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MEMORANDUM

DATE: June 13, 2017

TO: Marc Stilson, P.E., CPM, M.ASCE FROM: Jones & DeMille Engineering, Inc. PROJECT: Spanish Valley Culinary Water Project

PROJECT NO: 1503-060

RE: Ground Water Well Monitoring Plan

The following is information regarding the Spanish Valley Culinary Water System Well Monitoring Plan.

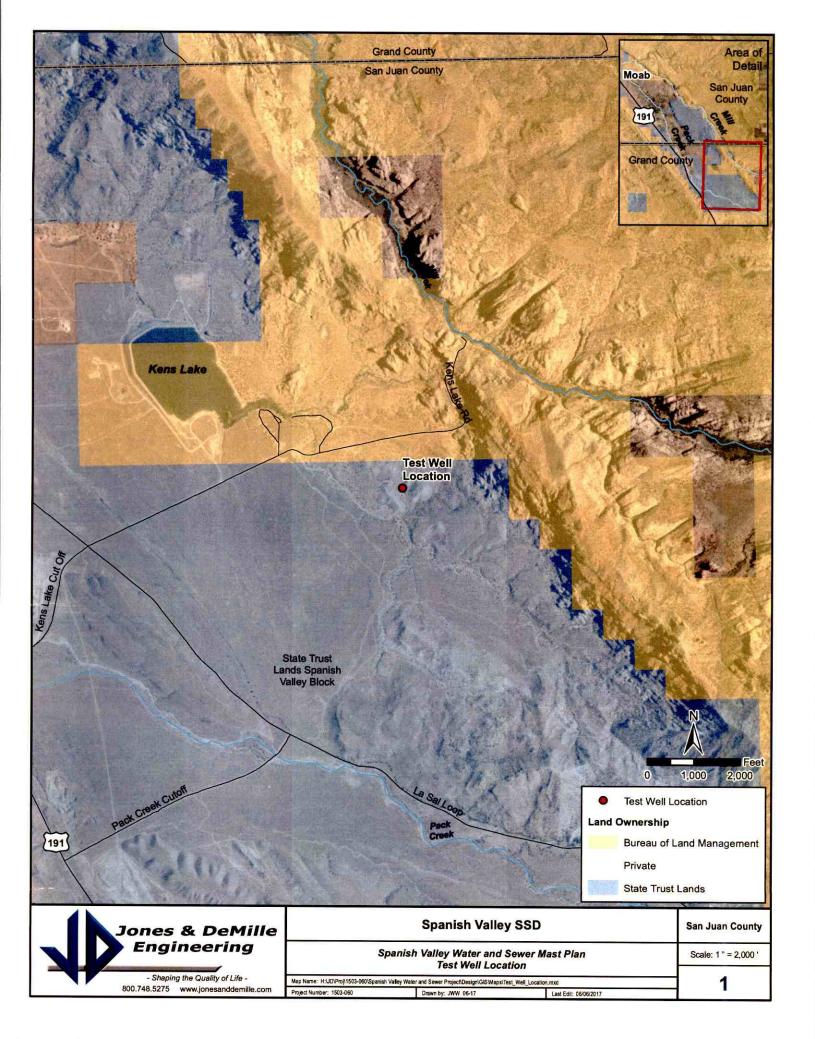
The San Juan Spanish Valley Special Service District (District) plans procure a contractor to drill a test well for their culinary water system. This test well is to be located at Point of Diversion (POD) 14 under Water Right 09-2349 southeast of Ken's Lake. A proposed construction diagram for this test well is attached.

