655.92	1470.00	185.92	80.57
Scott Dr.	----	1566.00	1566.00	0.00	0.00
ection 36	----	1566.00	1566.00	0.00	0.00
ignal Pea	----	1566.00	1566.00	0.00	0.00
anger Boo	0.00	1659.92	1470.00	189.92	82.30
Well #27	0.00	1605.86	1410.00	195.86	84.87
Well #28	-1500.00	1675.25	1520.00	155.25	67.27
Well #29	-1500.00	1642.73	1440.00	202.73	87.85

Well #31	-1500.00	1625.66	1403.00	222.66	96.49
Well #32	0.00	1641.55	1433.00	208.55	90.37
Well #33	0.00	1641.64	1442.00	199.64	86.51
Well #34	-1500.00	1675.33	1520.00	155.33	67.31
Well #35	0.00	1639.58	1433.00	206.58	89.52
Well #36	0.00	1637.31	1441.00	196.31	85.07
Well #37	-1500.00	1642.53	1435.00	207.53	89.93
Well #38	-1500.00	1618.20	1428.00	190.20	82.42
Well #39	-1500.00	1626.60	1427.00	199.60	86.49
Well #40	-1500.00	1601.61	1420.00	181.61	78.70
Well #41	-1500.00	1641.80	1438.00	203.80	88.31
Well #42	-1500.00	1634.62	1428.00	206.62	89.53
Well #43	-1500.00	1624.91	1427.00	197.91	85.76
Well #44	-1500.00	1528.58	1364.00	164.58	71.32
Well #45	-1500.00	1526.18	1310.00	216.18	93.68
Well #46	-1500.00	1528.37	1320.00	208.37	90.29
Well #47	-1500.00	1549.03	1343.00	206.03	89.28
Well #48	-1500.00	1548.11	1336.00	212.11	91.92
Well #49	-1500.00	1549.24	1347.00	202.24	87.64
Well #50	-1500.00	1554.15	1360.00	194.15	84.13
Well #51	-1500.00	1563.85	1371.00	192.85	83.57
Well #52	-1500.00	1564.52	1374.00	190.52	82.56
Well #53	-1500.00	1557.51	1364.00	193.51	83.85
Well #54	-1500.00	1567.19	1382.00	185.19	80.25
Well #55	-1500.00	1558.87	1373.00	185.87	80.54
Well #56	-1500.00	1566.69	1379.00	187.69	81.33
Well #57	-1500.00	1570.45	1394.00	176.45	76.46
Well #58	-1500.00	1563.07	1381.00	182.07	78.90
Well #59	-1500.00	1563.83	1385.00	178.83	77.49
Well #60	-1500.00	1564.35	1392.00	172.35	74.68
Well #61	-1500.00	1566.40	1404.00	162.40	70.37
Well #62	0.00	1620.38	1422.00	198.38	85.96
Well #63	0.00	1641.13	1406.00	235.13	101.89
Well #64	0.00	1639.42	1444.00	195.42	84.68
Well #65	0.00	1598.30	1399.00	199.30	86.36
Well #66	0.00	1601.54	1400.00	201.54	87.33
Well #67	0.00	1595.77	1393.00	202.77	87.87
Well #68	0.00	1619.77	1408.00	211.77	91.77
Well #69	0.00	1642.11	1409.00	233.11	101.01
Well #70	0.00	1640.41	1405.00	235.41	102.01
Well #71	0.00	1613.49	1409.00	204.49	88.61
Well #72	0.00	1592.12	1399.00	193.12	83.68
Well #73	0.00	1583.46	1392.00	191.46	82.96
Well #74	0.00	1565.16	1382.00	183.16	79.37
Well #75	0.00	1544.87	1351.00	193.87	84.01
Well #76	0.00	1601.83	1422.00	179.83	77.92
Well #77	0.00	1599.90	1410.00	189.90	82.29
Well #78	0.00	1600.63	1394.00	206.63	89.54
Well #79	0.00	1604.22	1395.00	209.22	90.66
Well #80	0.00	1604.98	1393.00	211.98	91.86
Well #81	0.00	1604.98	1393.00	211.98	91.86
Well #82	-1500.00	1561.54	1425.00	136.54	59.17
Well #83	-1500.00	1555.39	1381.00	174.39	75.57
Well #84	-1500.00	1536.30	1370.00	166.30	72.07
Well #85	-1500.00	1535.79	1353.00	182.79	79.21
WEll #86	-1500.00	1532.96	1357.00	175.96	76.25
Well #87	-1500.00	1528.75	1328.00	200.75	86.99
Well #88	-1500.00	1528.17	1388.00	140.17	60.74
Well #89	0.00	1528.53	1415.00	113.53	49.20
Well #90	0.00	1527.36	1420.00	107.36	46.52
Well #91	0.00	1526.39	1424.00	102.39	44.37
Well 19	-4250.00	1642.86	1412.00	230.86	100.04
RV-2	0.00	1655.92	1470.00	185.92	80.57

E G U L A T I N G V A L V E R E P O R T

VALVE LABEL	VALVE TYPE	VALVE SETTING (psi or gpm)	VALVE STATUS	UPSTREAM PRESSURE (psi)	DOWNSTREAM PRESSURE (psi)	THROUGH FLOW (gpm)

RV-2	PSV	80.00	WIDE OPEN	80.57	80.57	3000.00

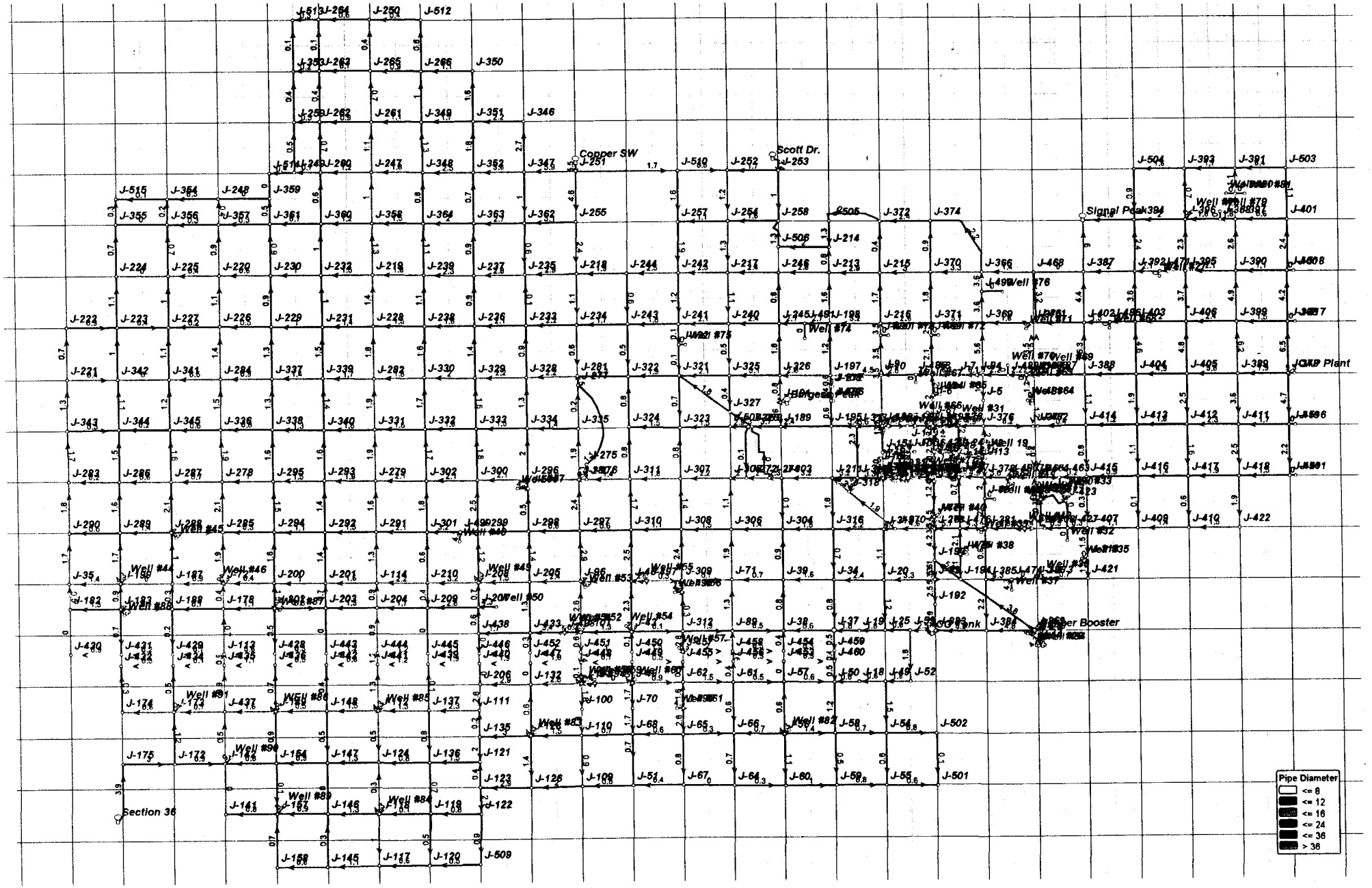
S U M M A R Y O F I N F L O W S A N D O U T F L O W S

(+) INFLOWS INTO THE SYSTEM FROM SUPPLY NODES
(-) OUTFLOWS FROM THE SYSTEM INTO SUPPLY NODES

NODE NAME	FLOWRATE (gpm)	NODE TITLE
Burgess Pea	1458.96	
CG Tank	-7076.63	
Copper SW	7747.44	
Scott Dr.	1202.19	
Section 36	1359.55	
Signal Peak	-5351.52	

NET SYSTEM INFLOW = 11768.13
NET SYSTEM OUTFLOW = -12428.15
NET SYSTEM DEMAND = -660.00

***** HYDRAULIC ANALYSIS COMPLETED *****


Copper SW
Scott Dr.
Signal Peak
Section 36
Pipe Diameter
<= 8
<= 12
<= 16
<= 24
<= 36
> 36

ARIZONA WATER COMPANY

Direct Testimony of

Ralph J. Kennedy

Q. WHAT IS YOUR NAME, EMPLOYER AND OCCUPATION?

A. My name is Ralph J. Kennedy. I am employed by Arizona Water Company (the "Company") as Vice President and Treasurer.

Q. PLEASE DESCRIBE YOUR WORK EXPERIENCE AND EDUCATIONAL BACKGROUND.

A. I was employed by the Arizona Water Company in January 1987 as Vice President and Treasurer. My previous regulatory experience was as Chief of the Accounting and Rates section of the Arizona Corporation Commission ("Commission") from 1985 to 1986 and as Manager of Accounts and Finance for the Illinois Commerce Commission from 1974 to 1978. In addition to my regulatory work, I have also been employed as a management consultant with the firm of Booz, Allen & Hamilton, as Assistant to the Illinois Director of Revenue and as a programmer analyst. I have also been self-employed as an independent trader on the Chicago Board Options Exchange and as a consultant on government accounting systems and controls.

I completed my undergraduate work at the University of Illinois – Chicago and received a B.S. with an accounting concentration. I continued my education at the University of Chicago where I earned an M.B.A. with a major in accounting and behavioral science. I am a C.P.A. in Illinois and Arizona and a member of both the Arizona Society of Certified Public Accountants and the American Institute of Certified Public Accountants.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to:

- Analyze whether customers would realize a financial advantage by receiving water and sewer service from either affiliated providers such as Global's affiliates, Santa Cruz Water Company ("SCWC") and Palo Verde Utilities Company ("PVUC"), or non-affiliated providers such as the Arizona Water Company and a non-affiliated sewer provider, such as a city.

- Evaluate Global's claims and certain Staff assumptions regarding Global's unconventional affiliated service model.

- Review the Commission's recent experience with a similar service model and discuss the implications if Global is allowed to continue its rapid expansion based on its aberrant service model.

Q. WILL YOU BE SPONSORING ANY EXHIBITS WITH YOUR DIRECT TESTIMONY?

A. Yes. I will be sponsoring the following exhibits with the exhibits themselves following my testimony and the Exhibit List in tabbed order:

RJK1 Water And Sewer Bill Comparisons Integrated vs. Non-Integrated Service.

RJK2 Chart of Combined Coolidge Water And Sewer Bill.

RJK3 Chart of Combined Casa Grande Water And Sewer Bill.

RJK4 Chart Comparing Casa Grande Tiered Rates To SCWC Flat Rates.

RJK5 Comparison of Casa Grande Tiered Rates To SCWC Flat Rates By Consumption Level.

RJK6 Chart of Combined Water And Sewer Bills 19 Affiliated Providers By Bill Amount

RJK7 Analysis of 19 ACC Regulated Affiliated Water And Sewer Providers Bills.

RJK8 Chart Of Water Bills 19 Affiliated Providers By Number Of Customers.

RJK9 Chart Of Sewer Bills 19 Affiliated Providers By Number Of Customers.

RJK10 Comparison of Casa Grande Tiered Rates With ACRM Impact And $20 Million Additional Investment To SCWC Flat Rates.

