# SSHCZO Metadata Worksheet

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| Data File Name | **SH\_Well\_W12.csv** |
| Date Prepared | 2017-12-06 |
| Descriptive Title | Well 12 |
| Update Frequency | Quarterly |
| Abstract | Well 12 drilled in 2009 by a power auger to a depth of 4 meters. Casing diameter is 5 cm and bottom meter is screened. Groundwater level data and water temperature for well 12 are measured every 15 minutes using a HOBO U20-001-01 non-vented pressure transducer. Barometric pressure is recorded using a Hobo HOBO U20-001-01 sensor and processed using Hoboware Pro software. Recorded data began 2017-02-08 through present. |
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| Data Value Descriptions | * COL1: label = TmStamp\_UTC * COL2: label = Water\_Temp\_C; water temperature; Units = degC * COL3: label = WL\_BLG\_m; water level below ground; Units = meters |
| Keywords | Groundwater Depth, Groundwater Temperatures, Hydrology |
| Methods | Groundwater level measurements are recorded every 15 minutes on a HOBO U20-001-01 non-vented pressure transducer. Data are manually downloaded monthly using HOBO-Ware Pro software. Sensor depth is calculated in the software by processing with barometric pressure data recorded on a separate HOBO U20-001-01 pressure transducer. Water level below ground determined using the suspended cable length to sensor below ground and taking the difference of the SensorDepth\_m [WL\_BLG\_m = 3.45 - SensorDepth\_m].  well_diagram  TOC above land surface = 0.30 meters  Sensor level down borehole from MP = 3.85 meters  Sensor level below ground = 3.55 meters  Casing type = pvc  Quality control:  Data were checked by graphing data in R package and comparing to precipitation and manual water level measurements using a Solinist electric tape. Bad, missing, or erroneous data values were removed or marked with -9999 which could be caused during data downloads and/or malfunctioning sensors. |
| Sites | Shale Hills Valley northing/easting: 147826.7002/ 586998.627; DMS: 40.664571, -77.903758 (NAD\_1983\_StatePlane\_Pennsylvania\_South\_FIPS\_3702); Elevation 278.17 meters |
| Publications | none |
| Citation | The following acknowledgment should accompany any publication or citation of these data: Logistical support and/or data were provided by the NSF-supported Susquehanna Shale Hills Critical Zone Observatory. |
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