

1 service issues. After leaving the TCEQ, I have been retained on at least twenty additional
2 CCN and/or rate related projects for various clients.

3 **II. SCOPE AND PURPOSE OF TESTIMONY**

4 **Q. In connection with SOAH DOCKET NO. 473-17-0119, what are your**
5 **responsibilities?**

6 **A.** I was retained by Double Diamond Utilities Company, Inc. in October 2016 to update
7 asset inventories for two water systems and two wastewater systems.

8 **Q. What is the purpose of your testimony?**

9 **A.** I will present testimony concerning my professional opinion on the original cost of the
10 water and wastewater assets as of December 31, 2015.

11 **Q. Have you ever testified as an expert witness in contested matters before the**
12 **Commission or other level of Court?**

13 **A.** Yes. I have provided testimony for contested matters which are listed below.

- 14 ▪ In the matter of the City of Pearland, Texas (SOAH Docket Nos. 582-98-0994 and 582-98-1977)
- 15 ▪ In the matter of AquaSource Development Company regarding Briar Creek Subdivision in Travis
- 16 County (SOAH Docket No. 98-1479-UCR)
- 17 ▪ In the matter of Hays v. Frankford Properties in the 72nd District court in Lubbock, Texas
- 18 ▪ In the matter of Creedmoor-Maha Water Supply Corporation (SOAH Docket No. 582-00-0546)
- 19 ▪ In the matter of the City of Fort Worth (SOAH Docket No. 582-00-1092)
- 20 ▪ In the matter of Woodcreek Utilities, inc. (SOAH Docket No. 582-00-1469)
- 21 ▪ In the matter of City of Crandall (SOAH Docket No. 582-00-1479)
- 22 ▪ In the matter of Mustang Water Supply Corporation and the Town of Little Elm (SOAH Docket
- 23 No. 582-01-1618)
- 24 ▪ In the matter of The City of Midlothian and City of Cedar Hill (SOAH Docket No. 582-02-1618)
- 25 ▪ In the matter of the City of Prosper (SOAH DOCKET NO. 582-03-1994)
- 26 ▪ In the matter of East Medina Special Utility District (SOAH DOCKET NO. 582-04-1012)
- 27 ▪ In the matter of the Petition of Collin Count Municipal Utility District (SOAH DOCKET NO.
- 28 582-04-2699)
- 29 ▪ In the matter of AquaTexas, Inc. for a water and wastewater tariff change and rate increase
- 30 (SOAH DOCKET NOS. 582-05-2770, 582-05-2771, 582-05-3745, 582-05-4181, 582-05-4182,
- 31 582-05-4184)

- 1 ▪ In the matter of Cease and Desist Petition Of Wax Mid, Inc. Certificate of Convenience and
2 Necessity (CCN) No 11966 against The City Of Midlothian, CCN No. 11706 In Ellis County,
3 Texas (SOAH DOCKET NO. 582-06-1029, TCEQ DOCKET NO. 2006-0487-UCR).
- 4 ▪ In the matter of the City of Georgetown, Certificate of Convenience and Necessity No. 12369 in
5 Bell, Burnett and Williamson Counties, Texas (SOAH DOCKET NO. 582-14-3380, TCEQ
6 DOCKET NO. 2014-0437-UCR).
- 7 ▪ In the Matter of Metal Coaters Operating, L.P., V. L. W. Kohlmeyer, LWK-MPOH Liquidating,
8 Inc., et al. 189th Judicial District, Harris County, Texas, Cause No. 200405898.
- 9 ▪ In the Matter of Travis County, TX and the State of Texas, v. Rodman Excavation, Inc. and
10 Coldwater Development, Ltd. For erosion assessment and repair, TCEQ DOCKET NO. 2007-
11 1198-WQ-E. 98TH Judicial District, Travis County, Cause NO. D-1-GV-07-002293.
- 12 ▪ In the Matter of the City of Frisco, TX om the Matter of the Formal Complaint of ADC West
13 Ridge, L.P. and Center for Housing Resources, Inc. Cause No. 473-16-4619, PUC Docket 45870
- 14 ▪ In the Matter of USOR Site PRP Vs. A&M Contractors, Inc., et al. Civil Action No. 4:14-cv-
15 2441 in US District Court Southern District, Houston Division (Declaration).

16
17 **Q. What topics are you going to discuss in your testimony?**

18 **A.** I will present asset listings for the water and wastewater assets used to serve two Double
19 Diamond Utilities Company, Inc. systems: The Cliffs and White Bluff.

20 **Q. Do you have any attachments to your testimony?**

21 **A.** Yes. I have the following exhibits as attachments to my testimony for The Cliffs and
22 White Bluff utility systems.

- 23 a. Resume/CV (Ex DDU-5A)
- 24 b. Asset table (DDU-5B) White Bluff Water
- 25 c. Asset table (DDU-5C) The Cliffs Water
- 26 d. Trending Study (DDU-5D) White Bluff Water
- 27 e. Trending Study (DDU-5E) The Cliffs Water
- 28 f. Asset table (DDU-5F) White Bluff WW
- 29 g. Asset table (DDU-5G) The Cliffs WW
- 30 h. Trending Study (DDU-5H) White Bluff WW
- 31 i. Trending Study (DDU-5J) The Cliffs WW

32
33

III. TESTIMONY

1
2 **Q. Please explain your responsibilities regarding the water and wastewater assets for**
3 **two utility systems**

4 **A.** My first task was to review prior rate base work completed for the applications filed by
5 Double Diamond Utilities in 2008 and 2009.

6 My second task was to request all invoices for capital items since the 2008 and 2009
7 filings. My third task was to merge the asset listing created as of 12/31/2007 with the list
8 of invoiced items since 2007. I updated each systems' asset listing. I updated the
9 trending study completed to remove the fencing for The Cliffs Water system that had
10 since depreciated from the original 2008 filing.

11 Per the 2008 filing, I had trended two wells, a ground storage tank and a portion of the
12 linework for White Bluff Water System. I trended two ground storage tanks and a
13 portion of the linework for The Cliffs Water System.

14 Per the 2009 filing, I trended a package wastewater plant, grinder pumps, and linework
15 for The Cliffs Wastewater Treatment Plant and system and grinder pumps and linework
16 for White Bluff Wastewater Treatment Plant and system.

17 For all four systems, I made a determination of used and useful for each utility asset. As
18 part of that determination, I reviewed all invoices and the most recent compliance
19 investigations. I updated the asset listings to remove replaced assets and those assets that
20 had depreciated out.

21 Finally, I reviewed and updated service lives for each asset. I provided the asset data to
22 Mr. Joyce in spreadsheets that included a summary of each asset, service life, date of
23 installation and original cost for each system.

1 **Q. What documents did you review to complete your work?**

2 A. I reviewed the following documents:

3 1. Prior Double Diamond Utilities rate base files

4 2. Capital Items invoiced 2008-2015

5 3. Compliance Investigations for both The Cliffs and White Bluff Water and
6 Wastewater systems

7
8 **Q. Why did you trend linework for both The Cliffs and White Bluff Water and**
9 **Wastewater?**

10 A. Based on review of the footage of linework for both The Cliffs and White Bluff Water
11 and Wastewater Systems and a comparison to the trended original costs, invoices were
12 not available to account for the linework in its entirety. Therefore, I took the trended
13 original cost and subtracted the value of the invoices in receipt and depreciated the
14 remainder. The costs subtracted are shown in duplicate at the bottom of each trended
15 data summary for completeness.

16 **Q. Why did you trend grinder pumps and lift stations for both wastewater systems?**

17 A. Based on review of invoices and receipts for tap fees, DDU had expenses greater than the
18 tap fee assessed. Therefore, I trended the cost of the grinder pump and receiving station
19 as well as the current \$2,500 tap fee to construction timelines. The tap fee was trended
20 back in the exact same fashion as the current costs for the grinder pumps and receiving
21 stations and capitalized for 20 years to reflect the capital outlay of DDU.

22

23

1 **Q. What date did you use for installation dates?**

2 **A.** Utilizing a conservative approach, I used a date in which construction data was made
3 available for each of the systems. I used 1985 for The Cliffs and 1991 for White Bluff.

4 **Q. What is a trending study?**

5 **A.** A trending study is used to estimate costs of the asset at the date of installation. The
6 process starts with a current cost at the time of review and assessment (12/31/2007).
7 Based on the type of asset, for example, linework versus ground storage tanks, an index
8 value is assigned for today's cost and for the date of installation. The indices provide a
9 reliable guide to determine appropriate changes in costs since the date of installation. By
10 multiplying the current cost to the indices given per year (current and date of
11 installation), an estimated original cost can be calculated. For Double Diamond Utilities,
12 requests for current costs were made to the current suppliers used by Double Diamond
13 Utilities Companies, Inc. Additional current costs were researched on-line. With current
14 costs, I utilized the Handy Whitman Indices to trend back the current costs to the
15 approximate date of installation.

16 **Q. Is the trending study used in 2008 and 2009 still applicable to the current filing?**

17 **A.** Yes, trending uses indices set annually. The calculation of original cost was completed
18 using the installation dates presented above and a date of 12/31/2007 to determine the
19 appropriate multiplier for calculation of an original cost. The indices change annually
20 according to economic measures and industry changes. Inherent to the use of indices, a
21 current cost in 2015 numbers and the corresponding index number will result in a similar
22 original cost calculation.

23

1 **IV. CONCLUSION**

2 **Q. What is the conclusion of your asset inventory tasks?**

3 **A.** I have provided the results of my tasks in the form of spreadsheets. DDU-5B presents
4 asset inventory for White Bluff Water. DDU-5C is the asset inventory for The Cliffs
5 Water. The trended original cost of those items trended for White Bluff Water are shown
6 in DDU-5D and for The Cliffs Water in DDU-5E. Wastewater assets for the White
7 Bluff Wastewater Treatment Plant and System are presented in DDU-5F. DDU 5-G
8 presents the wastewater assets for The Cliffs Wastewater Treatment Plant and System.
9 The trended original cost of those items trended for White Bluff Wastewater is shown in
10 DDU-5H and for The Cliffs Wastewater in DDU-5J. The assets listed on these
11 spreadsheets are all used and useful to the operations of their respective utility systems.

12 **Q. Please provide the original costs for each system.**

13 **A.** For The Cliffs Water System, the original cost, including those items trended, is
14 \$1,612,545.

15 For White Bluff Water System, the original cost, including those items trended, is
16 \$3,791,956.

17 For The Cliffs Wastewater System, the original cost, including those items trended, is
18 \$1,017,634.

19 For White Bluff Wastewater System, the original cost, including those items trended, is
20 \$2,847,336.

21 **V. RATE CASE EXPENSES**

22 **Q. What invoices have you submitted to Double Diamond Utilities Companies, Inc. for**
23 **the water and wastewater asset inventory presented above?**

1 I have invoiced Double Diamond Utilities Companies, Inc. as of July 18, 2017 for the
2 water asset inventory study and water rate case work \$15,646.65.

3 **Q. What do you estimate your costs to be for the remainder of this proceeding?**

4 I estimate a remaining cost of \$6,000 for preparation and three days of hearing.

5 **Q. Does this conclude your direct, prefiled testimony?**

6 **A.** Yes, it does, but I reserve the right to supplement this testimony during the course of the
7 proceeding as new facts arise or new information becomes available to me.

EXHIBIT DDU-5A



Education:

- B.A. Biochemistry, Texas Tech University, 1992
- M.S. Civil Engineering, Texas Tech University, 1995
- Ph.D. Civil Engineering, Texas Tech University, 1998

Professional/Technical Affiliations:

- Texas State Board of Professional Engineers – Professional Engineer No. 87733
- Oklahoma State Board of Professional Engineers – Professional Engineer No. 20957
- Member of American Society of Engineers
- Diplomate Water Resources Engineer –American Academy of Water Resources Engineers
- Texas Tech University Civil Engineering Academy Member
- Texas Tech Civil and Environmental Engineering Advisory Council

Awards/Recognitions:

- Texas Tech University Distinguished Engineer, 2014
- American Society of Civil Engineers Texas Outstanding Civil Engineering Award, 2012
- American Council of Engineering Companies Texas Gold Medal/Eminent Conceptor, 2011
- American Council of Engineering Companies National Recognition Award, 2011

Fields of Experience:

Dr. Victoria Richards Harkins is currently a private engineering consultant in Austin, Texas. Dr. Harkins provides project management and engineering services for small, private, and multi-million dollar projects which included water and wastewater engineering, environmental engineering including water quality and soil contamination and remediation, and general civil engineering projects. Dr. Harkins has several years of experience in environmental site investigations, regulatory compliance, and environmental engineering including soil, subsurface soil, surface water, groundwater and solid and hazardous waste.

Publications:

Harkins, V., Kullbreth, M. (2011) "DEL Tank Uses Dewatering System to Clarify and Restore Texas Hill Country Landmark" International Dredging Review.

Harkins, V. (2008) TCEQ FY09 Annual Water Quality, CAFO, Pretreatment, and Storm Water Training, Assessment of Aquatic Habitat Damage due to Unauthorized Storm Water Discharges, Clear Lake, Texas.

Harkins, V. (2008) "Why Conduct a Water and Wastewater Rate Study" Presentation for Texas Rural Water Association, Tyler, Texas.

Harkins, V. (2002) "Retail Public Water and Sewer Utility Service in Texas" Proceedings of the Fall Meeting of the Texas Section of ASCE, Waco, Texas.

Harkins, V. (2002) "Water and Sewer Utilities 101" Proceedings of the Texas Environmental Trade Fair, Austin, Texas

Harkins, V., Mollhagen, T., Rainwater, K. and Heintz, C. (1999) "Aerobic Biodegradation of High Explosives, Phase I - HMX" Bioremediation Journal. 3(4):285-290.

Harkins, V, Mollhagen, T., Rainwater, K. and Heintz, C. (1998) "Aerobic Biodegradation of Octahydro-1,3,5,7-tetranitro-1,3,5,7 tetrazocine (HMX)" Proceedings of the Spring Meeting of the Texas Section of ASCE, South Padre Island, Texas.

Harkins, V., Mollhagen, T., Rainwater, K. and Heintz, C. (1998) "Aerobic Biodegradation of Octahydro-1,3,5,7-tetranitro-1,3,5,7 tetrazocine (HMX)" Proceedings of the Remediation of Chlorinated or Recalcitrant Hydrocarbons Battelle Conference.

Expert Witness Testimony:

- In the matter of the City of Pearland, Texas (SOAH Docket Nos. 582-98-0994 and 582-98-1977)
- In the matter of AquaSource Development Company regarding Briar Creek Subdivision in Travis County (SOAH Docket No. 98-1479-UCR)
- In the matter of Hays v. Frankford Properties in the 72nd District court in Lubbock, Texas
- In the matter of Creedmoor-Maha Water Supply Corporation (SOAH Docket No. 582-00-0546)
- In the matter of the City of Fort Worth (SOAH Docket No. 582-00-1092)
- In the matter of Woodcreek Utilities, inc. (SOAH Docket No. 582-00-1469)
- In the matter of City of Crandall (SOAH Docket No. 582-00-1479)
- In the matter of Mustang Water Supply Corporation and the Town of Little Elm (SOAH Docket No. 582-01-1618)
- In the matter of The City of Midlothian and City of Cedar Hill (SOAH Docket No. 582-02-1618)
- In the matter of the City of Prosper (SOAH DOCKET NO. 582-03-1994)
- In the matter of East Medina Special Utility District (SOAH DOCKET NO. 582-04-1012)
- In the matter of the Petition of Collin Count Municipal Utility District (SOAH DOCKET NO. 582-04-2699)
- In the matter of AquaTexas, Inc. for a water and wastewater tariff change and rate increase (SOAH DOCKET NOS. 582-05-2770, 582-05-2771, 582-05-3745, 582-05-4181, 582-05-4182, 582-05-4184)
- In the matter of Cease and Desist Petition Of Wax Mid, Inc. Certificate of Convenience and Necessity (CCN) No 11966 against The City Of Midlothian, CCN No. 11706 In Ellis County, Texas (SOAH DOCKET NO. 582-06-1029, TCEQ DOCKET NO. 2006-0487-UCR).
- In the matter of the City of Georgetown, Certificate of Convenience and Necessity No. 12369 in Bell, Burnett and Williamson Counties, Texas (SOAH DOCKET NO. 582-14-3380, TCEQ DOCKET NO. 2014-0437-UCR).
- In the Matter of Metal Coaters Operating, L.P., V. L. W. Kohlmeyer, LWK-MPOH Liquidating, Inc., et al. 189th Judicial District, Harris County, Texas, Cause No. 200405898.
- In the Matter of Travis County, TX and the State of Texas, v. Rodman Excavation, Inc. and Coldwater Development, Ltd. For erosion assessment and repair, TCEQ DOCKET NO. 2007-1198-WQ-E. 98TH Judicial District, Travis County, Cause NO. D-1-GV-07-002293.
- In the Matter of the City of Frisco, TX om the Matter of the Formal Complaint of ADC West Ridge, L.P. and Center for Housing Resources, Inc. Cause No. 473-16-4619, PUC Docket 45870
- In the Matter of USOR Site PRP Vs. A&M Contractors, Inc., et al. Civil Action No. 4:14-cv-2441 in US District Court Southern District, Houston Division (Declaration)



Selected Environmental Experience:

Environmental Information Document (EID)/Environmental Assessment, City of Grand Prairie, Texas: Dr. Harkins was the project manager for the development and prosecution of an EID/EA as required as part of the NEPA process for submittal to the USACE for easement related to a large wastewater line. The EA focused on resources: soil, water, air, biological, cultural resources, land use, aesthetics, hazardous, toxic, and radioactive materials, socioeconomics, geology, and vegetation. The analysis included the evaluation of surface and ground water; biological resources of plant and wildlife species, terrestrial communities, wetlands, and freshwater aquatic communities; cultural resources (Archeology); and socioeconomic factors that could potentially affect the citizens of Ellis County, Texas. Consideration was made to the affected environment as it exists currently as well as impacts to such under four different alternative project scenarios. The Finding of No Significant Impact was issued.

Affected Environment, EID, LCRA SAWS Water Supply Project, - Matagorda Bay Health Study, Austin, Texas: Dr. Harkins served as task leader for data inventory, acquisition, evaluation and management of physical, chemical, hydrological, biological data for the Matagorda Bay and all the connecting and minor bays as part of a project team for the development of an Environmental Information Document/Environmental Assessment of the large water resources project. Data was evaluated for its period of record, quality, format, and accessibility for all water quality and biological parameters of Matagorda Bay to establish the current existing status of the bay for future consideration of potential project alternatives.

Nationwide Permit No. 12, City of Grand Prairie, Texas. Dr. Harkins served as the project manager for the development and acquisition of a Nationwide Permit for the location and construction of a large collection system through Waters of the United States. The permit application included address of current conditions, waters of the US, historic properties, threatened and endangered species, wetlands, wildlife, noise, and use characteristics. The permit was secured.

Hamilton Pool Hamilton Creek and Davis Creek Assessment and Remediation, Travis County, Austin, Texas: Dr. Harkins was the project manager for a detailed creek assessment and natural pond remediation due to point source pollution upstream due to failure of on-site erosion control measures and insufficient best management practices. As a result, large and repetitive stormwater runoff events led to the discharge of sediment laden stormwater. Thus, large amounts of silt have been deposited in the creek and in Hamilton Pool. A detailed project assessment was completed. Remediation design has been completed. Restoration activities included a crude clean-up and a combination of crude and wash-down method. Clean-up of the pool was conducted using divers and high pressure filter presses with a return of treated water to maintain water level vegetative benches.

Water Quality Assessment and Remediation, Austin, Texas: Dr. Harkins was the field manager for a natural pond remediation due to point and non-point source pollution upstream. The project contained many sensitive biological and ecological factors. Remediation encompassed a pump and treat system with careful return of treated water. Project assessment included a detailed assessment of the current water quality, nutrient loadings from sediments (in the pool and upstream), background concentrations, and comparable water quality concentrations. A detailed literature review has been completed as well as an extensive field assessment. The project met its goals and was successfully completed.

Water Quality and Streambed Assessment and Restoration, Hays County, Texas: Dr. Harkins was the project manager to assess a streambed affected by upstream development activities. Point and non-point source pollution entered a contributing stream affecting a large subdivision downstream. Results of the assessment have been presented, and remediation alternatives were presented.



Oil and Gas Assessment and Remediation, Texas: Dr. Harkins is currently the project manager to provide professional civil and environmental engineering and consulting services related to environmental oversight, and representation for a private client for response to oil and gas contamination of the clients' private property due to the pipeline transfer of refined and unrefined petroleum product. Dr. Harkins has conducted an independent assessment of the remediation of a refined product spill from a ruptured pipeline into shallow groundwater on the property including an analysis of groundwater data, product recovery efforts, and overall remediation effectiveness. This review demonstrated the pipeline company had overstated the effectiveness of remediation. Dr. Harkins established a remediation endpoint based on recovery data, developed a groundwater monitoring well network for the site, and provided continued recovery recommendations to the TCEQ.

Metals Assessment, Sampling and Remediation Alternatives: Dr. Harkins also conducted a creek and lake assessment from previous metals contamination. Dr. Harkins has also completed an on-site sampling of a recent discovery of a petroleum product spill during pipeline assessment and repair. Dr. Harkins is also project manager for the placement and installation of several groundwater monitoring wells to test for the presence and potential restoration of petroleum related discharge.

Water Quality Pond Assessment and Wastewater Reuse, Austin, Texas: Dr. Harkins served as field manager for a project to assess the applicability of using treated wastewater effluent as make-up water for a stormwater quality pond/detention pond. An extensive literature review was completed and field analysis and prototype studies were scoped. Field studies were designed to test the pond's ability to treat the potentially higher levels of nutrients and other potential contaminants.

Environmental Assessment, Vista and Encantada, Llano County, Texas: Dr. Harkins was a project manager for a surface water pond water quality investigation for potential herbicide, pesticide, and other potential contaminants of concern as part of a due diligence for a property transfer.

PCB Contamination and Remediation, Houston, Texas: Dr. Harkins served as a project manager of a multi-million-dollar remediation of an industrial site in Texas contaminated with PCBs, heavy metals and total petroleum hydrocarbons. Work has included: delineation of the contamination profile, site surveys, groundwater assessment, remediation design, on site management, soil samples, and contractor bid and oversight. The site was accepted into the VCP program of the TCEQ. Dr. Harkins completed all the site delineation, remediation design and managed first hand all field work. Remediation was accomplished via excavation and disposal with concrete pad for final overlay. Post closure documentation has been provided to both the TCEQ and EPA for completion. A release of liability has been awarded by the TCEQ.

Site-Wide Ecological Risk Assessment (ERA), Pantex/BWXT, Amarillo, Texas: Dr. Harkins served as the field manager for the sample collection requirement for additional data needed to support the ERA. Tasks include coordination with Pantex personnel, organization of sampling crews, sampling, QA/QC and reporting requirements. Both surface water and sediment samples were collected at five separate playas at approximately 18 sites per playa to represent potential points of exposure and biologically active zones.

Riparian Restoration, New Braunfels, TX Landa Lake: Dr. Harkins served as a project manager providing environmental restoration a part of a habitat enhancement for the endangered species, the Riffle Beetle and Fountain Darter. Work has included sediment removal, riparian restoration, erosion control, and re-vegetation.



Phase II Environmental Site Investigation: Total Petroleum Hydrocarbons and BTEX Contamination, Possum Kingdom, Texas: Dr. Harkins served a project manager for a Phase II environmental site investigation for a currently planned development. The site has a history of oil and gas production with a resulting contamination around well heads and storage tank embankments.

Water Quality Modeling, The Tidelands, Port O'Connor, Texas, Dr. Harkins completed a water quality study of a proposed subdivision located northwest of Port O' Connor, Texas. Modeling of the subdivision was done to ensure adequate dissolved oxygen levels in the far reaches of the subdivision. Parameters included sediment oxygen demand, aerations, dispersion, biochemical oxygen demand, tides, meteorological factors, surface water runoff, temperature, etc.

Water Quality Modeling, Beachside Development, Seadrift, Texas, Dr. Harkins completed a water quality study of a proposed subdivision located along San Antonio Bay, Texas. Modeling of the subdivision was done to ensure adequate dissolved oxygen levels in the far reaches of the subdivision. Parameters included biochemical oxygen demand, tides, meteorological factors, benthic demand, surface water runoff, temperature, etc.

Water Quality Modeling, The Sanctuary, Port O'Connor, Texas, Dr. Harkins completed a water quality study of a proposed subdivision located along Matagorda Bay, Texas. Modeling of the subdivision was done to ensure adequate dissolved oxygen levels in the far reaches of the subdivision.

Water Quality Modeling, Seadrift, Texas, Dr. Harkins was project manager for a water quality model of a proposed subdivision near Seadrift, Texas located along Espiritu Santo Bay. Initial data collection was completed for model development including biochemical oxygen demand, tides, meteorological factors, benthic demand, surface water runoff, temperature, etc. Alternatives for subdivision design were completed with related water quality effects being addressed.

Water Quality Modeling, Copano Bay Development, Dr. Harkins completed a water quality study of a proposed subdivision located along Copano Bay, Texas. Modeling of the subdivision was done to ensure adequate dissolved oxygen within the proposed channel lengths. Parameters included biochemical oxygen demand, tides, meteorological factors, benthic demand, surface water runoff, temperature, etc.

Environmental Site Assessment (ESA), Jonestown, Texas, Texas, Dr. Harkins performed a Phase I environmental site assessment for a commercial property used for boat storage, off-site storage, a small mobile home park, and vacant land. The ESA was completed in accordance with all applicable ASTM standards.

ESA, Possum Kingdom, Texas, Texas, Dr. Harkins performed a Phase I environmental site assessment for a large undeveloped ranch land planned for a large multi-family, marina and estates development. The site had numerous oil and gas production facilities. The ESA was completed in accordance with all applicable ASTM standards.

ESA, San Marcos, Texas, Dr. Harkins performed a Phase I environmental site assessment for a commercial property for a previous auto restoration and salvage operations. The ESA was completed in accordance with all applicable ASTM standards.

ESA, Austin, Texas, Dr. Harkins performed a Phase I environmental site assessment for a land development project. The ESA was completed in accordance with all applicable ASTM standards.

ESA, Buffalo, Texas, Dr. Harkins performed an ESA compliant with (Texas Department of Housing and Community Affairs, Real Estate Division, Real Estate Analysis Rules, 1.35) and ASTM Practice E 1527-



09. Assessment included a site reconnaissance and area survey which included a detailed physical observation of the property, interviews with identified person(s) familiar with the property's history, and inquiries to the appropriate public agencies in an attempt to determine if past practices or current conditions at the site may have caused an environmental impact on the property, a 50-year chain-of-title and environmental lien search was performed and reviewed to assess historical ownership of the property, review of available historical aerial photographs, federal, state, and local regulatory agencies enforcement and permitting records were reviewed for evidence of prior contamination on the property or in the vicinity of the property, a review was completed of state and federal environmental databases for areas of environmental concern within the recommended American Society for Testing and Materials (ASTM) radius of the property, a review of USEPA Radon Zone Information, a review of TCEQ Drinking Water Database, and a review of HUD guidelines for Noise Assessment Study triggers.

ESA, Buffalo, Texas, Dr. Harkins performed an ESA compliant with (Texas Department of Housing and Community Affairs, Real Estate Division, Real Estate Analysis Rules, 1.35) and ASTM Practice E 1527-09. See description above.

ESA, Taft, Texas, Dr. Harkins performed an ESA compliant with (Texas Department of Housing and Community Affairs, Real Estate Division, Real Estate Analysis Rules, 1.35) and ASTM Practice E 1527-05. See description above.

ESA, West Columbia, Texas, Dr. Harkins performed an ESA compliant with (Texas Department of Housing and Community Affairs, Real Estate Division, Real Estate Analysis Rules, 1.35) and ASTM Practice E 1527-05. See description above.

ESA, Three Rivers, Texas, Dr. Harkins performed two ESAs compliant with (Texas Department of Housing and Community Affairs, Real Estate Division, Real Estate Analysis Rules, 1.35) and ASTM Practice E 1527-05. See description above.

Selected Water and Sewer Utility Experience:

Engineer V, Texas Commission on Environmental Quality (TCEQ), Austin, Texas. Dr. Harkins was a senior engineer for the Water Supply Division of the TCEQ for over four years. Dr. Harkins' team processed over 300 certification applications a year and over 75 ratemaking applications per year. Dr. Harkins served as a legislative resource and provided testimony for a variety of legislators as well as numerous committee hearings at the Capitol.