RJK11 Chart Comparison of Casa Grande Tiered Rates With ACRM Impact And $20 Million Additional Investment To SCWC Flat Rates

RJK12 Arizona Water Company Data Request 1.92 And Response.

A reduced version of most of these exhibits are also directly embedded in my testimony.

I. Awarding The CCN to the Arizona Water Company Provides Lower Rates for Customers

Q. WHY ARE YOU CONCERNED ABOUT THE RELATIVE RATES CHARGED BY AFFILIATED PROVIDERS OF WATER AND SEWER SERVICE VERSUS THE RATES THAT WOULD BE CHARGED BY NON-AFFILIATED PROVIDERS?

A. As set forth in the James P. Paul case:

"The public interest is the controlling factor in decisions concerning the service of water by water companies."

In addition to the qualifications and capabilities of competing utilities, as discussed in Mr. Garfield's testimony, the consumers' ultimate expense is a

primary determinant of the public interest. It was for this reason that Staff's very first Data Request sought substantiation for Global's asserted efficiencies and resulting cost savings to customers as the following request and response indicate.

Staff Data Request *LJ 1.1*

Provide any study or analysis performed by Santa Cruz, Palo Verde or any public utility, public utility affiliate or public utility research firm which estimates costs savings to ratepayers who are provided water and wastewater services by affiliates compared to water and wastewater services provided by non-affiliates.

Response: Trevor Hill

"<u>This is a matter of fact</u>. The simple act of combining services under one umbrella will result in economies of scale and scope that non-affiliates cannot achieve.... Global's experience in operating integrated utilities, which implement the triad of conservation, demonstrates that there are many practical advantages to the integrated model. For instance, an integrated utility employs the same Customer Service Representatives whether the call be about a sewer account or a water account. Similarly, the number of Operations Staff is decreased as staff are cross-trained in systems and can respond to issues on both water and wastewater. The list of combined services that result in direct economies to the customers goes on... In non-integrated utility, each of these elements is required to be staffed, administered and executed separately. <u>These additional costs will be reflected in the rates paid [by] the ratepayers of non-integrated utilities."</u> (Emphasis supplied)

It is clear from this response Global has never conducted any study or analysis and simply relies on Mr. Hill's conclusions, which are not supported with any objective data or analysis.

Q. DID STAFF MAKE A SIMILAR DATA REQUEST TO THE COMPANY?

A. Yes. Staff sought the same information in their first Data Request to the Company. The Company had not conducted any such study and did not find any relevant studies in an Internet search. After reviewing the subsequent Staff

Report, which speculated about possible efficiencies from SCWC's and PVUC's ability to provide both water and wastewater service, it became obvious that an analysis of the relative utility bills that customers would pay under each type of service would be essential to determining the public interest in this case. Since no published or on-line studies specifically dealing with water and sewer service rate differentials attributable to affiliated versus non-affiliated providers have been discovered, I conducted a study examining the rates charged by affiliated and non-affiliated providers. Contrary to Mr. Hill's conclusionary statement in his response to LJ 1.1, **"additional costs will be reflected in the rates paid [by] the ratepayers of non-integrated utilities."** If affiliated providers like Global have higher costs, then their rates will be higher than a non-affiliated utility. In other words, an entity's rates and the resulting bills to its customers will reflect whatever efficiencies and economies exist for that particular entity.

Q. THE RATES OF ARIZONA WATER COMPANY'S CASA GRANDE SYSTEM WERE INCREASED DECEMBER 1, 2005 BASED ON TEST YEAR 2003. AREN'T SCWC AND PVUC RATES OUT OF DATE IN COMPARISON?

A. No, they are not. SCWC's and PVUC's rates were authorized in Decision No. 61943, issued September 17, 1999, as part of their initial CCN application. Since then, however, SCWC's and PVUC's rates have been subject to a formal rate review by Staff. In conformity with Decision No. 61943, which required SCWC and PVUC to file for a rate review within 24 months of providing initial service, SCWC submitted its financial data as of September 30, 2002 to the Staff for a rate review. PVUC submitted its financial data as of

December 31, 2003 to the Staff for a rate review. In comparison, the current rates of Arizona Water Company's Casa Grande system were based on the test year ending December 31, 2003.

Staff did not recommend any changes to SCWC's and PVUC's rates. Nor did Staff recommend the issuance of an order to show cause why the existing rates should not be reduced or direct the filing of a complete general rate case within a set period of time based on its rate review. Staff allowed continuation of the initial rates, indicating that these rates reflect the cost of service.

More recently, Global's management affirmed that it believes the current SCWC water and PVUC sewer rates are appropriate, just and reasonable. Global officers provided the following data responses to the Company and Staff:

- In response to Company Data Request AWC 1.97, Ms. Cindy Liles, CPA, Chief Financial Officer & Senior Vice President, Global Water Management stated: **"SCWC believes its current rates are just and reasonable. Because no rate cases are planned, there will be no modifications to rates in the foreseeable future."**

- In response to Staff Data Request LJ 1.14, Mr. Trevor Hill, President and CEO of Global Water Resources, LLC stated: **"Palo Verde is satisfied with its current rates and believes they are appropriate. Palo Verde has no plans at present to file a rate case."**

Q. DID YOU PERFORM AN ANALYSIS TO EVALUATE GLOBAL'S CLAIM THAT "ADDITIONAL COSTS WILL BE REFLECTED IN THE RATES PAID [BY] THE RATEPAYERS OF NON-INTEGRATED UTILITIES" AND ADDRESS A SIMILAR HYPOTHESIS RAISED IN THE STAFF REPORT?

A. Yes. After establishing the appropriateness of comparing Global's SCWC and PVUC rates with those of the Arizona Water Company's Casa Grande system, I performed several analyses to evaluate Global's claims as well as to examine the Staff Report's hypothesis of potentially lower rates for water and sewer service if provided by affiliates rather than non-affiliates. I performed four types of analyses.

1. I examined the actual rates that a customer would pay for water and sewer service in the Coolidge or Casa Grande area if served by an affiliated provider versus obtaining service from two non-affiliated providers. In both instances, as discussed below, the comparative analysis established that the customer would realize a significant savings on his/her total monthly water and sewer bill if service was obtained from Arizona Water Company and a non-affiliated sewer provider.

2. I directly compared the water bills that would result across typical residential consumption levels for an Arizona Water Company Casa Grande customer versus a SCWC customer and found an affiliated **penalty** instead of the savings one would expect based on Global's assertions of the superiority of its unconventional utility service model and economies of scale and scope. Even at high residential consumption levels above 10,000 gallons per month where the

third tier of the rate structure of Arizona Water Company's Casa Grande system becomes effective, SCWC's water bills are still 80% to 100% higher.

3. I tested Global's claim of producing savings to its rate paying customers by doing away with utility company employees and utilizing an unconventional model of providing utility services through a web of affiliated corporations by comparing SCWC and PVUC against affiliated peers for evidence of the alleged superiority of Global's service model. I also screened for evidence of economies of scale among the affiliated water and sewer providers. The water bills evidenced a *decreasing* cost trend of the bill amounts as provider customer count increased, thus supporting the existence of economies of scale among affiliated water providers. However, despite Global's conclusionary response to Staff Data Request LJ1.1 quoted above, I found SCWC's monthly water bill to be far above the decreasing trend line and the highest bill of any affiliated water provider regardless of size.

The affiliated sewer providers' monthly bills, on the other hand, produced an upward sloping trend line demonstrating increasing costs with increases in customer counts. Eight sewer utilities with **fewer** customers than PVUC have lower monthly bills. This comparative monthly bill evidence contradicts the claim of economies of scale for the affiliated sewer providers in general and PVUC in particular. On a broader scale it calls into question the Commission's current preference for inexperienced affiliated water and sewer providers over established and proven non-affiliated providers.

4. Finally, I addressed the concerns expressed in the Staff Report that while the current rates of Arizona Water Company's Casa Grande system are less than those of SCWC, this could be a temporary difference that will reverse after the

Arizona Water Company's Casa Grande Arsenic Cost Recovery Mechanism ("ACRM") is implemented. In fact, as the analysis demonstrates, the significant rate advantage of Arizona Water Company's Casa Grande system that Staff recognized in its report is not temporary and will not reverse after Arizona Water Company's Casa Grande rates are increased as a result of the two permitted ACRM filings. The evidence demonstrates that both today's customers, as well as the ultimate future water utility customers in the extension area will enjoy significantly lower rates if they are served by the Arizona Water Company's Casa Grande system rather than SCWC.

Q. PLEASE ELABORATE ON THE MONTHLY RATE SAVINGS A CUSTOMER IN THE COOLIDGE AND CASA GRANDE AREAS WOULD RECEIVE IF SERVICE WAS PROVIDED BY ARIZONA WATER COMPANY AND A NON-AFFILIATED SEWER UTILITY?

A. In the Coolidge area the average water consumption is 10,100 gallons per month. The average combined monthly bill for service from the affiliated Woodruff providers[1] is $99.35 as shown by the horizontal line on the below chart. The combined average monthly bill for service from Arizona Water Company's Coolidge system and a non-affiliated sewer provider, the City of Coolidge, is $41.57 as shown by the lower, horizontal average consumption line on the chart and Exhibits RJK1 and RJK2.

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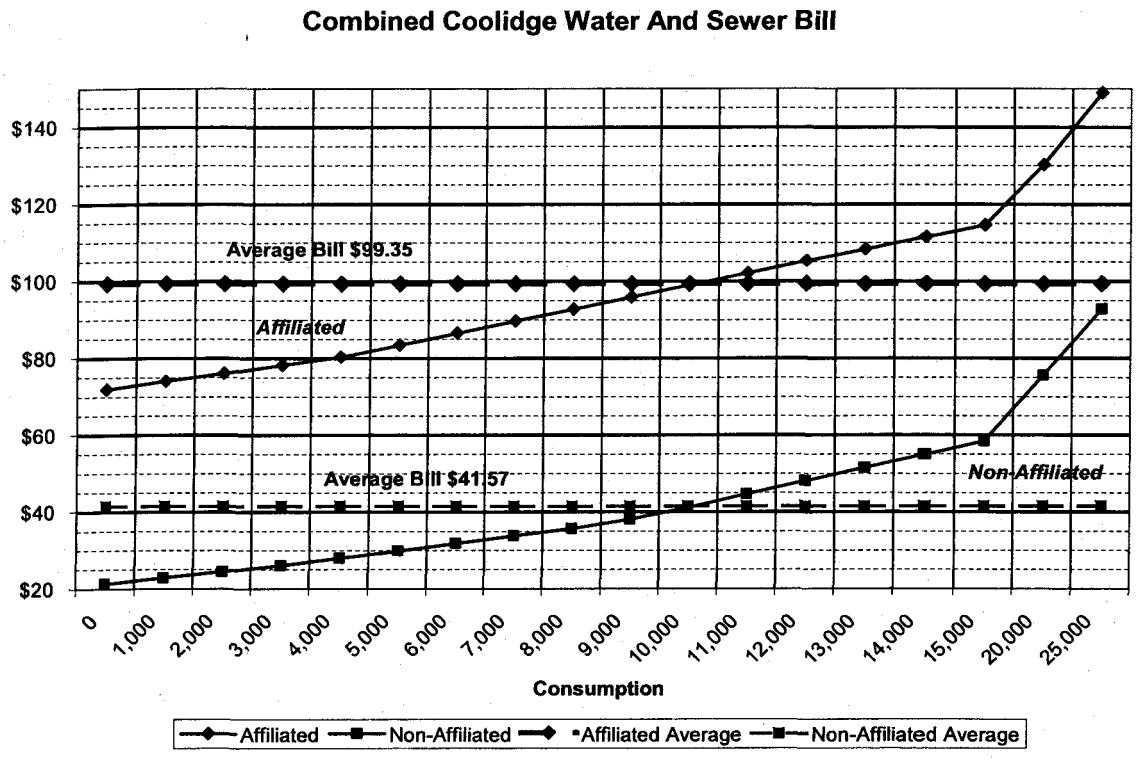
[1] Woodruff Water Company and Woodruff Utility Company (the sewer provider)

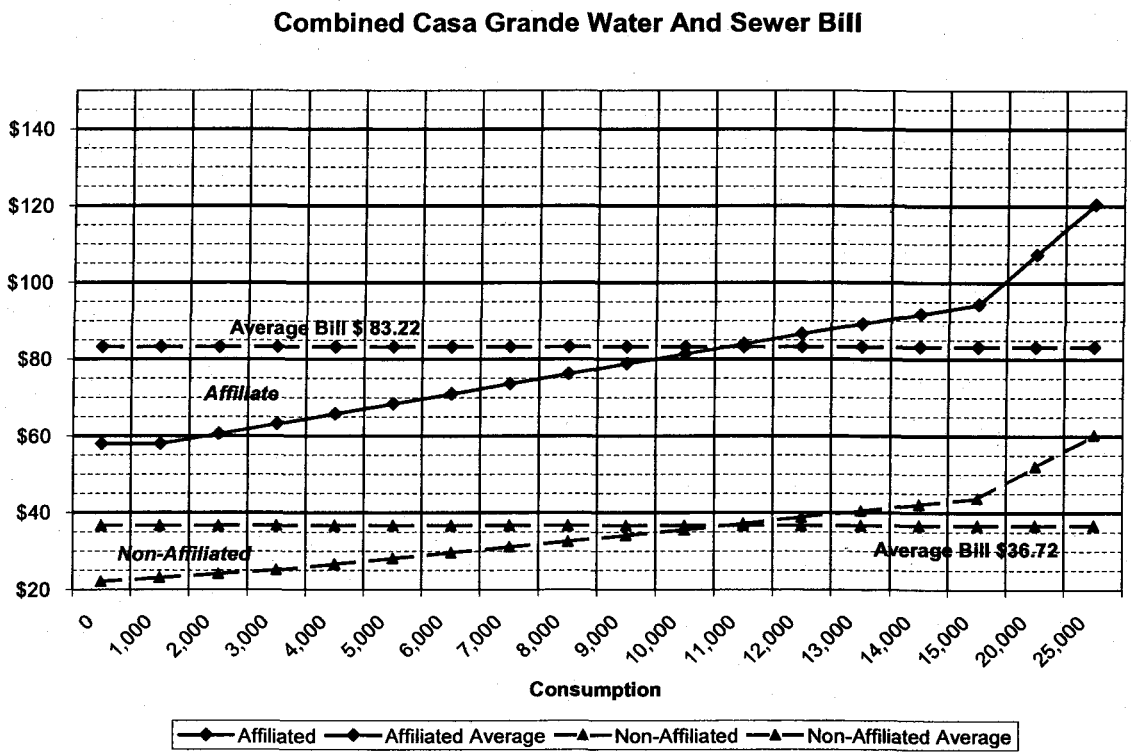


In the Coolidge area, rather than savings, customers incur an affiliated service penalty of $57.78 or 139% each month based on the average consumption levels shown on the above chart. If given a choice of providers in the Coolidge area, at any normal residential consumption level, customers would surely choose to obtain service from the lower cost non-affiliated water and sewer providers.

