# Technical Data Information Report

| RID Number | Transmitter | Transmitter Organization | Receiver | Receiver Organization | Keyword 1 |
|---|---|---|---|---|---|
| 8243.00 | Klenke | Nye County | QARC | Nye County | MWL |

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| Document Date | 10/9/2018 | General Document Type | QA Program Doc | Keyword 2 | Private Wells |
| Entry Date | 10/17/2018 | Detail Document Type | Data | Keyword 3 | NCWD |

**Document Title/Subject**
Manual Water Level Measurements in Private Wells from January 1, 2017 through December 31, 2017.

**Data Originator/Preparer**
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**Data Description**
Manual Water Level Measurements in Private Wells from January 1, 2017 through December 31, 2017. Data package includes Nye County's Regional Groundwater Elevation Database (RGED V. 6.0_091018.accdb) containing manual water level measurements taken in Private Wells, from January 1, 2017, through December 31, 2017, field forms, hydrographs (available on request) and exported data from database - posted to nyecounty.net and nyecountywaterdistrict.net websites as rid8243.zip.

**Data Collection Method**
: Manual water level measurement data collected using standardized electric water level sounders in accordance with NCWD Work Plan-10 Rev. 0 (3/16/15), Groundwater Level Monitoring and Evaluation, and NCWD Technical Procedure 9.9 Rev. 0 (3/16/15), 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**
1/1/17 – 12/31/17

**Data Sources**
) 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 (Form TP-9.9 Rev 4, dated 8/6/09) or field scientific notebook (SNB); 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**
AW07 – Measurements of 69.89 ft at 13.07 hrs, on 6/20/17 was censored. This measurement was above the trend and believed to be due to a reading error by the technician.

**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**
AC-CS1 – Water level readings were not taken form 9/25/12 to 7/9/17 because a transducer has been installed in the piezometer tube.
AC-CS2 – Water level readings were not taken form 9/25/12 to 3/10/17 because a transducer has been installed in the piezometer tube.
AC-CS3 – Water level readings have not been taken since 9/25/12 because a transducer has been installed in the piezometer tube.
AC-CS4 – Water level readings have not been taken since 9/14/15 because a transducer has been installed in the piezometer tube.
AC-CS5 – Water level readings have not been taken since 9/25/12 because a transducer has been installed in the piezometer tube.