Plans and Specifications, TCEQ, Austin, Texas: Dr. Harkins reviewed and approved/disapproved over 300 design plans and specifications submitted by public water supply systems in the State of Texas. The review consisted of technical design, capacity calculations and compliance for distribution water lines, ground storage tanks, elevated storage tanks, hydropneumatic tanks, and service pumps and public drinking water wells with well pump capacities. The review was made to ensure compliance with the requirements of TCEQ's Chapter 290 Rules and Regulations for Public Drinking Water Systems and the Texas Health and Safety Code.

Expert Witness, Wholesale Rate Appeal, City of Gladewater, Texas. Dr. Harkins provided expert testimony related to a wholesale water and wastewater rate appeal. As a governmental entity, a rate may be changed without state approval. The water and/or wastewater recipient may file an appeal with the State for review. At such time, evidence must be provided that the rate is fair and justifiable. Dr. Harkins assisted in settlement negotiations through SOAH arbitration.



Outside City Customer Appeal, Parker County, Texas. Dr. Harkins was retained by the Parker County Communities Coalition to provide professional engineering services as related to a rate increase made by the City of Willow Park. Dr. Harkins will provide a professional opinion on the reasonableness of the rates set for outside city customers as well as an opinion of the expenses used to determine the rate established.

Expert Witness, Certificate of Convenience and Necessity (CCN), City of Royse City, Texas. Dr. Harkins was retained to assist the City of Royse City in a contested hearing related to the utility's ability to provide continuous and adequate service and amend its current CCN for water service and to obtain a sewer CCN.

Expert Witness, Certificate of Convenience and Necessity, City of Prosper, Texas. Dr. Harkins was retained to provide expert witness testimony for the City of Prosper related to the City of Prosper's CCN. Dr. Harkins has testified as to the City of Prosper's ability to serve as well as address each of the required criteria to amend a CCN.

Expert Witness, Certificate of Convenience and Necessity, City of Midlothian, Texas. Dr. Harkins provided expert witness testimony for the City of Midlothian related to the City of Midlothian's CCN and its service area.

Expert Witness, Certificate of Convenience and Necessity, East Medina County Special Utility District, Medina County, Texas. Dr. Harkins was retained to assist the District in a contested hearing related to the utility's ability to provide continuous and adequate service and amend its current CCN for water service. Dr. Harkins testified as to the District's ability to serve as well as address each of the required criteria to amend and obtain a CCN.

Certificate of Convenience and Necessity, City of Midlothian, Texas, Dr. Harkins was retained by the City of Midlothian to prepare and prosecute a CCN amendment for a large development within the city's corporate limits as well as address a potential cease and desist request.

Certificate of Convenience and Necessity, Towns of Annetta, Annetta South, Annetta North, Hudson Oaks and Aledo, Texas. Dr. Harkins is currently retained by the Parker County Cities Coalition to provide professional engineering services as related to a sale, transfer, merger application made by the City of Willow Park.

Certificate of Convenience and Necessity Transfer and Cancellation, Houston, Texas. Dr. Harkins was retained by BCWK to complete a wastewater transfer, public water system transfer, and CCN cancellation for a privately-owned water and wastewater system.

CCN Amendment Application, Mission, Texas. Dr. Harkins provided professional consultation services for the City of Mission and its application to certificate additional wastewater service area.

Water and Wastewater Service Extension Policy, Austin, Texas. Dr. Harkins made an in-depth review of a water and wastewater supply corporation service extension policy regarding the applicable rules and regulations of the TCEQ and made recommendations for changes and/or improvements.

Certificate of Convenience and Necessity, City of Royse City, Texas. Dr. Harkins has provided and continues to provide the City of Royse City professional services related to the City's CCN which includes address of neighboring utilities. Dr. Harkins has assisted and prepared several CCN amendments, STMs, and related petitions including decertification applications for the City.



CCN Application and Decertification, Harvest Hills Treatment, LTD. Guadalupe County, Texas. Dr. Harkins was the project manager for a new CCN application and decertification from Green Valley SUD. Dr. Harkins presented and prosecuted the petition. Decertification was successful.

CCN Decertification, Keralla Development, Royse City, Texas. Dr. Harkins was the project manager for a large acreage petition for expedited release of a CCN. Dr. Harkins prepared the petition with all the required documentation for decertification to obtain service from an adjacent provider. Decertification was successful. Dr. Harkins also assisted in the determination of monies due as a result of the decertification.

CCN Decertification, Red Wolf Golf Resort, Humble, Texas. Dr. Harkins was the project manager for a large acreage request for expedited release from a CCN. Dr. Harkins presented and prosecuted the petition. Decertification was successful.

CCN Decertification, City of Cibolo, Texas. Dr. Harkins was the project manager to assist the City with potential decertification of a large acreage from a CCN.

Expedited Release, City of Midlothian, Texas. Dr. Harkins completed a petition to the Texas Public Utility Commission for the release of a 120 acre tract from a current CCN holder. Decertification was granted.

CCN Application and Dual Certification, City of Josephine, Texas: Dr. Harkins assisted the City of Josephine with water extension and water utility service which includes permitting and address of neighboring utility issues.

CCN Planning and Decertification, City of McLendon-Chisholm, Texas. Dr. Harkins provided professional consulting services to the City of McLendon-Chisholm with regards to development of City water and wastewater sources which included applications for water permits, wastewater permits, CCN applications and CCN decertifications from adjacent and overlying CCNs.

Capital Improvement Planning, Town of Annetta, Parker County, Texas. Dr. Harkins is currently the project manager for the development of long term planning for the Town of Annetta including 5, 10, and 20 year projections for land use, population projections, water use demand, and development of additional water supplies. The long-term planning includes term capital assets to be used for financial budgeting.

Capital Asset Planning, City of Cibolo, Texas. Dr. Harkins was the project manager for the asset inventory and costing of a large water purveyor. Trending and asset inventories will be used to determine the cost of replacement and cost for sale purposes.

Selected Water and Wastewater Rate and Asset Evaluation Experience

Expert Witness, Wholesale Water Rate Appeal, Manor, Texas. Dr. Harkins provided professional engineering services for a master district and three sub districts for a wholesale rate appeal. Work included detailed capital assets inventory, used and useful review, depreciation expense, and developer/customer aid in construction contributions.

Water and Wastewater Utility Inventory, Texas. Dr. Harkins was the project manager for the development of a detailed water and wastewater utility asset inventory as well as completing a trending study to determine costs at installation as well as depreciation values used for rate making procedures.



Water Rate Analysis and Application, Cleburne, Texas. Dr. Harkins completed a water rate analysis as well as an asset inventory for the prosecution of a water rate application with the TCEQ for a multi-system public water utility.

Water Rate Analysis, Granbury, Texas. Dr. Harkins provided professional engineering services to a private water company that serves potable water service to three subdivisions in Hood County, Texas. Services include asset inventory, rate applications, and potential litigation support.

Water and Wastewater Rate Analyses, Manvel, Texas. Dr. Harkins provided expert professional services for water and wastewater rate applications which included a detailed water and wastewater capital assets inventory and trending analysis.

Expert Witness, Water and Sewer Rate and Tariff Change Application, Austin, Texas. Dr. Harkins provided expert witness testimony for the largest rate case filed with the State of Texas. The applicant provides service to 50,000 connections in the State of Texas. Dr. Harkins testified on the just and reasonability of the rates, the substantial similarity issues for consolidated systems, used and useful requirements for items to be included in rate base, basic rate design, and all discovery and other formal requirements of the application as it proceeded through the State Office of Administrative Hearings.

Water Rate and Tariff Change Application, Lake Whitney, Texas. Dr. was the project manager for a rate change application filed with the TCEQ for eleven water systems located in central Texas. Dr. Harkins' was overall responsible for the creation and prosecution of the application as well as providing supporting documentation as required for the application. Dr. Harkins provided detailed information for the systems' capital assets.

Wholesale Rate Review, City of Port Lavaca, Texas. Dr. Harkins assisted in the data collection, review and evaluation of a wholesale water contract for potable use between City of Port Lavaca and the Guadalupe Blanco River Authority.

Water Resources/Civil Experience:

Groundwater Production and Treatment, Town of Annetta, Parker County, Texas. Dr. Harkins is currently the project manager for the design of a groundwater treatment plant including three groundwater wells, two storage tanks, piping, chlorination, and related appurtenances. Water distribution modeling will be used to establish the initial network and all future additions.

Groundwater Production and Treatment, City of Hudson Oaks, Parker County, Texas. Dr. Harkins provides general water and wastewater engineering services for the City. Work has included regulatory compliance, design and installation of groundwater wells, provisional wastewater assessment, and water quality assessment, etc.

Groundwater Assessment, City of Fairview, Collin County, Texas. Dr. Harkins provided an assessment for the development of potential groundwater sources to supplement the City's water sources to meet current and future demands of the City.

Groundwater Production and Treatment, Lower Colorado River Authority, Burnet County, Texas. Dr. Harkins served as the project manager of a groundwater well design, installation and development project for a public water supply. In addition, the project involved a study of the localized groundwater to assess the potential for development of additional ground water supplies and the feasibility of obtaining service from a neighboring utility.



Groundwater Assessment, Private Country Club, Austin, Texas, Dr. Harkins was the project manager for the development and acquisition of potable water supply for a new planned subdivision and golf resort. Tasks include conceptual planning, water source development and development.

Water and Wastewater Utilities Audit, City of Italy, Ellis County, Texas. Dr. Harkins completed a detailed and comprehensive audit of the city's water and wastewater utilities and management. A final report with models and templates was provided.

Groundwater Production and Treatment, City of Italy, Ellis County, Texas. Dr. Harkins served as the project manager for the design, construction and completion of a groundwater well, piping and related appurtenances for the City of Italy. Dr. Harkins completed and provided the required documentation for the application of a grant to assist in funding the new well.

Emergency Action Plans, Large Private Ranch, Texas. Dr. Harkins is the project manager for civil engineering services related to the Texas Commission on Environmental Quality Dam Safety Program for a private client. A total of six lakes are located within the project site, five of which are impounded by earthen dams and one impounded by a concrete dam. Tasks have included dam breach analysis modeling. Three EAPs have been submitted for TCEQ approval and prosecution. In addition, Dr. Harkins is currently assisting in two major dam modifications to re-route spillway flow and decrease dam height and flood storage.

Selected Wastewater Permitting Experience:

New Wastewater Treatment Plant, Town of Annetta, Texas. Dr. Harkins serves as the project manager for several modifications to the Town of Annetta's WWTP including modification to the pond receiving effluent, contact chambers, and digester. Dr. Harkins designed, permitted, and installed a new 164,000 gallons per day wastewater treatment package plant.

Wastewater Permit Renewal, Austin Independent School District, Austin, Texas: Dr. Harkins served as the project manager of a wastewater permit renewal for a package plant with a storage lagoon and on-site irrigation for disposal.

Wastewater Treatment Plant Major Modification, Flagship Emerald Point Marinas, Lake Travis, Texas: Dr. Harkins served as the project manager for an on-site wastewater treatment plant modification as well as an additional 10,000 gpd WWTP.

Wastewater Treatment Facilities, Village at Northlake, II, Jonestown, Texas. Dr. Harkins served as the project manager for a wastewater treatment plant design, construction and permitting for a pending light commercial and hotel development.

Water Quality Modeling of Lake Dunlap (New Braunfels Utilities), New Braunfels, Texas: Dr. Harkins was the field manager for a large multi year water quality study for the processing of a large wastewater treatment plant permit renewal with studies completed to assess nutrient limitations, flow changes and downstream conditions. Dr. Harkins conducted an eighteen-month water quality sampling project. The scope of the project was to collect surface water samples in order to obtain information to assist in determining whether nutrient limitations on point source discharges from NBU's wastewater treatment plants (WWTPs) will prevent the growth of excessive aquatic vegetation in receiving waters, as provided by the Texas Commission on Environmental Quality (TCEQ) regulations at 30 TAC 307.4(e). As part of the water quality study numerous water quality studies related to point and non-point source loadings entering Lake Dunlap from the Comal and Guadalupe were evaluated to determine the impact of point and non-point source nutrient loadings on Lake Dunlap.



Wastewater Permit Renewal, Private Subdivision, Austin, Texas: Dr. Harkins served as the project manager for an on-site wastewater treatment plant permit renewal with the TCEQ. Service is provided by a package plant with drip irrigation.

Wastewater Treatment Facilities, Village at Northlake, II, Jonestown, Texas. Dr. Harkins served as the project manager for a wastewater treatment plant design, construction and permitting for a light commercial and hotel development.

Wastewater Permit Renewal, Flagship Emerald Point Marinas, Lake Travis, Texas: Dr. Harkins served as the project manager for a wastewater treatment plant permit renewal for an on-site wastewater treatment plant utilizing a large in-ground treatment plant and low-dose pressure drain fields.

Wastewater Permit Renewal, Austin Independent School District, Austin, Texas: Dr. Harkins was the project manager of a wastewater permit renewal process as well as a study of alternatives for future service.

Wastewater Permit Renewal, Town of Annetta, Texas: Dr. Harkins served as the project manager for a wastewater treatment plant permit renewal.

Wastewater Permit Renewal, City of Lago Vista, Texas: Dr. Harkins served as the project manager for a wastewater treatment plant permit renewal for a large wastewater treatment plant permit modification to increase use of treated wastewater irrigation and golf course irrigation.

Wastewater Permit Renewal, BCWK, L.P., Houston, Texas: Dr. Harkins served as the project manager for a wastewater treatment plant permit renewal for a large wastewater treatment plant permit with discharge into nearby water courses.

Wastewater Permit Renewal, Austin Independent School District, Austin, Texas: Dr. Harkins was the project manager for the closure and decommissioning of an on-site wastewater treatment plant for a package plant with a storage lagoon and on-site irrigation for disposal.

Wastewater Permit Renewals, City of Corpus Christi, Texas: Dr. Harkins is currently the project manager for permit renewals for three large municipal wastewater treatment plans with discharges into a variety of receiving water bodies with multiple permit effluent requirements, WET, mixing zones, nutrients, DO, etc.



EXHIBIT DDU-5B

Double Diamond Utilities Co. / White Bluff

Water Asset / Rate Base Listing

New, As needed	Old Bates Number				
DDU16-009345-DDU16009346	DDU16-009345-DDU16009346	1/5/1996	water bores (2)	\$ 1,000.00	50
DDU16-009347-DDU16009348	DDU16-009347-DDU16009348	1/11/1996	water line unit 40	\$ 4,510.00	50
DDU16-009647-009648	DDU009459-DDU009461	1/12/1996	water bore (3)	\$ 1,500.00	50
DDU16 - 009663	DDU009461 - DDU009463	1/12/1996	water line unit 39	\$ 4,230.00	50
DDU16 - 009646	DDU009444	1/31/1996	water bore	\$ 500.00	50
DDU16 - 009647-009648	DDU009445-DDU009446	2/29/1996	water bore	\$ 1,500.00	50
DDU16 - 009647-009648	DDU009445-DDU009446	2/29/1996	water line unit 33, 34, 35	\$ 9,090.00	50
DDU16-009649-009651	DDU009447-DDU009449	6/19/1996	water storage tank #2	\$ 81,617.96	50
DDU16 - 009655	DDU009453	6/30/1996	water line Unit 38	\$ 6,125.00	50
DDU16 - 009655	DDU009453	6/30/1996	water line unit 36	\$ 4,510.00	50
DDU16 - 009656	DDU009454-DDU009455	7/31/1996	water and sewer bores	\$ 2,000.00	50
DDU16 - 009658-009660	DDU009456-9458	11/9/1996	pipe - Rohan	\$ 3,280.96	50
DDU16 - 009686-009687	DDU009484-DDU009485	1/4/1997	bores	\$ 500.00	50
DDU16-009349-DDU16009351	DDU16-009349-DDU16009351	1/4/1997	water line unit 40	\$ 7,475.00	50
DDU16 - 009706-009708	DDU009504-DDU009506	1/8/1997	water line unit 41	\$ 4,875.00	50
DDU16 - 009667-009668	DDU009465 - DDU009466	1/15/1997	pipng	\$ 7,551.52	50
DDU16 - 009669-009670	DDU009467-DDU009468	1/16/1997	raw water intake	\$ 389.88	20
DDU16 - 009671	DDU009469	1/22/1997	pipng	\$ 274.49	50
DDU16 - 009709-009711	DDU009507-DDU009509	2/7/1997	pipe - Unit 41	\$ 331.66	50
DDU16 - 009673-009675	DDU009471 - DDU009473	2/28/1997	tee and gate valves - Unit 40	\$ 1,034.21	50
DDU16-009352-DDU16009353	DDU16-009352-DDU16009353	2/28/1997	pipe Unit 40	\$ 4,817.34	50
DDU16-009354-DDU16009356	DDU16-009354-DDU16009356	2/28/1997	pipng	\$ 6,939.91	50
DDU16 - 009680-009684	DDU009478- DDU009482	3/29/1997	pipng	\$ 14,210.00	50
DDU16 - 009690-009691	DDU009488-DDU009489	4/18/1997	valves - Unit 41	\$ 738.27	50
DDU16-009357-DDU16009358	DDU16-009357-DDU16009358	4/23/1997	pipng - US Filter - Unit 40	\$ 318.26	50
DDU16 - 009699-009700	DDU009497-DDU009498	6/16/1997	pipe - Unit 41	\$ 636.51	50
DDU16 - 009701-009702	DDU009499-DDU009500	6/16/1997	pipe - Unit 41	\$ 1,686.54	50
DDU16 - 009716-009717	DDU009514-DDU009515	7/25/1997	valves, tees - Unit 41	\$ 175.20	50
DDU16 - 009704-009705	DDU009502-DDU009503	7/31/1997	bore	\$ 1,000.00	50
DDU16 - 009704-009705	DDU009502-DDU009503	7/31/1997	water line unit 41	\$ 2,705.00	50
DDU16 - 009721-009722	DDU009519-DDU009520	8/20/1997	gate valves - unit 41	\$ 1,277.16	50
DDU16 - 009727-009729	DDU009525-DDU009527	9/19/1997	valve box lid - US Filter	\$ 1,021.50	50
DDU16 - 009688-009689	DDU009486-DDU009487	10/4/1997	Water line Unit 40	\$ 518.29	50
DDU16 - 009754-009756	DDU009552-DDU009554	1/2/1998	pipe - Unit 42	\$ 3,690.00	50
DDU16 - 009757-009759	DDU009555-DDU009557	2/2/1998	waterline	\$ 188.68	50
DDU16 - 009837-009839	DDU009635-DDU009637	3/8/1998	fittings on booster station	\$ 4,159.50	10
DDU16-009359-DDU16009362	DDU16-009359-DDU16009362	4/15/1998	backfill - Unit 42	\$ 2,183.75	50
DDU009582	DDU16-009363	4/15/1998	pipe - Unit 42	\$ 2,187.30	50
DDU009583	DDU16-009364	4/21/1998	pipe - Unit 42	\$ 675.48	50
DDU16 - 009778	DDU009576	4/23/1998	valves - Unit 42	\$ 114.25	50
DDU16 - 009792	DDU009590	5/22/1998	backfill - Unit 42	\$ 9,620.00	50
DDU16 - 009792	DDU009590	5/22/1998	backfill - Unit 42	\$ 9,620.00	
DDU16 - 009776	DDU009574	6/4/1998	pipng	\$ 317.34	50
DDU16 - 009806-009808	DDU009604-DDU009606	6/26/1998	pipe - Unit 43	\$ 2,651.55	50
DDU16 - 009806-009808	DDU009604-DDU009606	6/26/1998	pipe - Unit 43	\$ 2,651.55	50
DDU16 - 009821	DDU009619	7/13/1998	concrete - three invoices of \$113.21	\$ 169.82	50

Double Diamond Utilities Co. / White Bluff
Water Asset / Rate Base Listing

New, As needed	Old Bates Number				
DDU16 - 009820	DDU009618	7/13/1998	valve - Unit 43	\$ 178.78	50
DDU16 - 009832	DDU009630	7/23/1998	gate valve, saddle	\$ 358.58	50
DDU16 - 009833	DDU009631	7/24/1998	valves - Unit 43	\$ 51.95	50
DDU16 - 009834-009836	DDU009632-DDU009634	7/28/1998	bobcat - sewer and water pipe installation	\$ 13,117.50	20
DDU16 - 009842	DDU009640	7/31/1998	check and swing valves	\$ 195.20	50
DDU16 - 009843	DDU009641	8/19/1998	appurtenances - Unit 43	\$ 201.49	50
DDU16 - 009844-009846	DDU009642-DDU009644	8/19/1998	bobcat	\$ 1,457.50	20
DDU16 - 009817-009819	DDU009615-DDU009617	9/7/1998	bobcat water and sewer pipe Unit 43	\$ 15,400.00	20
DDU16 - 009817-009819	DDU009615-DDU009617	9/7/1998	bobcat water and sewer pipe Unit 43	\$ 15,400.00	20
DDU16 - 009766-009772	DDU009564-DDU009570	10/2/1998	tees - Unit 42	\$ 621.31	50
DDU16 - 009766-009772	DDU009564-DDU009570	10/2/1998	valves - Unit 42	\$ 2,135.06	50
DDU16 - 009766-009772	DDU009564-DDU009570	10/2/1998	pipe - Unit 42	\$ 9,801.82	50
DDU16 - 010025-010027	DDU009823-DDU009825	1/9/1999	timers for well pumps	\$ 437.33	20
DDU16 - 009859-009863	DDU009657-DDU009661	2/4/1999	trench work - Unit 44	\$ 2,418.00	50
DDU16 - 009916	DDU009714	2/7/1999	well #3 piping and meter	\$ 3,147.25	20
DDU16 - 010042-010045	DDU009840-DDU009843	2/10/1999	shingles for booster station	\$ 176.65	20
DDU16 - 009946-009950	DDU009744-DDU009748	3/8/1999	air compressor for booster station (2)	\$ 1,169.10	10
DDU16 - 009951-009953	DDU009749-DDU009751	3/8/1999	block for pump house #1	\$ 3,264.13	50
DDU16 - 009851-009855	DDU009649-DDU009653	3/15/1999	trench work - Unit 44	\$ 7,293.00	50
DDU16 - 009856	DDU009654	3/17/1999	concrete mix - Unit 44	\$ 63.64	20
DDU16 - 009851-009855	DDU009649-DDU009653	3/19/1999	trench work - Unit 44	\$ 3,549.00	50
DDU16 - 009859-009863	DDU009657-DDU009661	3/29/1999	trench work - Unit 44	\$ 5,674.50	50
DDU16 - 009954	DDU009752-	4/8/1999	booster station piping	\$ 22,476.91	20
DDU16 - 009887-009889	DDU009685-DDU009687	4/14/1999	trench work - Unit 44	\$ 1,930.50	50
DDU16 - 009871	DDU009669	4/21/1999	well piping	\$ 1,998.05	20
DDU16 - 009874-009876	DDU009672-DDU009674	4/22/1999	piping	\$ 2,409.28	50
DDU16 - 009877-009878	DDU009675-DDU009676	4/23/1999	concrete - unit 44	\$ 56.61	50
DDU16 - 009883	DDU009681	5/5/1999	haul material for trench fill	\$ 565.00	50
DDU16 - 009893-009895	DDU009691-DDU009693	5/13/1999	drill and case well (Well No. 3)	\$ 28,905.29	20
DDU16 - 009896-009898	DDU009694-DDU009696	5/17/1999	engineering	\$ 5,270.83	5
DDU16 - 009893-009895	DDU009691-DDU009693	5/19/1999	well pump, electrical (well No 3)	\$ 26,775.25	20
DDU16 - 009927-009931	DDU009725-DDU009729	6/7/1999	water line piping	\$ 518.93	50
DDU16 - 009932-009934	DDU009730-DDU009732	6/7/1999	new well tie-in	\$ 1,193.00	20
DDU16 - 009966-009970	DDU009764-DDU009768	6/8/1999	fence for booster station	\$ 139.30	20
DDU16 - 009971	DDU009769	6/8/1999	foundation for booster station	\$ 2,137.50	50
DDU16 - 009905-009908	DDU009703-DDU009706	6/16/1999	booster pumps (2X25 HP)	\$ 8,127.41	10
DDU16 - 009909-009911	DDU009707-DDU009709	6/30/1999	well piping	\$ 94.56	20
DDU16 - 009912-009914	DDU009710-DDU009712	6/30/1999	well piping	\$ 432.65	20
DDU16 - 009937	DDU009735	7/16/1999	hydropneumatic pressure tank - 6000gallon	\$ 27,576.00	50
DDU16 - 009942-009943	DDU009740-DDU009741	7/28/1999	fence for new well	\$ 1,225.40	20
DDU16 - 009799	DDU009799	8/16/1999	appurtenances	\$ 148.00	20
DDU16 - 010011-010013	DDU009809-DDU009811	8/19/1999	booster pump repair	\$ 788.31	10
DDU16 - 010014-010016	DDU009812-DDU009814	8/20/1999	concrete blocking	\$ 132.61	50
DDU16 - 010017-010019	DDU009815-DDU009817	8/23/1999	road bores	\$ 1,500.00	50
DDU16 - 010020	DDU009818	8/25/1999	water piping	\$ 281.98	50

**Double Diamond Utilities Co. / White Bluff
Water Asset / Rate Base Listing**

New, As needed	Old Bates Number				
DDU16 - 009899	DDU009697	9/6/1999	new well electrical	\$	4,132.00 20
DDU16 - 009904	DDU009702	9/6/1999	engineering	\$	8,979.16 5
DDU16 - 010035-010037	DDU009833-DDU009835	9/21/1999	sleeves for water and sewer mains	\$	4,584.00 50
DDU16 - 010038-010041	DDU009836-DDU009839	9/25/1999	fence for booster station	\$	92.73 20
DDU16 - 009984	DDU009782	10/8/1999	pipe and fittings for booster station	\$	158.01 20
DDU16 - 009988-009991	DDU009786-DDU009789	10/8/1999	air compressor fittings	\$	630.00 10
DDU16 - 010029-010031	DDU009827-DDU009829	10/9/1999	lumber for booster station	\$	224.67 20
DDU16 - 010032-010034	DDU009830-DDU009832	10/9/1999	fence and gate at well #1	\$	350.00 20
DDU16 - 010051-010055	DDU009849-DDU009853	10/30/1999	waco paving - haul trench fill for unit45	\$	255.00 50
DDU16 - 010051-010055	DDU009849-DDU009853	10/30/1999	waco paving - unit 45 water andwastewater	\$	2,919.00 50
DDU16 - 009992	DDU009790	11/8/1999	booster station piping	\$	2,580.59 50
DDU16 - 009890	DDU009688	12/5/1999	survey	\$	175.00 5
DDU16 - 010115-010116	DDU009913-14	1/11/2000	water piping gst	\$	298.77 50
DDU16 - 010062-010064	DDU009860-DDU009862	2/6/2000	water line piping	\$	247.77 50
DDU16 - 010057-010060	DDU009855-DDU009858	2/17/2000	Repair to Well, pump	\$	8,624.33 20
DDU16 - 010082	DDU009880	6/8/2000	water tank slab	\$	11,500.00 50
DDU16 - 010065	DDU009863	8/6/2000	well #4 piping	\$	4,054.77 20
DDU16 - 010065	DDU009883	8/8/2000	water piping	\$	844.84 50
DDU16 - 010091-010092	DDU009889-DDU009890	8/9/2000	storage tank piping	\$	2,213.05 50
DDU16 - 010125-010126	DDU009923-9924	8/12/2000	piping	\$	86.33 50
DDU16 - 010091-010095	DDU009889-DDU009894	8/24/2000	well #4 piping	\$	2,564.25 20
DDU16 - 010091	DDU009889	9/18/2000	water line piping, \$1511 + \$513.49	\$	2,024.60 50
DDU16-00934565-DDU16009376	DDU16-00934565-DDU16009376	9/29/2000	storage tank, 250,000 gallons	\$	71,887.31 50
DDU16 - 010079-010081	DDU009877-DDU009879	10/7/2000	water line piping	\$	1,962.45 50
DDU16 - 0100112-010014	DDU009910-DDU009912, DDU009946	10/14/2000	repairs to well #2	\$	15,230.02 20
DDU16 - 010109	DDU009907	10/20/2000	water piping gst	\$	214.09 50
DDU16 - 010110-010111	DDU009908-DDU009909	10/20/2000	chlorine fittings	\$	593.68 5
DDU16 - 010097-010100	DDU009895-DDU009898	10/24/2000	fence around storage tank	\$	468.59 20
DDU16-009377-DDU16009381	DDU16-009377-DDU16009381	10/27/2000	piping for new storage tank	\$	3,188.79 50
DDU16 - 010117-010119	DDU009915-9917	11/20/2000	well screen and piping	\$	10,123.92 20
DDU16 - 010127-010131	DDU009925-29	12/12/2000	probes in storage tank	\$	2,229.55 20
DDU16 - 010132	DDU009930	12/21/2000	fence at storage tank	\$	135.94 20
DDU16 - 010135	DDU009933	12/31/2000	piping insulation at water plant	\$	400.00 10
DDU16 - 010134-010136	DDU009932-34	12/31/2000	piping insulation at water plant	\$	1,452.00 10
DDU16-009382-DDU16009383	DDU16-009382-DDU16009383	1/17/2001	piping	\$	1,246.01 50
DDU16 - 010153-010156	DDU009951-54	2/22/2001	Water Well No 4	\$	163,215.41 20
DDU16 - 010168-010177	DDU009966-75	4/18/2001	piping	\$	1,467.48 50
DDU16 - 010179-010181	DDU009977-79	4/18/2001	well controls	\$	3,310.54 20
DDU16 - 010160-010161	DDU009958-59	8/3/2001	well #4 piping	\$	178.60 20
DDU16 - 010186-010188	DDU009984-86	8/15/2001	light at well #4	\$	158.73 20
DDU16 - 010141-010143	DDU009939-41	9/2/2001	well #4 piping	\$	903.01 20
DDU16 - 010169-010170	DDU009967-68	11/4/2001	piping	\$	149.97 50
DDU16 - 010182-010185	DDU009980-83	11/7/2001	concrete for well#4 fence	\$	156.73 50
DDU16 - 010190-010193	DDU009988-91	5/27/2002	POLLWAT WELL WORK-WELL#1	\$	5,671.36 20
DDU16-009385	DDU16-009385	5/29/2002	heavy equipment rental	\$	3,823.75 20