In the Arizona Water Company's Casa Grande service area the average water consumption is 10,700 gallons per month. The average combined monthly bill for service from the Global affiliated providers is $83.22 as shown by the higher, horizontal line on the below chart. The combined average monthly bill for service from Arizona Water Company's Casa Grande system and a non-affiliated

sewer provider, the City of Casa Grande, is $36.72 as shown by the lower horizontal line on the following chart and Exhibits RJK1 and RJK3.

In the Casa Grande area, rather than receiving the unsubstantiated savings claimed by Global, customers incur an affiliated service penalty of



$46.50 or 126.6% each month from Global's affiliated providers. If given a choice of providers in the Casa Grande area, at any normal residential consumption level, customers would surely choose to obtain service from the lower cost non-affiliated water and sewer providers.

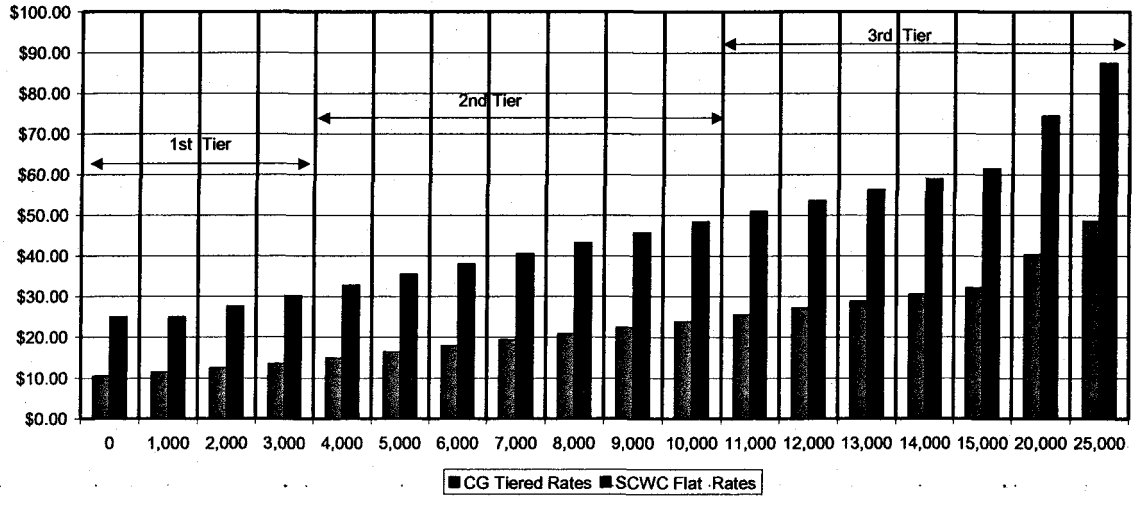
These exhibits document the customer savings available to a customer who receives water and sewer service in the Coolidge and Casa Grande area from Arizona Water Company and a non-affiliated sewer provider at all normal residential consumption levels. These data refute the Staff Report's speculation

about possible savings due to receiving water and sewer service from an affiliated provider.

Q. HOW DO THE CURRENT MONTHLY WATER BILLS OF AN ARIZONA WATER COMPANY CASA GRANDE CUSTOMER COMPARE TO THE WATER BILLS OF A SCWC CUSTOMER?

A. The water bills of Arizona Water Company's Casa Grande customers are significantly lower than SCWC's water bills at every normal residential consumption level. Even at consumption levels that fall into the highest rate tier of Arizona Water Company's Casa Grande system, customers' bills are still lower by 80% to100% as shown on the following chart and Exhibit RJK4. At the average consumption level of 10,700 gallons, as shown on Exhibit RJK5, Arizona Water Company's Casa Grande system customers enjoy bills that are 101% lower than customers of SCWC.

Comparison Of Casa Grande Tiered Rates
To Santa Cruz Water Company's Flat Rates



In this proceeding, comparisons of the parties' specific water rates at typical residential consumption levels are of particular significance because it is the Commission's responsibility to speak for and protect future utility customers rather than real estate developers or property owners. It is the public interest of the future utility customers that must be considered and given weight now, in this proceeding, rather than the immediate private interests of real estate developers.

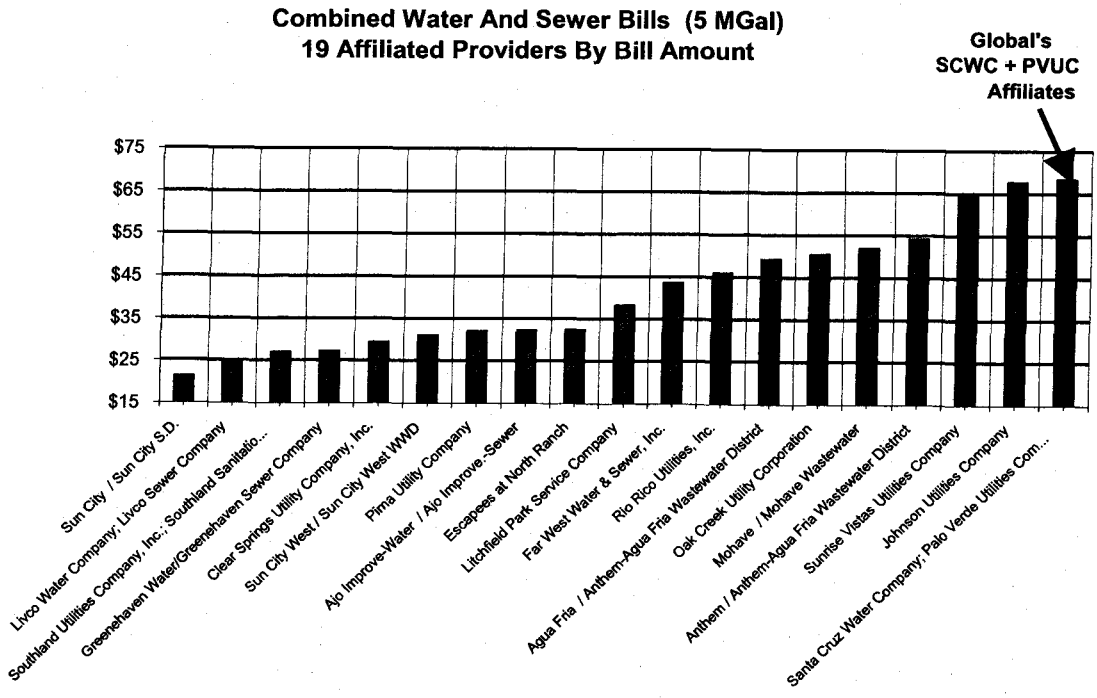
II. Global's Unconventional Affiliated Service Model Does Not Benefit Its Customers.

Q. DID YOU CONDUCT ANY OTHER ANALYSES TO TEST GLOBAL'S CLAIM OF PRODUCING SAVINGS FOR ITS UTILITY CUSTOMERS BY ACHIEVING ECONOMIES OF SCALE WHILE UTILIZING A NEW MODEL TO PROVIDE UTILITY SERVICES THROUGH AFFILIATED CORPORATIONS RATHER THAN WITH UTILITY COMPANY EMPLOYEES?

A. Yes. Although the previously described analyses clearly established that customers in the Coolidge and Casa Grande area would benefit by receiving water service from Arizona Water Company and sewer service from a non-affiliated provider rather than receiving both services from affiliated providers SCWC and PVUC, the next analytical step is to take a broader look at Global's claims that its customers benefit from economies of scale, as well as its efficiency claims. Comparing Global against its affiliated peers provides evidence to objectively evaluate these issues.

Nineteen affiliated, Commission-regulated, water and sewer utilities were identified, analyzed and rank-ordered by the amount of their combined monthly

bill. As documented on the following chart and Exhibits RJK6, Global's unconventional operating model does not provide evidence of operating efficiencies that reduce its customers' bills as compared to the other affiliated water and sewer peer-group providers. The evidence shows the contrary.



In fact, the Global affiliates' combined water and sewer rates are the highest of the 19 affiliated providers. I also evaluated how Global's SCWC and PVUC combined bills compare quantitatively to the average water and sewer bills of the 18 other affiliated providers, 17 of which directly employ their utility workers.

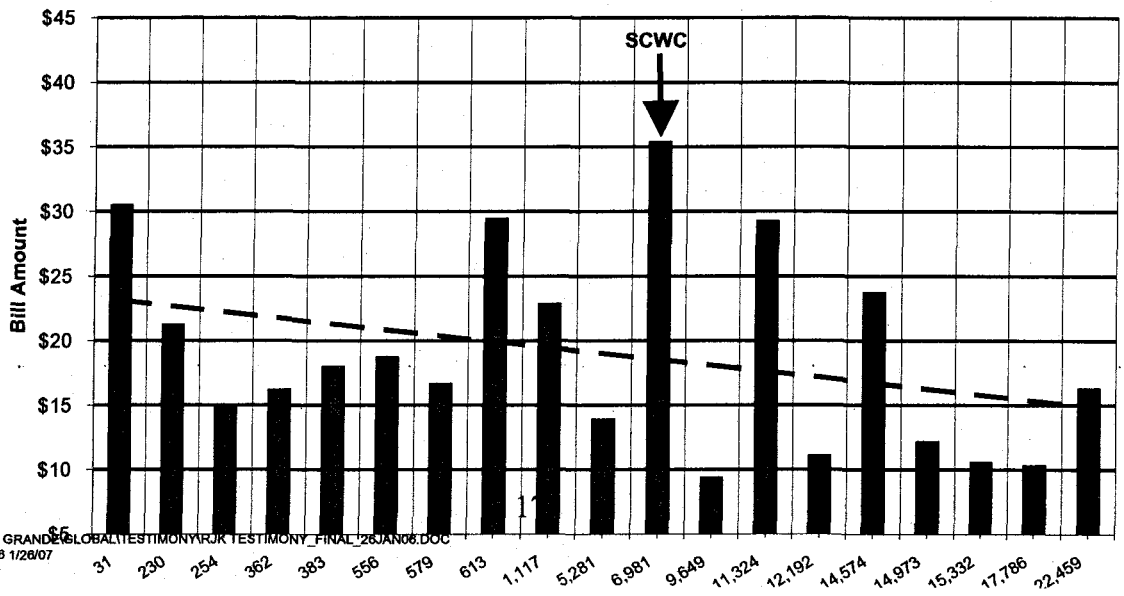
Affiliated Water/Sewer Provider Bills (5 MGal)	Water	Sewer	Total
Santa Cruz Water Company; Palo Verde Utilities Company	$35.40	$33.00	$68.40
Average 18 Affiliated Providers Excluding Global	$18.07	$22.17	$40.24
Global's SCWC & PVUC Rates As Multiple Of Average	1.96	1.49	1.70

SCWC's monthly water bill, which includes 1,000 gallons in the minimum charge, is **1.96 times** higher than the average of the water bills of the 18 affiliated providers as shown by the above table and Exhibit RJK7. Similarly, PVUC's sewer bill is **1.49 times** higher than the average of the sewer bills. SCWC/PVUC combined bills are **1.70 times** higher than the average combined bills of the 18 affiliated providers. These are not the results one would expect to observe based on Global's assertions in this proceeding. Customers who receive water and sewer service from SCWC and PVUC are charged the highest combined bills, indicating that SCWC and PVUC have the highest cost of service.