AD-9a – Well is situated just beyond the outer edge of an irrigation pivot which is probably influencing the water levels.
AW11 – The wellhead was cut down and a steel cap welded on some time before the 12/2/09 visit. The well was reactivated and a sounding port installed on 7/31/13. The well was subsequently given the new name of “AW11 - post capping” to reflect the new stickup, since the RGED database does not allow for the changing of the wellhead stickup for individual wells.
AW 64 – Readings are sporadic in this well since it is partially caved and water levels have declined to below the caved section. Readings are only possible when the water levels are at or near the yearly maximum. A new well was added to the program on 3/25/13 (Great Basin Drilling) - approximately 460 feet northwest) to replace this well when readings are no longer possible.
AW74 – This well (NDWR Log # 1933) is screened from 240 to 672 ft below ground surface and is believed to be tapping a deeper confined aquifer. This is evidenced by the water level in nearby well “Harrow Disk - post capping” located approximately 180 feet to the east, showing water levels of approximately 53 feet lower than that in well “AW74”.
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Basin Station – Measurements of 105.02 ft on 6/20/17 at 15:37 hrs, and 93.80 ft on 10/2/17 at 9:13 hrs are 29 and 17 feet lower than the hydrograph trend, and are due to pumping as noted in the field comments.
Caas Well – Measurements of 68.40 ft on 6/19/17 at 8:09 hrs, 66.30 ft on 9/27/17 at 7:44 hrs, and 58.70 ft on 12/20/17 at 9:00 hrs may be slightly lower than lower than the hydrograph trend and not represent the “true” static water level since the pumping was cycling on and off at the time of measurements, as noted in the field comments.
Chicago – Well was worked over and possibly deepened between 5/21/14 and 7/10/14 and appears to have established a new hydrograph trend with water levels approximately 4 feet lower than those before the work was done.
Forum Group – Well appears to have caved at sometime in the past and has a total current depth at 80 ft B.G.L. The Well Drillers Report (Log No. 69514) indicates that this well was originally drilled to a depth of 1020 ft on 11/15/1997. Water level measurements were not obtainable on 6/17/17, 9/27/17, and 12/21/17 visits due to the water level being lower than 80 ft B.G.L.
Grafitti Well –Well is nearly dry and water level readings only possible in this well when the water levels are at or near the yearly maximum. Readings were not obtainable on 6/20/17 and 9/28/17.
Harley – Measurements of 374.81 ft on 6/20/16 at 12:24 hrs, is approximately 3 ft lower than the hydrograph trend, and is due to pumping as noted in the comments. No reading was taken on 9/28/17 because the well was pumping.
Harrow Disk – The wellhead was cut down and a steel cap welded on some time before the 12/2/09 visit. The well was reactivated and a sounding port installed on 7/31/13. The well was subsequently given the new name of “Harrow Disk - post capping” to reflect the new stickup, since the RGED database does not allow for the changing of the wellhead stickup for individual wells.
Irene Fan – The wellhead was cut down and a steel cap welded on some time before the 12/2/09 visit. The well was reactivated and a sounding port installed on 7/31/13. The well was subsequently given the new name of “Irene Fan - post capping” to reflect the new stickup, since the RGED database does not allow for the changing of the wellhead stickup for individual wells.
Jeep Trail Well – Water level measurements for this well may contain slight errors since this well is uncased, and therefore the measurement point is difficult to locate with a high degree of accuracy.
Longstreet 2 – Measurements of 85.62 ft on 3/14/17 at 12:27 hrs, 87.30 ft on 6/13/17 at 12:44 hrs, and 87.69 ft on 12/14/17 at 11:29 hrs are 13, 12, and 10 feet lower than the hydrograph trend, and are due to pumping as noted in the field comments.
Mound Spring (well) – This well is noted as being a flowing artesian well since first being measured by the NWRPO Office on 2/27/04. Water table elevations are reported as equal to elevation of the outflow (0.33 ft below the measurement point elevation) and therefore underestimate the true water table elevation (pressure head). Note: This well is not the same as the Mound Springs located on USGS Topographic Maps located 0.71 miles to the SE (154°).

NDOT South – Well experienced a rapid water level increase of 34.4 feet between the 12/15/16 and 12/20/17 readings and probably is most likely due to increased precipitation in the Spring Mountains. Previously a similar increase occurred between 6/10/10 and 10/26/11 with an increase of 38.1 feet.
Rubys Store Well – Measurements of 100.19 ft on 6/14/17 at 11:46 hrs is 2.6 feet lower than the hydrograph trend, and is due to pumping as noted in the field comments.
Trout Canyon – Well is completed in a carbonate rock aquifer and water levels are not representative of alluvial aquifer heads.

Wells added to the program
GBWC12 – Well was drilled (completed to a depth of 990 ft on 12/15/16 - Log No.128074) to replace the Utilities 8 well. Location supplied -(36.175005, -115942124 – NAD83), M.P. elevation 2725 ft, and ground elevation 2725 ft, is approximate and will be updated with a high accuracy resource grade GPS location at some point in the future.

Reactivated wells:
No wells were reactivated during the period of this submittal.

Wells removed from the program:
Old Spanish Trail – Property changed hands and well was redone with a new slab and well house. Well is noted as having become flowing artesian from 9/17/12 through last reading taken on 3/22/17. Water table elevations for this time period are reported as equal to the measurement point elevation and therefore underestimate the true water table elevation (pressure head).
Utilities 8 – Well is out of service and replaces by GWBC 12 located approximately 160 feet to the southwest (242°).

Former U.S. Geological Survey (USGS) Yucca Mountain Project Environmental Monitoring Program Wells J-11, J-12, J-13 (HTH-6), JF-1 (WT-15), JF-2a (P#1), and JF-3 were last measured by Nye County on 3/21/16. The USGS continues to measure water levels in these wells and USGS Site ID's for the wells are J-11 (364706116170601), J-12 (364554116232401), J-13 (364828116234001), JF-1 (365116116233801), JF-2a (364938116252102) and JF-3 (364528116232201). More information for all of these wells can be found either on the USGS NWIS website at:
http://nwis.waterdata.usgs.gov/usa/nwis/gwlevels or the USGS/DOE Cooperative Studies in Nevada website at:
http://nevada.usgs.gov/doe_nv/levelsmap1.htm

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