Double Diamond Utilities Co. / White Bluff

Water Asset / Rate Base Listing

New, As needed	Old Bates Number				
DDU16 - 010198-010204	DDU009996-DDU010002	2/13/2003	WALLELE WELL #2 FOUND BADALTERNATR	\$ 755.72	20
DDU16 - 010198-010204	DDU009996-DDU010002	2/13/2003	WALLELE GENERATOR & TRNFERSWITCH-FINAL	\$ 1,295.00	20
DDU16 - 010205-010207	DDU010003-05	3/31/2003	WALLELE REPLACE STARTER-WELL #1	\$ 779.19	20
DDU16 - 010208-010211	DDU010006-09	4/6/2003	WALLELE REPLACE HS900CONTROLLER@ WELL	\$ 2,620.00	20
DDU16 - 010212-010215	DDU0010010-13	5/8/2003	Well No 3 Repair	\$ 7,852.83	20
DDU16 - 010216	DDU010014	9/29/2003	LONESTA PMP,ADPT,UNION,GSKT,ETC	\$ 773.43	20
DDU16 - 010224-010227	DDU010022-25	3/31/2004	well #2 repair pump and motor	\$ 15,873.46	20
DDU0010016-20 & DDU010027	DDU010016-20 & DDU010027	12/3/2004	well #4 pump and motor	\$ 28,525.50	20
DDU16 - 010234-010237	DDU010032-35	3/8/2005	POLLWAT PHASE MOTOR,PIPE,AIRLINE,ETC.	\$ 12,594.83	20
DDU16 - 010230-010233	DDU010028-31	5/18/2005	Well No. 4 repair	\$ 8,704.40	20
DDU16 - 010239-010242	DDU010037-40	1/3/2006	POLLWAT Service all Well #3	\$ 14,928.68	20
DDU16 - 010249-010251	DDU010047-49	3/7/2006	LONESTA Booster Pump	\$ 1,034.40	10
DDU16 - 010243-010246	DDU010041-44	3/28/2006	WALLELE Repair booster at Well #1	\$ 1,536.15	20
DDU16 - 010252-010254	DDU010050-52	7/31/2006	Well No 4 repair	\$ 14,581.95	20
DDU16 - 010255 - 010256	DDU010053-54	8/28/2006	LONESTA O-Ring, Plug, Gasket, Diaph, Etc	\$ 1,260.14	10
DDU16 - 010257-010259	DDU010055-57	12/20/2006	Well Electrical	\$ 3,550.00	20
DDU16 - 010305	DDU010103	2/7/2007	MCCLMECH Set pressure tank @ well#1/100ton crane	\$ 4,188.23	50
DDU16-009386-DDU16009387	DDU16-009386-DDU16009387	5/1/2007	United rental installation of 6 inch well line at well No 4	\$ 7,316.82	50
DDU16-009388-DDU16009389	DDU16-009388-DDU16009389	5/8/2007	J & S Pools 15' X 40' slab invoice No. 1002	\$ 4,800.00	50
DDU16 - 010272-010275	DDU010070-73	5/28/2007	SMITPUM Well #2 Pump Repair	\$ 6,883.92	10
DDU16-009390-DDU160093995	DDU16-009390-DDU160093995	6/6/2007	2006 John Deere Backhoe	\$ 38,362.05	15
DDU16 - 010289-010292	DDU010087-90	6/20/2007	BULLSTE 20,000 Gal Hydropneumatic Tank BS1006562	\$ 31,535.00	50
DDU16 - 010293-010295	DDU010091-93	6/21/2007	J&SPOOL Beams for the Water Plant	\$ 1,000.00	50
DDU16-009398-DDU16009399	DDU16-009398-DDU16009399	8/13/2007	Consulting Environmental engineering for 20,000 pt	\$ 1,362.00	10
DDU16 - 010307 - 010311	DDU010105-109	8/27/2007	LONESTA Booster Pump, Ejector	\$ 1,126.21	10
DDU16 - 010312-010314	DDU010110-112	8/27/2007	WALLELE Well #2 Service Call	\$ 2,246.78	20
DDU16 - 010315-010318	DDU010113-116	8/31/2007	SMITPUM Parts, Labor-Water Well	\$ 19,203.28	10
DDU16 - 010319-010321	DDU010117-119	9/10/2007	CONSENV Installation of New Pressure Tank/Expandin	\$ 4,278.00	50
DDU16 - 010323	DDU010121	10/20/2007	WALLELE Well #2 Install Breaker-New Comprssr	\$ 3,822.77	20
DDU16 - 010327-010330	DDU010125-128	10/25/2007	SMITPUM Repair Berkeley	\$ 6,487.44	10
DDU16 - 010331-010333	DDU010129-131	10/30/2007	ACTSUPP Mtr Boxes, Bend, Ball Chcks	\$ 1,456.49	20
DDU16-009400-DDU16-009405	DDU16-009400-DDU16-009405	10/30/2007	Backyard fence invoice 071030a	\$ 1,600.00	20
DDU16-009407-DDU16-009409	DDU16-009407-DDU16-009409	6/30/2008	Performance Meter Mobile Drive	\$ 20,567.50	20
DDU16-009410-DDU16-009412	DDU16-009410-DDU16-009412	6/30/2008	Upgrade water meters	\$ 43,427.74	20
DDU16-009413-DDU16-009416	DDU16-009413-DDU16-009416	7/31/2008	New meters 9090	\$ 30,768.98	20
DDU16-009417-DDU16-009419	DDU16-009417-DDU16-009419	9/30/2008	New meters 9090	\$ 42,217.50	20
DDU009057 -DDU009058	DDU009057 -DDU009058	12/31/2009	WB PORTABLE GENERATOR	\$ 881.92	10
DDU009059 -DDU009060	DDU009059 -DDU009060	12/31/2009	WB ADAPTERS, HYDRANT METER WITH GATE VALVE	\$ 1,085.72	20
DDU009062 -DDU009064	DDU009062 -DDU009064	12/31/2009	WB O RING SET, DIAPHRAGM, GASKET AND FILTER	\$ 1,440.05	50
DDU009065 -DDU009066	DDU009065 -DDU009066	12/31/2009	WB WELL INSPECTIONS	\$ 11,830.00	50
DDU009067 -DDU009068	DDU009067 -DDU009068	12/31/2009	WB REPLACED CLARIFIER DRIVE GEAR BOX	\$ 12,500.00	50
DDU009069 -DDU009071	DDU009069 -DDU009071	12/31/2009	WB WELL #3 REPAIRS	\$ 13,085.82	50
DDU009072 -DDU009074	DDU009072 -DDU009074	12/31/2009	WB WELL #4 INSPECT AND REPAIR	\$ 45,966.05	50
DDU16-009489-DDU16-009490	DDU16-009489-DDU16-009490	3/9/2010	V Cast Clarifier repair	\$ 1,850.00	20
DDU009075 -DDU009076	DDU009075 -DDU009076	9/30/2010	GENERATOR, TRANSFER SWITCH BACKUP	\$ 5,093.48	10
DDU009079 -DDU009081	DDU009079 -DDU009081	9/30/2010	PIPE JOINS, CK VALVES, CABLE FOR WELL	\$ 35,527.65	50

**Double Diamond Utilities Co. / White Bluff
Water Asset / Rate Base Listing**

New, As needed	Old Bates Number				
DDU009083 -DDU009087	DDU009083 -DDU009087	2/28/2011	Service Call Well #1	\$ 14,996.42	50
DDU009088 -DDU009093	DDU009088 -DDU009093	2/28/2011	New Pump Cable	\$ 24,038.92	10
DDU009094 -DDU009097	DDU009094 -DDU009097	9/30/2011	Service Call Well #2	\$ 16,625.07	50
DDU009098 -DDU009099	DDU009098 -DDU009099	12/20/2011	RTU GPRS NEMA, M-100 M-200 WB, Well No. 1 SCADA	\$ 1,779.95	20
DDU009101 -DDU009102	DDU009101 -DDU009102	12/31/2011	Service Call Well #2	\$ 4,368.98	50
DDU0103 -DD09U009104	DDU0103 -DD09U009104	1/31/2012	GENERATOR	\$ 1,383.44	10
DDU009105 -DDU009109	DDU009105 -DDU009109	5/31/2012	WB RELACE PUMP, MOTOR & CABLE	\$ 29,973.34	10
DDU009110 -DDU009116	DDU009110 -DDU009116	11/30/2012	6" Franklin 60hp submonitor/Startup - Well #2 WB	\$ 16,192.36	50
DDU009117 -DDU009123	DDU009117 -DDU009123	11/30/2012	Install new pipe 6" 60hp Submonitor/Start up - Well #1 WB	\$ 25,299.09	50
DDU16-009592-DDU16-009594	DDU16-009592-DDU16-009594	7/29/2015	Pump, Well No. 3	\$ 15,092.55	10
DDU16-009595-DDU16-009597	DDU16-009595-DDU16-009597	8/24/2015	Pump Replacement Well No. 2	\$ 16,949.75	10
DDU16-009598-DDU16-009600	DDU16-009598-DDU16-009600	12/3/2015	30 HP Motor Replacement, Well No. 1	\$ 26,239.36	10
DDU16-011009-011010	Documented	Land	Water Plant	\$ 12,810.00	
DDU16-011011-011015	Documented	Land	WB 4 2 30AC Water Tanks	\$ 17,700.00	
DDU16-011026-011030	Documented	Land	935 18 water tower & well	\$ 2,500.00	
DDU16-011016-011020	Documented	Land	907..120 257AC Pump Station	\$ 9,150.00	
				\$ 1,536,747.15	

EXHIBIT DDU-5C

Double Diamond Utilities Co

The Cliffs (Water)

New, As needed

Old Bates Number

DDU16 - 009158	DDU010314-316	Pipe	4/3/1997	50	\$200.00
DDU16 - 009153	DDU010259, DDU16-009153	RO membranes	2/3/1995	20	\$21,211.59
DDU16 - 010463	DDU010261	trencher rental	2/26/1996	20	\$9,697.50
DDU16 - 010468-010472	DDU010266-270	vermeer heavy equipment rental	1/6/1997	20	\$9,697.50
DDU16 - 010476-010479	DDU010274-277	heavy equipment	1/22/1997	20	\$1,557.50
DDU16 - 010473	DDU010271	water line appurtenances	1/22/1997	50	\$4,148.00
DDU16 - 010480	DDU010278	4 " gate valve	1/24/1997	50	\$535.78
DDU16-009125-009127	DDU16-009125-DDU16-009127	12,490 feet PVC Pipe	1/30/1997	50	\$8,087.50
DDU16 - 010485	DDU010283	PVC Pipe, US Filter	2/4/1997	50	\$16,873.74
DDU16 - 009154	DDU010285	tap sleeve	2/5/1997	50	\$362.27
DDU16 - 009156	DDU010289	6" PVC	2/13/1997	50	\$286.43
DDU16 - 010493	DDU010291	fire hydrant	3/10/1997	20	\$1,534.88
DDU16 - 010498	DDU010296?	Utility Backfill	3/13/1997	50	\$4,265.00
DDU16 - 010495-010497	DDU010293-295	shows pvc phase X	3/19/1997	50	\$12,142.50
DDU16 - 010513	DDU010311	Equipment Rental, Utility Installation	3/25/1997	20	\$4,170.00
DDU16 - 010519	DDU010317	vermeer heavy equipment rental	4/24/1997	20	\$9,739.63
DDU16-009133-DDU16-009135	DDU16-009133-DDU16-009135	Backhoe Work	5/31/1997	20	\$520.00
DDU16 - 009161	DDU010340	Bores	5/31/1997	50	\$1,000.00
DDU16 - 010543	DDU010341	Electric panels, pumps	7/11/1997	20	\$7,453.99
DDU16 - 010545-010546	DDU010343-034	waterline valve caps	10/17/1997	50	\$1,021.88
DDU16 - 010550-010551	DDU010348-349	sand filters	2/27/1998	20	\$2,985.23
DDU16 - 009162-009171	DDU010350-359	Water Treatment Plant Expansion, Update RO	3/9/1998	20	\$75,767.68
DDU16 - 010562-010567	DDU010360-365	engineering	3/15/1998	5	\$1,388.00
DDU16 - 010568	DDU010366	engineering	5/14/1998	5	\$488.75
DDU16 - 010574-010580	DDU010372-378	pump repair	10/21/1998	10	\$7,365.02
DDU16 - 010581-010583	DDU010379-381	pump repair	10/30/1998	10	\$1,472.20
DDU16 - 010584-010588	DDU010382-386	engineering	11/12/1998	5	\$2,175.00
DDU16 - 010590-010592	DDU010388-390	engineering	1/20/1999	5	\$3,411.90
DDU16 - 010593-010594	DDU010391-392	PVC Pipe	5/25/1999	50	\$740.43
DDU16 - 010595-010597	DDU010393-395	pipe	5/25/1999	50	\$9,219.64
DDU16 - 010599-010600	DDU010397-398	sand for lines	6/7/1999	50	\$750.00
DDU16 - 010601-010603	DDU010399-401	rock saw	6/18/1999	10	\$2,250.00
DDU16-009128-DDU16-009132	DDU16-009128-DDU16-009132	pipe installation	7/1/1999	50	\$3,562.50
DDU16-009136-DDU16-009138	DDU16-009136-DDU16-009138	Road Crossing	2/2/2000	50	\$742.50
DDU16 - 010613-010622	DDU010411-420	pipe, valves	5/10/2000	50	\$964.65
DDU16 - 010623-010625	DDU010421-423	Water Line	6/2/2000	50	\$5,217.00
DDU16 - 010627-010630	DDU010425-428	RO skid / heater element	2/6/2001	10	\$1,482.39
DDU16 - 010631-010639	DDU010429-437	PROGWAT MEDIA REPLACEMENT	3/8/2001	10	\$2,496.63
DDU16 - 010631-010639	DDU010429-437	PROGWAT MEMBRANES	3/8/2001	10	\$11,691.00
DDU16-009172-DDU16-009205	DDU16-009172-DDU16-009205	RO unit and upgrade	6/18/2001	20	\$80,710.00
DDU16 - 010657-010668	DDU010455-466	RO electrical	6/26/2001	20	\$607.36

**Double Diamond Utilities Co
The Cliffs (Water)**

New, As needed	Old Bates Number				
DDU16 - 010669-010671	DDU010467-469	PROGWAT PUMP MOTOR	7/20/2001	10	\$566.50
DDU16 - 010672	DDU010470	ACSALES Transformer for Lake pumps	8/8/2001	20	\$1,212.40
DDU16 - 010675-010680	DDU010473-478	filter repair	9/25/2001	10	\$1,051.28
DDU16 - 010691-010694	DDU010489-492	TRIPDPU VOLUTE CASE FOR BERKELY PUMP	2/1/2002	20	\$1,072.79
DDU16 - 010695-010700	DDU010493-498	intake pump repair	5/1/2002	10	\$12,092.22
DDU16-009226-DDU16-009228	DDU16-009226-DDU16-009228	raw water intake pump	5/10/2002	20	\$28,343.10
DDU16 - 010705-010708	DDU010503-506	intake pump repair	6/6/2002	10	\$8,000.00
DDU16 - 010709-010712	DDU010507-510	intake pump	6/20/2002	20	\$4,751.00
DDU16 - 010714-010716	DDU010512-514	LYNNELE MOTORS FOR BOOSTER PUMPS	7/1/2002	10	\$2,644.55
DDU16 - 010717-010720	DDU010515-518	ROWEELE Water Pump Motor- Backup	7/29/2002	10	\$963.58
DDU16 - 010721-010723	DDU010519-521	TRIPDPU Parts for Berkley Pump	7/29/2002	10	\$1,390.74
DDU16-009230-DDU16-009231	DDU16-009230-DDU16-009231	REXEMIN 120V STARTER, ELEMENTS, CABLETIES	9/9/2002	20	\$402.93
DDU16 - 010724-010729	DDU010522-527	REXEMIN TRANSFORMER	9/10/2002	20	\$405.02
DDU16 - 010730-010732	DDU010528-530	ROWEELE BACKUP PUMP MOTORS-TREATMENT PLANT	11/25/2002	10	\$1,031.51
DDU16 - 010733-010736	DDU010531-534	ROWEELE RO WATER PUMP MOTOR	1/8/2003	10	\$767.11
DDU16 - 010738-010741	DDU010536-539	PROGWAT REPAIR TO RO & SAND FILTERS	2/14/2003	10	\$1,144.88
DDU16 - 010742-010746	DDU010540-544	DEIONIZATION SYS, FILTER, CARTRIDGE	4/28/2003	20	\$3,381.07
DDU16 - 010747-010749	DDU010545-547	PROGWAT SAND FOR SAND FILTERS AT WATER PLANT	5/6/2003	10	\$1,349.07
DDU16 - 010750-010751	DDU010548-549	RONMAR REBUILD BOOSTER PUMP	6/15/2003	10	\$1,257.00
DDU16 - 010753	DDU010551	SMITPUM RPR#1 BOOSTER PUMP	8/25/2003	10	\$814.13
DDU16 - 010754	DDU010552	SMITPUM RPR#2 BOOSTER PUMP	8/25/2003	10	\$844.43
DDU16 - 010752	DDU010550	PROGWAT CLAMPS,VLVS,SST HEADER FOR BOOSTER	8/25/2003	10	\$3,053.84
DDU16 - 010755-010758	DDU010553-556	pump electrical repair	8/29/2003	10	\$418.30
DDU16 - 010759-010762	DDU010557-560	SNDBLST/COAT PRSSR VESSEL	12/11/2003	20	\$4,680.00
DDU16 - 010763-010765	DDU010561-563	MORRISUP WATER PIPE-600	8/23/2004	50	\$2,750.83
DDU16 - 010766-010768	DDU010564-566	BORDWEL TANK REPAIR	10/1/2004	50	\$1,403.27
DDU16 - 010769-010773	DDU010567-571	SUPETAN STORAGE TANK REPAIRS/RUPTURED TNK	5/20/2005	50	\$6,487.17
DDU16 - 010779-010781	DDU010577-579	water line 3", 4"	7/15/2005	50	\$11,589.00
DDU16 - 010785-010788	DDU010583-586	UTILSER TANK RENOVATION-APP. #1	8/1/2005	50	\$14,850.00
DDU16 - 010789-010791	DDU010587-589	heavy equipment rental - trencher	8/15/2005	20	\$8,172.86
DDU16 - 010792	DDU010590	United Trencher Rental	9/16/2005	20	\$4,024.00
DDU16 - 010796-010798	DDU010594-596	water line	10/3/2005	50	\$2,572.50
DDU16 - 010799-010801	DDU010597-599	UTILCOM TANK #2 RENOVATION	10/14/2005	50	\$12,750.00
DDU16 - 010805	DDU010603	UNITREN compressor, air pavement breaker	1/2/2006	10	\$1,620.50
DDU16-009147-DDU16-009148	DDU16-009147-DDU16-009148	Backhoe Rental	1/7/2006	20	\$582.17
DDU16 - 010816-010818	DDU010614-616	PROGWAT Pump, Headers	5/29/2006	10	\$2,760.38
DDU16 - 010819-010820	DDU010617-618	PROGWAT New Filter Housing	8/3/2006	10	\$11,057.90
DDU16 - 010821-010823	DDU010619-621	PROGWAT Rebuilt Tonkaflo Pump	8/24/2006	10	\$935.28
DDU16 - 010824-010826	DDU010622-624	PROGWAT New Filter Housing for Reverse Osmosis	10/2/2006	20	\$3,577.66
DDU16 - 010841-010843	DDU010639-641	SMITPUM Motor, Pump and Assembly	2/27/2007	10	\$5,429.91
DDU16-009238-DD U16-009243	DDU16-009238-DD U16-009243	Installation 100,000 gal GST	4/11/2007	50	\$59,055.93

**Double Diamond Utilities Co
The Cliffs (Water)**

New, As needed

Old Bates Number

DDU16 - 010844-010846	DDU010642-644	MORRISUP Tank Fill Lines for Ground Storage	5/9/2007	50	\$1,469.95
DDU16 - 010847-010851	DDU010645-649	J&JOILF Wiring	5/29/2007	20	\$5,463.50
DDU16 - 010852	DDU010650	MORRISUP Meter for Product Water	6/12/2007	20	\$4,535.68
DDU16 - 010853-010857	DDU010651-655	C&CCONC Slab for New Storage Tanks	6/13/2007	50	\$4,620.00
DDU16-009206-DDU16-009208	DDU16-009206-DDU16-009208	LAYNCHR Hydranautic CPA2 Elements/RO Membranes	6/21/2007	20	\$23,997.40
DDU16 - 010860-010861	DDU010658-659	RUSSTUR Pad Built for Storage Tank	7/11/2007	50	\$2,480.00
DDU16-009209-DDU16-009210	DDU16-009209-DDU16-009210	MORRISUP Raw Water Line	8/28/2007	50	\$8,581.95
DDU16 - 010869-010871	DDU010667-669	WALLELE Electrical Work on Flow Meters	9/5/2007	20	\$1,790.43
DDU16 - 010872-010874	DDU010670-672	USABLU Chemical Feed Pump	9/10/2007	5	\$394.48
DDU16-009220-DDU16-009221	DDU16-009220-DDU16-009221	Piping GST	9/19/2007	50	\$9,322.62
DDU16 - 010875-010877	DDU010673-675	USABLU Pressure Logger, Software, Gauge to Hose A	10/1/2007	7	\$659.01
DDU 16 - 010878-010884	DDU010676-682	KOKOPEL Raw Water Intake Line	10/3/2007	50	\$6,868.46
DDU16 - 010885-010886	DDU010683-684	MORRISUP Raw Water Line	10/19/2007	50	\$1,082.50
DDU16 - 010887-010889	DDU010685-687	PROGWAT Rebuilt Pumps for Back Ups	11/26/2007	10	\$3,720.69
DDU16 - 010890-01092	DDU010688-690	UNITEQU Trencher	12/17/2007	20	\$1,368.14
DDU16 - 010893-010895	DDU010691-693	Trencher	12/31/2007	20	\$1,894.88
DDU16-009139-DDU16-009140	DDU16-009139-DDU16-009140	Backhoe Rental	2/22/2008	20	\$378.48
DDU16-009141-DDU16-009142	DDU16-009141-DDU16-009142	trencher rental	4/28/2008	20	\$2,409.66
DDU16-009143-DDU16-009144	DDU16-009143-DDU16-009144	Turbine Master Meter	5/14/2008	10	\$427.47
DDU16-009145-DDU16-009146	DDU16-009145-DDU16-009146	trencher rental	5/16/2008	20	\$1,692.07
DDU16-009149-DDU16-009150	DDU16-009149-DDU16-009150	Bobcat Rental	12/5/2008	20	\$2,074.52
DDU008564	DDU008564	Line work, tie into lake pumps	10/22/2009	20	\$1,200.00
DDU008569-70	DDU008569-70	TC FILL PIPE	12/1/2009	10	\$761.18
DDU008629-30	DDU008629-30	TC VALVES FOR SAND FILTER AIR LINES	12/1/2009	10	\$775.40
DDU008921-922	DDU008921-922	TC SET BASIN FOR ELECTRICAL GUTTER	12/1/2009	10	\$780.00
DDU008619-20	DDU008619-20	TC UNBOLTED FLANGES ON PIPING AT WATER PLANT	12/1/2009	10	\$810.00
DDU008586	DDU008586	TC LAKE PUMPS	12/1/2009	10	\$842.14
DDU008566-8568	DDU008566-8568	TC REPLACE CONCRETE AT MARINA	12/1/2009	10	\$896.40
DDU008617-618 & DDU008623	DDU008617-618 & DDU008623	TC CHANGED FLOATS, TIED IN BOOSTER PUMP	12/1/2009	10	\$1,012.50
DDU008582-83	DDU008582-83	TC 2" PUMP AND 1" PUMP	12/1/2009	10	\$1,017.55
DDU008640-41	DDU008640-41	TC BOOSTER PUMPS FOR WATER PLANT	12/1/2009	10	\$1,061.54
DDU008571-72	DDU008571-72	TC REINFORCED WATER LINES	12/1/2009	10	\$1,282.50
DDU008576-77 & DDU008621	DDU008576-77 & DDU008621	TC RAN 4" PIPING CHANGED OUT PUMP	12/1/2009	10	\$1,282.50
DDU008635-36	DDU008635-36	TC HEATER CONNECTIONS	12/1/2009	10	\$1,391.49
DDU008633-34	DDU008633-34	TC PUMP AND FEED TUBES	12/1/2009	10	\$1,397.99
DDU008621-22	DDU008621-22	TC WELDED 4" PLOY TIE	12/1/2009	10	\$1,512.00
DDU008617-618	DDU008617-618	TC TAPPING SLEEVE, SWING CK VALVE	12/1/2009	10	\$1,529.15
DDU008563-65	DDU008563-65	TC POLY TIE IN LAKE PUMPS	12/1/2009	10	\$2,400.00
DDU008589	DDU008589	TC POLY LINE TIE INTO LAKE PUMPS	12/1/2009	10	\$2,646.71
DDU008642	DDU008642	TC HEATING UNIT INSTALLATION	12/1/2009	10	\$2,764.83
DDU008584	DDU008584	TC LAKE PUMPS	12/1/2009	10	\$3,847.07