Q. DO SCWC'S RATES SHOW SUPERIOR ECONOMIES OF SCALE COMPARED TO ITS AFFILIATED PEERS?

A. No, they certainly do not. Ranking the monthly water bills of all 19 affiliated providers in order by number of customers provides another specific evaluation

Water Bills (5 MGal)
19 Affiliated Providers
By Number Of Customers



of SCWC's rates against its peers and clear evidence of whether or not its claimed economies of scale benefit its customers.

The downward sloping, least-squares trend line on the above chart is evidence of economies of scale among the 19 affiliated water providers, i.e., water bills are generally decreasing as the number of customers increases. SCWC's customer count places it near the middle of its peers by size. However, SCWC is at the very top of its peer group by bill amount. In other words, SCWC's water bills violate the trend of decreasing bills as the number of customers increase. In fact SCWC ranks as the highest cost provider of the 19 affiliated water providers shown on the above chart and Exhibit RJK8. Either SCWC lacks its claimed economies of scale or, if the claimed economies and efficiencies exist, they are not being reflected in rate reductions for its customers.

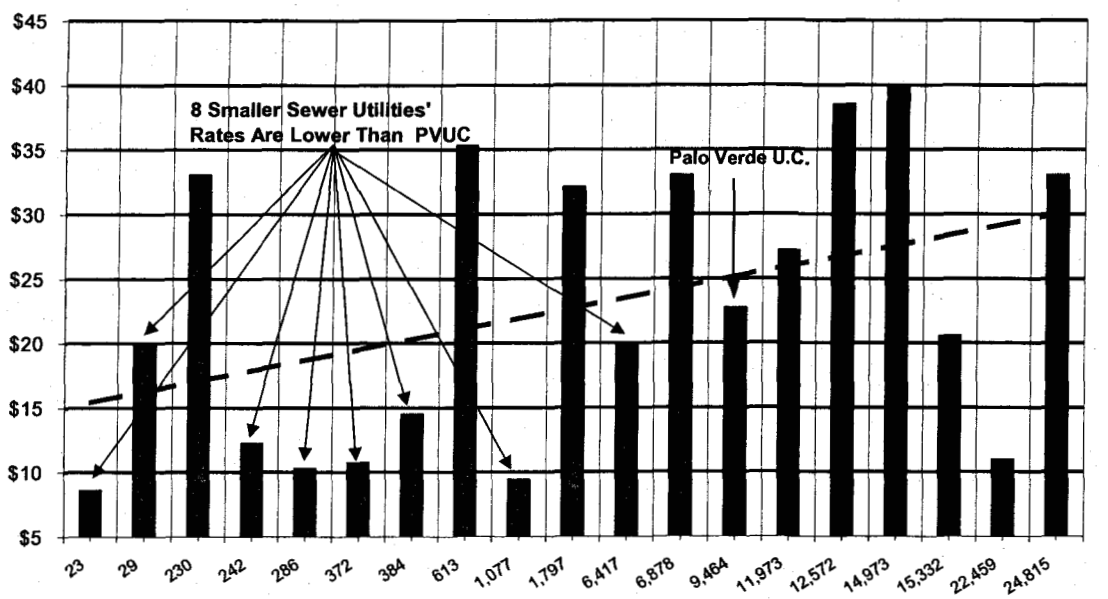
The evidence contradicts Global's unsupported and self-serving claims of economies of scale enabling lower rates for its customers. In reality, Global's unconventional, affiliated model does not provide either efficiencies or economies of scale that benefit SCWC's water utility customers.

Q. DO GLOBAL'S PVUC SEWER BILLS SHOW ECONOMIES OF SCALE IN COMPARISON TO ITS AFFILIATED PEERS?

A. No, they do not. Ranking the monthly sewer bills of all 19 affiliated providers in order by number of customers provides a comparative evaluation of PVUC's sewer bills against its peers. Like the chart of water bills by number of customers, shown above, the existence of economies of scale among the

affiliated sewer providers would be revealed by generally decreasing sewer bills and a downward sloping trend line as the number of customers increases. The sewer bills, unlike the water bills, however, increase as the number of customers

Sewer Bills (5 MGal)
19 Affiliated Providers By Number Of Customers



increases, as shown by the upward sloping trend line on the above chart and on Exhibit RJK9. In other words the bills of the affiliated sewer providers actually show diseconomies of scale. Diseconomies of scale are clearly evidenced

by the dashed, upward sloping trend line and the fact that 8 (two-thirds) of the affiliated sewer providers with fewer customers than PVUC have lower monthly bills.

Q. DOESN'T THE INCREASING TREND OF HIGHER SEWER BILLS WITH LARGER CUSTOMER COUNTS AND THE EARLIER COOLIDGE AND CASA GRANDE RATE COMPARISONS ARGUE AGAINST FAVORING AFFILIATED WATER AND SEWER PROVIDERS?

A. Yes it does, especially if sound public policy requires that the customers' ultimate expense is a primary determinant of the public interest. During the past two years, developer-owned water and sewer utilities have apparently convinced many people at the Commission that a single "integrated" water and sewer provider is preferable to having two, non-affiliated water and sewer providers. Although it is possible that this may be true in certain instances, it certainly isn't supported by the comparison of affiliated and non-affiliated providers' combined water and sewer rates in the Coolidge and Casa Grande areas. There simply is no hard or objective evidence to support the concept of affiliated providers' customers enjoying lower monthly bills due to greater operating efficiencies or economies of scale. The lack of evidence is clearly substantiated by Global's failure to provide any objective support in its response to Staff's first data request, which was discussed earlier in my testimony. Moreover, the actual models being put forth by developers frequently are not a single integrated provider but two separate corporations with common ownership (at least at the outset) and, in the extreme, Global's unconventional model of multiple corporations directing the operations of separate water and sewer utilities that have no employees.

Q. IS IT APPROPRIATE TO COMPARE THE WATER RATES OF ARIZONA WATER COMPANY'S CASA GRANDE SYSTEM TO THE WATER RATES OF SCWC, SINCE, AS STAFF POINTED OUT, ARIZONA WATER COMPANY'S CASA GRANDE RATES WILL INCREASE IN THE NEAR FUTURE WITH THE ACRM FILINGS?

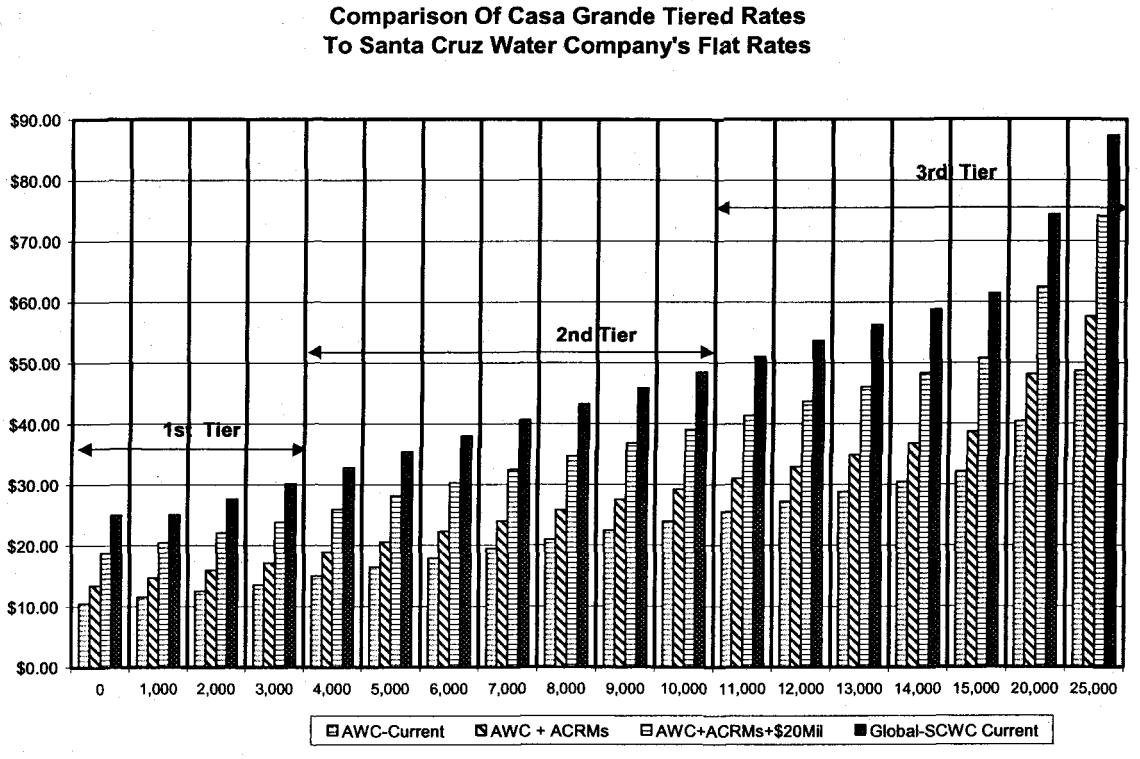
A. The Staff Report speculated that since the Arizona Water Company's Casa Grande system would be subject to Arsenic Cost Recovery Mechanism ("ACRM") filings its current rate advantage could quickly disappear. To test this hypothesis, new ACRM revenue requirements and the corresponding revised tiered rates were determined using the authorized ACRM methodology and then compared to SCWC's current rates. This comparison showed that SCWC rates would still be 65% higher than Arizona Water Company's Casa Grande rates even after including the impact of the full two-step ACRM rate increases.

A second test was performed by calculating the revenue requirement and rates that would be necessary after adding a further $20 million of hypothetical plant in the Arizona Water Company's Casa Grande system rate base on top of the previously calculated ACRM impact. Even after this significant rate base increase, SCWC's rates were still 24% higher, as summarized in the following

	Arizona Water Company Casa Grande System Tiered Rates			SCWC
	Current	With ACRMs	With addl. 20 Mil Rate Base	Flat Rate
Average Bill	$25.04	$30.52	$40.65	$50.22
Percent SCWC > CG Current				100.5%
Percent SCWC > CG With ACRMs				64.5%
Percent SCWC > CG With ACRMs + $20 Million				23.6%

table and on Exhibit RJK10.

SCWC's unfavorable high-rate differentials persist all the way across typical residential consumption levels as shown in the following chart and on Exhibit RJK11.



Q. AFTER REVIEWING THE ABOVE DATA, WHAT CONCLUSIONS HAVE YOU REACHED ABOUT THE STAFF REPORT'S DISCUSSION OF EFFICIENCY, BURDEN OF PROOF AND REFUTING STAFF'S BELIEF?

A. The Staff Report discussed "Efficiencies" on pages 5 and 6 and stated in part:

"Both Santa Cruz and Arizona Water have the burden of proof to show that it would be in the public interest for each of them to provide service to the areas requested.... Staff believes that the provision of water and wastewater service by affiliates is likely to be more efficient than water service being provided by a utility and wastewater service to the same area being provided by an unrelated entity. Therefore, unless Arizona Water can successfully refute the above, Staff acknowledges that the provision of water and wastewater by affiliates such as Palo

Verde and Santa Cruz is likely to result in efficiencies which would not be experienced by unaffiliated utilities or by a utility and a municipality".

My testimony and exhibits comparing combined water and sewer rates for affiliated versus non-affiliated providers in the Coolidge and Casa Grande areas, as well as the specific comparisons of the water rates of Arizona Water Company's Casa Grande system and SCWC that would apply to the extension area clearly demonstrate that Arizona Water Company is the more efficient, lower cost provider. Accordingly, the public interest is best served if Arizona Water Company provides water service to the requested area. The evidence also demonstrates that Global's SCWC and PVUC customers pay the highest monthly bill of the 19 affiliated providers and it would not be in the public interest to grant them an expanded service area.