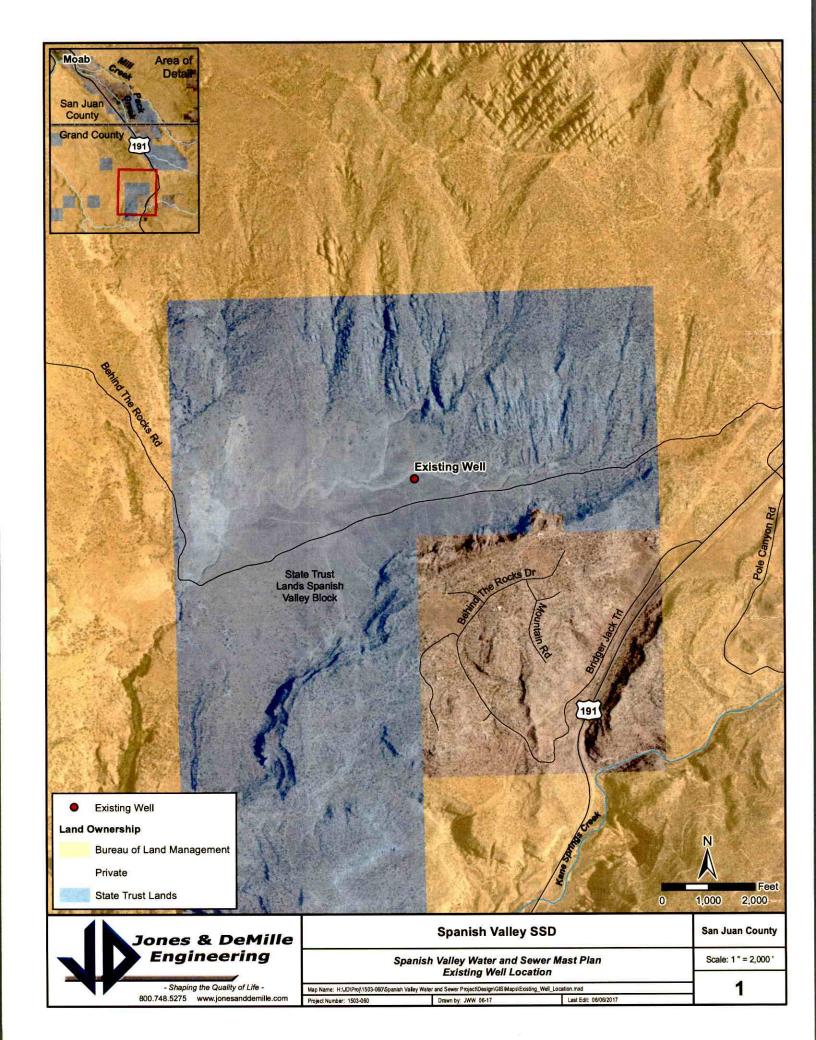
Upon completion of the test well, the District will test pump the well to verify the maximum flow which can be produced by the well. The test will run a minimum of 24 hours up to a maximum of 1 week. Throughout the pump test on the well, the District will monitor the level in a nearby well owned by the United States Bureau of Land Management (BLM). This well is located adjacent to Ken's lake to the west and approximately 6,000 feet northwest of the test well and falls under water right 05-3067. The contractor will install a sounding tube on the BLM well and will be able to monitor the water level in the well throughout the testing of the new well for the District. Any fluctuations will be recorded and analyzed to determine if the new well location will be adequate to supply culinary water for the District and not have any adverse effects on any wells nearby or throughout the valley.

An additional pump test will be performed on a well located on State Lands located approximately 4 miles southwest of Spanish Valley to determine the maximum flow which can be handled by this well. This well will also be tested for a minimum of 24 hours to a maximum of 1 week. Locations for this well as well as the locations of the test well and BLM well are attached to this memo.

Upon completion of the test well and pump test and if adequate water is available from the well. A long term Well Monitoring Plan will be developed and submitted according to the Division of Water Rights criteria.







PROPOSED FINAL WELL PILOT HOLE (IF PILOT HOLE TESTS POSITIVE) 0'-110'SANITARY SEAL 0'-1000 PILOT HOLE DIAMETER 8"-10" DEPENDING ON TOOLING OF INDIVIDUAL 18" MAX BOREHOLE 1.5'agl - 680'bgl 14" casing DRILLER 110'-400' FILLER GRAVEL PILOT HOLE REAMED TO FIND BEDROCK DIAMETER 450' ESTIMATED WATER LEVEL PROPOSED WELL ESTIMATED MAX TOTAL DEPTH: 1000' #1 - FINAL BOREHOLE DIAMETER WILL DEPEND ON HOW WELL 400' - 1000' PILOT TESTS. WELL ROUNDED 3/8 GRAVEL FINAL DIAMETER OF THE WELL IS ESTIMATED TO BE BETWEEN 8"-14" DIAGRAM REPRESENTS A MAXIMUM CASING DIAMETER OF 14 600 ESTIMATED DEPTH I #2 - ACTUAL SIZE OF SLOT WILL DEPEND ON WHAT IS SET FOR PUMP I ENCOUNTERED IN PILOT HOLE. ON OPEN HOLE PUMP TEST #3 - GRAVEL PACK IN SATURATION WILL DEPEND ON WHAT IS ENCOUNTERED IN PILOT. In saturation a 3/8 well-rounded gravel may be used. Above saturation a 'filler' gravel may be used. 680' - 1000' 14" 0.20" min diameter PILOT HOLE STAINLESS STEEL ESTIMATED MAX TOTAL DEPTH: 1000' WIRE WRAP SCREEN THE PILOT HOLE'S ESTIMATED TOTAL DEPTH WILL MOSTLY BE THROUGH THE NAVAJO SANDSTONE, AS THIS HOLE WILL BE IN AN AREA WITH NO PREVIOUS DRILLING, THE ACTUAL DEPTH WILL DEPEND ON THE GEOLOGY AND FLOWS ENCOUNTERED. ALL DEPTHS AND SIZES OF FINAL WELL ARE ESTIMATES DUE TO LACK OTHER DRILLING IN THIS AREA. THE CONSTRUCTION OF THE FINAL WELL (IF CONSTRUCTED) WILL BE BASED ON THE GEOLOGY AND THE FLOWS OF THE PILOT HOLE. BOREHOLE AND WELL DIAMETERS USED WILL BE THE MAXIMUM SIZE EXPECTED FOR THE NAVAJO IN THIS AREA. Project Manager: John Files San Juan County Date: May 2017 File: SJC ProposedWell.pdf Spanish Valley Well #1 Drawn By: Proposed Well Construction Diagram maps@BluesunGeoGraphics.com