**Double Diamond Utilities Co
The Cliffs (Water)**

New, As needed	Old Bates Number				
DDU008625-27	DDU008625-27	TC VALVES WITH ACTUATOR	12/1/2009	10	\$3,884.63
DDU008644-45	DDU008644-45	TC MEMBRANES	12/1/2009	10	\$4,050.00
DDU008631-32	DDU008631-32	TC PUMP	12/1/2009	10	\$4,138.86
DDU008578-580	DDU008578-580	TC REWIRED TRANSFORMER AT LAKE PUMP	12/1/2009	10	\$5,239.26
DDU008919	DDU008919	TC FILL DIRT AND TRACTOR WORK	12/1/2009	10	\$5,340.00
DDU008638-39	DDU008638-39	TC FEED PRESS CONTROL AT WATER PLANT	12/1/2009	10	\$6,248.59
DDU008592-93	DDU008592-93	TC UPGRADE 2 NEW 20HP LAKE PUMPS	12/1/2009	10	\$13,971.66
DDU008573-74	DDU008573-74	TC INSTALL WATER LINE 6"	12/1/2009	10	\$18,343.80
DDU008596-8615	DDU008596-8615	Water Plant Electical Strike Deductible for insurance	12/31/2009	20	\$10,000.00
DDU008658-59	DDU008658-59	500 GALLON FLAT BOTTOM TANK	1/1/2010	10	\$1,196.42
DDU008673-8674	DDU008673-8674	Stainless Steel Headers	1/14/2014	20	\$4,487.00
DDU008661-62	DDU008661-62	MANIFOLD	2/1/2010	10	\$1,989.33
DDU008663 or DDU008675	DDU008663 or DDU008675	WATER PLANT PHONE SYSTEM-TC	3/1/2010	10	\$831.31
DDU008677-78	DDU008677-78	FEED TANK VALVE	3/1/2010	10	\$1,569.10
DDU008663 or DDU008675	DDU008663 or DDU008675	BOSTER PUMPS & RO SYSTEM-TC	3/1/2010	10	\$1,892.29
DDU008665-667	DDU008665-667	WATER PLANT RO SYSTEM-TC	3/1/2010	10	\$3,509.60
DDU008680-682	DDU008680-682	PUMP G, IMPELLER TRIM	4/1/2010	10	\$2,733.52
DDU008689-691	DDU008689-691	WIRING, WATER EYE AND INTERNET-TC	5/1/2010	10	\$826.44
DDU008686-688	DDU008686-688	WATER PLANT STORAGE ROOM LIGHTS-TC	5/1/2010	10	\$1,407.56
DDU008683-685	DDU008683-685	TC-UPGRADE SYSTEM	5/1/2010	10	\$1,560.11
DDU008692-696	DDU008692-696	WATER PLANT BOOSTER PUMPS-TC	5/1/2010	10	\$9,956.14
DDU008700-702	DDU008700-702	FILTRATE TANK FLOAT REPLACEMENT	6/1/2010	10	\$254.08
DDU008706-708	DDU008706-708	WATER PLANT	6/1/2010	10	\$372.16
DDU008697-699	DDU008697-699	CALLIBRATION OF FLOW METERS-TC	6/1/2010	10	\$549.63
DDU008703-705	DDU008703-705	ACID INJECT PUMP/CHLORINE PUMP/TUBING-TC	6/1/2010	10	\$2,341.64
DDU008709-710	DDU008709-710	INSTALLATION OF NEW ELECTRIC VALVE	7/1/2010	10	\$368.94
DDU008668-671	DDU008668-671	ALLEN BRADLEY 3P480VAC DRIVE	7/1/2010	10	\$4,376.28
DDU008724-726	DDU008724-726	SENSORS	8/1/2010	10	\$212.22
DDU008751-753	DDU008751-753	BUSHINGS, UNION BALL CHECK VALVE	10/1/2010	10	\$281.08
DDU008754	DDU008754	26 Gallon Air Compressor	1/1/2011	10	\$238.65
DDU008793-795	DDU008793-795	Calibration of Flow meters	1/1/2011	10	\$512.50
DDU008796-798	DDU008796-798	Membranes, End Caps	2/1/2011	10	\$21,263.60
DDU008812-814	DDU008812-814	Electrical Actuator	3/1/2011	10	\$393.21
DDU008809-811	DDU008809-811	Electric Over Air Valves	3/1/2011	10	\$485.64
DDU008815-817	DDU008815-817	Install Main Breaker Booster Pane	3/1/2011	10	\$593.30
DDU008806-808	DDU008806-808	Flowmeter	3/1/2011	10	\$1,623.45
DDU008803-805	DDU008803-805	Membranes	3/1/2011	10	\$4,215.00
DDU008799-802	DDU008799-802	Adapters, Seals, Head Assembly	3/1/2011	10	\$7,536.37
DDU008821-823	DDU008821-823	Elect Valve Acuator Fill Tank	4/1/2011	10	\$690.64
DDU008836-840	DDU008836-840	Reducer, Gland Pack	5/1/2011	10	\$216.49
DDU008836-840	DDU008836-840	PVC Pipe, Gland Pack	5/1/2011	10	\$424.46

**Double Diamond Utilities Co
The Cliffs (Water)**

New, As needed	Old Bates Number				
DDU008824-826	DDU008824-826	Work on Ater Analyzer	5/1/2011	10	\$1,386.81
DDU008827-829	DDU008827-829	Ejector Pump	5/1/2011	10	\$1,612.93
DDU008830-832	DDU008830-832	Volute, Wear Ring, O-Ring	5/1/2011	10	\$1,688.08
DDU008833-835	DDU008833-835	Goulds Pump, Pump Floats Switch	5/1/2011	10	\$1,757.16
DDU008841-843	DDU008841-843	PLC's & HMI	5/1/2011	10	\$2,000.00
DDU008789-790	DDU008789-790	TC Repair Lake Pump	5/31/2011	10	\$871.70
DDU008846-848	DDU008846-848	Checkvalves	6/1/2011	10	\$386.32
DDU008856-859	DDU008856-859	Fabricate RO#1, Header	6/1/2011	10	\$920.83
DDU008860-863	DDU008860-863	Rotating Assembly	6/1/2011	10	\$4,713.21
DDU008844	DDU008844	Submittal of US Protocol to TCEQ	6/1/2011	10	\$6,210.00
DDU00849-851	DDU00849-851	Media, Vitec 30000 Antiscalant	6/1/2011	10	\$7,280.93
DDU008852-855	DDU008852-855	Membranes	6/1/2011	10	\$18,626.83
DDU008864-865	DDU008864-865	Membrane System	8/1/2011	10	\$1,545.50
DDU008872-874	DDU008872-874	Samples	9/1/2011	10	\$480.00
DDU008875	DDU008875	TC Watereye Subscription-	11/1/2011	10	\$3,768.47
DDU008892-895	DDU008892-895	Codeline Pressure Vessels TC	12/1/2011	10	\$913.23
DDU008896-898	DDU008896-898	Turbidimeter Kit TC	12/1/2011	10	\$956.58
DDU008908-910	DDU008908-910	Meter, Pipe Gaskets TC	12/1/2011	5	\$992.05
DDU008903-906	DDU008903-906	Case, Wearing Ring TC	12/1/2011	10	\$1,382.00
DDU008881-884	DDU008881-884	Sandfilter Media Change TC	12/1/2011	10	\$2,120.58
DDU008899-902	DDU008899-902	Turbidity Calibration Contract TC	12/1/2011	10	\$2,721.42
DDU008888-891	DDU008888-891	Snap rings, Thermometer TC	12/1/2011	10	\$2,908.43
DDU008885-887	DDU008885-887	Chemical Injection Pumps TC	12/1/2011	10	\$3,045.19
DDU008945-947	DDU008945-947	Fire Hydrant @ Bay Hill Ct. TC	2/1/2012	10	\$1,194.73
DDU008924-926	DDU008924-926	HYDRANT, STEM, VALVE, FITTINGS	2/1/2012	10	\$2,618.85
DDU008931-933	DDU008931-933	RO 3 & 4 VFD Replacement	4/1/2012	10	\$1,731.35
DDU008928-930	DDU008928-930	RO 3 & 4 Power Flex 400 Line Reactor	4/1/2012	10	\$5,434.14
DDU008935-937	DDU008935-937	WATEREYE SUG. JAN-JUN 2012 TC	5/1/2012	10	\$2,190.10
DDU008938-940	DDU008938-940	REPLACEMENT OF FOULED MEDIA IN SAND FILTERS TC	5/1/2012	10	\$8,065.71
DDU16-009634-DDU16-009638	DDU16-009634-DDU16-009638	WB REPLACE PUMP, MOTOR AND CABLE	5/31/2012	20	\$29,973.34
DDU008941-943	DDU008941-943	Micron Filters, Anti Scaltent TC	7/1/2012	10	\$6,274.32
DDU16-009615-DDU16-009621	DDU16-009615-DDU16-009621	Install new pipe 6" 60hp Submonitor/Start up - Well #1 WB	11/30/2012	50	\$17,817.55
DDU008981-83 & DDU008977-80	DDU008981-83 & DDU008977-80	membranes	9/1/2013	10	\$3,844.96
DDU008972-80	DDU008972-80	Membranes	9/1/2013	10	\$3,845.29
DDU008972-80	DDU008972-80	Powerflex 400 to repair VFD	9/1/2013	10	\$4,728.36
DDU008967-70	DDU008967-70	Barge and crew for lake pump repair	9/1/2013	10	\$4,800.00
DDU008963-65	DDU008963-65	Replace #4 lake pump	9/1/2013	10	\$6,057.21
DDU16-009601-DDU16-009602	DDU16-009601-DDU16-009602	2014 Ford F150 #6893	5/14/2015	5	\$29,952.72
DDU008994-8998	DDU008994-8998	Pump & 20HP Motor	12/1/2015	10	\$12,669.40
DDU16-009622-DDU16-009632	DDU16-009622-DDU16-009632	Pump Well #3, Pump Replacement, 60HP Hitachi Motor	12/31/2015	10	\$58,281.66

**Double Diamond Utilities Co
The Cliffs (Water)**

New, As needed

Old Bates Number

		MORRISUP Tank Fill Lines for Ground Storage Invoice No. 06560758		50	
DDU16 - 010993	Documented	AB1086 TR 2-1 W J Wesley Water Plant	Land	n/a	\$17,920.00

\$1,111,506.10

EXHIBIT DDU-5D

White Bluff Water
Double Diamond Utilities **White Bluff Water**

Date of Reference 12/31/2007

	Trended Assets			Current Cost	Current Cost		Service Life	Trended Annual Depreciation	Trended Accumulated Depreciation	Trended Net Plant *
Treatment	1/1/1991	Well No. 1	1	\$ 100,000.00	\$ 100,000.00	n	20	2609	\$44,375	\$ 7,806
Treatment	1/1/1996	Well No. 2	1	\$ 125,000.00	\$ 125,000.00	n	20	3356	\$40,287	\$ 26,827
Storage Tank	1/1/1991	58,000 gallon gst, field erect with base	1	\$ 60,000.00	\$ 60,000.00	n	50	420	\$7,152	\$ 13,873
		Pipe 2" - 49,078 feet * 12.38		\$ 607,585.64						
		Pipe 4" - 214,561 ft *13.74		\$ 2,948,068.14						
		Pipe 6" - 82,263 ft *15.41		\$ 1,267,672.83						
Line	1/1/1996	Total Pipe Installed	1	\$ 4,823,326.61	\$ 4,823,326.61	n	50	43976	\$527,957	\$ 1,670,858

* Match with columns below

White Bluff Water

Pipe Costs Invoiced	
\$ 500.00	\$ 9,620.00
\$ 9,090.00	\$ 2,651.55
\$ 1,500.00	\$ 15,400.00
\$ 1,000.00	\$ 178.78
\$ 10,635.00	\$ 358.58
\$ 5,105.00	\$ 51.95
\$ 3,795.00	\$ 13,117.50
\$ 2,000.00	\$ 195.20
\$ 3,280.96	\$ 1457.5
\$ 4,510.00	\$ 201.49
\$ 4,230.00	\$ 56.61
\$ 1,500.00	\$ 7,293.00
\$ 7,551.52	\$ 63.64
\$ 274.49	\$ 3,549.00
\$ 6,939.91	\$ 5,674.50
\$ 4,817.34	\$ 2,418.00
\$ 1,034.21	\$ 1,930.50
\$ 14,210.00	\$ 232.50
\$ 7,475.00	\$ 2,409.28
\$ 500.00	\$ 565.00
\$ 518.29	\$ 518.93
\$ 738.27	\$ 146.41
\$ 318.26	\$ 1,500.00
\$ 1,686.54	\$ 281.98
\$ 636.51	\$ 4,584.00
\$ 331.66	\$ 2,919.00
\$ 175.20	\$ 255.00
\$ 2,705.00	\$ 247.77
\$ 1,000.00	\$ 1,962.45
\$ 4,875.00	\$ 844.84
\$ 1,277.16	\$ 2,024.60
\$ 375.09	\$ 149.97
\$ 1,021.50	\$ 1,467.48
\$ 3,690.00	\$ 206,485.00
\$ 188.68	
\$ 9,801.82	
\$ 2,135.06	
\$ 621.31	
\$ 114.25	

	* Current HW Index	Install HW Index	HW Line No.	Invoiced	Trended Original Cost
Well No. 1	596	311	17		\$ 52,181.21
Well No. 2	596	320	17		\$ 67,114.09
58,000 gallon gst, field erect with base	722	253	23		\$ 21,024.93
Pipe 2" - 49,078 feet * 12.38					
Pipe 4" - 214,561 ft *13.74					
Pipe 6" - 82,263 ft *15.41					
Total Pipe Installed	379	189	38	\$ 206,485.00	\$ 2,198,815.08

EXHIBIT DDU-5E

Cliffs Water

Double Diamond Utilities

Cliffs Water

Date of

Reference

12/31/2007

Trended Assets		Current Cost	Used and Useful Original Cost		Service Life	Accumulated Depreciation	Remaining Plant
1/1/1986	75,000 gallon gst, field erect with pad	\$ 65,000.00	\$ 65,000.00	n	50	\$ 7,292.75	\$ 57,707.25
1/1/1986	75,000 gallon gst, field erect with pad	\$ 65,000.00	\$ 65,000.00	n	50	\$ 7,292.75	\$ 57,707.25
1/1/1985	Pipe 2" - 9,725 feet * 12.38	\$ 120,395.50					
1/1/1985	Pipe 3" - 2,774 ft * 12.77	\$ 35,423.98					
1/1/1985	Pipe 4" - 50,207 ft *13.74	\$ 689,844.18					
1/1/1985	Pipe 6" - 45,083 ft *15.41	\$ 694,729.03					
1/1/1985	Pipe 8" - 6,896 ft *21.83	\$ 150,539.68					
1/1/1985	Pipe 12" -4,200 ft *28.53	\$ 119,826.00					
1/1/1985	Total Pipe Installed	\$ 1,810,758.37	\$ 1,810,758.37	n	50	\$ 258,441.74	\$ 1,552,316.63

* Align for indices and calculations

	Current HW Index	Install HW Index	HW Line No.	Invoiced	Trended Orig. Cost- Invoiced
75,000 gallon gst, field erect with pad	722	184	23		\$ 16,565
75,000 gallon gst, field erect with pad	722	184	23		\$ 16,565
Pipe 2" - 9,725 feet * 12.38					
Pipe 3" - 2,774 ft * 12.77					
Pipe 4" - 50,207 ft *13.74					
Pipe 6" - 45,083 ft *15.41					
Pipe 8" - 6,896 ft *21.83					
Pipe 12" -4,200 ft *28.53					
Total Pipe Installed	379	146	38	\$ 135,763.53	\$ 561,785

Pipe Cost Invoiced	
\$ 9,697.50	\$ 5,217.00
\$ 9,697.50	\$ 2,750.83
\$ 4,148.00	\$ 11,589.00
\$ 1,557.50	\$ 8,172.86
\$ 535.78	\$ 4,024.00
\$ 6,496.88	\$ 1,368.14
\$ 362.27	\$ 1,894.88
\$ 286.43	\$ 2,572.50
\$ 4,265.00	
\$ 12,142.50	
\$ 4,170.00	
\$ 200.00	
\$ 9,739.63	
\$ 1,000.00	
\$ 1,021.88	
\$ 16,873.74	
\$ 9,219.64	
\$ 740.43	
\$ 3,562.50	
\$ 742.50	
\$ 750.00	
\$ 964.65	
	\$ 135,763.53

EXHIBIT DDU-5F

Double Diamond Utilities Co. / White Bluff
Sewer Asset / Rate Base Listing

New, As needed	Old Bates Number				
DDU16 - 009347	DDU009462	11/1/1996	pipe work unit 40	\$4,510.00	50
DDU16 - 009662	DDU009460	12/1/1996	pipe work unit 39	\$4,230.00	50
	DDU16-009265-DDU16-009266	2/29/1996	pipe work unit 33, 34, 35, line work subdivision sections	\$9,090.00	50
	DDU16-009267-DDU16-009268	6/30/1996	pipe work unit 38	\$3,795.00	50
	DDU16-009269-DDU16-009270	6/30/1996	pipe work pipe work unit 37	\$5,105.00	50
	DDU16-009271-DDU16-009272	6/30/1996	pipe work unit 36 and 38	\$10,536.00	50
DDU16 - 009656	DDU009454	7/31/1996	water and sewer bores	\$2,000.00	50
	DDU16-009273-DDU16-009275	9/11/1996	pipe - Rohan	\$3,280.96	50
DDU16 - 009681-0098682	DDU009479-80	3/1/1997	sewer bore	\$500.00	50
DDU16 - 009351	DDU009484-9485	4/1/1997	bores	\$500.00	50
DDU16 - 009351	DDU009484-9485	4/1/1997	pipe work unit 40	\$7,475.00	50
DDU16 - 009706-009708	DDU009504-9506	8/1/1997	pipe work unit 41	\$4,875.00	50
DDU16 - 009667-009668	DDU009465-9466	1/15/1997	pipng	\$7,551.52	50
DDU16 - 009671	DDU009469	1/22/1997	pipng	\$460.36	50
DDU16 - 009507-009509	DDU009507-9509	7/2/1997	pipe - pipe work unit 41	\$331.66	50
DDU16 - 009354	DDU009475	2/28/1997	tee and gate valves - pipe work unit 40	\$1,034.21	50
	DDU16-009276-DDU16-009277	2/28/1997	pipe work unit 40	\$4,817.34	50
DDU16 - 009355-009356	DDU009472 & DDU0476-9477	2/28/1997	pipng	\$6,939.91	50
DDU16 - 009357	DDU009478 & 9481-9482	3/29/1997	pipng	\$14,210.00	50
DDU16 - 009690-009691	DDU009488-9489	4/18/1997	valves - pipe work unit 41	\$738.27	50
	DDU16-009280-DDU16-009285	4/23/1997	purestream wwtp model pt-50-ts (50,000 gpd)	\$116,377.00	20
	DDU16-009279	4/23/1997	pipng - US Filter - pipe work unit 40	\$318.26	50
DDU16 - 009358	DDU009490 & DDU009497-98	6/16/1997	pipe - pipe work unit 41, subd. Sections	\$636.51	50
DDU16 - 009701-009702	DDU009499-9500	6/16/1997	pipe - pipe work unit 41	\$1,686.54	50
DDU16 - 009704-009705	DDU009502-9503	7/31/1997	Sewer bore	\$1,000.00	50
DDU16 - 009704	DDU009502	7/31/1997	pipe work unit 41	\$2,705.00	50
DDU16 - 009721-009723	DDU009519-9521	8/20/1997	sewer plant piping	\$415.24	20
DDU16 - 009725-009726	DDU009523-24	8/20/1997	pvc pipe - pipe work unit 41	\$375.09	50
DDU16 - 009688-009689	DDU009486-9487	4/10/1997	pipe work unit 40	\$518.29	50
DDU16 - 009738-009740	DDU009536-9538	1/1/1998	structure around pumps for noise control	\$1,200.00	20
DDU16 - 009754-009789	DDU009552-9554	2/1/1998	pipe - pipe work unit 42	\$3,690.00	50
DDU16 - 009749-009751	DDU009547-9549	1/22/1998	HACH meter for wwtp	\$908.05	10
DDU16 - 009747-009748	DDU009545-9546	1/22/1998	Sewer Building Roof	\$730.69	20
DDU16 - 009753	DDU009551	1/30/1998	slab for wwtp	\$545.00	20
DDU16-009286-DDU16-009289	DDU16-009286-DDU16-009289	4/15/1998	backfill - pipe work unit 42	\$2,183.75	50
DDU16 - 009363	DDU009582	4/15/1998	pipe - pipe work unit 42	\$2,187.30	50
DDU16 - 009364	DDU009583	4/21/1998	pipe - pipe work unit 42	\$675.48	50
DDU16 - 009741-009743	DDU009539-9541	1/5/1998	insulation at sewer plant building	\$727.44	20
DDU16 - 009786	DDU009584 & DDU009590	5/22/1998	backfill - pipe work unit 42	\$9,620.00	50
DDU16 - 009776	DDU009574	4/6/1998	pipng	\$317.34	50
DDU16 - 009806-009808	DDU009604-9606	6/26/1998	pipe - pipe work unit 43	\$2,651.55	50
DDU16 - 009813	DDU009611	7/16/1998	fiberglass tank at wwtp	\$8,025.66	50
DDU16 - 009814	DDU009612	7/23/1998	pumps, basins - lift station	\$7,077.13	20

Double Diamond Utilities Co. / White Bluff
Sewer Asset / Rate Base Listing

New, As needed	Old Bates Number				
DDU16 - 009832	DDU009630	7/23/1998	gate valve, saddle	\$358.58	50
DDU16 - 009834-009836	DDU009632-9634	7/28/1998	bobcat - sewer and water pipe installation	\$13,117.50	20
DDU16 - 009811	DDU009609	7/8/1998	pump repair and float switch - lift station	\$315.98	10
DDU16 - 009844-009846	DDU009642-9644	8/19/1998	bobcat	\$1,457.50	20
DDU16 - 009843	DDU009641	8/19/1998	appurtenances - pipe work unit 43	\$201.49	50
DDU16 - 009817-009819	DDU009615-9617	7/9/1998	bobcat water and sewer pipe pipe work unit 43	\$15,400.00	50
DDU16 - 009766-009772	DDU009564-9570	2/10/1998	tees - pipe work unit 42	\$621.31	50
DDU16 - 009766-009772	DDU009564-9570	2/10/1998	valves - pipe work unit 42	\$2,135.06	50
DDU16 - 009766-009772	DDU009564-9570	2/10/1998	pipe - pipe work unit 42	\$9,801.82	50
DDU16 - 009812	DDU009610	7/10/1998	pump repair - lift station	\$588.45	10
DDU16 - 009859-009863	DDU009657-9661	4/2/1999	trench work - pipe work unit 44	\$2,418.00	50
DDU16 - 009851-009853	DDU009649-9651	3/15/1999	trench work - pipe work unit 44	\$7,293.00	50
DDU16 - 009854-009855	DDU009652-53	3/19/1999	trench work - pipe work unit 44	\$3,549.00	50
DDU16 - 009859-009863	DDU009657-9661	3/29/1999	trench work - pipe work unit 44	\$5,674.50	50
DDU16 - 009665	DDU009665-9667	4/16/1999	asbuilts for pipe work units 42 and 43	\$232.50	50
DDU16 - 009874-009876	DDU009672-74	4/22/1999	pipng	\$2,409.28	50
DDU16 - 009880	DDU009678	5/5/1999	haul material for trench fill	\$565.00	50
DDU16 - 009815-009817	DDU009815-9817	8/23/1999	road bores	\$1,500.00	50
DDU16 - 010035-010037	DDU009833-9835	9/21/1999	sleeves for water and sewer mains	\$4,584.00	50
DDU16-009290-DDU16-009282	DDU16-009290-DDU16-009282	10/30/1999	waco paving - haul trench fill for pipe work unit 45	\$255.00	50
DDU16-009293-DDU16-009297	DDU16-009293-DDU16-009297	10/30/1999	waco paving - pipe work unit 45 water and wastewater	\$2,919.00	50
DDU16 - 009887-009889	DDU009685-87	5/11/1999	trench work - pipe work unit 44	\$1,930.50	50
DDU16 - 010057-010060	DDU009855-9858	2/17/2000	KYLEHAR 60 hp- 480 r motor, pump rpr	\$8,624.33	20
DDU16 - 010079-010081	DDU009877-79	7/10/2000	pipng	\$1,962.45	50
DDU16 - 010138-010139	DDU009936-37	1/17/2001	pipng	\$1,246.01	50
DDU16-009298	DDU16-009298	5/29/2002	heavy equipment rental	\$3,823.75	20
DDU16 - 010212-010215	DDU010010-13	8/5/2003	POLLWAT PHASE MOTOR, CHECK VLV, LABOR	\$7,852.83	20
DDU16 - 010230-010233	DDU010028-31	5/30/2005	POLLWAT 7CH8 STAGE,BREAK OUT PINS,LABOR#4	\$8,704.40	20
DDU16 - 010247-010248	DDU010045-46	6/5/2006	USABLU Blower	\$1,417.45	20
DDU16 - 010252-010254	DDU010050-52	8/28/2006	Pull & Inspect, Motor, Pipe, Etc	\$14,581.95	20
DDU16 - 010257-010259	DDU010055-57	11/27/2006	WALLELE Electrical Bid	\$3,550.00	10
DDU16 - 010260-010262	DDU010058-60	12/16/2006	MCCLMECH Air Manifold- Fabricate& Install	\$4,551.80	10
DDU16 - 010267-010268	DDU010065-67	4/30/2007	MCCLMECH Repair Clarifier	\$1,150.00	10
DDU16 - 010264-010266	DDU010062-64	4/30/2007	MCCLMECH Pulley, Bushings, Belts, Installation	\$1,408.00	10
DDU16 - 010267-010271	DDU010065-69	4/30/2007	MCCLMECH Replace Chain Sprockets, Idler Shaft	\$2,642.00	10
DDU16 - 010276-010280	DDU010074-78	5/22/2007	crane to set equalization basin	\$3,192.39	50
DDU16 - 010276-010278	DDU010074-76	6/6/2007	2006 John Deere Backhoe	\$38,362.05	20
DDU16 - 010337-010339	DDU010135-137	12/6/2007	MCCLMECH Install New SubmersiblePumps in EQ	\$4,356.00	20
DDU16 - 010340-010342	DDU010138-140	12/7/2007	MCCLMECH Repair Catwalk onWastewater Plant	\$1,580.00	20
DDU16 - 010306-010308	DDU010104-106	7/30/2007	MCCLMECH Build & Install Air LiftPumps & Scrapes	\$14,500.00	20
DDU16 - 010295-010298	DDU010093-96	6/8/2007	EQ tank - southwest fluids - startup	\$4,800.83	50
DDU16-009299-DDU16-009300	DDU16-009299-DDU16-009300	6/8/2007	wwtp improvements	\$18,200.00	50
DDU16-009301-DDU16-009309	DDU16-009301-DDU16-009309	6/8/2007	EQ tank - southwest fluids	\$29,363.90	50