The evidence also firmly establishes that the lower water bills rendered by Arizona Water Company's Casa Grande system are not a temporary condition. This demonstration, clearly contradicting the speculation in the Staff Report, has been made by holding SCWC's current water rates constant, while including two pro forma adjustments that increase the Arizona Water Company's Casa Grande system's rates:

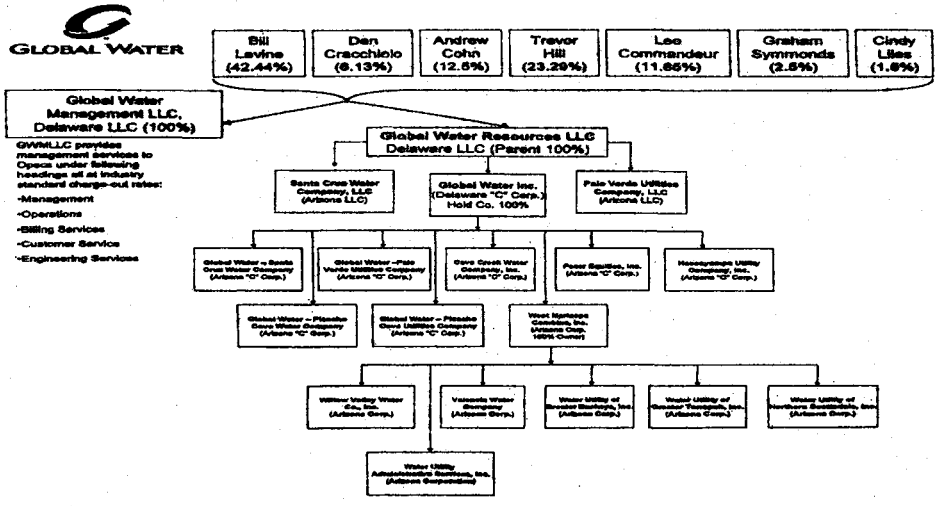
1. Showing the impact of the two expected Arizona Water Company's Casa Grande ACRM filings
2. Increasing Arizona Water Company's Casa Grande customer bills for the capital costs of an additional $20 million of hypothetical rate base investment

The customer savings would be even greater as SCWC's future rates increase due to the capital costs of the necessary treatment facilities and operating expenses incurred to remediate the high arsenic and nitrate levels that the Staff

Engineering Report believes are likely to occur in SCWC's wells in the requested area.[2]

Q. WHY IS SCWC LESS EFFICIENT THAN ITS ARIZONA PEERS?

A. That is a difficult question, but the answer undoubtedly lies in the complexity of Global's corporate structure, the way employee services are provided and charged to Global's regulated utilities by its unregulated affiliates, and Global's incomplete and unsubstantiated responses to discovery requests from Arizona Water Company. The various Global entities affiliated with its Arizona regulated water and sewer utilities form an unconventional and unusually complex structure, illustrated on the following chart and Exhibit RJK11, which Global provided to Arizona Water Company and Staff in response a Staff data request.



SCWC appears on the organization chart in two different places: in one it is an Arizona LLC under its parent Global Water Resources, which is a Delaware

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[2] Staff Report, Docket No. W-01445A-06-0199, October 26,2006. Engineering Memo from Dorothy Hains, P. E., Section II, Pt. E.

LLC. One level down on the organization chart Global Water-Santa Cruz Water Company, an Arizona C corporation, appears under its parent Global Water Inc., a Delaware C corporation.

Since SCWC has no employees, all utility work including management, operations, billing, customer service and engineering, is provided to SCWC and the other wholly owned operating utilities by the left-most entity on the organization chart, the unregulated Global Water Management LLC, through various layers of the organization. Global charges the regulated utilities "**market based prices**" for this work, which in almost all other utilities is performed by utility employees at cost. In other words, the inter-company charges are not limited to the cost of the workers' wages and benefits, as is the case of almost every other regulated Arizona utility, instead they are grossed–up to what Global Water Management determines are appropriate prices and profit margins and then passed on to the regulated affiliate without a contract.

Global was unwilling to provide information about these costs and there is no public information that would enable an interested analyst to determine the reasonableness of these charges to SCWC, PVUC and their other captive operating utilities, how often they are changed or the amount of profit added to the actual costs as they are passed through by the various affiliates on their way to the regulated utilities.

AWC Data Request 1.93, which appears as Exhibit RJK12, sought to obtain the total costs of each common or shared service and for each service the

amount and percentage of the total costs allocated to each regulated affiliate as well as the basis of each cost allocation. In a convoluted response Ms. Cindy Liles, CPA, Chief Financial Officer and Senior Vice President, Global Water Management stated, **"There are no "shared" or "common" services as AWC uses the term."** At the same time, however, Global was stating in their response to Staff Data Request LJ 1.1:

"For instance, an integrated utility employs the same Customer Service Representatives whether the call be about a sewer account or a water account. Similarly, the number of Operations Staff is decreased as staff are cross-trained in systems and can respond to issues on both water and wastewater. <u>The list of combined services that result in direct economies to the customers goes on.</u>"

Global's list may go on but apparently Global is not willing to provide the factual data that would support such claims. The undisclosed methodology and resulting charges for personal services provided by employees of other non-regulated Global affiliates may well be another source of Global's inefficiency as reflected in its unfavorable rate comparisons.

III. Recent Commission Actions Reject Key Aspects Of The Global Service Model.

Q. DO YOU KNOW OF ANY OTHER REGULATED ARIZONA WATER OR SEWER UTILITY THAT OPERATES WITHOUT ANY EMPLOYEES?

A. Yes, I recently learned that in addition to Global's Arizona utilities, those owned by Algonquin Water Resources of America ("AWRA"), such as Black Mountain

Sewer Company ("BMSC"), Litchfield Park Service Company and several other regulated Arizona utilities controlled by AWRA also operate without employees.

Q. HAS THE COMMISSION RECENTLY ISSUED A RATE DECISION THAT DISCUSSED THIS MANNER OF OPERATING A UTILITY WITHOUT ANY EMPLOYEES?

A. Yes, in a recent BMSC rate case, (Decision No. 69164, December 5, 2006), the Commission considered the way AWRA and BMSC are operated without employees and stated:

"AWRA, BMSC's sole shareholder has no employees. BMSC, as well as all of the other regulated utility companies...have no employees. Instead, almost all operational services are provided by an allegedly unregulated affiliate called Algonquin Water Services ("AWS") that has between 70 and 90 employees and which, apparently, provides similar services received by the regulated public service corporations owned by Algonquin in Arizona, including BMSC."

Evidently there is a written contract between BMSC and AWS for provision of wastewater services but it was not negotiated, and as recognized in the Decision:

"BMSC has in effect turned over the entirety of its operations and management to an (allegedly) unregulated affiliate, and that the affiliate's shareholders have imposed a contract on BMSC, without negotiation, that provides the affiliate with guaranteed profits at the expense of BMSC's captive ratepayers."

Staff testimony cited in the Decision included one example of a billing rate of $150 per hour for a "general manager" being charged to BMSC by its affiliate.

Staff stated that this rate equates to $312,000 on an annual basis to perform management duties for BMSC and contended that only the reasonable **actual** costs should be recovered from customers. In Global's case there is no evidence of even a contract under which it imposes its charges on the regulated affiliates.

Q. DO YOU BELIEVE THAT THE PROBLEMS AND CONCERNS IDENTIFIED IN THE BMSC DECISION APPLIES TO THE GLOBAL ENTITIES?

A. Yes, I do. AWRA and Global share many similarities. They are the only two entities operating Arizona regulated utilities without any employees. Global has structured itself and its utility model along the lines of AWRA, the first entity in the state with this concept, and not surprisingly, several of Global's owners were former employees of AWRA before forming Global.

Q. WHAT ARE THE IMPLICATIONS IF GLOBAL IS ALLOWED TO CONTINUE ITS RAPID EXPANSION BASED ON ITS HIGHLY QUESTIONABLE SERVICE MODEL?

A. The Decision in the BMSC rate case recognized the inappropriateness of this service model, which adds additional layers of affiliate profit to the regulated utility's capital and operating expenses, and attempts to justify them by claiming additional efficiencies. The Staff reply brief in the BMSC case concluded:

"The Commission should disallow affiliated profits even if the Company's business model achieves economies of scale."

It was difficult and time intensive for Staff to compute how much affiliate profit was actually included in the BMSC's operating expenses and according to Staff

"...there may be additional affiliate profit that it was unable to specifically identify."

However, the specific capitalized and expensed amounts that could be determined by Staff were disallowed by the Decision, which declared:

"We also share the concern raised by staff that there may be additional affiliated profit margins built into the affiliate billings that have not been specifically identified. Because we do not have any specific record evidence of additional inappropriate profits in this case, we will exclude only the "profits" that have been clearly identified by Staff. In doing so, however, we make no finding as to the reasonableness of the Algonquin affiliate structure and, in future cases involving the Algonquin companies, we expect all affiliate salaries, expenses, and billings to be scrutinized to avoid potential abuses."

As I explained, Global has refused to provide information about the imposition of intercompany charges and clearly evaded having these charges scrutinized for abuse. Accordingly, Global should not be allowed to expand its operations into enlarged CCN areas under its current organizational structure and operating model that obscures the extent of its affiliates' profits included in the regulated utilities rate bases and operating expenses.

Q. WHAT OTHER QUESTIONABLE PRACTICES HAS GLOBAL INSTITUTED?

A. Global has gone even further than AWRA and BMSC by introducing a new type of financing agreement between a non-regulated Global affiliate and developers that distorts the regulated utility's capital structure by understating and obscuring the correct amount of Advances In Aid Of Construction provided by developers

that should be deducted from rate base and overstating the amount of Common Equity on which the regulated utilities are entitled to earn a return.

An examination of SCWC's Common Equity Accounts discloses numerous changes that Global has refused to explain in response to two specific Arizona Water Company data requests: AWC 1.100 and AWC 1.102. Legal Counsel for Global provided the same response to both:

"Objection. This request seeks information that is overly broad, unduly burdensome, *irrelevant and not reasonably* calculated to lead to the discovery of any admissible evidence. Further, the information sought is proprietary business information that is confidential."

Global's non-regulated affiliates not only execute Non-Traditional Financing Arrangements with land owners and developers for the provision of utility services, they also refuse to explain their accounting for the payments received under these arrangements.

As discussed more fully in the Commission's own proceeding *Evaluation of the Regulatory Impact from the Use of Non-Traditional Financing Arrangements by Water Utilities and Their Affiliates,* Docket No. W-00000C-06-0149 ("Generic Docket") and the Staff Report thereto, Global has developed and implemented unorthodox long-term financing agreements without Commission approval. These financing agreements, somewhat similar in effect, but more complex than the earlier Commission-rejected SCWC and PVUC PILOR agreements (payments in lieu of revenue) (Decision No. 61943, September 17,

1999) are called *Infrastructure Coordination and Financing Agreements* ("ICFAs").

The ICFAs, like the PILORs, are an attempt to bypass the customer protections embodied in the Commission's Main Extension Rule, R14-2-406. An unregulated Global affiliate has executed ICFA agreements covering utility services for approximately 170,000 units in the SCWC and PVUC service area as of September 2006. However, no one outside of Global knows:

- The status of these agreements
- How much money has been collected
- How much additional money will be collected
- What contractual obligations the ICFAs place on the regulated utilities
- What accounting procedures have been followed
- How the money collected is supposed to be used
- How the money collected has actually been used
- How much of the regulated utilities equity capital is derived from ICFA payments

Although in the Generic Docket Staff concluded that ICFAs should be treated as Advances in Aid of Construction or Contributions instead of equity, the Staff Report did not address any of the above questions. Staff conducted no independent investigation and did not recommend any remedial action by the Commission to forestall ICFA funds from being added to the regulated utilities equity. Moreover, the Staff Report did not address the broader jurisdictional issues about whether the non-regulated affiliates entering into ICFAs should be

considered public service corporations subject to Commission audits and regulation.

On December 20, 2006, however, a procedural order was issued in the Company's Formal Complaint Against Global, Docket No. W-01445A-06-0200, which directed the Staff to file, by January 19, 2007:

"a legal brief addressing the issues of whether entities that employ non-traditional financing arrangements, such as ICFAs, should be considered public service corporations or otherwise subject to the Commission's jurisdiction. Staff's brief should also discuss any other issues that may be relevant to the Commission's consideration of whether it should assert jurisdiction over ICFAs and the entities employing such arrangements and, if so, what action should be taken regarding such devices."

If Global is awarded the CCN in this proceeding and the ICFA procedure is allowed to continue and cover the new extension area, evaluating SCWC's future rate filings will be extraordinarily complex, if not impossible and time intensive. This case should not endorse the continuation and expansion of the now discredited AWRA model as further complicated by Global. Global's aberrant operating and financing model is designed to benefit its shareholders at its customers' expense. Allowing Global's service territories to be enlarged in light of its questionable operating, financing and accounting practices irreparably harms the public interest. Indeed, these practices must be fully examined and rectified in a general rate proceeding, in Arizona Water Company's Formal Complaint proceeding or in the Generic Docket.

Q. DO YOU HAVE ANY FINAL RECOMMENDATIONS BEFORE CONCLUDING YOUR DIRECT TESTIMONY?

A. Yes, I do. Arizona Water Company should be awarded the CCN to provide water service to all areas requested in the application. However, the new CCN area should not be defined by the checkerboard of discrete parcels that have requested service and entered into ICFAs with Global. Instead, the new CCN area should enable needed service to be provided through a logical, interconnected grid system, as discussed more fully in Mr. Whitehead's testimony, following generally accepted water system design principles.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes, it does.

EXHIBITS

RJK1 Water And Sewer Bill Comparisons Integrated vs. Non-Integrated Service.

RJK2 Chart of Combined Coolidge Water And Sewer Bill.

RJK3 Chart of Combined Casa Grande Water And Sewer Bill.

RJK4 Chart Comparing Casa Grande Tiered Rates To SCWC Flat Rates.

RJK5 Comparison of Casa Grande Tiered Rates To SCWC Flat Rates By Consumption Level.

RJK6 Chart of Combined Water And Sewer Bills 19 Affiliated Providers By Bill Amount

RJK7 Analysis of 19 ACC Regulated Affiliated Water And Sewer Providers Bills.

RJK8 Chart Of Water Bills 19 Affiliated Providers By Number Of Customers.

RJK9 Chart Of Sewer Bills 19 Affiliated Providers By Number Of Customers.

