Technical Data Information Report

RID Number	Transmitter	Transmitter Organization	Receiver	Receiver Organization	Keyword 1
8039.01	Klenke	Nye County Water District	QARC	Nye County	MWL

Document Date	4/8/2015	General Document Type	QA Program Doc	Keyword 2	Private
Entry Date	9/4/2015	Detail Document Type	Data	Keyword 3	Well

Document Title/Subject
Manual Water Level Measurements in Private Wells from January 1, 2011 through December 31, 2011. (Supersedes RID 8039)

Data Originator/Preparer
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Data Description
Data package includes Nye County's Regional Groundwater Elevation Database (RGED V6.0_052115.accdb) containing manual water level measurements made in private wells (non-EWDP) from January 1, 2011 through December 2011, field forms, hydrographs (available upon request), and exported data from the database, "Export Pahrump Data 123111.xlsx" and "Export Amargosa Data 123111.xlsx". This RID (8039.01) supersedes RID 8039 in order to update well locations based on reprocessed (Differentially Corrected) GPS locations using Trimble® Pathfinder Office (PFO) Program ver. 5.60.
Export files have been compressed and posetd to the NCWD website as rid8039_01.zip.

Data Collection Method
Manual water level measurement data collected using standardized electric water level sounders in accordance with Work Plan 10 Rev. 0, Groundwater Level Monitoring and Evaluation, and Technical Procedure 9.9 Rev. 4, Measurement of Groundwater Levels Using Electric Well Sounders.

Data Collection Location
Various locations in Pahrump Valley, Amargosa Desert, Chicago Valley, Stewart Valley, and surrounding areas. Specific locations for each well are included in RGED V.6.0 and in RID 8182

Data Collection Period
1/1/11 – 12/31/11.

Data Sources
1) NWRPO derived latitude and longitude for well location and elevation data for ground elevation; 2) Depth to groundwater measured with electric water level sounders as recorded on the NWRPO Water Level Measurement Field Form or field scientific notebook; 3) Wellhead diagrams as established with engineers steel tape and recorded in scientific notebook showing casing type, diameter, and measuring point stickup above land surface.
Supporting Data: : NWRPO Water Level Measurement Field Forms (TP-9.9 REV1-REV3), field scientific notebooks, and RID 8182 containing updated GPS coordinates.

Data Censoring
Basin Station – Measurement of 102.58 ft on 8/22/11 at 11:17 hrs was censored. Filed notes did not indicate that the well was pumping at the time of the measurement, and technician wasn't able to verify.

Data Processing
Routinely, data processing consists of calculations made in the Access database (RGED V6.0.accdb) and exports made from the database to MS Excel. Additionally, data are evaluated through the use of hydrographs to determine whether anomalous data exist. Anomalous data are investigated (through scientific notebooks, earthquake records, etc.) to determine the source of the anomaly. If the anomaly cannot be explained, the data are censored.

Data Limitations
AVSTP – Measurement of 304.20 ft on 10/24/11 at 15:11 hrs is questionable since it is approximately 1 ft lower than expected from the hydrograph trend. The measurement point was not censored; since no information is available that refutes this reading, and may actually indicate pumping of a nearby well, and/or a drop in the water table locally (similar to drops seen previously (RID 7925, on 1/27/09 and 3/16/09).