Double Diamond Utilities Co. / White Bluff
Sewer Asset / Rate Base Listing

New, As needed	Old Bates Number				
DDU16 - 010334-010336	DDU010132-34	11/10/2007	MCCLMECH Fabric & Install 3" AirPumpWaste Water	\$2,876.00	20
DDU16 - 010344-010346	DDU010142-144	1/19/2008	SDS Fabricate and Install Roof OverEQ Basin	\$2,922.75	20
DDU16 - 010347-010349	DDU010145-147	1/22/2008	Storage Building	\$3,997.53	20
DDU16 - 010380	DDU010178 & DDU010196 and DDU010201-206	5/3/2008	crane at wwtp	\$18,615.00	20
DDU16 - 010360-010362	DDU010158-160	3/16/2008	WWTP Repairs-Sproket and Wheels	\$1,742.81	10
DDU16 - 010363-010365	DDU010161-163	3/21/2008	Mtr Contactors, New 480 V Discount	\$1,450.00	10
DDU16 - 010366-010368	DDU010164-166	4/26/2008	Emergency Repairs to Sewer Blowers	\$1,050.00	10
DDU16 - 010409-010411	DDU010207-209	5/15/2008	Emergency Repairs to Sewer Blowers	\$1,230.00	10
DDU16-009302-DDU16-009343	DDU16-009302-DDU16-009343	8/1/2008	Ashbrook Simon Hartley wwtp	\$436,650.00	20
DDU16 - 010421-010423	DDU010219-221	8/25/2008	Repair Roof On EQ Basin	\$2,500.00	20
DDU16 - 010424-010426	DDU010222-224	8/27/2008	Fabricate Walkway BetweenWastewater Plants	\$4,215.00	20
DDU16 - 010394-010396	DDU010192-194	6/9/2008	New WWTP Set Up	\$1,250.00	20
DDU16 - 010428	DDU010226	10/21/2008	Generator	\$905.36	10
DDU009000 -DDU009001	DDU009000 -DDU009001	12/31/2009	WB FLOATS AND BASIN COVER	\$1,163.69	20
DDU009004 -DDU009005	DDU009004 -DDU009005	12/31/2009	WB GRDR PUMPS/ MODULE PIPES	\$2,219.13	20
DDU009006 -DDU009007	DDU009006 -DDU009007	12/31/2009	WB HPGR PUMPS AND CONTROL BOXES	\$3,615.00	20
DDU009011 -DDU009012	DDU009011 -DDU009012	12/31/2009	WB CONTROL FLOATS, HPGRS	\$4,849.60	20
DDU009015 -DDU009016	DDU009015 -DDU009016	12/31/2009	WB LIDS/HPGR/HPD/STAND PUMPS	\$5,173.27	20
DDU009018 -DDU009019	DDU009018 -DDU009019	12/31/2009	WB FLOAT SWITCHES/ GRINDER STTN	\$5,519.67	20
DDU009002 -DDU009003	DDU009002 -DDU009003	12/31/2009	WB REPAIRS TO CLARIFIER WHEEL	\$1,565.00	50
DDU009009 -DDU009010	DDU009009 -DDU009010	12/31/2009	WB REPLACE EQ BASIN	\$4,679.00	50
DDU009020 -DDU009021	DDU009020 -DDU009021	12/31/2009	WB PLANT REPAIRS	\$13,554.00	50
DDU009022 -DDU009023	DDU009022 -DDU009023	4/30/2010	V-CAST CLARIFIER WHEELS WB	\$1,850.00	50
DDU009024, DDU009027	DDU009024, DDU009027	10/31/2010	INSTALL PROPANE LINES & TANK EMERGENCY GENE.	\$331.30	10
DDU009031 -DDU009032	DDU009031 -DDU009032	10/31/2010	BACK UP POWER	\$1,204.98	10
DDU009033 -DDU009034	DDU009033 -DDU009034	10/31/2010	GENERATOR, TRANSFER SWITCH BACKUP	\$5,093.48	10
DDU009037 -DDU009038	DDU009037 -DDU009038	9/30/2011	Water Tank	\$9,020.00	50
DDU009041 -DDU009042	DDU009041 -DDU009042	12/31/2011	Air Valves WB	\$3,891.59	20
DDU009044 -DDU009046	DDU009044 -DDU009046	7/31/2012	E One Pumps and Control Boxes	\$6,659.75	20
DDU009047 -DDU009049	DDU009047 -DDU009049	8/31/2012	(4) E One Pumps and Control Boxes	\$6,564.96	20
DDU009050 -DDU009052	DDU009050 -DDU009052	12/31/2012	E-One Pumps WB	\$5,016.38	20
DDU009053 -DDU009055	DDU009053 -DDU009055	12/31/2012	E-One Pumps WB	\$9,847.44	20
DDU16-009574 - DDU16-009576	DDU16-009574 - DDU16-009576	1/28/2013	Risers	\$968.04	20
DDU16-009582-DDU16-009585	DDU16-009582-DDU16-009585	8/25/2014	Upgrade Chemical Feed Equipment	\$7,410.82	20
DDU16-009578-DDU16-009581	DDU16-009578-DDU16-009581	9/11/2014	Upgrade Chemical Feed Equipment	\$7,306.56	20
DDU16-009586-DDU16-009589	DDU16-009586-DDU16-009589	11/12/2014	Upgrade Chemical Feed Equipment	\$10,907.26	20
DDU16-010999-011003	Documented		Watkins A-960 TR1B 2.534ac sewer treatmnt	\$3,870.00	Land
DDU16-011004-011008	Documented		WB 7 n 1/2 lt 119 pump station	\$3,625.00	Land
DDU16-011021-011025	Documented		Lots 17 and 18 Sewage Treatment plant	\$14,960.00	Land
DDU16-010994-010998	Documented		Cline A-134 TR 1A .25ac pump station	\$12,280.00	Land
				\$1,142,299.53	

EXHIBIT DDU-5G

Double Diamond Utilities Co
The Cliffs (Sewer)

New, As needed

Old Bates Number

DDU16 - 010463	DDU010261-270	trencher rental	2/26/1996	20	\$ 9,697.50
DDU16 - 010465	DDU010263-265	engineering master plan	6/30/1996	5	\$ 420.50
DDU16 - 010468	DDU010266-270	vermeer heavy equipment rental	1/6/1997	20	\$ 9,697.50
DDU16 - 010476-010479	DDU010274-277	heavy equipment	1/22/1997	20	\$ 1,557.50
DDU16 - 010473	DDU010271	PVC Pipe 6, 4, 3, 2"	1/22/1997	50	\$ 4,147.87
DDU16-009125-DDU16-009127	DDU16-009125-DDU16-009127	12,940 feet PVC Pipe	1/30/1997	50	\$ 8,087.50
DDU16 - 010485	DDU010283	sewer line	2/4/1997	50	\$ 16,873.00
DDU16 - 010489-010490	DDU010287-88	4" Gate Valve Sewer	2/7/1997	50	\$ 191.79
DDU16 - 010498	DDU010296?	bobtail heavy equipment rental	3/19/1997	20	\$ 4,265.00
DDU16 - 010495-010497	DDU010293-295	shows pvc phase X	3/19/1997	50	\$ 12,142.50
DDU16 - 010513	DDU010311	Equipment Rental, Utility Installation	3/25/1997	20	\$ 4,170.00
DDU16 - 010516-010518	DDU010314-316	Pipe	4/3/1997	50	\$ 200.00
DDU16-009134-DDU16-009135	DDU16-009134-DDU16-009135	Backhoe work	5/31/1997	20	\$ 520.00
DDU16 - 010539-010540	DDU010337-338	shows heavy equipment	5/31/1997	20	\$ 1,040.00
DDU16 - 010542	DDU010340	sewer bore	5/31/1997	50	\$ 1,500.00
DDU16 - 010570-010573	DDU010368-371	HACH unit	6/24/1998	5	\$ 410.52
DDU16 - 010599-010600	DDU010397-398	sand for lines	6/7/1999	50	\$ 750.00
DDU16 - 010601-010603	DDU010399 - 401	rock saw	6/18/1999	20	\$ 2,250.00
DDU16-009128-DDU16-009133	DDU16-009128-DDU16-009133	pipe installation	7/1/1999	50	\$ 3,562.50
DDU16-009136-DDU16-009138	DDU16-009136-DDU16-009138	Road Crossing	2/2/2000	50	\$ 742.50
DDU16 - 010623-010625	DDU010421-423	sewer line	6/2/2000	50	\$ 5,042.00
DDU16 - 010685	DDU010483	TRIPDPU Simplex lift station	6/4/2001	20	\$ 6,440.88
DDU16 - 010669-010671	DDU010467-469	PROGWAT PUMP MOTOER	7/20/2001	20	\$ 566.50
DDU16 - 010681-010683	DDU010479-481-485	USFILGA Blowers,. 5hp Motors	10/29/2001	20	\$ 3,461.56
DDU16 - 010724-010729	DDU010522-527	REXEMIN 120V STARTER, ELEMENTS, CABLETIES	9/9/2002	10	\$ 402.93
DDU16 - 010724-010729	DDU010522-527	REXEMIN TRANSFORMER	9/10/2002	10	\$ 405.02
DDU16 - 010774-010776	DDU010572-574	RONNMAR SEWER TNK RFRBSH-200K TNK	11/24/2003	10	\$ 1,500.00
DDU16 - 010783	DDU010581	KOPFKEV SEWER TANK LID	5/30/2005	10	\$ 931.75
DDU16 - 010796-010798	DDU010594-596	sewer line	10/3/2005	50	\$ 2,572.50
DDU16 - 010806-010809	DDU010604-607	blowers at wwtp	3/14/2006	10	\$ 1,197.81
DDU16 - 010803-010805	DDU010601-603	USABLU Blower for Sewer Plant	5/29/2006	10	\$ 1,717.73
DDU16 - 010813-010815	DDU010611-613	NORMPLU Sewer Line Repair Lot #90	8/1/2006	50	\$ 1,295.00
DDU16 - 010821-010823	DDU010619-621	PROGWAT Rebuilt Tonkalfu Pump	8/24/2006	10	\$ 935.28
DDU16 - 010828-010831	DDU010626-629	MCCLMECH Air Drop Pipes	1/26/2007	20	\$ 1,280.00
DDU16 - 010839	DDU010637	USABLU Core Sample, Pump	2/7/2007	20	\$ 1,959.96
DDU16 - 010835-010838	DDU010633-636	USABLU Portable Sampler	2/8/2007	10	\$ 1,514.52
DDU16 - 010832-010834	DDU010630-632	MCCMECH Installed Walkway and Hand Rails	2/12/2007	20	\$ 3,659.00
DDU16 - 010869-010871	DDU010667-669	WALLELE Electrical Work on Flow Meters	9/5/2007	10	\$ 1,790.43
DDU16 - 010872-010874	DDU010670-672	USABLU Chemical Feed Pump	9/10/2007	20	\$ 394.48
DDU16 - 010875-010877	DDU010673-675	USABLU Pressure Logger, Software, Gauge to Hose A	10/1/2007	10	\$ 659.01
DDU16 - 010890-010892	DDU010688-690	UNITEQU Trencher	12/17/2007	20	\$ 1,368.14

Double Diamond Utilities Co
The Cliffs (Sewer)
New, As needed

	Old Bates Number					
DDU16 - 010893-010895	DDU010691-693	Trencher	12/31/2007	20	\$	1,894.88
DDU16 - 010896	DDU010694	RSCEQUI Backhoe Rental (1/14 - 2/11)	2/4/2008	20	\$	582.17
DDU16-009139-DDU16-009140	DDU16-009139-DDU16-009140	Backhoe Rental	2/25/2008	20	\$	378.48
DDU16 - 010906	DDU010704	Trencher	4/28/2008	20	\$	2,409.66
DDU16 - 010908-010910	DDU010706-708	Bobcat Rental	5/12/2008	20	\$	2,074.52
DDU16-009143-DDU16-009144	DDU16-009143-DDU16-009144	Turban Master MI	5/14/2008	10	\$	427.47
DDU16-009145-DDU16-009146	DDU16-009145-DDU16-009146	Trencher	5/16/2008	20	\$	1,692.07
DDU16-009147-DDU16-009148	DDU16-009147-DDU16-009148	RSCEQUI Backhoe Rental (12/17-1/14)	7/1/2008	20	\$	582.17
DDU16-009149-DDU16-009150	DDU16-009149-DDU16-009150	Bobcat Rental	12/5/2008	20	\$	2,074.52
DDU008656	DDU008656	Lift Station Electrical	4/23/2009	20	\$	2,032.29
DDU008647-48	DDU008647-48	TC EXTENSION RISERS, FIBERGLASS EXTENSION RISERS	12/1/2009	10	\$	1,750.81
DDU16-009141-DDU16-009142	DDU16-009141-DDU16-009142, DDU008652-654	TC REPAIR TO SEWER PLANT BLOWER MOTOR	12/1/2009	10	\$	2,409.64
DDU008649-50	DDU008649-50	TC PANELS	12/1/2009	10	\$	2,635.94
DDU008783-84	DDU008783-84	REPLACING WIRING	1/1/2010	10	\$	10,593.83
DDU008762-64	DDU008762-64	3 PHASE PUMP PANEL-TC	4/1/2010	10	\$	1,666.84
DDU008765-768	DDU008765-768	CONTROL BOX AND INSTALLATION-TC	4/1/2010	10	\$	2,927.15
DDU008769-770	DDU008769-770	GP SPYGLASS FOR POOL #2 TC	4/1/2010	10	\$	4,286.30
DDU008771-72	DDU008771-72	GP FOR LIFT STATION TC	4/1/2010	10	\$	4,369.26
DDU008773-775	DDU008773-775	WORK ON SEWER LIFT STATION-TC	5/1/2010	10	\$	1,284.28
DDU008776-778	DDU008776-778	(2) 30' FLOAT SWITCHES AT LIFT STATION	8/1/2010	10	\$	1,044.94
DDU008785-787	DDU008785-787	ROOTS BLOWER, REPLACEMENT	11/1/2010	10	\$	1,635.37
DDU008779-781	DDU008779-781	GRINDER PUMP-TC	11/1/2010	10	\$	3,052.37
DDU008915-917	DDU008915-917	Check Valves TC	12/1/2011	10	\$	1,243.86
DDU008912-914	DDU008912-914	2" Sewage air Valves TC	12/1/2011	10	\$	2,990.84
DDU008958-961	DDU008958-961	REDUCERS, MOTOR-TC	3/1/2012	10	\$	2,400.00
DDU16-009125-DDU16-009127	DDU16-009125-DDU16-009127	Ginder Pump-Float Marina Lift Station TC	3/1/2012	10	\$	3,383.17
DDU008949-951	DDU008949-951	LIFT STATION MARINA/CLIFFS DRIVE	3/1/2012	10	\$	3,434.40
DDU008952-8956	DDU008952-8956	E-One Pump Package	12/1/2012	7	\$	8,314.13
DDU008987-8990	DDU008987-8990	Secondary clarifier weir	7/1/2014	10	\$	6,285.92
DDU008996-8998	DDU008996-8998	Pump at Sewer Plant	6/26/2015	10	\$	5,317.80
DDU008994-8995	DDU008994-8995	Grundfous 20HP Pump	6/29/2015	10	\$	7,351.60
DDU16 - 010993	Documented	AB1086 TR 2-1 W J Wesley Wastewater Plant	Land	n/a	\$	17,920.00
						\$ 231,767.36

EXHIBIT DDU-5H

WB WW

12/31/2007

Trended Assets		Current Cost	Used and Useful Original Cost	Service Life	Accumulated Depreciation	Accumulated Depreciation	Net Book Value	Current HW Index	Install HW Index	HW Line No.	Tap fees/Invoiced	Trended Cost
1/1/1996	grinder station receiving tank and pump (520 total), \$2,766 each	1 \$ 1,438,320.00	\$1,438,320.00	n 20	\$ 1,438,320.00	\$ 1,438,320.00	\$ -	596	338	17	\$ 737,248.32	\$ 78,443.22
1/1/1996	Tap fees trended (\$2,500*520)	1 \$ 1,300,000.00	\$ 1,300,000.00	n 20	\$ 1,300,000.00	\$ 1,300,000.00	\$ -	596	338	17	\$ 737,248.32	
1/1/1996	Pipe 2" - 192347 feet * 12.38	\$ 2,381,255.86										
1/1/1996	Pipe 4" - 102815ft *13.74	\$ 1,412,678.10										
1/1/1996	Total Pipe Installed	1 \$ 3,793,933.96	\$ 3,793,933.96	n 50	\$ 3,793,933.96	\$ 3,793,933.96	\$ -	379	189	38	\$ 263,556.40	\$ 1,628,405

Pipe Cost Invoiced			
	\$ 1,686.54	\$ 317.34	\$ 3,549.00
\$ 9,090.00	\$ 331.66	\$ 2,183.75	\$ 5,674.50
\$ 10,635.00	\$ 806.40	\$ 2,187.30	\$ 2,418.00
\$ 3,795.00	\$ 175.20	\$ 675.48	\$ 232.50
\$ 5,105.00	\$ 2,705.00	\$ 114.25	\$ 2,409.28
\$ 2,000.00	\$ 1,000.00	\$ 9,620.00	\$ 56.61
\$ 3,280.96	\$ 4,875.00	\$ 2,651.55	\$ 565.00
\$ 4,510.00	\$ 1,949.50	\$ 315.98	\$ 1,930.50
\$ 4,230.00	\$ 375.09	\$ 15,400.00	\$ 1,500.00
\$ 7,551.52	\$ 415.24	\$ 588.45	\$ 4,584.00
\$ 460.36	\$ 145.94	\$ 178.78	\$ 2,919.00
\$ 1,034.21	\$ 1,200.00	\$ 169.82	\$ 255.00
\$ 4,817.34	\$ 727.44	\$ 8,025.66	\$ 8,624.33
\$ 6,939.91	\$ 159.74	\$ 358.58	\$ 24,850.79
\$ 500.00	\$ 730.69	\$ 7,077.10	\$ 1,962.45
\$ 14,210.00	\$ 908.05	\$ 51.95	\$ 1,246.01
\$ 7,475.00	\$ 184.77	\$ 13,117.50	\$ 149.97
\$ 500.00	\$ 545.00	\$ 195.20	\$ 3,823.75
\$ 518.29	\$ 3,690.00	\$ 201.49	
\$ 738.27	\$ 9,801.82	\$ 1,457.50	
\$ 318.26	\$ 621.31	\$ 56.61	
	\$ 2,135.06	\$ 7,293.00	
\$ 636.51	\$ 989.75	\$ 63.64	
			\$ 263,556.40

EXHIBIT DDU-5I

Cliffs WW

12/31/2007

Trended Assets			Current Cost	Used and Useful Original Cost					Current HW Index	Install HW Index	HW Line No.	Tap fee/Invoiced	Trended Cost - Invoiced/Tap Fees
1/1/1985	Davco Plant 25,000 gpd	1	\$ 140,000.00	\$ 140,000.00	n	50			531	327	16		\$ 86,214.69
	Pipe 2" - 34500 feet * 12.38		\$ 427,110.00										
	Pipe 3" - 28963 ft * 12.77		\$ 369,857.51										
	Pipe 4" - 51197 ft *13.74		\$ 703,446.78										
	Pipe 6" - 2142 ft *15.41		\$ 33,008.22										
	Pipe 8" -364 ft *21.83		\$ 7,946.12										
	Pipe 10" -2037 ft *28.53		\$ 58,115.61										
1/1/1996	Total Pipe Installed	1	\$ 1,599,484.24	\$ 1,599,484.24	n	50			379	189	38	\$ 93,908.61	\$ 703,723
1/1/1996	grinder station receiving tank and pump (\$2,766 X 204 total)	1	\$ 564,264.00	\$ 564,264.00	n	20			596	338	17	\$ 289,228.19	\$ 30,773.88
1/1/1996	Tap fees trended (2,500*204)	1	\$ 510,000.00	\$ 510,000.00	n	20			596	338	17	\$ 289,228.19	
1/1/1996	Oak Tree Central Lift Station (2)	1	\$ 9,306.00	\$ 9,306.00	n	20			531	327	16		\$ 5,730.81
1/1/1996	Cliffs Dr Central Lift Station (1)	1	\$ 5,645.00	\$ 5,645.00	n	20			531	327	16		\$ 3,476.30
1/1/1996	Marina Central Lift Station (1 -	1	\$ 5,645.00	\$ 5,645.00	n	20			531	327	16		\$ 3,476.30
1/1/1996	Melbourne Trail Lift Station (1 -	1	\$ 5,645.00	\$ 5,645.00	n	20			531	327	16		\$ 3,476.30
1/1/1996	RV Park & Employee Housing	1	\$ 9,524.00	\$ 9,524.00	n	20			531	327	16		\$ 5,865.06
1/1/1996	Pool # 2 Lift Station (1 - 5hp pu	1	\$ 5,645.00	\$ 5,645.00	n	20			531	327	16		\$ 3,476.30

Pipe Cost Invoiced	
\$	9,697.50
\$	9,697.50
\$	1,557.50
\$	4,147.87
\$	6,496.88
\$	16,873.00
\$	191.79
\$	4,265.00
\$	12,142.50
\$	4,170.00
\$	200.00
\$	1,040.00
\$	520.00
\$	750.00
\$	3,562.50
\$	5,042.00
\$	2,572.50

\$	1,368.14
\$	1,894.88
\$	582.17
\$	582.17
\$	378.48
\$	2,409.66
\$	2,074.52
\$	1,692.07
\$	93,908.61

SOAH DOCKET NO. 473-17-0019.WS
PUC DOCKET NO. 46245

RECEIVED
2017 AUG -4 PM 2:40
UTILITY COMPANY
CLERK

APPLICATION OF DOUBLE	§	BEFORE THE STATE OFFICE
DIAMOND UTILITY COMPANY, INC.	§	
FOR WATER AND SEWER	§	OF
RATE/TARIFF CHANGE	§	
	§	ADMINISTRATIVE HEARINGS

DIRECT TESTIMONY

OF

JAY JOYCE

ON BEHALF OF

DOUBLE DIAMOND UTILITY COMPANY, INC.

AUGUST 2017

EXHIBIT DDU-6

TESTIMONY INDEX

<u>SUBJECT</u>	<u>PAGE</u>
I. POSITION AND QUALIFICATIONS	1
II. PURPOSE OF TESTIMONY	3
III. SUMMARY OF REQUIRED REVENUE REQUIREMENT VERSUS THE REQUESTED REVENUE REQUIREMENT	5
IV. APPLICATION PROCESS	6
V. RATE BASE / INVESTED CAPITAL	8
VI. RATE OF RETURN	12
VII. INCOME TAXES	15
VIII. OPERATIONS AND MAINTENANCE EXPENSES.....	15
IX. TAXES OTHER THAN INCOME.....	18
X. OTHER REVENUES	18
XI. RATES	19
XII. RATE CASE EXPENSES	24
XIII. CONCLUSION.....	24

EXHIBITS

Exhibit DDU-6A	Jay Joyce Resume
Exhibit DDU-6B	Participation by Jay Joyce in Utility Proceedings
Exhibit DDU-6C	White Bluff Asset Listing Applying 80% Theoretical Developer Contribution to Certain Assets
Exhibit DDU-6D	The Cliffs Asset Listing Applying 80% Theoretical Developer Contribution to Certain Assets
Exhibit DDU-6E	Account Assignment to PUCT Categories
Exhibit DDU-6F	Type of Account Assignment
Exhibit DDU-6G	Estimated Rate Case Expense

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22

I. POSITION AND QUALIFICATIONS

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Jay Joyce. My business address is Expergy®, 3838 Oak Lawn Avenue, Suite 1000, Dallas, Texas, 75219.

Q. WHAT SERVICES DOES EXPERGY OFFER?

A. Founded in 2008, Expergy provides expert consulting services to the energy and utility industries. These services include utility rate design, cost allocation, cash working capital studies, depreciation and valuation studies, rate case assistance, expert testimony, and other related consulting services.

Q. WHAT IS YOUR POSITION WITH EXPERGY?

A. I am president of the firm. My client responsibilities include preparing and presenting analyses relating to pricing and rate design matters, cost of service and revenue requirement issues, cash working capital studies, customer and weather normalization, and other gas, electric, water, and sewer related matters.

Q. BRIEFLY DESCRIBE YOUR QUALIFICATIONS.

A. I graduated from the University of Texas in 1986 with a Bachelor of Business Administration degree in Finance. In 1989, I earned a Master of Business Administration degree from Southern Methodist University. While at Southern Methodist University, I was employed by Reed-Stowe & Co. as a Senior Consultant. My responsibilities at

1 Reed-Stowe included developing and presenting analyses and testimony concerning
2 revenue requirements, cost allocation, and rate design for water, sewer, gas, electric, and
3 cable utilities.

4 In 1995, I joined the Management Consulting division of the Dallas office of
5 Deloitte & Touche LLP (now Deloitte Consulting) as a Manager. In 1997 I was
6 promoted to Senior Manager. My responsibilities included project management for a
7 wide range of utility-related projects including merger and acquisition analyses, merger
8 synergy analyses, cost of service studies, management audits, cash working capital
9 studies, and preparation of expert testimony before various commissions, courts, and
10 other governmental authorities.

11 In January 2003, I resigned from Deloitte to join Management Applications
12 Consulting (“MAC”), a small Pennsylvania professional services firm specializing in
13 utility rate matters. In 2004, four professionals, including several MAC partners and
14 myself, formed Alliance Consulting Group, a professional services firm headquartered in
15 Dallas and focused on the utility industry. In December 2008, I sold my interest in the
16 Alliance partnership, and I launched my own consulting firm, Expergy. Exhibit DDU-6A
17 is my resume which provides additional detail.

18

19 **Q. HAVE YOU PREVIOUSLY TESTIFIED AS AN EXPERT WITNESS?**

20 A. Yes. I have previously testified before, or submitted written testimony to, the Public
21 Utility Commission of Texas (“PUC” or “Commission”), the Public Utilities
22 Commission of Ohio, the Arkansas Public Service Commission, the Railroad

1 Commission of Texas, the Public Service Commission of West Virginia, the Texas
2 Commission on Environmental Quality, the Virginia State Corporation Commission, the
3 U.S. District Court for the Northern District of California, and the Superior Court of
4 Fulton County, Georgia. Exhibit DDU-6B provides a listing of utility proceedings in
5 which I have appeared as an expert witness, participated as an expert, or made formal
6 presentations in utility matters.

7
8 **Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?**

9 A. I am testifying on behalf of Double Diamond Utility Company (“DDU” or “Company”).

10

11 **II. PURPOSE OF TESTIMONY**

12 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

13 A. I was retained by DDU to assist in preparing applications for changes in the water
14 and sewer rates of White Bluff (“WB”) and The Cliffs (“TC”), including completing
15 the schedules contained in the PUCT’s Class B Rate/Tariff Change Application (“Rate
16 Filing Package”). The purpose of my testimony is to describe my analyses and the
17 supporting data for the water and sewer rates requested in this case.

18

19 **Q. WHAT IS THE BASIS FOR SETTING UTILITY RATES?**

20 A. Utility rates are based the costs of providing service, including a fair return on invested
21 capital. Representative levels of the various components comprising a utility’s cost of
22 providing service—operation and maintenance expenses (“O&M”), administrative and

1 general expenses (“A&G”), taxes other than income (e.g., payroll and property taxes),
2 depreciation expense, return on invested capital (calculated as a percentage rate of
3 return applied to rate base), and income taxes—are determined and then summed to
4 calculate revenue requirements. These revenue requirements are then divided by
5 representative billing determinants to calculate unit rates that are included in a utility’s
6 tariff.

7

8 **Q. HOW ARE REPRESENTATIVE LEVELS OF THE COMPONENTS OF A**
9 **UTILITY’S COST OF PROVIDING SERVICE USUALLY MEASURED?**

10 A. In most jurisdictions, including Texas, the determination of a utility’s revenue
11 requirements begins with a historical period, which serves as a “test year”. Actual
12 financial and customer billing data from a utility’s books and records during the test year
13 provide the foundation for the rates.

14

15 **Q. HAVE YOU DEVELOPED THE REQUESTED RATES FOR THE WHITE**
16 **BLUFF AND THE CLIFFS SYSTEMS IN THIS MANNER?**

17 A. Yes. The requested water and sewer rates are based on operating expenses, invested
18 capital, capital costs, and billing determinants recorded on The Cliffs’ and White Bluff’s
19 books and records for calendar year 2015.

20

21 **Q. HAVE YOU PREPARED ANY EXHIBITS IN SUPPORT OF YOUR**
22 **TESTIMONY?**

1 A. Yes. The Rate Filing Packages for The Cliffs (Exhibit DDU-1) and White Bluff (DDU-
2 2) were prepared by me or under my direct supervision and control. Exhibits DDU-6A,
3 DDU-6B, DDU-6C, DDU-6D, DDU-6E, DDU-6F and DDU-6G are attached to this
4 testimony and were also prepared by me or under my direct supervision and control.

5

6 **Q. DO YOU SPONSOR OR CO-SPONSOR ANY SCHEDULES IN THE**
7 **COMPANY'S APPLICATION?**

8 A. Yes, I do. I sponsor all of the schedules in the Company's Rate Filing Package (Exhibits
9 DDU-1 and DDU-2) as well as the work papers and other supporting documentation used
10 to prepare those schedules.

11

12 **III. SUMMARY OF REQUIRED REVENUE REQUIREMENT VERSUS THE**
13 **REQUESTED REVENUE REQUIREMENT**

14

15 **Q. WHAT IS THE APPROPRIATE REVENUE REQUIREMENTS FOR DDU?**

16 A. The required revenue requirements and resulting revenue increases are shown below:

TABLE 1 - SUMMARY OF REQUIRED REVENUE REQUIREMENT				
	WB Water	WB Sewer	TC Water	TC Sewer
Required Revenues	\$ 704,733	\$597,999	\$ 453,576	\$ 327,424
Revenues Under Present Rates	\$ 481,754	\$417,117	\$ 371,260	\$217,528
Increase Required	\$ 222,979	\$180,882	\$ 82,317	\$109,895
Percentage Increase	46%	43%	22%	51%

17

18

19 **Q. ARE THESE THE REVENUE REQUIREMENTS THAT DDU IS REQUESTING**
20 **IN THIS DOCKET?**

1 A. No.

2

3 **Q. CAN YOU PLEASE SUMMARIZE THE REVENUE REQUIREMENT DDU IS**
4 **REQUESTING BE APPROVED BY THE COMMISSION.**

5 A. Table 2 below presents the summary of requested revenue requirements.

TABLE 2 - SUMMARY OF REQUESTED REVENUE REQUIREMENT				
	WB Water	WB Sewer	TC Water	TC Sewer
Requested Revenues	\$573,531	\$576,642	\$ 424,391	\$316,104
Revenues Under Present Rates	\$481,754	\$417,117	\$ 371,260	\$217,528
Increase Requested	\$ 91,777	\$159,525	\$ 53,131	\$ 98,576
Percentage Increase Requested	19%	38%	14%	45%

6

7

8 **Q. WHY ARE THE REQUESTED REVENUE REQUIREMENTS LOWER THAN**
9 **THE ALLOWABLE REVENUE REQUIREMENTS?**

10 A. DDU management has elected to treat certain assets as though they were contributed by
11 “a developer” and not by DDU. Although I disagree with this approach to ratemaking
12 since the requested revenues will not recover the cost to provide service, I have
13 nonetheless adjusted the rate base to reflect the asset reduction elected by DDU
14 management.