RJK10 Comparison of Casa Grande Tiered Rates With ACRM Impact And $20 Million Additional Investment To SCWC Flat Rates.

RJK11 Chart Comparison of Casa Grande Tiered Rates With ACRM Impact And $20 Million Additional Investment To SCWC Flat Rates

RJK12 Arizona Water Company Data Request 1.92 And Response.

ARIZONA WATER COMPANY

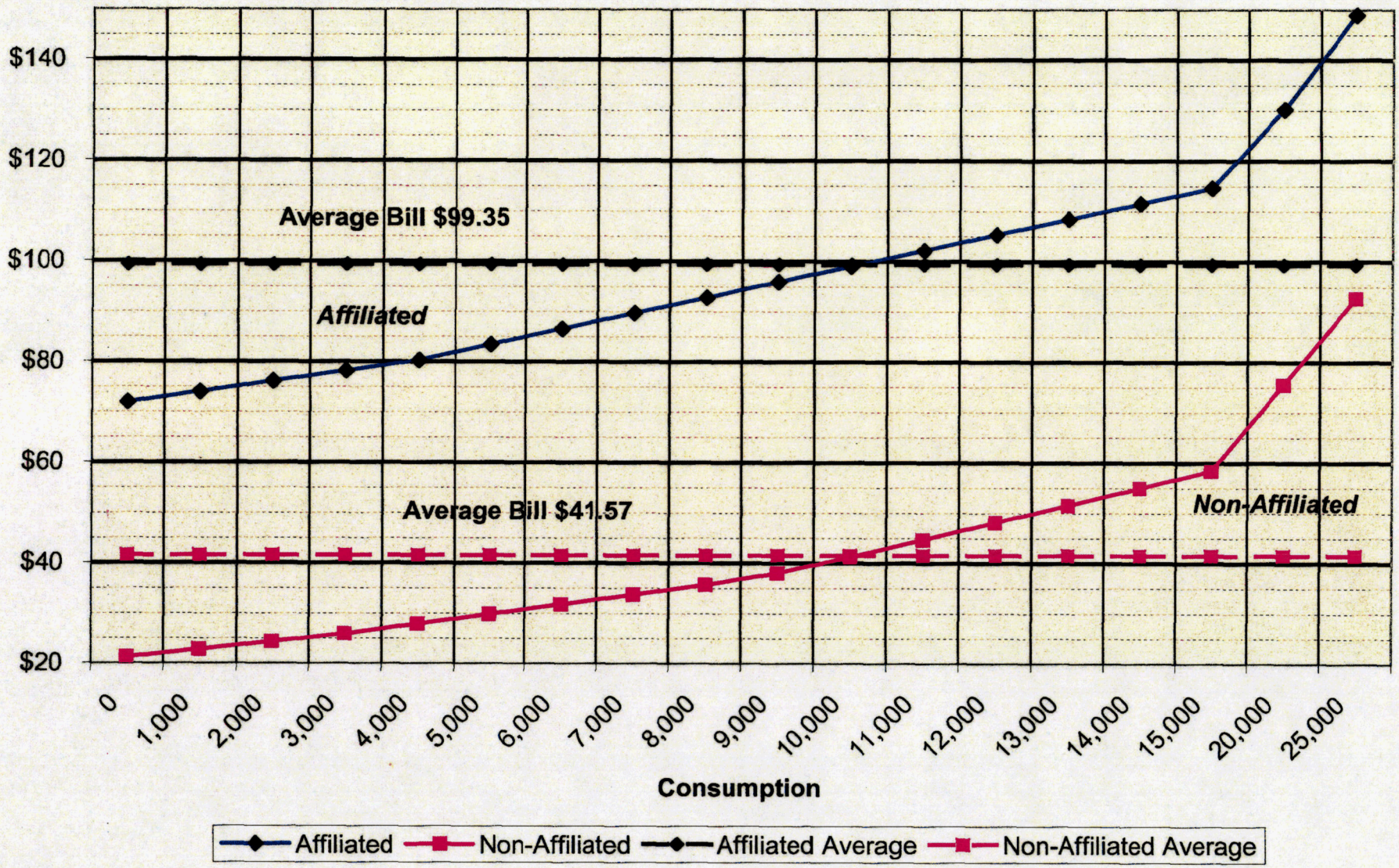
ıter & Sewer Bill Compaisons
egrated vs. Non-integrated Service
" - 3/4" Meters

RJK 1

	Coolidge Area						Casa Grande Area					
	Affiliated Woodruff Sewer & Water Rates			**Non-Affiliated** Coolidge Sewer & AWC Water Rates			**Affiliated** Global Sewer & Water Rates			**Non-Affiliated** Casa Grande Sewer & AWC Water Rates		
Gallons Consumption	Sewer Rates	Water Rates	Sewer & Water	Coolidge Sewer	AWC Water	Sewer & Water	Sewer Rates	Water Rates	Sewer & Water	Casa Grande Sewer	AWC Water	Sewer & Water
0	$52.00	$20.00	$ 72.00	$10.40	$10.90	$ 21.30	$33.00	$25.00	$ 58.00	$11.68	$10.48	$ 22.16
1,000	52.00	22.08	$ 74.08	10.40	12.45	$ 22.85	33.00	25.00	$ 58.00	11.68	11.48	$ 23.16
2,000	52.00	24.16	$ 76.16	10.40	14.00	$ 24.40	33.00	27.60	$ 60.60	11.68	12.48	$ 24.16
3,000	52.00	26.24	$ 78.24	10.40	15.55	$ 25.95	33.00	30.20	$ 63.20	11.68	13.48	$ 25.16
4,000	52.00	28.32	$ 80.32	10.40	17.51	$ 27.91	33.00	32.80	$ 65.80	11.68	14.97	$ 26.65
5,000	52.00	31.44	$ 83.44	10.40	19.47	$ 29.87	33.00	35.40	$ 68.40	11.68	16.45	$ 28.13
6,000	52.00	34.56	$ 86.56	10.40	21.43	$ 31.83	33.00	38.00	$ 71.00	11.68	17.94	$ 29.62
7,000	52.00	37.68	$ 89.68	10.40	23.39	$ 33.79	33.00	40.60	$ 73.60	11.68	19.43	$ 31.11
8,000	52.00	40.80	$ 92.80	10.40	25.35	$ 35.75	33.00	43.20	$ 76.20	11.68	20.91	$ 32.59
9,000	52.00	43.92	$ 95.92	10.76	27.31	$ 38.07	33.00	45.80	$ 78.80	11.68	22.40	$ 34.08
10,000	52.00	47.04	$ 99.04	11.95	29.27	$ 41.22	33.00	48.40	$ 81.40	11.68	23.89	$ 35.57
11,000	52.00	50.16	$ 102.16	13.15	31.51	$ 44.66	33.00	51.00	$ 84.00	11.68	25.54	$ 37.22
12,000	52.00	53.28	$ 105.28	14.35	33.75	$ 48.10	33.00	53.60	$ 86.60	11.68	27.19	$ 38.87
13,000	52.00	56.40	$ 108.40	15.54	35.99	$ 51.53	33.00	56.20	$ 89.20	11.68	28.84	$ 40.52
14,000	52.00	59.52	$ 111.52	16.74	38.23	$ 54.97	33.00	58.80	$ 91.80	11.68	30.49	$ 42.17
15,000	52.00	62.64	$ 114.64	17.93	40.47	$ 58.40	33.00	61.40	$ 94.40	11.68	32.14	$ 43.82
20,000	52.00	78.24	$ 130.24	23.91	51.67	$ 75.58	33.00	74.40	$ 107.40	11.68	40.39	$ 52.07
25,000	52.00	96.94	$ 148.94	29.89	62.87	$ 92.76	33.00	87.40	$ 120.40	11.68	48.64	$ 60.32
Avg Consumption	10,100	10,100		10,100	10,100		10,700	10,700		10,700	10,700	
Avg Bill	**$ 52.00**	**$ 47.35**	**$ 99.35**	**$ 12.07**	**$ 29.49**	**$ 41.57**	**$ 33.00**	**$ 50.22**	**$ 83.22**	**$ 11.68**	**$ 25.04**	**$ 36.72**
Integrated Service Penalty												
Amount						**$ 57.78**						**$ 46.50**
Percent						**139.0%**						**126.6%**