AW64 – Water level measurements cannot be obtained in this well approximately 81 ft below the measurement point (water table elevation of 2542 ft). The well is believed to be caved below this level, and water level measurements may not be representative (in equilibrium) of the localized potentiometric surface.
Crystal Fire – Measurement of 31.50 ft on 8/23/11 at 16:11 hrs is questionable since it is approximately 0.5 ft lower than expected from the hydrograph trend. The measurement point was not censored; since no information is available that refutes this reading, and may actually indicate pumping of a nearby well, and/or a drop in the water table locally (similar to drops seen previously (RID 7925, 12/14/05 to 11/16/07).
Donna – Measurement of 78.00 ft on 6/27/11 at 16:02 hrs is questionable since it is approximately 2.5 ft higher than expected from the hydrograph trend. The measurement point was not censored; since no information is available that refutes this reading.
DV Junction Well – Water level measurements cannot be obtained in this well approximately 3.8 ft below the measurement point (water table elevation of 2038 ft). The well is caved below this level, and water level measurements may not be representative (in equilibrium) of the localized potentiometric surface.
HWWT Gravel Pit – Measurement of 118.57 ft on 4/6/11 at 14:24 hrs is questionable since it is approximately 2.5 ft lower than expected from the hydrograph trend. The measurement point was not censored; since no information is available that refutes this reading.
NDOT – Measurement of 410.93 ft on 2/28/11 at 09:22 hrs is questionable since it is approximately 4 ft higher than expected from the hydrograph trend. The measurement point was not censored; since no information is available that refutes this reading.
Quarterhorse – Measurements of 62.34 ft on 8/23/11 at 16:14 hrs (approximately 3 ft higher than expected), and 62.04 ft on 10/26/11 at 11:24 hrs (approximately 1.5 ft higher than expected) are questionably higher than expected from the hydrograph trend. The measurement point was not censored; since no information is available that refutes this reading, and may actually indicate a rise in the water table locally.

Wells added to the program:

Wells AC-CS1, AC-CS2, AC-CS3, AC-CS4, AC-CS5, AC-CS6, AC-CS7, AC-CS8, AC-CS9, AC-CS10, and AC-CS11 were added to the program on 6/10/10. These piezometers are being measured by the Amargosa Conservancy (AC), with the data being supplied to Nye County. DV Junction Well is also being measured by the AC.

Note: Former U.S. Geological Survey (USGS) Yucca Mountain Project Environmental Monitoring Program Wells AD-3a (Gauging Station), AD-5 (Power 04), AD-7a, AD-9a, AD-12 (Ash Meadows Gauging Station), AD-14 (DV Junction Well), and RV-1, are being measured by Nye County under a cooperative agreement with the USGS. Wells AD-7a, AD-9a, and RV-1 were not previously on the Nye County Water Level Measurements Program (WLMP), and therefore were located by Nye County using a resource grade GPS prior to this update (RID 7925.01, April 2015). Water level data for these wells are reported using the Nye County GPS locations. More information for all of these wells can be found on the USGS NWIS website at: http://nwis.waterdata.usgs.gov/usa/nwis/gwlevels and the USGS/DOE Cooperative Studies in Nevada website at: http://nevada.usgs.gov/doe_nv/levelsmap1.htm

Wells removed from the program:

Measurements in Franklin Dry (USGS site ID 362525116274301) and Franklin PVC Well (USGS site ID 362525116274302) have temporarily been suspended since the installation of transducers by the USGS on 9/15/10. The transducers are anticipated to be in place for a period of about two years.
AW11 – The last water level taken in this well was 9/23/09, just prior to the well being capped. Hopefully, measurements will resume at some time in the future, when arrangements can be made to install a sounding port in the cap.
Farm 1B – The last water level measurement was taken was on 2/28/11. The owner has pulled the casing, and is currently in the process abandoning this well.
Forum Group – The last water level taken in this well was 6/15/10. Several attempts to obtain water level measurements have been made since this time, but without success. Hopefully, the obstruction near the surface can be cleared at some point in the future.
Harrow Disk – The last water level taken in this well was 9/23/09, just prior to the well being capped. Hopefully, measurements will resume at some time in the future, when arrangements can be made to install a sounding port in the cap.
Irene Fan – The last water level taken in this well was 9/23/09, just prior to the well being capped. Hopefully, measurements will resume at some time in the future, when arrangements can be made to install a sounding port in the cap.
Susan Moore – This well was removed from the program on 4/6/11, due to difficulty in obtaining water level measurements, and limited access to the well.

Governing QA Docs:	WP-10 Rev. 0, NWRPO TP-9.9 Rev. 4
Frequency of Transmittal	Biannually or as required by PI
Direct Questions About Data To:	QA Records Center