15

16 **Q. WHAT IS THE EFFECT OF DDU MANAGEMENT’S EXCLUSION OF THIS**
17 **PORTION OF USED-AND USEFUL ASSETS?**

18 A. The effect of this adjustment is shown below in Table 3.

TABLE 3 - EFFECT OF ASSET EXCLUSION ON REVENUE REQUIREMENT INCREASES				
	WB Water	WB Sewer	TC Water	TC Sewer
Required Increase	\$ 222,979	\$ 180,882	\$ 82,317	\$ 109,895
Requested Increase	\$ 91,777	\$ 159,525	\$ 53,131	\$ 98,576
Reduction in Requirement	\$ (131,202)	\$ (21,357)	\$ (29,186)	\$ (11,319)
Percentage Reduction	-59%	-12%	-35%	-10%

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20

IV. APPLICATION PROCESS

Q. HOW DID YOU GO ABOUT OBTAINING THE DATA USED AS THE BASIS FOR THIS RATE APPLICATION?

A. I requested that The Cliffs and White Bluff provide me with their calendar year 2015 statements of income, detailed trial balances, payroll records, audited financial statements, and other financial data. These documents reflect the revenues and expenses of The Cliffs and White Bluff systems for the test year. I also obtained monthly billing records for each utility to determine billing units with which to develop rates. Dr. Victoria Harkins, witness for DDU, provided me the results of her asset study which identified all utility assets used-and-useful to White Bluff’s and The Cliffs’ ratepayers.

Q. WHAT WAS YOUR NEXT STEP?

A. Having obtained test year financial and billing information from the books and records of The Cliffs and White Bluff, I next obtained the Instructions for the Rate/Tariff Change Application for Class B Investor-owned Utilities – Water and/or Water and sewer (“Instructions”) and the Rate Filing Package from the Commission’s website.

1 **Q. HOW DOES DDU KEEP TRACK OF THE COSTS INCURRED TO OPERATE**
2 **AND MANAGE THE CLIFFS AND WHITE BLUFF SYSTEMS?**

3 A. Almost all of the costs relating exclusively to The Cliffs or White Bluff are directly
4 assigned to the applicable entity. A few common costs are pooled and allocated among
5 entities, including The Cliffs and White Bluff, through a central cost allocation. A
6 detailed description of the process by which common costs are assigned to White Bluffs
7 and The Cliffs is discussed in DDU witness Tim Grout's testimony.

8

9

V. RATE BASE

10 **Q. WHAT IS RATE BASE?**

11 A. Rate base is also referred to as invested capital and is the amount of investment on which
12 a utility is allowed the opportunity to earn a fair rate of return. The rate of return is
13 applied to the rate base. Rate base normally consists of the net investment in assets used
14 to provide service, less adjustments for non-investor supplied capital. The largest
15 component of rate base is net plant in service, which is the original cost of property,
16 plant, and equipment at the time it was dedicated to public use less accumulated
17 depreciation. Also included in rate base is a cash working capital allowance, with any
18 non-investor supplied capital serving to reduce rate base. Components included in the
19 Commission's rules for determining the rate base are as follows (condensed from TAC 16
20 § 24.31(c)(2)):

21 (A) Original cost, less accumulated depreciation, of utility plant, property,
22 and equipment used by and useful to the utility in providing service. For any utility plant
23 which has no historical records for verification purposes, the original cost of plant and
24 equipment allowed in the cost of service is usually estimated by trending studies or

1 other means. Original cost is the actual money cost, or the actual money value of any
2 consideration paid other than money, of the property at the time it was dedicated to
3 public use, whether by the utility that is the present owner or by a predecessor. Assets
4 may be booked in itemized or group accounting. Accumulated depreciation is the
5 accumulation of recognized allocations of original cost, representing recovery of
6 initial investment, over the estimated useful life or remaining life of the asset.
7 Utility property funded by explicit customer agreements or customer
8 contributions in aid of construction such as surcharges may not be included in original
9 cost or invested capital; and

10 (B) A working capital allowance to be composed of, but not limited to the
11 following:

12 (iii) a reasonable allowance for cash working capital. The following shall
13 apply in determining the amount to be included in invested capital for cash
14 working capital:

15 (I) Cash working capital for water and sewer utilities shall in no
16 event be greater than one-eighth of total annual operations and
17 maintenance expense, excluding amounts charged to operations and
18 maintenance expense for materials, supplies, fuel, and prepayments.

19 (II) For Class C utilities, one-eighth of operations and maintenance
20 expense excluding amounts charged to operations and maintenance
21 expense for materials, supplies, expenses recovered through a pass
22 through provision or through charges other than base rate and gallonage
23 charges, prepayments will be considered a reasonable allowance for
24 cash working capital.

25 (III) For Class B utilities, one-twelfth of operations and maintenance
26 expense excluding amounts charged to operations and maintenance
27 expense for materials, supplies, expenses recovered through a pass
28 through provision or charges other than base rate and gallonage
29 charges, and prepayments will be considered a reasonable allowance for
30 cash working capital.

31 Unless otherwise determined by the commission, for good cause shown, the following
32 items will be deducted from the overall rate base in the consideration of applications filed
33 pursuant to TWC §13.187 or §13.1871:

34 (D) Contributions in aid of construction; and

35 (E) Other sources of cost-free capital, as determined by the Commission.

1

2 **Q. WHAT WORKING CAPITAL ITEMS ARE INCLUDED IN THE RATE BASE**
3 **OF THE CLIFFS AND WHITE BLUFF SYSTEMS?**

4 A. A cash working capital allowance, which accounts for the working capital required
5 because of the delay between the receipt of revenues and when expenses are paid. Since
6 The Cliffs is a Class C utility, cash working capital is one-eighth of adjusted O&M and
7 A&G expenses from Schedule I-1. White Bluff is a Class B utility; therefore, its cash
8 working capital is one-twelfth of its adjusted O&M and A&G expenses from Schedule I-
9 1.

10

11 **Q. WHAT IS THE APPROPRIATE LEVEL OF INVESTED CAPITAL PRESENTED**
12 **IN THE APPLICATIONS?**

13 A. The appropriate level of investor-supplied capital is summarized in Table 4 below:

TABLE 4 - SUMMARY OF REQUIRED RATE BASE				
	WB Water	WB Sewer	TC Water	TC Sewer
Net Book Value of Assets	\$ 2,188,228	\$ 1,642,255	\$ 785,987	\$ 574,728
Working Capital Allowance	\$ 24,568	\$ 23,152	\$ 35,769	\$ 28,823
Less: Developer Contributions	\$ -	\$ -	\$ -	\$ -
Total Required Rate Base	\$ 2,212,796	\$ 1,665,406	\$ 821,756	\$ 603,550

14

15

16 **Q. IS THIS THE LEVEL OF RATE BASE REQUESTED IN THE APPLICATION?**

17 A. No. Although under generally accepted ratemaking principles and the rules and
18 precedents of this Commission, the Company could request this full amount of used-and-
19 useful rate in the applications, the Company chose to exclude 80% of the cost of some the

1 utility assets. To determine the recommended level of these contributions by the parent
 2 company, DDU witness Mr. Randy Gracy identified those assets subject to the 80% rate
 3 base from the asset listing produced by Dr. Harkins. These listings are presented as
 4 Exhibits DDU-6C and DDU-6D for White Bluff and The Cliffs, respectively.

5

6 **Q. WHAT IS THE LEVEL OF RATE BASE REQUESTED IN THE**
 7 **APPLICATIONS?**

8 A. The requested rate base amounts are shown on Table 5 below:

TABLE 5 - SUMMARY OF REQUESTED RATE BASE				
	WB Water	WB Sewer	TC Water	TC Sewer
Net Book Value of Assets	\$ 2,188,228	\$ 1,642,255	\$ 785,987	\$ 574,728
Working Capital Allowance	\$ 24,568	\$ 23,152	\$ 35,769	\$ 28,823
Less: Developer Contributions	\$(1,186,227)	\$ (137,457)	\$ (248,421)	\$ (71,898)
Total Required Rate Base	\$ 1,026,569	\$ 1,527,949	\$ 573,335	\$ 531,652

9
10

11 **Q. DID DR. HARKINS ALSO DEVELOP THE RECOMMENDED DEPRECIATION**
 12 **RATES?**

13 A. Yes. I applied her depreciation rates to the original cost assets, resulting in the
 14 depreciation expenses shown on Table 6 below:

TABLE 6 - SUMMARY OF DEPRECIATION EXPENSE				
	WB Water	WB Sewer	TC Water	TC Sewer
Annual Depreciation Expense	\$ 110,077	\$ 84,700	\$ 78,443	\$ 29,263

15
16

1 **VI. RATE OF RETURN**

2 **Q. WHAT IS THE PURPOSE OF A RETURN ON INVESTMENT IN SETTING A**
3 **UTILITY’S RATES?**

4 A. Return on investment compensates investors for the use of their capital to finance the
5 plant and equipment necessary in providing service. Capital, like any other resource, has
6 a cost associated with its usage. By identifying this cost and including a corresponding
7 return component in revenue requirements, customers pay a fair cost on the capital
8 employed in serving them and investors are fairly compensated for the use of their
9 money.

10
11 **Q. WHAT RATE OF RETURN IS DDU REQUESTING IN THIS APPLICATION?**

12 A. As illustrated on Schedule III-1 of the applications, DDU is requesting a rate of return of
13 8.42%. This rate of return is based on Double Diamond Delaware’s (“DDD”) capital
14 structure of 55.84% debt and 44.16% equity, with a return on equity (“ROE”) of 11.49%
15 and a cost of debt of 6.00%.

16
17 **A. Capital Structure**

18 **Q. CAN YOU EXPLAIN WHY DDU IS REQUESTING TO USE ITS PARENT**
19 **COMPANY CAPITAL STRUCTURE IN CALCULATING RATE OF RETURN?**

20 A. DDU is a wholly-owned subsidiary of DDD and currently does not obtain capital from
21 the financial markets. DDU depends completely on its parent company for its capital

1 financing needs. As such, DDU is requesting to utilize the capital structure of its parent
2 company in this proceeding.

3

4 **Q. HOW DID YOU DEVELOP THE CAPITAL STRUCTURE USED IN THE**
5 **APPLICATIONS?**

6 A. I utilized DDD's capital structure from its 2015 audited financial statements. DDD's
7 capital structure at December 31, 2015 is summarized below in Table 7 and excludes
8 short-term debt consistent with the Commission's Instructions for Rate/Tariff Change
9 Applications:

TABLE 7 - DOUBLE DIAMOND DELAWARE'S CAPITAL STRUCTURE			
Debt Component			
Notes Payable	\$	166,925,768	
Less: NP due in 2016		<u>(22,059,065)</u>	
Debt Subtotal	\$	144,866,703	55.84%
Equity Component			
Total Shareholders' Equity	\$	<u>114,587,336</u>	
Equity Subtotal	\$	114,587,336	44.16%
Total Capitalization	\$	<u>259,454,039</u>	100.00%

10
11

12 **Q. IS THERE INDUSTRY PRECEDENT ON THE USE OF THE PARENT**
13 **COMPANY CAPITAL STRUCTURE IN DETERMINING RATE OF RETURN?**

14 A. Yes. The American Water Works Association M1 Manual, at Page 48, states, "If the
15 water utility is a subsidiary of another company (holding company), the parent

1 company's capital structure may be deemed to provide the appropriate weighting of the
2 costs of capital.”¹

3

4 **B. Cost of Debt**

5 **Q. YOU PREVIOUSLY TESTIFIED THAT 6.00% WAS USED AS THE COST OF**
6 **DEBT IN THE APPLICATION. HOW WAS THIS AMOUNT DETERMINED?**

7 A. The 6.00% cost of debt contained within the applications is based on the portion of
8 DDD's debt that is collateralized with utility assets based on a 2013 loan from First
9 Financial Bank.

10

11 **C. Cost of Equity**

12 **Q. YOU PREVIOUSLY TESTIFIED THAT 11.49% WAS USED AS THE COST OF**
13 **EQUITY IN PREPARING THE APPLICATION. HOW WAS THIS**
14 **DEVELOPED?**

15 A. The 11.49% cost of equity was calculated by adding the BAA Bond Yield Average of
16 5.49% and the risk premium of 6.00%. The BAA Bond Yield Average was provided by
17 the Commission at January 2016. The risk premium is based on the instructions in the
18 Commission's Instructions for Rate/Tariff Change Applications. The instructions also
19 state that this method of determining the ROE will be presumed reasonable if no other
20 party provides opposing testimony. Given the cost associated with developing and

¹ American Water Works Association, *Manual of Water Supply Practices, Principles of Water Rates, Fees, and Charges*,
“*AWWA M1*”, Sixth Edition, p.48

1 defending cost of equity testimony and the small number of customers over which to
2 spread that cost, it would be illogical and wasteful for any of the other parties to force
3 DDU to develop ROE testimony by contesting the requested ROE when the requested
4 ROE is exactly calculated on the instructions proscribed by this Commission.

5
6 **VII. INCOME TAXES**

7 **Q. WHAT INCOME TAXES ARE ASSOCIATED WITH THIS RETURN ON**
8 **INVESTMENT?**

9 A. The federal income tax (“FIT”) calculation begins on line 1 of Schedule V with the return
10 on investment. Synchronized interest expense is deducted on line 2 and represents the
11 product of rate base multiplied by the cost of debt. This results in the after-tax return on
12 equity. This after-tax return was then multiplied by a gross-up factor to develop the pre-
13 tax return. This produces an income tax expense associated with the return on
14 investment included in revenue requirements for The Cliffs and White Bluff systems
15 as shown on Schedule V of the RFP.

16
17 **VIII. OPERATIONS AND MAINTENANCE EXPENSES**

18 **Q. HOW WAS THE REQUESTED LEVEL OF O&M EXPENSE DETERMINED**
19 **FOR THE APPLICATION?**

20 A. The requested level of O&M expense included in the applications is from the DDU
21 statements of operations and detailed trial balance for the test year. The 2015 statements
22 of operations for The Cliffs and White Bluff are shown on Exhibits DDU-4B and DDU-

1 4C, respectively. The first step in determining the requested level of O&M expenses was
2 to assign each DDU account to a classification used by the PUCT in the rate application.
3 Exhibit DDU-6E shows the assignment of each account maintained by DDU during the
4 test year to the appropriate PUCT category of expense. The next step was to directly
5 assign or allocate expenses to either the water or the sewer service function of DDU.
6

7 **Q. PLEASE DISCUSS HOW EXPENSES WERE ASSIGNED OR ALLOCATED TO**
8 **THE WATER AND SEWER SERVICE FUNCTIONS AS PART OF THE**
9 **APPLICATION.**

10 A. To allocate the O&M expenses to the water and sewer systems, I obtained DDU's
11 detailed trial balance which lists each expense (see Exhibits DDU-4D and DDU-4E).
12 Using this information, I directly assigned expenses to the water or sewer service
13 functions where sufficient detail existed. The type of assignment for each account is
14 shown in Exhibit DDU-6F. For accounts where the detail was insufficient to assign costs
15 between water and sewer, I developed and applied allocation factors based on the number
16 of water and sewer customers.
17

18 **Q. CAN YOU PLEASE SUMMARIZE THE TOTAL LEVEL OF O&M EXPENSES**
19 **INCLUDED IN DDU'S REVENUE REQUIREMENT?**

20 A. The O&M summary is in Table 16 below. Additional breakdowns of the amounts in
21 each account for each system are in the trial balances contained in my workpapers.
22

TABLE 8 - SUMMARY OF O&M AND A&G EXPENSES				
	WB Water	WB Sewer	TC Water	TC Sewer
O&M Expenses				
Power Expense	\$ 12,020	\$ 85,323	\$ 18,275	\$ 3,292
Employee Labor	91,440	171,960	86,950	86,950
Materials	2,581	5,494	1,636	1,363
Contract Work	2,922	6,220	12,110	10,084
Transportation Expense	11,795	25,108	15,924	13,261
Other Plant Maintenance	100,955	142,010	65,828	57,231
Miscellaneous O&M	2,409	10,698	21,107	373
Subtotal O&M	\$ 224,122	\$ 446,813	\$ 221,830	\$ 172,554
A&G Expenses				
Office Supplies & Expenses	\$ 7,722	\$ 16,438	\$ 6,088	\$ 5,069
Professional Services	3,937	3,937	21,231	3,028
Insurance	8,566	18,234	11,243	9,363
Regulatory expense (other)	7,049	31,525	3,326	21,886
Miscellaneous A&G	26,424	55,685	22,432	18,681
Subtotal A&G	\$ 53,698	\$ 125,819	\$ 64,320	\$ 58,027
Total Operating Expenses	\$ 277,819	\$ 572,632	\$ 286,150	\$ 230,581

1
2

3 **Q. ARE ANY OF THE ABOVE O&M OR A&G EXPENSES RELATED TO**
4 **AFFILIATES?**

5 A. Yes. Some of the O&M and A&G expenses recorded on the books of The Cliffs and
6 White Bluff are directly or indirectly charged to them from affiliated, shared services
7 entities. DDU witness Tim Grout addresses these charges in his testimony.

8

9 **Q. DO THE O&M AND A&G EXPENSES SHOWN ON TABLE 8 INCLUDE ANY**
10 **IMPERMISSIBLE EXPENSES?**

11 A. No. I inquired as to whether any impermissible expenditures per 16 TAC Section
12 24.31(b)(2), such as legislative advocacy, political contributions, or funds supporting

1 social, recreational, fraternal, or religious clubs or organizations, are included in test year
2 O&M or A&G expenses. I was advised that there are none, and my review of the DDU
3 records did not reveal any such expenses.

4

5

IX. TAXES OTHER THAN INCOME

6 **Q. WHAT TAXES OTHER THAN INCOME DID THE CLIFFS AND WHITE**
7 **BLUFF INCUR DURING THE TEST YEAR?**

8 A. As shown in the “Per Books” accounts of Schedule IV(a), the only taxes other than
9 income recorded for the Cliffs and White Bluff systems in 2015 were for property taxes,
10 payroll taxes, and TCEQ permit fees.

11

12 **Q. WERE ANY ADJUSTMENTS MADE TO TEST YEAR TAXES OTHER THAN**
13 **INCOME?**

14 A. Yes. Property taxes were adjusted to reflect plant additions and retirements that
15 occurred after the tax appraisal date. Payroll taxes were synchronized to the test year
16 adjusted payroll after known and measurable changes.

17

18

X. OTHER REVENUES

19 **Q. PLEASE DESCRIBE THE MISCELLANEOUS REVENUES INCLUDED**
20 **WITHIN THE APPLICATIONS.**

21 A. As detailed in RFP Schedule II-3, miscellaneous revenues included in the applications
22 consist of tap fees (net of expenses), late fees, reconnect fees, and other revenues.

1

2

XI. RATES

3

Q. WHAT ARE THE TOTAL REQUESTED REVENUE REQUIREMENTS FOR THE CLIFFS AND WHITE BLUFF SYSTEMS?

4

5

A. As summarized on RFP Schedule I-1, summing the adjusted O&M and A&G expenses, taxes other than income, depreciation expenses, return on investment, and federal income taxes developed above produces revenue requirements for water and sewer services on The Cliffs and White Bluff systems.

6

7

8

9

10

Q. ARE THESE THE REVENUE REQUIREMENTS USED TO CALCULATE RATES?

11

12

A. No. A portion of the total revenue requirements of the Cliffs and White Bluff systems will be collected through various miscellaneous revenues as described previously and to which no changes are being proposed. As shown in RFP Schedule I-1, these miscellaneous revenues are subtracted from total revenue requirements to result in the net revenues to be recovered through water and sewer service rates.

13

14

15

16

17

18

Water

19

Q. HOW DID YOU DETERMINE THE NUMBER OF CUSTOMERS USED FOR WATER RATE DESIGN?

20

1 A. The number of customers utilized for rate design is equivalent to the customers indicated
 2 in the billing records of DDU as of December 2015 (Exhibit DDU-4H). Table 9 below
 3 provides a summary of the number of water customers, by meter size.
 4

TABLE 9 - SUMMARY OF WATER CUSTOMERS		
Meter Size	WB Water	TC Water
5/8" or 3/4"	606	258
1"	18	13
1 1/2"	6	1
2"	10	15
Total	640	287

5
 6 **Q. HOW DID YOU DETERMINE THE WATER CONSUMPTION VOLUMES**
 7 **UTILIZED IN THE APPLICATIONS FOR RATE DESIGN?**

8 A. Billed consumption for the test year provided the foundation for the development of the
 9 proposed water volume charges. As required by Schedule VI-1, line 17, column C of the
 10 Commission's application, I utilized actual test year billed volumes for water rate design.
 11 The Company's billing data (Exhibit DDU-4H) provided sufficient information to
 12 separate usage into usage blocks. Table 10 summarizes the required billing determinants
 13 used for rate design purposes.

TABLE 10 - SUMMARY OF REQUIRED WATER BILLING DETERMINATES (GALLONS)		
Rate Block	WB Water	TC Water
0 - 3,000	15,658	5,260
3,001 - 10,000	15,417	6,142
10,001 - 15,000	6,370	2,655
15,001 - 20,000	4,489	1,958
20,001 +	14,834	8,708
Total	56,769	24,724

14

1

2 **Q. IS DDU REQUESTING ANY CHANGES TO ITS CURRENT WATER RATE**
3 **DESIGN?**

4 A. No. DDU is requesting to keep its two-part rate design consisting of (1) a meter charge,
5 which escalates based on the size of the meter, and (2) a five-block inclining volumetric
6 charge. The volumetric rate blocks are as follows:

- 7 • 0 – 3,000 gallons
- 8 • 3,001 – 10,000 gallons
- 9 • 10,001 – 15,000 gallons
- 10 • 15,001 – 20,000 gallons
- 11 • 20,001 + gallons

12

13 **Q. PLEASE SUMMARIZE THE WATER RATES REQUESTED IN THIS**
14 **PROCEEDING.**

15 A. The requested water rates are shown in Table 11 below:

TABLE 11 - REQUESTED WATER RATES			
	WB Water		TC Water
<u>Monthly Meter Charge (size)</u>			
5/8" or 3/4"	\$	39.00	\$ 40.00
1"		97.50	110.00
1 1/2"		195.00	230.00
2"		312.00	395.00
<u>Volume Charge (per 1000 gals)</u>			
0 - 3,000	\$	2.10	\$ 3.50
3,001 - 10,000		2.95	4.00
10,001 - 15,000		3.90	6.50
15,001 - 20,000		5.25	10.50
20,001 +		5.76	14.45

1
2
3
4
5
6
7
8
9

Sewer

Q. HOW DID YOU DETERMINE THE NUMBER OF CUSTOMERS USED FOR SEWER RATE DESIGN?

A. The number of customers utilized for rate design is equivalent to the customers indicated in the billing records of DDU as of December 2015 (Exhibit DDU-4H). Table 12 below provides a summary of the number of sewer customers, by water meter size.

TABLE 12 - SUMMARY OF SEWER CUSTOMERS		
Meter Size	WB Sewer	TC Sewer
5/8" or 3/4"	540	220
1"	11	4
1 1/2"	5	1
2"	11	14
Total	567	239

10

1
2
3
4
5
6
7
8
9
10
11
12
13

Q. HOW DID YOU DETERMINE THE SEWER BILLING VOLUMES UTILIZED IN THE APPLICATIONS FOR RATE DESIGN?

A. As required in the Commission’s application on Schedule VI-1, line 17, column C, I utilized actual test year billed volumes for sewer rate design. Billed sewer volumes are based on the winter water consumption of each customer. The winter average consumption is determined by averaging each customer’s actual metered water usage during the months of December, January, and February. This winter average is recalculated each spring based on the customer’s actual metered water use for the most recent winter months. Consistent with the current billing structure, the requested sewer rates include 3,000 of flow within the base sewer bill to minimize the impact of the rate increase on low-income users. The sewer billing determinants were developed from the Company’s test year billing records (Exhibit DDU-4H) and are shown below in Table 13:

TABLE 13 - SUMMARY OF REQUIRED SEWER BILLING DETERMINATES (GALLONS)		
Rate Block	WB Sewer	TC Sewer
0 - 3,000	10,106	4,527
3,001 +	9,717	5,045
Total	19,823	9,571

14

Q. IS DDU REQUESTING AND MODIFICATION TO ITS CURRENT SEWER RATE DESIGN?

A. No. DDU’s requested rates maintain the current two-part sewer rate design consisting of (1) a base charge, which escalates based on the size of the customer’s water meter, and (2) a volumetric charge applied to the winter average water consumption of each

1 customer, with the winter average being based on water consumption during the winter
 2 months of December, January, and February. DDU's proposed sewer rates keep the
 3 3,000-gallon monthly amount that is currently included in the wastewater base charge.

4

5 **Q. PLEASE SUMMARIZE THE SEWER RATES REQUESTED IN THIS**
 6 **PROCEEDING.**

7 A. The requested sewer rates are shown in Table 14 below:

TABLE 14 - REQUESTED SEWER RATES			
	WB Sewer		TC Sewer
Monthly Meter Charge (size)			
5/8" or 3/4"	\$	56.65	\$ 72.00
1"	\$	144.00	\$ 126.00
1 1/2"	\$	295.00	\$ 216.00
2"	\$	465.00	\$ 324.00
3"			\$ 575.00
Volume Charge (per 1000 gals)			
0 - 3,000	\$	-	\$ -
3,001 - 10,000		11.00	12.00

8

9

XII. RATE CASE EXPENSES

10 **Q. HAS DDU INCLUDED ANY RATE CASE EXPENSES IN THIS FILING?**

11 A. Yes. DDU has provided an estimate of incremental rate case expenses in Exhibit DDU-
 12 6G for this proceeding. DDU is proposing, consistent with past Commission practice,
 13 that a separate proceeding be initiated after the completion of this rate case, in which the
 14 reasonableness of and recovery mechanism for DDU's incremental rate case expenses for
 15 this case be reviewed.

16

1 **Q. WHAT PROCESS DOES DDU PROPOSE FOR REVIEW AND RECOVERY OF**
2 **RATE CASE EXPENSES ASSOCIATED WITH THIS PROCEEDING?**

3 A. DDU proposes that the review of the reasonableness of the rate case expenses incurred in
4 connection with this proceeding and the determination of the mechanism for their
5 recovery be severed to a separate proceeding to be convened at the conclusion of this
6 case. Rate case expenses incurred in this proceeding by the Company should be updated
7 at that time to allow review of actual rate case expenses already incurred. This approach
8 is consistent with procedures followed in recent rate cases.

9

10 **Q. HAS DDU PREPARED AN ESTIMATE OF THE COST OF PREPARING AND**
11 **LITIGATING THIS RATE CASE FILING?**

12 A. Yes. I estimate that the cost for processing this case is approximately \$285,000. Exhibit
13 DDU-6G is a schedule detailing the estimated expenses for preparing and litigating this
14 proceeding. Only costs of outside consultants, legal counsel and incremental expenses
15 such as travel are included in the estimate. No separate payroll costs are being requested
16 for DDU personnel who have prepared and support the filing.

17

18 **Q. PLEASE DESCRIBE THE TYPES OF RATE CASE EXPENSES DDU IS**
19 **SEEKING TO RECOVER RELATED TO THIS APPLICATION.**

20 A. DDU is seeking recovery of three categories of costs: outside consultants, outside legal
21 counsel, and miscellaneous expenses. Internal employee time associated with this case is
22 excluded from the rate case expenses.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

Q. PLEASE DESCRIBE THE OUTSIDE CONSULTING EXPENSES.

A. Outside consultants were employed to develop and/or support various aspects of this filing including preparation of the application, development of testimony, and responding to discovery:

- My firm, Expergy, compiled the data and developed the Applications for filing.
- Dr. Victoria Harkins, Ph.D., P.E., D.WRE. of Harkins Engineering, Inc. conducted an asset evaluation and trending study to support the values and depreciable lives of the utility plant included in rate base.