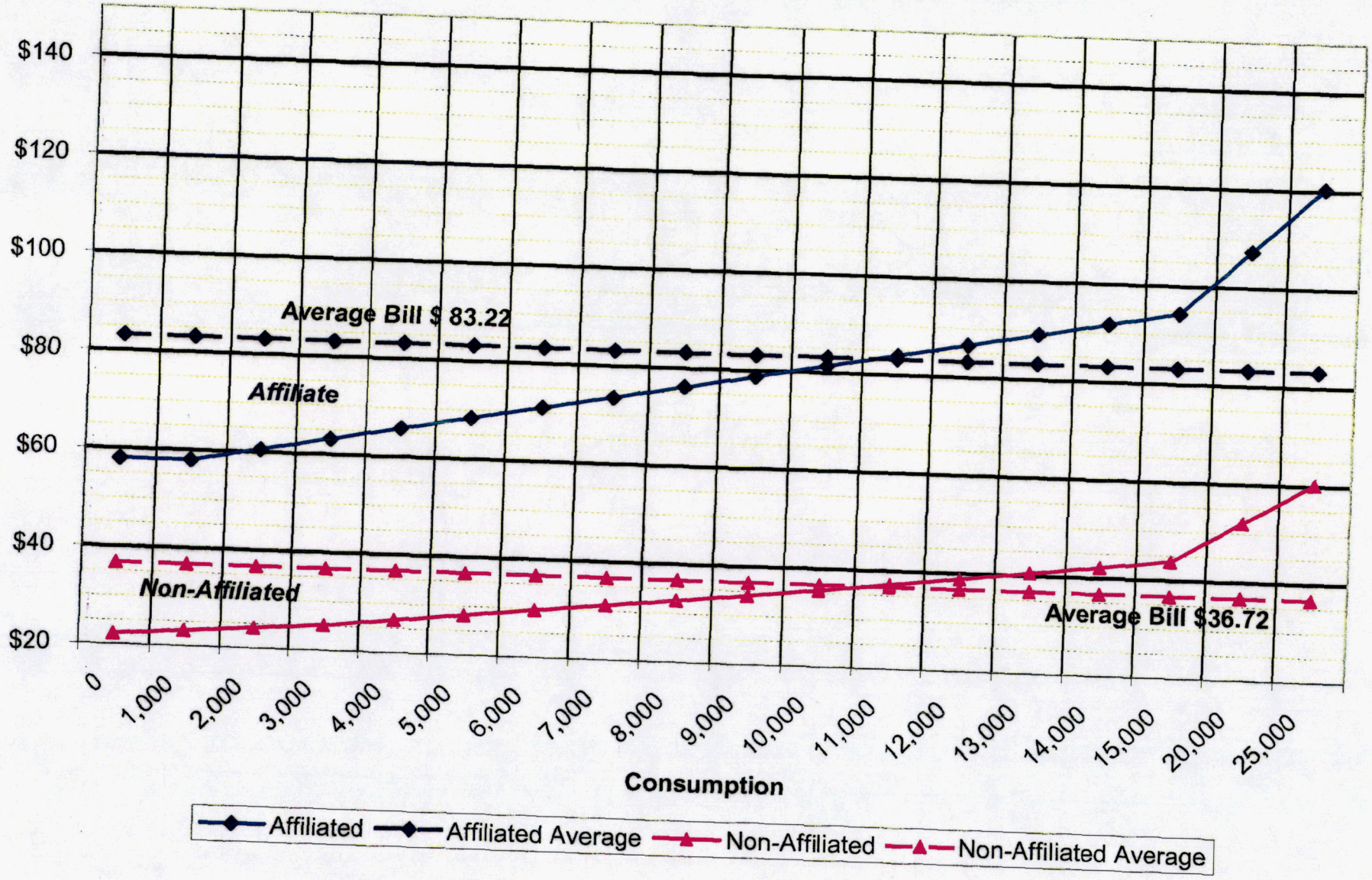
RJK 2

Combined Coolidge Water And Sewer Bill



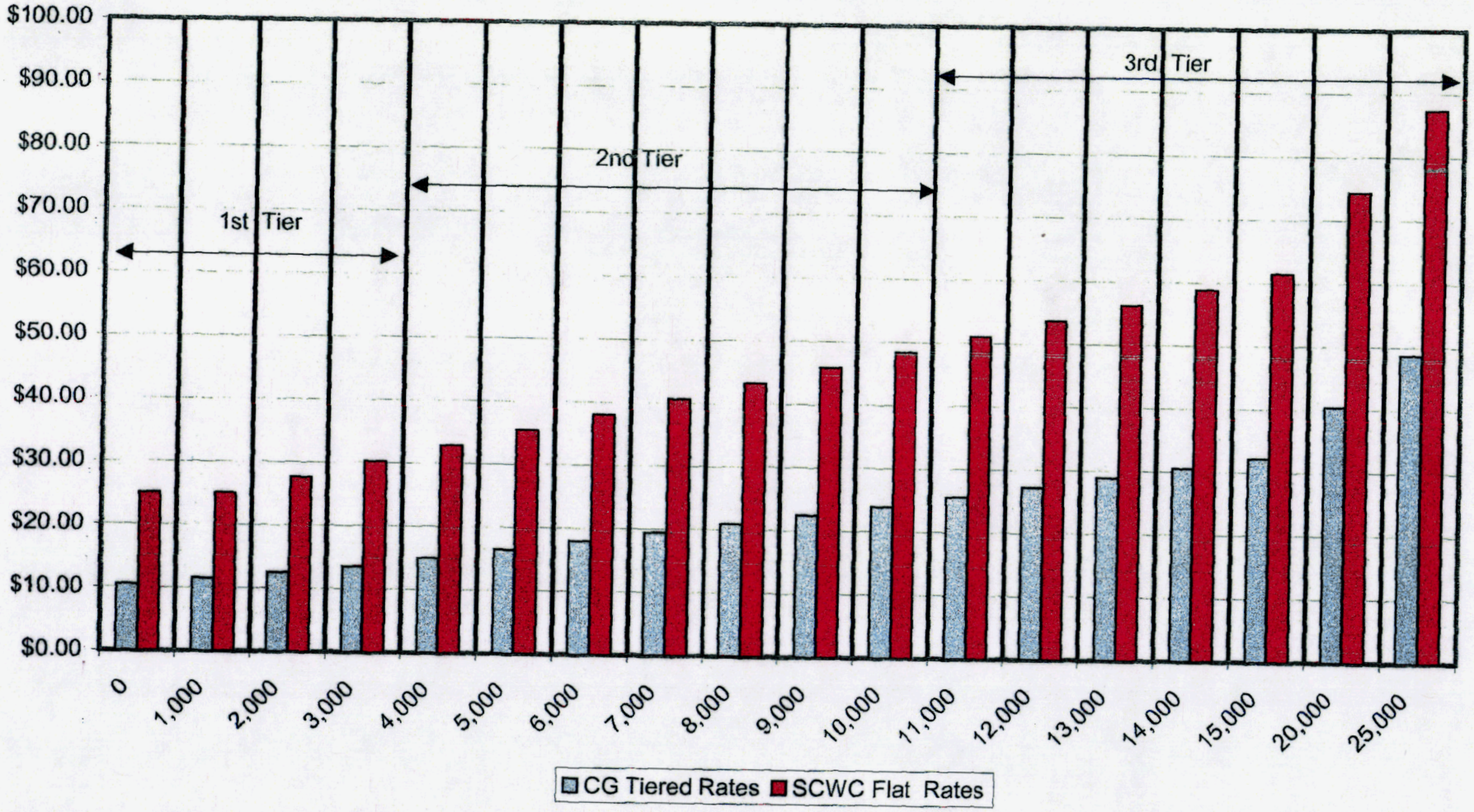
RJK 3

Combined Casa Grande Water And Sewer Bill



RJK 4

Comparison Of Casa Grande Tiered Rates To Santa Cruz Water Company's Flat Rates



Arizona Water Company

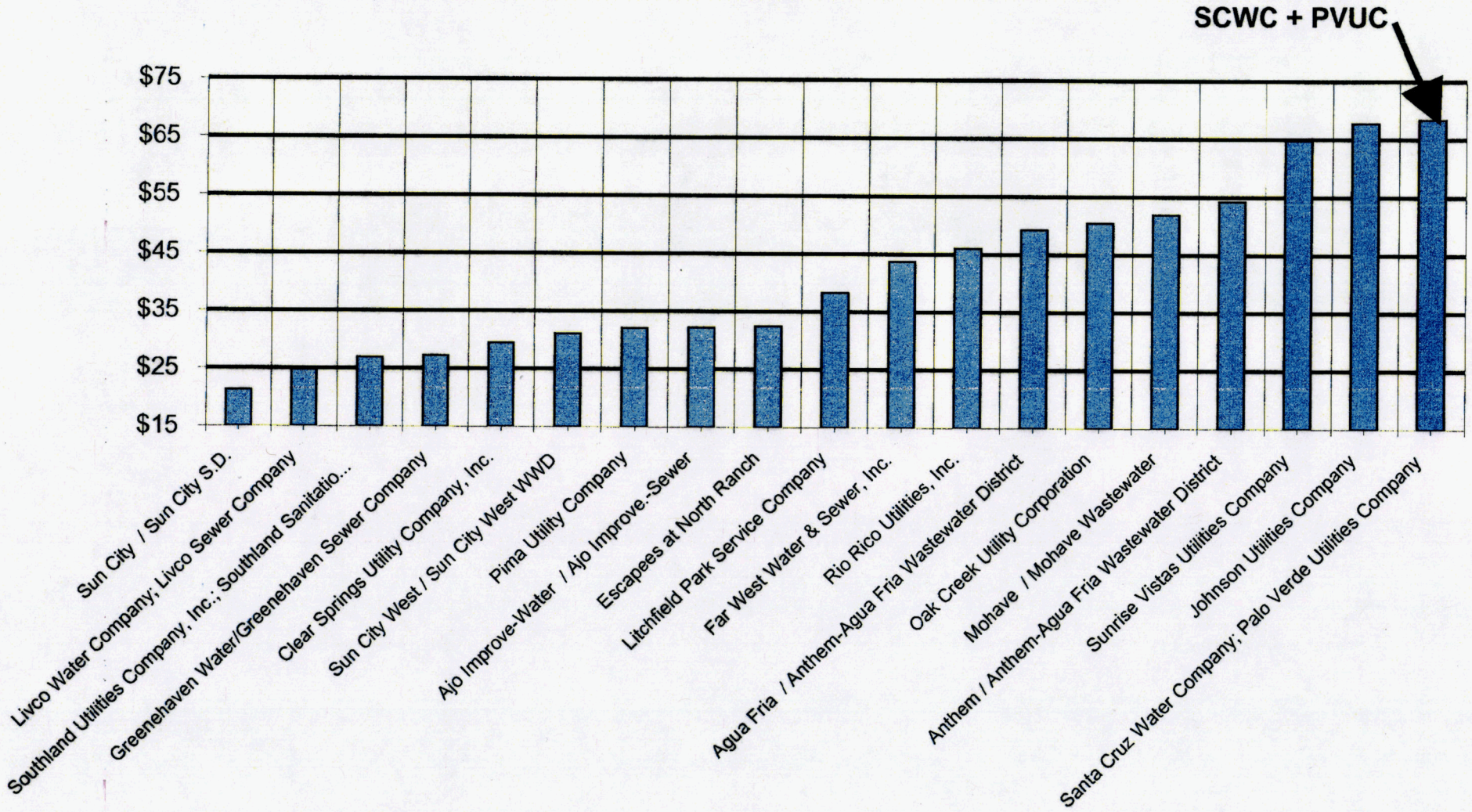
RJK 5

Comparison Of Casa Grande Tiered Rates To Santa Cruz Water Company Flat Rates 5/8" - 3/4" Meters By Consumption Level

Line No.	Gallons Consumption		Casa Grande vs. SCWC: CG Tiered Rates		SCWC Flat Rates		Casa Grande % Lower
1.	0	AWC's	$	10.48	$	25.00	138.5%
2.	1,000	1st Tier	$	11.48	$	25.00	117.8%
3.	2,000		$	12.48	$	27.60	121.2%
4.	3,000		$	13.48	$	30.20	124.0%
5.	4,000		$	14.97	$	32.80	119.2%
6.	5,000		$	16.45	$	35.40	115.1%
7.	6,000		$	17.94	$	38.00	111.8%
8.	7,000	2nd Tier	$	19.43	$	40.60	109.0%
9.	8,000		$	20.91	$	43.20	106.6%
10.	9,000		$	22.40	$	45.80	104.5%
11.	**10,000**		**$**	**23.89**	**$**	**48.40**	**102.6%**
12.	11,000		$	25.54	$	51.00	99.7%
13.	12,000		$	27.19	$	53.60	97.1%
14.	13,000		$	28.84	$	56.20	94.9%
15.	14,000	3rd Tier	$	30.49	$	58.80	92.9%
16.	15,000		$	32.14	$	61.40	91.0%
17.	20,000		$	40.39	$	74.40	84.2%
18.	25,000		$	48.64	$	87.40	79.7%
19.	Average Consumption			10,700		10,700	
20.	**Average Bill**		**$**	**25.04**	**$**	**50.22**	**100.5%**

RJK 6

Combined Water And Sewer Bills (5 MGal)
19 Affiliated Providers By Bill Amount



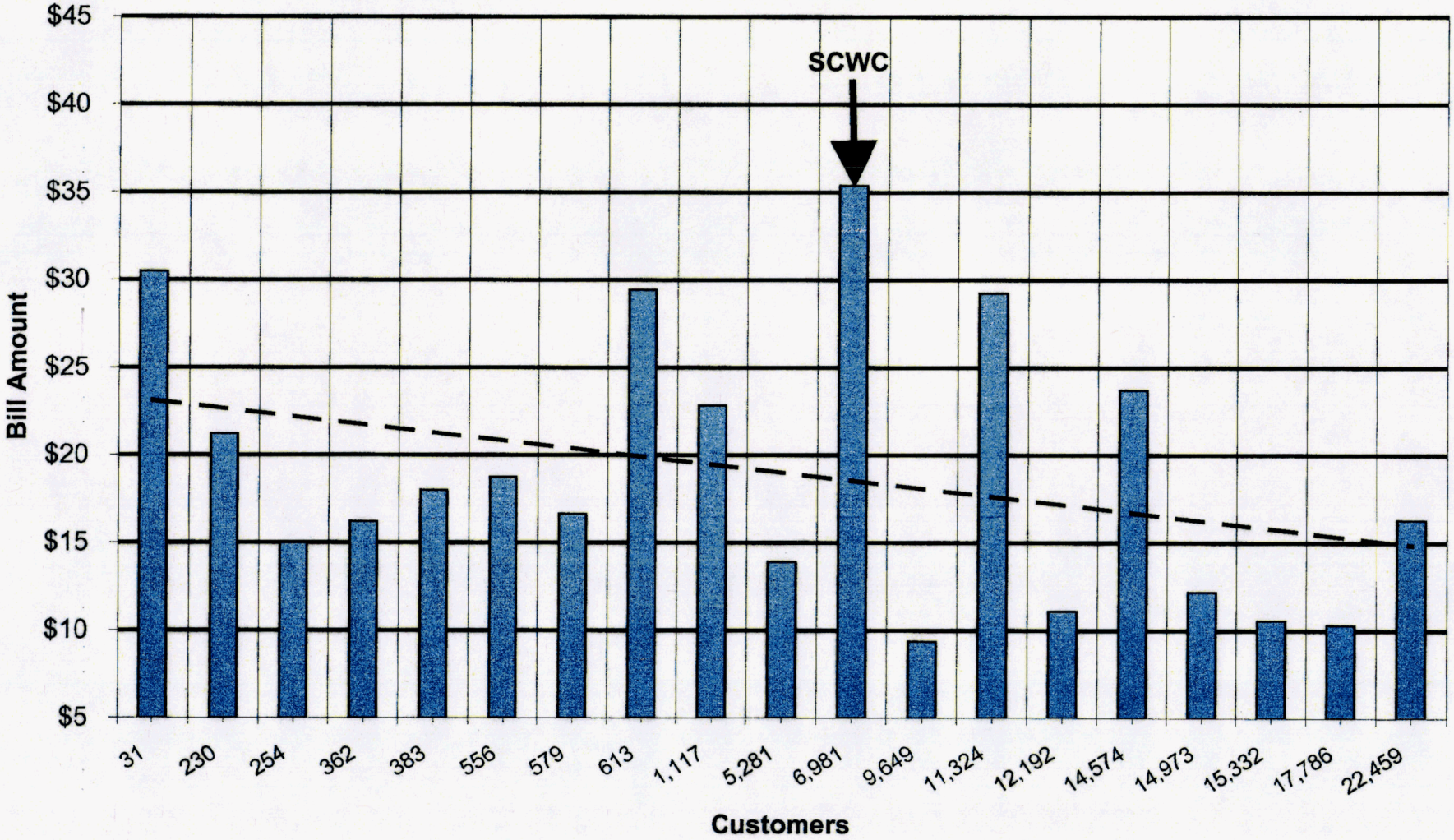
Arizona Water Company

Analysis of 19 ACC Regulated Affiliated Water and Sewer Providers' Bills - 2005 Data