Q. PLEASE DESCRIBE THE EXPENSES FOR OUTSIDE LEGAL COUNSEL.

A. DDU has employed outside legal counsel from the Carlton Law Firm PLLC as regulatory counsel for DDU. This outside firm has worked with DDU previously and has extensive experience in Texas regulatory matters. Fees are based upon the scope of the engagement and the customary fees for regulatory attorneys.

Q. PLEASE DESCRIBE THE MISCELLANEOUS EXPENSES.

A. Miscellaneous expenses incurred by DDU include expenses for travel, lodging and other miscellaneous items. Travel and lodging expenses include expenses of employees incurred in traveling to Austin to participate in the hearings. Miscellaneous expenses may include other expenses of preparing and litigating the filing.

XIII. CONCLUSION

1 Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

2 A. Yes, it does.

EXHIBIT DDU-6A

JAY JOYCE

President
EXPERGY®
3838 Oak Lawn Ave., Suite 1000
Dallas, Texas 75219
214 432 2500
www.expergy.com

Experience:

Water and Wastewater Utility Consulting

- Mr. Joyce has directed engagements associated with the following water, wastewater, and steam production utilities:

Cost of Service Studies/Rate Studies

Aqua Texas (water & wastewater)
Chisholm Trail Special Utility District (water)
City of Arlington (wastewater)
City of Austin (water)
City of Kilgore (water)
City of Knollwood (water and wastewater)
City of Lewisville (water and wastewater)
City of Mesquite (water and wastewater)
City of Midlothian (water)
City of North Richland Hills (water and wastewater)
City of Paris (water and wastewater)
City of Pflugerville (water and wastewater)
City of Rollingwood (water and wastewater)
City of Rowlett (water and wastewater)
City of Waco (water)
City of West Lake Hills (wastewater)
Cottonwood Creek MUD No. 1 (water and wastewater)
Crosby Municipal Utility District (water and wastewater)
Culleoka Water Supply Corporation (water)
Dallas Water Utilities (water and wastewater)
Fort Worth Water Department (water)
Guam Water Works (water and wastewater)
Lakeside Utilities, Inc (water and wastewater)
Lakeway Municipal Utility District (water and wastewater)
Lower Colorado River Authority (wastewater)
Metro H2O (water)
Monarch Utilities (water)
Nashville Metro Water Services (wastewater)
Nashville Thermal Transfer Corporation (steam)
Northtown Municipal Utility District (water and wastewater)
Paseo del Este Municipal Utility District No. 1 (water and wastewater)
Rockett Special Utility District (water)
Titus County Fresh Water Supply District No. 1 (water)
Town of Flower Mound (water)
Travis County Municipal Utility District No. 2 (water and wastewater)
Travis County Municipal Utility District No. 4 (water and wastewater)
Travis County Municipal Utility District No. 11 (water and wastewater)
Travis County Municipal Utility District No. 12 (water and wastewater)
Travis County Municipal Utility District No. 13 (water and wastewater)
Travis County Municipal Utility District No. 14 (wastewater)

Water and Wastewater Utility Consulting (continued)

Trinity River Authority (water)
Trinity Water Reserve, Inc. d/b/a Devers Canal System (water)
United Irrigation District of Hidalgo County (water)
West Travis County Public Utility Agency (water)
Wilbarger Creek MUD No. 1 (water and wastewater)
Windermere Utility Company (wastewater)

Management Audits

Brazos River Authority
City of Houston Public Works & Engineering
City of New Orleans
Dallas Water Utilities
Trinity River Authority

Electric and Gas Utility Consulting

- Mr. Joyce has directed engagements associated with the following electric and gas utilities:

American Electric Power – Appalachian Power Company
American Electric Power – Public Service Company of Oklahoma
American Electric Power – Texas Central Company
American Electric Power – Texas North Company
American Electric Power – Wheeling Power Company
Arkansas-Oklahoma Gas Company
Atlanta Gas Light
Atmos Energy
CenterPoint Energy
City of Charlottesville Gas Utility
Colorado Public Service Company
CoServ
Denton County Electric Cooperative
Detroit Edison
Dominion Virginia Electric Power Company
El Paso Electric Company
Elizabethtown Gas
General Public Utilities
Houston Lighting & Power Company
Illinois Power Company
Kansas City Power & Light Company
Lone Star Gas Company
MCN Corporation
Mt. Carmel Public Utilities
New Century Energies
NewPower
Northern States Power
Oncor Electric Delivery Company
Pedernales Electric Cooperative
Puget Sound Power & Light
San Diego Gas & Electric
Southern California Gas
Southern Union Gas Company

Southwest Power Pool
 Southwest Public Service Company
 Southwestern Bell Telephone Company
 Texas-New Mexico Power Company
 Tucson Electric Power
 TXU Electric Delivery
 TXU Energy Retail
 TXU Gas Distribution
 TXU Lone Star Pipeline
 Vectren Energy Delivery of Ohio
 Washington Natural Gas
 Western Resources
 Wisconsin Electric Company

Selected Engagement Summaries:

- Directed the valuation of Mt. Carmel Public Utilities, a small investor-owned electric and gas company. The scope of the engagement included ratio analyses for comparable electric utilities, the evaluation of financial performances, analysis of strategic characteristics affecting value and regulatory environment analysis.
- Directed the valuation of CoServ's electric utility business primarily relying on a discounted cash flow analysis, and supported by per-meter analyses of market comparables. A range of overall values was developed for various growth scenarios.
- Conducted settlement negotiations on behalf of Lakeside Utilities, Inc. for the water and wastewater rate increase request before the TNRCC. Issues included valuation of plant-in-service, return, federal income tax methodology and working capital allowance.
- Directed the City of Pflugerville's valuation of the Windermere Utility Company's net assets relating to a potential purchase of the assets. Extensive research concentrated on the utility's contributed capital and corresponding obligations to provide current and future water service.
- Supervised a cost segregation study on behalf of Titus County Fresh Water Supply District No. 1 relating to the planned purchase of water rights in a reservoir owned and operated by Franklin County Water District. The study identified the reservoir expenses unrelated to water supply for exclusion from the cost sharing mechanism contemplated in the proposed agreement.
- Directed the litigation efforts for the City of Waco, Texas pertaining to a Texas Natural Resources Conservation Commission appeal of the water rates charged by Waco to a wholesale customer. Prepared expert testimony, directed cross-examination of witnesses, and participated in extensive negotiations and mediation
- Participated in litigation assistance for the proposed merger of Southwestern Public Service Company and Public Service Company of Colorado. Activities included development of rebuttal testimony and assistance with discovery requests before the Texas, Colorado and New Mexico regulatory commissions negotiations and mediation
- Filed expert testimony on the appropriate ratemaking treatment of \$89 million in Houston Lighting & Power Company restructuring costs. Participated in all

-
- aspects of the case before the Public Utility Commission of Texas (“PUCOT”), including discovery; analyses of plant-in-service (post-test-year adjustments), labor costs and employee benefits; preparation of expert witness testimony; and assistance with settlement negotiations
 - Filed expert testimony on Texas-New Mexico Power Company regulatory commission expenses before the PUCOT. Conducted prudence reviews of the construction of generating facilities at TNP One (Units 1 and 2). Directed the engagements, coordinating the efforts of in-house consultants, outside consultants, attorneys and client representatives.
 - Directed settlement negotiations during the Denton County Electric Cooperative rate proceeding before the PUCOT. Managed the preparation of expert testimony encompassing financial integrity, kWh sales forecasts and treatment of G&T credits
 - Directed the analysis of a potential merger of Washington Natural Gas Company with Puget Sound Power & Light. Activities included identification of available operational cost savings; financial modeling; projection of future combined financial operations; development of regulatory testimony; and litigation assistance on regulatory issues, deposition preparation and discovery questions for approval at the Washington Utilities and Transportation Commission
 - Assisted Tucson Electric Power in quantifying “stranded costs” in preparation for a regulatory filing at the Arizona Public Service Commission. In connection with this filing, the company required extensive assistance with the management of the development of the stranded cost quantification and the development of the resultant effect on revenue requirements. Significant issues included the treatment of regulatory assets and the potential reclamation costs at the Four Corners Generating Facility
 - Managed the development of a cash working capital analysis (lead/lag study) for TXU Electric Company. The project incorporated an in-depth review of company records to establish the revenue recovery/cost payment patterns reflected by the electric system operations and provided the material required for the potential preparation of rate filing exhibits and testimony consistent with the rate filing requirements adopted by the Public Utility Commission of Texas
 - Testified in the wastewater rate dispute between the City of Lewisville and the City of Highland Village before the Texas Natural Resource Conservation Commission (“TNRCC”). Conducted settlement negotiations and filed an affidavit on rate calculations in the subsequent TNRCC proceeding. Assisted legal counsel in the district court case involving the same dispute. Directed the preparation of expert testimony in the TNRCC case and assisted with discovery, cross-examination, closing arguments, exceptions to proposal for decision and presentation before commissioners at the final order meeting.
 - Directed settlement negotiations between Culleoka Water Supply Corporation and the City of Princeton for the water rate dispute before the TNRCC. The central issue involved the premium charged by the city on water purchased from North Texas Municipal Utility District.
 - Directed the filing of expert witness testimony on behalf of United Irrigation District of Hidalgo County relating to the cost of providing water transportation services to Sharyland WSC for dispute at the TNRCC. Issues included valuation of water rights and contractual requirements.

Previous employment experience:	Owner Alliance Consulting Group	2005 - 2008
	Director Management Applications Consulting, Inc.	2003 - 2005
	Senior Manager, Financial Advisory Services Deloitte & Touche LLP	1995 - 2003
	Manager Reed-Stowe & Co., Inc.	1989 - 1995
	Real Property Appraiser Kaiser & Associates	1986 – 1988
Education:	Southern Methodist University, M.B.A. University of Texas at Austin, B.B.A., Finance	
Professional:	American Water Works Association Water Environment Federation Institute of Management Consultants	
Presentations:	Texas Water Conservation Association: “Conservation Rates” Water Environment Federation of Texas: “Alternative Funding for Capital Improvements” Texas Rural Water Association: “How to Determine Your Cost of Service”	

EXHIBIT DDU-6B

JAY JOYCE – REPRESENTATIVE UTILITY PROJECTS

Line	Jurisdiction	Docket	Company	Year	Description
1	Texas Natural Resource Conservation Commission (TNRCC)	7796-M & 7831-M	City of Kilgore, Texas	1989	Wholesale Revenue Requirements, Cost of Service, and Rate Design
2	Texas Public Utility Commission (PUC)	8928	Texas-New Mexico Power Company	1989	Revenue Requirements
3	Texas PUC	8585	Southwestern Bell Telephone Company	1989	Revenue Requirements
4	Texas PUC	9491	Texas-New Mexico Power Company	1990	Revenue Requirements, Prudence
5	TNRCC	8388-M	Trinity Water Reserve, Inc. d/b/a Devers Canal System	1990	Rate Base, Return, Rate Design
6	Texas PUC	10200	Texas-New Mexico Power Company	1991	Revenue Requirements, Prudence
7	N/A	N/A	TCI Cablevision of Texas, Inc.	1991	Franchise Compliance
8	Oklahoma Corp. Comm.	PUD 001346	Arkansas-Oklahoma Gas Company	1991	Cost of Service, Rate Design
9	TNRCC	8293-M	United Irrigation District of Hidalgo County, Texas	1991	Revenue Requirements, Cost of Service
10	Texas PUC	10034	Texas-New Mexico Power Company	1992	Deferred Accounting
11	Texas PUC	9892	Denton County Electric Cooperative	1992	Revenue Requirements, Settlement Negotiations
12	N/A		Southern Union Gas Company	1992	Federal Income Taxes
13	TNRCC		Culleoka Water Supply Corporation	1992	Wholesale Revenue Requirements, Cost of Service, and Rate Design *
14	TNRCC	8338-A	City of Lewisville, Texas	1993	Revenue Requirements, Cost of Service *
15	N/A	N/A	City of Paris, Texas	1993	Revenue Requirements, Cost of Service
16	TNRCC		City of Knollwood, Texas	1994	Wholesale Revenue Requirements, Cost of Service, and Rate Design
17	N/A	N/A	Rockett Special Utility District/City of Midlothian, Texas	1994	Water Supply Feasibility Analysis



JAY JOYCE – REPRESENTATIVE UTILITY PROJECTS

Line	Jurisdiction	Docket	Company	Year	Description
18	Texas PUC	12065	Houston Lighting & Power Company	1994	Revenue Requirements, Restructuring Costs *
19	Texas PUC	12900	Texas-New Mexico Power Company	1994	Revenue Requirements, Rate Case Expenses *
20	TNRCC	N/A	Lakeside Utilities, Inc.	1994	Revenue Requirements, Cost of Service *
21	N/A	N/A	City of North Richland Hills, Texas	1994	Revenue Requirements, Cost of Service
22	N/A	N/A	Detroit Edison/MCN Corporation	1995	Merger Analysis
23	N/A	N/A	Illinois Power Company	1995	Merger Candidate Evaluation
24	N/A	N/A	Northern States Power/Wisconsin Electric Company	1995	Merger Analysis
25	Washington Utilities & Transportation Commission	UE-960195	Washington Natural Gas/Puget Sound Power & Light	1995	Merger Analysis, Testimony In Support of Merger
26	N/A	N/A	General Public Utilities	1996	Merger Candidate Evaluation
27	N/A	N/A	San Diego G&E/Southern California Gas Company	1996	Merger Analysis
28	Texas PUC	14980	Southwest Public Service Company/Public Service Company of Colorado	1996	Testimony In Support of Merger
29	New Mexico Public Regulation Commission (PRC)	2678	Southwest Public Service Company/Public Service Company of Colorado	1996	Testimony In Support of Merger
30	Colorado Public Service Commission	95A-513EG	Southwest Public Service Company/Public Service Company of Colorado	1996	Testimony In Support of Merger
31	N/A	N/A	Western Resources/Kansas City Power & Light	1996	Merger Analysis
32	N/A	N/A	Fort Worth Water Department	1996	Wholesale Water Revenue Requirements, Cost of Service, Rate Design
33	N/A	N/A	Nashville Metro Water Services	1996	Wastewater Cost of Service and Rate Design
34	Texas PUC	18490	TXU Electric Company	1997	Cash Working Capital (CWC)
35	N/A	N/A	Tucson Electric Power	1997	Stranded Cost Quantification



JAY JOYCE – REPRESENTATIVE UTILITY PROJECTS

Line	Jurisdiction	Docket	Company	Year	Description
36	N/A	N/A	Cobb County Water System	1997	Sewer Development Fee Analysis
37	N/A	N/A	Fern Bluff Municipal Utility District	1997	Wastewater Contract Negotiations
38	N/A	N/A	Lower Colorado River Authority	1997	Wastewater Contract Negotiations
39	N/A	N/A	Nashville Thermal Transfer Corporation	1997	Financial Advisory Services
40	N/A	N/A	Pflugerville Water and Wastewater Utility	1997	Water and Wastewater Revenue Requirements, Cost of Service, Rate Design
41	N/A	N/A	Travis County Municipal Utility District No.4	1997	Wholesale Water Revenue Requirements, Cost of Service, Rate Design
42	N/A	N/A	Southwest Power Pool	1998	Tariff Policies and Procedures
43	N/A	N/A	Houston Public Utilities	1998	Management Audit
44	TNRCC	N/A	Trinity River Authority	1998	Management Audit
45	Texas PUC	22350	TXU Electric Company	1999	CWC
46	Texas PUC	22350	TXU SESCO Company	1999	CWC
47	N/A	N/A	Mt. Carmel Public Utilities	1999	Valuation
48	TNRCC	97-0049-UCR	Waco Water and Wastewater Utility	1999	Wholesale Water Revenue Requirements, Cost of Service, Rate Design
49	Texas Railroad Commission (RRC)	8976	Lone Star Pipeline Company	2000	CWC
50	Texas RRC	9145	TXU Gas Distribution – Dallas Distribution System	2000	CWC
51	Georgia PSC	14311-U	Atlanta Gas Light Company	2001	CWC
52	New Jersey BPU	GR02040245	Elizabethtown Gas Company	2002	CWC
53	United States Bankruptcy Court for the Northern District of Georgia	02-10835 through 02-10837	NewPower	2002	Contractual Pricing, Bankruptcy
54	Texas RRC	9400	TXU Gas Company	2003	CWC *
55	Texas PUC	28840	American Electric Power - Texas Central Company	2003	CWC
56	North Carolina UC	E-22, Sub 412	Dominion Virginia Electric Power	2004	CWC



JAY JOYCE – REPRESENTATIVE UTILITY PROJECTS

Line	Jurisdiction	Docket	Company	Year	Description
57	PUC of Ohio	04-571-GA-AIR and 04-794-GA-AAM	Vectren Energy Delivery of Ohio	2004	CWC *
58	Texas Commission on Environmental Quality (TCEQ)	2004-0979-UCR	Chisholm Trail SUD	2005	Cost of Service, Rate Design *
59	TCEQ	2004-1120-UCR, et. al	Aqua Texas	2005	Valuation, Cost Allocation, Revenue Requirements *
60	US District Court for the Northern District of California	C01-20289 RMW	TXU Energy Services	2006	Wholesale Gas Supply Pricing Dispute *
61	Superior Court of Fulton County, Georgia	2000-CV-20379	City of Atlanta Water Utility	2006	Water Rates *
62	Texas PUC	32093	CenterPoint Energy	2006	CWC *
63	Texas RRC	9670	Atmos Energy – Mid-Tex	2006	CWC *
64	Texas PUC	33309	American Electric Power - Texas Central Company	2006	CWC *
65	Texas PUC	33310	American Electric Power - Texas North Company	2006	CWC *
66	Oklahoma Corp. Comm.	PUD-200600285	Public Service Company of Oklahoma	2006	CWC
67	Arkansas PSC	060161-U	CenterPoint Energy Arkansas Gas	2007	Working Capital *
68	TCEQ	2006-1919-UCR	Oak Shores Water System	2007	Water Cost of Service, Rate Design *
69	Texas PUC	34040	TXU Electric Delivery Company	2007	CWC
70	TCEQ	2008-0804-UCR	Kendall County Utility Company	2008	Water & Wastewater Cost of Service & Rate Design *
71	Texas PUC	35717	Oncor Electric Delivery Company	2008	CWC
72	Texas RRC	9872	CenterPoint Energy Entex Gas – Texas Coast Division	2008	CWC *
73	New Mexico Public Regulation Commission	09-00171-UT	El Paso Electric Company	2009	CWC
74	Texas RRC	9902	CenterPoint Energy Entex Gas – Houston Division	2009	CWC *
75	TCEQ	2008-1856-UCR	City of Pecos City	2009	Water & Wastewater Cost of Service & Rate Design *
76	Virginia State Corporation Comm	PUE-2009-0030	Appalachian Power Company	2009	CWC *



JAY JOYCE – REPRESENTATIVE UTILITY PROJECTS

Line	Jurisdiction	Docket	Company	Year	Description
77	Texas PUC	37364	SWEPco	2009	CWC *
78	Texas PUC	37690	El Paso Electric	2009	CWC *
79	West Virginia PSC	10-099-E-42T	Appalachian Power Company & Wheeling Power Company	2010	CWC *
80	Texas PUC	38339	CenterPoint Energy Houston Electric	2010	CWC *
81	Texas RRC	9985, 9986, 9987	CenterPoint Energy Entex Gas – Beaumont Division	2010	CWC *
82	Texas RRC	10006, 10007, 10018	CenterPoint Energy Entex Gas – Texas Coast Division	2010	CWC *
83	Texas RRC	10038	CenterPoint Energy Entex Gas – South Texas Division	2010	CWC *
84	Oklahoma Corp. Comm	PUD-201000050	Public Service Company of Oklahoma	2010	CWC
85	Virginia State Corporation Comm	PUE-2011-00037	Appalachian Power Company	2011	CWC *
86	New Mexico Public Regulation Commission	11-00042-UT	New Mexico Gas Company	2011	CWC
87	TCEQ	2011-1533-UCR	Monarch Utilities	2011	Water & Wastewater Cost of Service & Rate Design *
88	Texas PUC	39896	Entergy Texas, Inc.	2011	CWC *
89	Texas PUC	40020	Lone Star Transmission	2012	CWC *
90	Texas RRC	10182	CenterPoint Energy Entex Gas – Beaumont/East Texas Division	2012	CWC *
91	Texas PUC	40443	SWEPco	2012	CWC *
92	Texas PUC	40604	Cross Texas Transmission LLC	2012	CWC *
93	Texas PUC	40606	Wind Energy Transmission Texas	2012	CWC *
94	TCEQ	2012-0065-WR	Upper Trinity Regional Water District	2012	Water Rates *
95	Virginia State Corporation Comm.	PUE-2013-00009	Appalachian Power Company	2013	CWC
96	TCEQ	2013-0865-UCR	City of Austin Water Department	2013	Wholesale Water Cost of Service & Rate Design *
97	TCEQ	2013-0509-UCR	Oak Shores Water System	2013	Water Cost of Service, Rate Design *



JAY JOYCE – REPRESENTATIVE UTILITY PROJECTS

Line	Jurisdiction	Docket	Company	Year	Description
98	Texas PUC	41791	Entergy Texas, Inc.	2013	CWC *
99	TCEQ	2012-2707-UCR	Wiedenfeld Water Works, Inc	2013	Water Cost of Service, Rate Design *
100	Oklahoma Corp Comm.	PUD-201300217	Public Service Company of Oklahoma	2013	CWC
101	Virginia State Corporation Comm.	PUE-2014-00026	Appalachian Power Company	2014	CWC *
102	Texas PUC	42857	Austin Water Utilities	2014	Wholesale Water & Wastewater Cost of Service*
103	West Virginia PSC	14-1152-E-42T	Appalachian Power Company & Wheeling Power Company	2014	CWC *
104	Texas PUC	42866	West Travis County Public Utility Agency	2014	Public Interest *
105	Public Utility Commission of Oregon	UE 294	Portland General Electric Company	2015	CWC
106	Texas PUC	44704	Entergy Texas, Inc.	2015	CWC *
107	District Court, 201 st Judicial Court, Travis County, Tx	D-1-GN-16-002274	West Travis County Public Utility Agency	2016	Breach of Contract *
108	Texas PUC	46245	Double Diamond Utilities, Inc.	2016	Water & Wastewater Rate Change Applications *
109	Texas PUC		Electric Transmission Texas	2016	CWC *
110	Texas PUC	46449	SWEPCo	2017	CWC *

* Indicates projects where Mr. Joyce was a testifying expert witness



EXHIBIT DDU-6C

WHITE BLUFF WATER

Table with columns: Net As needed, Old Meter Number, Item, Date of Installation, Service Life, Original Cost, Adjusted Original Cost, Depreciation, Accumulated, [J]-[D]([I) Net Book Value, % Parent, % DDU. Rows include items like Distribution System (mains), Meters and Service (taps), and various pipe and equipment repairs.

WHITE BLUFF WATER

New, As needed	Old Bates Number	(A) Item	(B) Date of Installation	(C) Service Life (yrs) **	(D 1) Original Cost when installed \$	(D 2) Customer CIAC amount	(D3 - D1) - (D 2) Adjusted Original Cost for Customer CIAC ¹	Depreciation					Net Book Value (\$)	% Parent	% DDU	
								Time in Service			(E) Annual (\$)	(F) Accumulated (\$) (Reserve)				(G) [D] (E)
								Years in Service	Months	Days						
DDU16 - 010234-010237	DDU010032-35	334 Meters and Service (taps no)	POLLWAT PHASE MOTOR_PIPE_AIRLINE_ET	3/8/2005	20	\$ 12,594.83	\$ 12,594.83	10	9	23	\$ 630	\$ 6,813.00	\$ 5,781.83	0%	100%	
DDU16 - 010230-010233	DDU010028-31	334 Meters and Service (taps no)	Well No 4 repair	5/18/2005	20	\$ 8,704.40	\$ 8,704.40	10	7	13	\$ 435	\$ 4,620.00	\$ 4,084.40	0%	100%	
DDU16 - 010239-010242	DDU010037-40	334 Meters and Service (taps no)	POLLWAT Service all Well #3	1/3/2006	20	\$ 14,928.68	\$ 14,928.68	9	11	28	\$ 746	\$ 7,453.00	\$ 7,475.68	0%	100%	
DDU16 - 010243-010246	DDU010041-44	334 Meters and Service (taps no)	WALLELE Repair booster at Well #1	3/28/2006	20	\$ 1,536.15	\$ 1,536.15	9	9	3	\$ 77	\$ 752.00	\$ 784.15	0%	100%	
DDU16 - 010252-010254	DDU010050-52	334 Meters and Service (taps no)	Well No 4 repair	7/31/2006	20	\$ 14,581.95	\$ 14,581.95	9	5	-	\$ 729	\$ 6,866.00	\$ 7,715.95	0%	100%	
DDU16 - 010257-010259	DDU010055-57	334 Meters and Service (taps no)	Well Electrical	12/20/2006	20	\$ 3,550.00	\$ 3,550.00	9	-	11	\$ 178	\$ 1,607.00	\$ 1,943.00	0%	100%	
DDU16 - 010312-010314	DDU010110-112	334 Meters and Service (taps no)	WALLELE Well #2 Service Call	8/27/2007	20	\$ 2,246.78	\$ 2,246.78	8	4	4	\$ 112	\$ 935.00	\$ 1,311.78	0%	100%	
DDU16 - 010323	DDU010121	334 Meters and Service (taps no)	WALLELE Well #2 Install Breaker-New Comprss	10/20/2007	20	\$ 3,822.77	\$ 3,822.77	8	2	11	\$ 191	\$ 1,566.00	\$ 2,256.77	0%	100%	
DDU16 - 010331-010333	DDU010129-131	334 Meters and Service (taps no)	ACTSUPP Mtr Boxes, Bend, Ball Chcks	10/30/2007	20	\$ 1,456.49	\$ 1,456.49	8	2	1	\$ 73	\$ 596.00	\$ 860.49	0%	100%	
DDU16-009407-DDU16-009409	DDU16-009407-DDU16-009409	334 Meters and Service (taps no)	Performance Meter Mobile Drive	6/30/2008	20	\$ 20,567.50	\$ 20,567.50	7	6	1	\$ 1,028	\$ 7,712.00	\$ 12,855.50	0%	100%	
DDU16-009410-DDU16-009412	DDU16-009410-DDU16-009412	334 Meters and Service (taps no)	Upgrade water meters	6/30/2008	20	\$ 43,427.74	\$ 43,427.74	7	6	1	\$ 2,171	\$ 16,286.00	\$ 27,141.74	0%	100%	
DDU16-009413-DDU16-009416	DDU16-009413-DDU16-009416	334 Meters and Service (taps no)	New meters 9090	7/31/2008	20	\$ 30,768.98	\$ 30,768.98	7	5	-	\$ 1,538	\$ 11,407.00	\$ 19,361.98	0%	100%	
DDU16-009417-DDU16-009419	DDU16-009417-DDU16-009419	334 Meters and Service (taps no)	New meters 9090	9/30/2008	20	\$ 42,217.50	\$ 42,217.50	7	3	1	\$ 2,111	\$ 15,304.00	\$ 26,913.50	0%	100%	
DDU009059 -DDU009060	DDU009059 -DDU009060	334 Meters and Service (taps no)	WB ADAPTERS, HYDRANT METER WITH G	12/31/2009	20	\$ 1,085.72	\$ 1,085.72	5	-	-	\$ 54	\$ 324.00	\$ 761.72	0%	100%	
DDU16-009489-DDU16-009490	DDU16-009489-DDU16-009490	334 Meters and Service (taps no)	V Cast Clarifier repair	3/9/2010	20	\$ 1,850.00	\$ 1,850.00	5	9	22	\$ 93	\$ 541.00	\$ 1,309.00	0%	100%	
DDU009098 -DDU009099	DDU009098 -DDU009099	334 Meters and Service (taps no)	RTU GPRS NEMA, M-100 M-200 WB, Well No	12/20/2011	20	\$ 1,779.95	\$ 1,779.95	4	-	11	\$ 89	\$ 359.00	\$ 1,420.95	0%	100%	
		334 Meters and Service (taps no)	Well No 2	1/1/1996	20	\$ 67,114.09	\$ 67,114.09	19	11	30	\$ 3,356	\$ 67,111.00	\$ 3.09	0%	100%	
			covered by fees)													
DDU16-009390-DDU16009395	DDU16-009390-DDU16009395	343 Shop Tools	2006 John Deere Backhoe	6/6/2007	15	\$ 38,362.05	\$ 38,362.05	8	6	25	\$ 2,557	\$ 21,912.00	\$ 16,450.05	0%	100%	
DDU16 - 010327-010330	DDU010125-128	345 Heavy Equipment	SMITPUM Repair Berkeley	10/25/2007	10	\$ 6,487.44	\$ 6,487.44	8	2	6	\$ 649	\$ 5,311.00	\$ 1,176.44	0%	100%	
DDU009057 -DDU009058	DDU009057 -DDU009058	345 Heavy Equipment	WB PORTABLE GENERATOR	12/31/2009	10	\$ 881.92	\$ 881.92	5	-	-	\$ 88	\$ 528.00	\$ 353.92	0%	100%	
DDU009075 -DDU009076	DDU009075 -DDU009076	345 Heavy Equipment	GENERATOR, TRANSFER SWITCH BACKU	9/30/2010	10	\$ 5,093.48	\$ 5,093.48	5	3	1	\$ 509	\$ 2,673.00	\$ 2,420.48	0%	100%	
DDU16 - 010029-010031	DDU009827-DDU009829	348 Fencing	lumber for booster station	10/9/1999	20	\$ 224.67	\$ 224.67	16	2	22	\$ 11	\$ 178.00	\$ 46.67	80%	20%	
DDU16 - 010042-010045	DDU009840-DDU009843	348 Fencing	shingles for booster station	2/10/1999	20	\$ 176.65	\$ 176.65	16	10	21	\$ 9	\$ 152.00	\$ 24.65	0%	100%	
DDU16 - 009966-009970	DDU009764-DDU009768	348 Fencing	fence for booster station	6/8/1999	20	\$ 139.30	\$ 139.30	16	6	23	\$ 7	\$ 116.00	\$ 23.30	0%	100%	
DDU16 - 009942-009943	DDU009740-DDU009741	348 Fencing	fence for new well	7/28/1999	20	\$ 1,225.40	\$ 1,225.40	16	5	3	\$ 61	\$ 1,002.00	\$ 223.40	0%	100%	
DDU16 - 010038-010041	DDU009836-DDU009839	348 Fencing	fence for booster station	9/25/1999	20	\$ 92.73	\$ 92.73	16	3	6	\$ 5	\$ 81.00	\$ 11.73	0%	100%	
DDU16 - 010012-010014	DDU009830-DDU009832	348 Fencing	fence and gate at well #1	10/9/1999	20	\$ 350.00	\$ 350.00	16	2	22	\$ 18	\$ 292.00	\$ 58.00	0%	100%	
DDU16 - 010097-010100	DDU009895-DDU009898	348 Fencing	fence around storage tank	10/24/2000	20	\$ 468.59	\$ 468.59	15	2	7	\$ 23	\$ 349.00	\$ 119.59	0%	100%	
DDU16-009400-DDU16-009405	DDU16-009400-DDU16-009405	348 Fencing	Backyard fence invoice 071030a	10/30/2007	20	\$ 1,600.00	\$ 1,600.00	8	2	1	\$ 80	\$ 654.00	\$ 946.00	0%	100%	
						\$ 1,772.34	\$ 1,772.34									
						\$ 3,791,956.26	\$ 3,791,956.26					\$ 110,077.00	\$ 1,603,728.00	\$ 2,188,228.26		
						\$ 3,791,956.26	\$ 3,791,956.26					\$ 110,077.00	\$ 1,603,728.00	\$ 2,188,228.26		

DDU16 - 011334

WHITE BLUFF WATER

New, As needed	Old Bates Number	[A]	[B]	[C]	[D 1]	[D 2]	[D] - [D 1] - [D 2]	Depreciation				% Parent	% DDU		
		Item	Date of Installation	Service Life (yrs) * **	Original Cost when installed \$	Customer CIAC amount	Adjusted Original Cost for Customer CIAC ¹	Time in Service			[E] - [D][C] Annual (\$)			[F] Accumulated (\$) (Reserve)	[G] - [D][F] Net Book Value (\$)
								Years in Service	Months	Days					
[A]	[B]	[C]	[D 1]	[D 2]	[D] - [D 1] - [D 2]	Depreciation									
Item	Date of Installation	Service Life (yrs) * **	Original Cost when installed \$	Customer CIAC amount	Adjusted Original Cost for Customer CIAC ¹	Time in Service			[E] - [D][C] Annual (\$)	[F] Accumulated (\$) (Reserve)	[G] - [D][F] Net Book Value (\$)				
						Years in Service	Months	Days							
0		303 Land and land rights	various		42,160	-	42,160	various				42,160			
		307 Wells													
		Well Pumps	Well Pumps												
		311 < 5 hp or less	311 < 5 hp or less												
0		311 Greater than 5 hp	various	10	139,765	-	139,765	various	13,975	46,265	93,500				
		Booster Pumps	Booster Pumps												
		311 < 5 hp or less	311 < 5 hp or less												
0		311 Greater than 5 hp	various	10	4,783	-	4,783	various	478	4,271	512				
		320 Chlorinators	320 Chlorinators												
		Structures	Structures												
		304 Wood	304 Wood												
		304 Masonry	304 Masonry												
0		305 Storage Tanks	various	50	178,018	-	178,018	various	3,560	65,375	112,643				
0		311 Pressure Tanks	various	50	36,042	-	36,042	various	722	10,547	25,495				
0		311 Distribution System (main and lines)	various	50	2,649,427	-	2,649,427	various	52,990	981,133	1,668,294				
0		314 Meters and Service (taps not covered by fees)	various	20	686,660	-	686,660	various	34,335	462,889	223,771				
		340 Office Equipment	340 Office Equipment												
		341 Vehicles	341 Vehicles												
0		343 Shop Tools	various	15	38,362	-	38,362		2,557	21,912	16,450				
0		345 Heavy Equipment	various	10	12,463	-	12,463	various	1,246	8,512	3,951				
0		348 Fencing	various	20	4,277	-	4,277	various	214	2,824	1,453				
		Other (Please list)													
			various												
			various												
			various												
			various												
		Total:			3,791,956		3,791,956		110,077	1,603,728	2,188,228				
					TRUE		TRUE		TRUE	TRUE	TRUE				

DDU16 - 011335

WHITE BLUFF SEWER

Double Diamond Utilities Co. / White Bluff Sewer Asset / Rate Base Listing		Item	Date of Installation	Service Life (yr) **	Original Cost when installed \$	Customer CIAC amount	Adjusted Original Cost for Customer CIAC ¹	Time in Service			[E] - [D] [C] Annual (\$)	[F] Accumulated (\$)(Reserve)	[G] - [D] [F] Net Book Value (\$)	% Parent	%DDU
New, As needed	Old Bates Number							Years in Service	Months	Days					
DDU16-011021-011025	Documented	303 Land and land rights	Lots 17 and 18 Sewage Treatment plant	1/29/1997	Land	\$14,960.00	\$14,960.00	18	11	2		\$ 14,960.00	80%	20%	
DDU16-010994-010998	Documented	303 Land and land rights	Chine A-134 TR 1A 25ac pump station	1/3/2000	Land	\$12,280.00	\$12,280.00	15	11	28		\$ 12,280.00	80%	20%	
DDU16-010999-011003	Documented	303 Land and land rights	Watkins A-960 TR1B 2.534ac sewer treatmnt	1/3/2000	Land	\$3,870.00	\$3,870.00	15	11	28		\$ 3,870.00	80%	20%	
DDU16-011004-011008	Documented	303 Land and land rights	WB 7 n 1/2 tr 119 pump station		Land	\$3,625.00	\$3,625.00	116	11	31		\$ 3,625.00	80%	20%	
various															
DDU16-009301-DDU16-009309		Sewer Plant - 50 yr life	Total Pipe Installed	1/1/1996	50	\$ 1,628,405.39	\$1,628,405.39	19	11	30	\$ 32,568	\$ 651,271.00	\$ 977,134.39	0%	100%
DDU16-009299-DDU16-009300		Sewer Plant - 50 yr life	EQ tank - southwest fluids	8/6/2007	50	\$29,363.90	\$29,363.90	8	4	25	\$ 587	\$ 4,932.00	\$ 24,431.90	0%	100%
DDU009020-DDU009021		Sewer Plant - 50 yr life	wvtp improvements	8/6/2007	50	\$18,200.00	\$18,200.00	8	4	25	\$ 364	\$ 3,058.00	\$ 15,142.00	0%	100%
DDU16-009817-009819		Sewer Plant - 50 yr life	WB PLANT REPAIRS	12/31/2009	50	\$13,554.00	\$13,554.00	5	-	-	\$ 271	\$ 1,626.00	\$ 11,928.00	0%	100%
DDU16-009357		Sewer Plant - 50 yr life	bobcat water and sewer pipe pipe work	9/7/1998	50	\$15,400.00	\$15,400.00	17	3	24	\$ 308	\$ 5,333.00	\$ 10,067.00	80%	20%
DDU009037-DDU009038		Sewer Plant - 50 yr life	piping	3/29/1997	50	\$14,210.00	\$14,210.00	18	9	2	\$ 284	\$ 5,327.00	\$ 8,883.00	80%	20%
DDU16-009766-009772		Sewer Plant - 50 yr life	Water Tank	9/30/2011	50	\$9,020.00	\$9,020.00	4	3	1	\$ 180	\$ 765.00	\$ 8,255.00	0%	100%
		Sewer Plant - 50 yr life	pipe - pipe work unit 42	10/2/1998	50	\$9,801.82	\$9,801.82	17	2	29	\$ 196	\$ 3,380.00	\$ 6,421.82	80%	20%
		Sewer Plant - 50 yr life	pipe work unit 36 and 38	6/30/1996	50	\$10,536.00	\$10,536.00	19	6	1	\$ 211	\$ 4,115.00	\$ 6,421.00	80%	20%
DDU16-009786		Sewer Plant - 50 yr life	backfill - pipe work unit 42	5/22/1998	50	\$9,620.00	\$9,620.00	17	7	9	\$ 192	\$ 3,381.00	\$ 6,239.00	80%	20%
		Sewer Plant - 50 yr life	pipe work unit 33, 34, 35, line work	2/29/1996	50	\$9,090.00	\$9,090.00	19	10	2	\$ 182	\$ 3,610.00	\$ 5,480.00	80%	20%
DDU16-009813		Sewer Plant - 50 yr life	fiberglass tank at wvtp	7/16/1998	50	\$8,025.66	\$8,025.66	17	5	15	\$ 161	\$ 2,811.00	\$ 5,214.66	80%	20%
DDU16-009851-009853		Sewer Plant - 50 yr life	trench work - pipe work unit 44	3/15/1999	50	\$7,293.00	\$7,293.00	16	9	16	\$ 146	\$ 2,452.00	\$ 4,841.00	80%	20%
DDU16-009667-009668		Sewer Plant - 50 yr life	piping	1/15/1997	50	\$7,551.52	\$7,551.52	18	11	16	\$ 151	\$ 2,862.00	\$ 4,689.52	80%	20%
DDU16-009351		Sewer Plant - 50 yr life	pipe work unit 40	1/4/1997	50	\$7,475.00	\$7,475.00	18	11	27	\$ 150	\$ 2,848.00	\$ 4,627.00	80%	20%
DDU16-009355-009356		Sewer Plant - 50 yr life	piping	2/28/1997	50	\$6,939.91	\$6,939.91	18	10	3	\$ 139	\$ 2,618.00	\$ 4,321.91	80%	20%
DDU009009-DDU009010		Sewer Plant - 50 yr life	WB REPLACE EQ BASIN	12/31/2009	50	\$4,679.00	\$4,679.00	5	-	-	\$ 94	\$ 564.00	\$ 4,115.00	0%	100%
DDU16-010295-010298		Sewer Plant - 50 yr life	EQ tank - southwest fluids - startup	8/6/2007	50	\$4,800.83	\$4,800.83	8	4	25	\$ 96	\$ 807.00	\$ 3,993.83	0%	100%
DDU16-009859-009863		Sewer Plant - 50 yr life	trench work - pipe work unit 44	3/29/1999	50	\$5,674.50	\$5,674.50	16	9	2	\$ 113	\$ 1,894.00	\$ 3,780.50	80%	20%
		Sewer Plant - 50 yr life	pipe work pipe work unit 37	6/30/1996	50	\$5,105.00	\$5,105.00	19	6	1	\$ 102	\$ 1,969.00	\$ 3,136.00	80%	20%
DDU16-010035-010037		Sewer Plant - 50 yr life	sleeves for water and sewer mains	9/21/1999	50	\$4,584.00	\$4,584.00	16	3	10	\$ 92	\$ 1,497.00	\$ 3,087.00	80%	20%
DDU16-009706-009708		Sewer Plant - 50 yr life	pipe work unit 41	1/8/1997	50	\$4,875.00	\$4,875.00	18	11	23	\$ 98	\$ 1,860.00	\$ 3,015.00	80%	20%
		Sewer Plant - 50 yr life	pipe work unit 40	2/28/1997	50	\$4,817.34	\$4,817.34	18	10	3	\$ 96	\$ 1,808.00	\$ 3,009.34	80%	20%
DDU16-009347		Sewer Plant - 50 yr life	pipe work unit 40	1/11/1996	50	\$4,510.00	\$4,510.00	19	11	20	\$ 90	\$ 1,797.00	\$ 2,713.00	80%	20%
DDU16-010276-010280		Sewer Plant - 50 yr life	crane to set equalization basin	5/22/2007	50	\$3,192.39	\$3,192.39	8	7	9	\$ 64	\$ 551.00	\$ 2,641.39	0%	100%
DDU16-009662		Sewer Plant - 50 yr life	pipe work unit 39	1/12/1996	50	\$4,230.00	\$4,230.00	19	11	19	\$ 85	\$ 1,697.00	\$ 2,533.00	80%	20%
DDU16-009754-009789		Sewer Plant - 50 yr life	pipe - pipe work unit 42	1/2/1998	50	\$3,690.00	\$3,690.00	17	11	29	\$ 74	\$ 1,331.00	\$ 2,359.00	80%	20%
DDU16-009854-009855		Sewer Plant - 50 yr life	trench work - pipe work unit 44	3/19/1999	50	\$3,549.00	\$3,549.00	16	9	12	\$ 71	\$ 1,192.00	\$ 2,357.00	80%	20%
		Sewer Plant - 50 yr life	pipe work unit 38	6/30/1996	50	\$3,795.00	\$3,795.00	19	6	1	\$ 76	\$ 1,482.00	\$ 2,313.00	80%	20%
		Sewer Plant - 50 yr life	pipe - Rohan	11/9/1996	50	\$3,280.96	\$3,280.96	19	1	22	\$ 66	\$ 1,263.00	\$ 2,017.96	80%	20%
DDU16-009293-DDU16-009297		Sewer Plant - 50 yr life	waco paving - pipe work unit 45 waco	10/30/1999	50	\$2,919.00	\$2,919.00	16	2	1	\$ 58	\$ 938.00	\$ 1,981.00	80%	20%
DDU16-009806-009808		Sewer Plant - 50 yr life	pipe - pipe work unit 43	6/26/1998	50	\$2,651.55	\$2,651.55	17	6	5	\$ 53	\$ 928.00	\$ 1,723.55	80%	20%
DDU16-009704		Sewer Plant - 50 yr life	pipe work unit 41	7/31/1997	50	\$2,705.00	\$2,705.00	18	5	-	\$ 54	\$ 995.00	\$ 1,710.00	80%	20%
DDU009022-DDU009023		Sewer Plant - 50 yr life	V-CAST CLARIFIER WHEELS WH	4/30/2010	50	\$1,850.00	\$1,850.00	5	8	1	\$ 37	\$ 210.00	\$ 1,640.00	0%	100%
DDU16-009874-009876		Sewer Plant - 50 yr life	piping	4/22/1999	50	\$2,409.28	\$2,409.28	16	8	9	\$ 48	\$ 801.00	\$ 1,608.28	80%	20%
DDU16-009859-009863		Sewer Plant - 50 yr life	trench work - pipe work unit 44	2/4/1999	50	\$2,418.00	\$2,418.00	16	10	27	\$ 48	\$ 811.00	\$ 1,607.00	80%	20%
DDU16-009363		Sewer Plant - 50 yr life	pipe - pipe work unit 42	4/15/1998	50	\$2,187.30	\$2,187.30	17	8	16	\$ 44	\$ 779.00	\$ 1,408.30	80%	20%
DDU16-009286-DDU16-009289		Sewer Plant - 50 yr life	backfill - pipe work unit 42	4/15/1998	50	\$2,183.75	\$2,183.75	17	8	16	\$ 44	\$ 779.00	\$ 1,404.75	80%	20%
DDU16-009766-009772		Sewer Plant - 50 yr life	valves - pipe work unit 42	10/2/1998	50	\$2,135.06	\$2,135.06	17	2	29	\$ 43	\$ 742.00	\$ 1,393.06	80%	20%
DDU009002-DDU009003		Sewer Plant - 50 yr life	WB REPAIRS TO CLARIFIER WH	12/31/2009	50	\$1,565.00	\$1,565.00	5	-	-	\$ 31	\$ 186.00	\$ 1,379.00	0%	100%
DDU16-010079-010081		Sewer Plant - 50 yr life	piping	10/7/2000	50	\$1,962.45	\$1,962.45	15	2	24	\$ 39	\$ 594.00	\$ 1,368.45	80%	20%
DDU16-009887-009889		Sewer Plant - 50 yr life	trench work - pipe work unit 44	11/5/1999	50	\$1,930.50	\$1,930.50	16	1	26	\$ 39	\$ 630.00	\$ 1,300.50	80%	20%
DDU16-009656		Sewer Plant - 50 yr life	water and sewer bores	7/31/1996	50	\$2,000.00	\$2,000.00	19	5	-	\$ 40	\$ 777.00	\$ 1,223.00	80%	20%

WHITE BLUFF SEWER

Double Diamond Utilities Co. / White Bluff
Sewer Asset / Rate Base Listing
New, As needed

Item	Date of Installation	Service Life (yrs) **	Original Cost when installed \$	Customer C IAC amount	Adjusted Original Cost for Customer C IAC	Time in Service			[F] - [D] [Y] Annual (\$)	[F] Accumulated (\$ Reserve)	[G] - [D] [Y] Net Book Value (\$)	% Parent	% DDU		
						Years in Service	Months	Days							
DDU009004 - DDU009005	DDU009004 - DDU009005	Sewer Plant - 20 yr life	WB GRDR PUMPS/ MODULE PIP	12/31/2009	20	\$2,219.13	\$2,219.13	5	-	-	\$ 111	\$ 666.00	\$ 1,553.13	0%	100%
DDU16-009298	DDU16-009298	Sewer Plant - 20 yr life	heavy equipment rental	5/29/2002	20	\$3,823.75	\$3,823.75	13	7	2	\$ 191	\$ 2,596.00	\$ 1,227.75	80%	20%
DDU16 - 010340-010342	DDU010138-140	Sewer Plant - 20 yr life	MCCLMECH Repair Catwalk on Wa	7/12/2007	20	\$1,580.00	\$1,580.00	8	5	19	\$ 79	\$ 669.00	\$ 911.00	0%	100%
DDU16 - 009814	DDU009612	Sewer Plant - 20 yr life	pumps, basins - lift station	7/23/1998	20	\$7,077.13	\$7,077.13	17	5	8	\$ 354	\$ 6,174.00	\$ 903.13	80%	20%
DDU16-009574 - DDU16-009576	DDU16-009574 - DDU16-009576	Sewer Plant - 20 yr life	Risers	1/28/2013	20	\$968.04	\$968.04	2	11	3	\$ 48	\$ 140.00	\$ 828.04	0%	100%
DDU009000 - DDU009001	DDU009000 - DDU009001	Sewer Plant - 20 yr life	WB FLOATS AND BASIN COVER	12/31/2009	20	\$1,163.69	\$1,163.69	5	-	-	\$ 58	\$ 348.00	\$ 815.69	0%	100%
DDU16 - 010394-010396	DDU010192-194	Sewer Plant - 20 yr life	New WWTP Set Up	9/6/2008	20	\$1,250.00	\$1,250.00	7	3	25	\$ 63	\$ 461.00	\$ 789.00	0%	100%
DDU16 - 010247-010248	DDU010045-46	Sewer Plant - 20 yr life	USABLU Blower	5/6/2006	20	\$1,417.45	\$1,417.45	9	7	25	\$ 71	\$ 685.00	\$ 732.45	0%	100%
DDU16 - 009844-009846	DDU009642-9644	Sewer Plant - 20 yr life	bobcat	8/19/1998	20	\$1,457.50	\$1,457.50	17	4	12	\$ 73	\$ 1,268.00	\$ 189.50	80%	20%
DDU16 - 009738-009740	DDU009536-9538	Sewer Plant - 20 yr life	structure around pumps for noise con	1/1/1998	20	\$1,200.00	\$1,200.00	17	11	30	\$ 60	\$ 1,080.00	\$ 120.00	80%	20%
DDU16 - 009741-009743	DDU009539-9541	Sewer Plant - 20 yr life	insulation at sewer plant building	5/1/1998	20	\$727.44	\$727.44	17	7	30	\$ 36	\$ 636.00	\$ 91.44	80%	20%
DDU16 - 009747-009748	DDU009545-9546	Sewer Plant - 20 yr life	Sewer Building Roof	1/22/1998	20	\$730.69	\$730.69	17	11	9	\$ 37	\$ 664.00	\$ 66.69	80%	20%
DDU16 - 009753	DDU009551	Sewer Plant - 20 yr life	slab for wwtp	1/30/1998	20	\$545.00	\$545.00	17	11	1	\$ 27	\$ 484.00	\$ 61.00	80%	20%
DDU16 - 009721-009723	DDU009519-9521	Sewer Plant - 20 yr life	sewer plant piping	8/20/1997	20	\$415.24	\$415.24	18	4	11	\$ 21	\$ 386.00	\$ 29.24	80%	20%
		Sewer Plant - 20 yr life	grinder station receiving tank and pu	1/1/1996	20	\$ 78,443.22	\$78,443.22	19	11	30	\$ 3,922	\$ 78,429.00	\$ 14.22	0%	100%
various															
DDU009033 - DDU009034	DDU009033 - DDU009034	Sewer Plant - 10 yr life	GENERATOR, TRANSFER SWITC	10/31/2010	10	\$5,093.48	\$5,093.48	5	2	-	\$ 509	\$ 2,630.00	\$ 2,463.48	0%	100%
DDU009031 - DDU009032	DDU009031 - DDU009032	Sewer Plant - 10 yr life	BACK UP POWER	10/31/2010	10	\$1,204.98	\$1,204.98	5	2	-	\$ 120	\$ 620.00	\$ 584.98	0%	100%
DDU16 - 010260-010262	DDU010058-60	Sewer Plant - 10 yr life	MCCLMECH Air Manifold- Fabric	12/16/2006	10	\$4,551.80	\$4,551.80	9	-	15	\$ 455	\$ 4,113.00	\$ 438.80	0%	100%
DDU16 - 010360-010362	DDU010158-160	Sewer Plant - 10 yr life	WWTP Repairs-Sproket and Wheels	3/16/2008	10	\$1,742.81	\$1,742.81	7	9	15	\$ 174	\$ 1,356.00	\$ 386.81	0%	100%
DDU16 - 010267-010271	DDU010065-69	Sewer Plant - 10 yr life	MCCLMECH Replace Chain Sprock	4/30/2007	10	\$2,642.00	\$2,642.00	8	8	1	\$ 264	\$ 2,289.00	\$ 353.00	0%	100%
DDU16 - 010257-010259	DDU010055-57	Sewer Plant - 10 yr life	WALLELE Electrical Bid	11/27/2006	10	\$3,550.00	\$3,550.00	9	1	4	\$ 355	\$ 3,228.00	\$ 322.00	0%	100%
DDU16 - 010363-010365	DDU010161-163	Sewer Plant - 10 yr life	Mtr Contactors, New 480 V Discoun	3/21/2008	10	\$1,450.00	\$1,450.00	7	9	10	\$ 145	\$ 1,128.00	\$ 322.00	0%	100%
DDU16 - 010409-010411	DDU010207-209	Sewer Plant - 10 yr life	Emergency Repairs to Sewer Blower	5/15/2008	10	\$1,230.00	\$1,230.00	7	7	16	\$ 123	\$ 938.00	\$ 292.00	0%	100%
DDU16 - 010428	DDU010226	Sewer Plant - 10 yr life	Generator	10/21/2008	10	\$905.36	\$905.36	7	2	10	\$ 91	\$ 655.00	\$ 250.36	0%	100%
DDU16 - 010366-010368	DDU010164-166	Sewer Plant - 10 yr life	Emergency Repairs to Sewer Blower	4/26/2008	10	\$1,050.00	\$1,050.00	7	8	5	\$ 105	\$ 800.00	\$ 244.00	0%	100%
DDU16 - 010264-010266	DDU010062-64	Sewer Plant - 10 yr life	MCCLMECH Pulley, Bushings, Bel	4/30/2007	10	\$1,408.00	\$1,408.00	8	8	1	\$ 141	\$ 1,223.00	\$ 185.00	0%	100%
DDU009024 - DDU009027	DDU009024 - DDU009027	Sewer Plant - 10 yr life	INSTALL PROPANE LINES & TA	10/31/2010	10	\$331.30	\$331.30	5	2	-	\$ 33	\$ 170.00	\$ 161.30	0%	100%
DDU16 - 010267-010268	DDU010065-67	Sewer Plant - 10 yr life	MCCLMECH Repair Clarifier	4/30/2007	10	\$1,150.00	\$1,150.00	8	8	1	\$ 115	\$ 997.00	\$ 153.00	0%	100%
various															
						\$2,847,335.66	\$2,847,335.66				\$84,700.00	\$1,205,081.00	\$1,642,254.66		

DDU16 - 011338

WHITE BLUFF SEWER

Double Diamond Utilities Co. / White Bluff
 Sewer Asset / Rate Base Listing
 New, As needed Old Bates Number

Item [A]	Date of Installation [B]	Service Life (yrs) ** [C]	Original Cost when installed \$ [D 1]	Customer CIAC amount [D 2]	Adjusted Original Cost for Customer CIAC [D] = [D 1] - [D 2]	Time in Service			[E] - [D] [Y] Annual (\$)	[F] - Accumulated (\$)(Reserve)	[G] - [D] [F] Net Book Value (\$)
						Years in Service	Months	Days			
Item	Date of Installation	Service Life (yrs) **	Original Cost when installed \$	Customer CIAC amount	Adjusted Original Cost for Customer CIAC	Time in Service			[E] - [D] [Y] Annual (\$)	[F] - Accumulated (\$)(Reserve)	[G] - [D] [F] Net Book Value (\$)
						Years in Service	Months	Days			
DDU16-011004 011008											
803 Land and land rights	various		\$ 34,735 00	-	\$ 34,735 00	various			\$ -	\$ -	\$ 34,735 00
807 Wells											
807 Wells											
Well Pumps											
Well Pumps											
811 1/2 hp or less											
811 1/2 hp or less											
DDU16 009766 009772											
Booster Pumps											
Booster Pumps											
811 1/2 hp or less											
811 1/2 hp or less											
DDU16 009667 009668											
120 4 Chlorinators											
120 4 Chlorinators											
Structures											
Structures											
304 Wood											
304 Wood											
304 Masonry											
304 Masonry											
DDU16 010015-010017											
DDU16 009662											
DDU16 - 010267-010268											
0											
140 Office Equipment											
141 Vehicles											
141 Vehicles											
0											
0											
0											
Other (Please list)											
Sewer Plant - 50 yr life	various	50	1,908,258	-	1,908,258	various			38,167	734,294	1,173,964
Sewer Plant - 20 yr life	various	20	878,033	-	878,033	various			43,903	450,634	427,399
Sewer Plant - 10 yr life	various	10	26,310	-	26,310	various			2,630	20,153	6,157
Total			2,847,336	-	2,847,336				84,700	1,205,081	1,642,255

% Parent %DDU

DDU16 - 011339