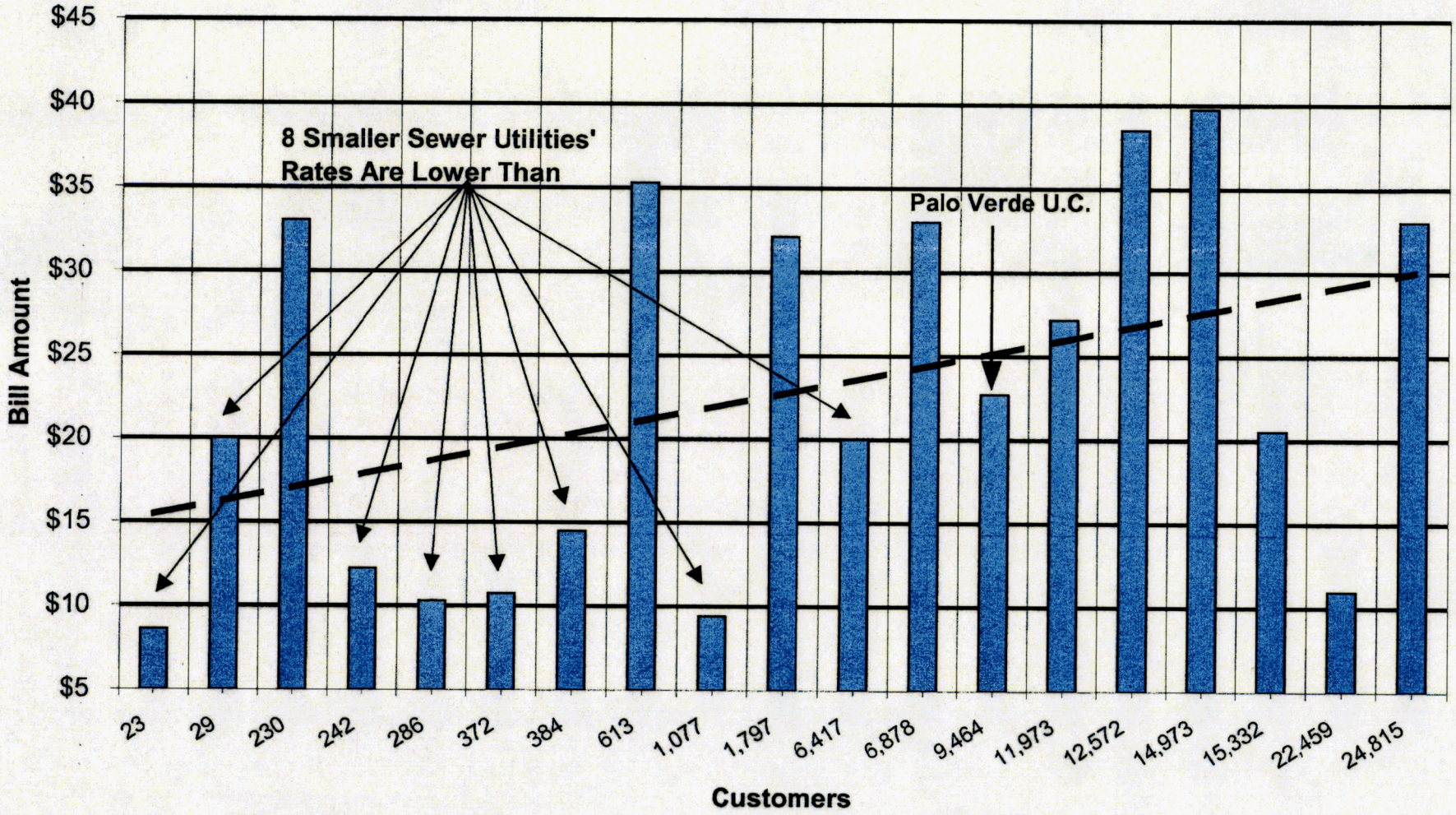
RJK 7

Line	Water/Sewer Provider	Monthly Bill 5 MGal		
		Water	Sewer	Total
1	Sun City / Sun City S.D.	10.31	10.98	21.29
2	Livco Water Company; Livco Sewer Company	16.20	8.60	24.80
3	Southland Utilities Company, Inc.; Southland Sanitation Company	16.65	10.30	26.95
4	Greenehaven Water/Greenehaven Sewer Company	15.00	12.25	27.25
5	Clear Springs Utility Company, Inc.	18.75	10.75	29.50
6	Sun City West / Sun City West WWD	10.56	20.56	31.12
7	Pima Utility Company	9.38	22.73	32.11
8	Ajo Improve-Water (I) / Ajo Improve.-Sewer (I)	22.84	9.42	32.26
9	Escapees at North Ranch	18.00	14.50	32.50
10	Litchfield Park Service Company	11.10	27.20	38.30
11	Far West Water & Sewer, Inc. (I)	23.72	20.00	43.72
12	Rio Rico Utilities, Inc.	13.91	32.10	46.01
13	Agua Fria / Anthem-Agua Fria Wastewater District	16.30	33.03	49.33
14	Oak Creek Utility Corporation	30.50	20.00	50.50
15	Mohave / Mohave Wastewater	12.19	39.75	51.94
16	Anthem / Anthem-Agua Fria Wastewater District	21.22	33.03	54.25
17	Sunrise Vistas Utilities Company	29.45	35.31	64.76
18	Johnson Utilities Company (I)	29.25	38.50	67.75
19	**Santa Cruz Water Company; Palo Verde Utilities Company**	**35.40**	**33.00**	**68.40**
20	**Average 18 Affiliated Providers Excluding Global**	**18.07**	**22.17**	**40.24**
21	**Global's SCWC & PVUC Bills As Multiple Of Average**	**1.96**	**1.49**	**1.70**

Water Bills (5 MGal)
19 Affiliated Providers
By Number Of Customers



Sewer Bills (5 MGal)
19 Affiliated Providers By Number Of Customers



Arizona Water Company

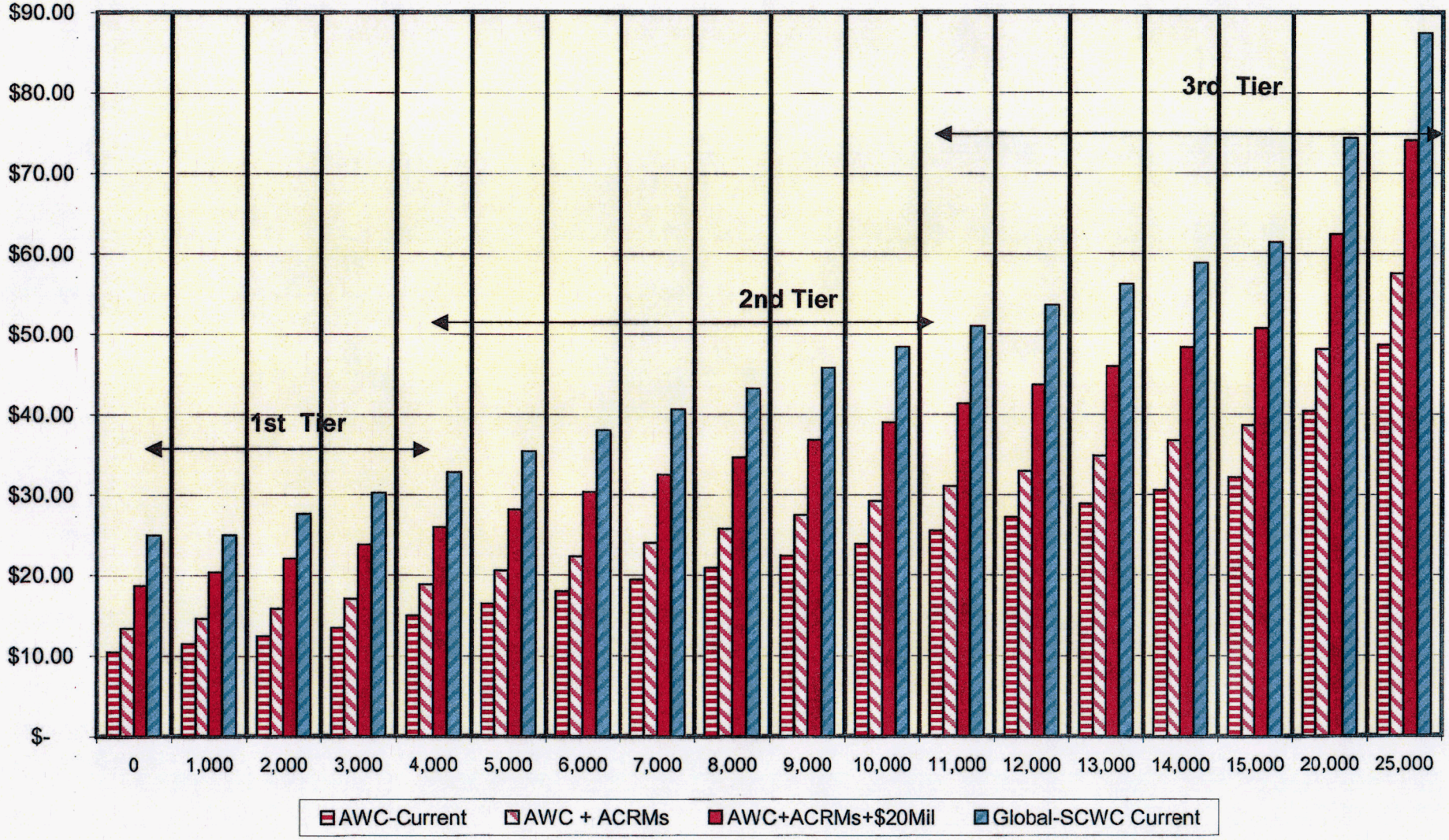
Comparison Of Casa Grande Tiered Rates
Current, With ACRM Impact and $20 Million
Hypothetical Additional Rate Base
To Santa Cruz Flat Water Rates
5/8" - 3/4" Meters

RJK 10

Line No.	Gallons Consumption		Casa Grande Tiered Rates: Current	Casa Grande Tiered Rates: With ACRMs	Casa Grande Tiered Rates: With addl. $20 Mil Rate Base	SCWC Flat Rates: Current	SCWC % Higher: Current	SCWC % Higher: Arsenic	SCWC % Higher: +$20 Mil
1.	0	**AWC's**	$ 10.48	$ 13.39	$ 18.70	$ 25.00	139%	86.7%	34%
2.	1,000	1st Tier	$ 11.48	$ 14.63	$ 20.39	$ 25.00	118%	70.9%	23%
3.	2,000		$ 12.48	$ 15.87	$ 22.08	$ 27.60	121%	73.9%	25%
4.	3,000		$ 13.48	$ 17.11	$ 23.77	$ 30.20	124%	76.5%	27%
5.	4,000		$ 14.97	$ 18.84	$ 25.95	$ 32.80	119%	74.1%	26%
6.	5,000		$ 16.45	$ 20.56	$ 28.12	$ 35.40	115%	72.1%	26%
7.	6,000		$ 17.94	$ 22.29	$ 30.30	$ 38.00	112%	70.5%	25%
8.	7,000	2nd Tier	$ 19.43	$ 24.02	$ 32.48	$ 40.60	109%	69.0%	25%
9.	8,000		$ 20.91	$ 25.74	$ 34.65	$ 43.20	107%	67.8%	25%
10.	9,000		$ 22.40	$ 27.47	$ 36.83	$ 45.80	104%	66.7%	24%
11.	10,000		$ 23.89	$ 29.20	$ 39.01	$ 48.40	103%	65.8%	24%
12.	**11,000**		**$ 25.54**	**$ 31.09**	**$ 41.35**	**$ 51.00**	**100%**	**64%**	**23%**
13.	12,000		$ 27.19	$ 32.98	$ 43.69	$ 53.60	97%	62.5%	23%
14.	13,000		$ 28.84	$ 34.87	$ 46.03	$ 56.20	95%	61.2%	22%
15.	14,000	3rd Tier	$ 30.49	$ 36.76	$ 48.37	$ 58.80	93%	60.0%	22%
16.	15,000		$ 32.14	$ 38.65	$ 50.71	$ 61.40	91%	58.9%	21%
17.	20,000		$ 40.39	$ 48.10	$ 62.41	$ 74.40	84%	54.7%	19%
18.	25,000		$ 48.64	$ 57.55	$ 74.11	$ 87.40	80%	51.9%	18%
19.	Average Consumption		10,700	10,700	10,700	10,700			
20.	**Average Bill**		**$25.04**	**$30.52**	**$40.65**	**$50.22**			
21	**Percent SCWC > CG Current**					**100.5%**			
22	**Percent SCWC > CG With ACRMs**					**64.5%**			
23	**Percent SCWC > CG With ACRMs + $20 Million**					**23.6%**			

RJK 11

Comparison Of Casa Grande Tiered Rates To Santa Cruz Water Company's Flat Rates



SANTA CRUZ WATER COMPANY
AND PALO VERDE UTILITIES COMPANY
RESPONSES TO ARIZONA WATER COMPANY'S
FIRST SET OF DATA REQUESTS
Docket No. W-01445A-06-0199
October 24, 2006

AWC 1.93 For each of the last three years, provide the total costs of each common or shared service referred to in AWC 1.92 or AWC 1.93 above. For each common or shared service provide the amount and percentage of total costs allocated to each regulated affiliate and the basis of each cost allocation.

RESPONSE: There are no "shared" or "common" services as AWC uses these terms because the services are not provided at the regulated utility level (or, indeed, by any of their parent companies). Instead, services are provided by in separate entity – GWM. See AWC 1.91 and 1.92. GWM also serves non-Global utilities. For GWM's attenuated relationship to Global Water Resources, LLC, see the attachment to our response to AWC 1.23.

RESPONDENT: Cindy Liles
Senior Vice President
Global Water Management, LLC
21410 North 19th Avenue, Suite 201
Phoenix, Arizona 85027