WorleyParsons
resources & energy

**Table 5.4-5**
**TDS and Chloride Concentrations for Selected Wells in the Chuckwalla Valley Groundwater Basin - Genesis Solar, LLC**

| Well ID | Source | Sample Collection Date | Sample Depth (feet bgs) | Sample Depth (feet amsl) | Approximate Ground Surface Elevation (feet amsl) | Well Depth (feet bgs) | Screened Interval (feet bgs) | TDS (mg/L) | Chloride (mg/L | Geologic Unit |
|---|---|---|---|---|---|---|---|---|---|---|
| OBS-2 | WorleyParons, 2009 | | 800 | -417 | 383 | - - | - - | 5,000 | 2,300 | Bouse Formation |
| TW-1 | WorleyParons, 2009 | | 350 to 550 | 33 to -167 | 383 | 555 | 350 to 550 | 9,500 | 5,600 | Bouse Formation |
| 1 | DWR, 1963 | 5/19/1961 | - - | - - | 889 | - - | - - | 1,760 | 656 | - - |
| 5 | DWR, 1963 | 10/10/1961 | ?to85.7 | ? to 274.3 | 360 | 85.7 | -- | 5,730 | 1,770 | Alluvium |
| 14 | DWR Well Records | 6/25/1991 | 890 to 940 | -498 to -548 | 392 | 982 | 890 to 940 | 2,400 | - - | Fanglomerate |
| 17 | DWR, 1963 | 1959 | 1,175 to 1,200 | -814 to -839 | 361 | 1200 | 1,175 to 1,200 | 2,150 | 986 | Fanglomerate |
| 21 | DWR, 1963 | 10/17/1917 | - - | - - | - - | - - | - - | 3,820 | 865 | - - |
| 23 | USGS- NWIS, 2009 | 4/19/1979 | - - | - - | 392.10 | - - | - - | 2,350 | 950 | - - |
| 27 | DWR, 1963 | 10/10/1961 | ? to 486.4 | ? to 68.6 | 555 | 486.4 | - - | 2,210 | 718 | ?/Bouse Formation |
| 28 | DWR, 1963 | 10/10/1961 | ? to 779.4 | ? to -259.4 | 520 | 779.4 | - - | 1,470 | 273 | ?/Bouse Formation |
| 31 | DWR, 1963 | 10/10/1961 | ? to 242.2 | ? to 181.69 | 423.89 | 242.2 | - - | 2,560 | 734 | Alluvium |
| 32 | DWR, 1963 | 10/10/1961 | ? to 315.7 | ? to 102.3 | 418.00 | 315.7 | - - | 8,150 | 3,250 | Alluvium |
| 37 | Engineering-Science, 199 | 6/4/1990 | 750 to 1,050 | -316.91 to -616.91 | 433.09 | 1,050 | 750 to 1,050 | 752 | 214 | Bouse Formation/ Fanglomerate |
| 38 [12] | Woodward-Clyd Consultants, 1986 | 6/20/1986 | 275 | 158 | 433 | 1,040 | 795 to 815 and 995 to 1,015 | 1,222 | 540 | Bouse Formation |
| | | | 315 | 118 | 433 | | | 1,081 | 480 | |
| | | | 335 | 98 | 433 | | | 1,128 | 510 | |
| | | | 355 | 78 | 433 | | | 1,175 | 420 | |
| | | | 375 | 58 | 433 | | | 1,222 | 540 | |
| | | | 395 | 38 | 433 | | | 1,340 | 540 | |
| | | | 415 | 18 | 433 | | | 1,387 | 450 | |
| | | | 435 | -2 | 433 | | | 1,340 | 600 | |
| | | | 455 | -22 | 433 | | | 1,551 | 510 | |
| | | | 475 | -42 | 433 | | | 1,586 | 720 | |
| | | | 495 | -62 | 433 | | | 2,244 | 1,170 | |
| | | | 515 | -82 | 433 | | | 1,974 | 450 | |
| | | | 535 | -102 | 433 | | | 4,028 | 1,500 | |
| | | | 575 | -142 | 433 | | | 2,362 | 960 | |
| | | | 615 | -182 | 433 | | | 1,281 | 600 | |
| | | | 635 | -202 | 433 | | | 893 | 330 | |
| | | | 655 | -222 | 433 | | | 787 | 270 | |
| | | | 675 | -242 | 43 | | | 776 | 270 | |
| | | | 695 | -262 | 433 | | | 705 | 240 | |
| | | | 735 | -302 | 433 | | | 599 | 330 | |
| | | | 755 | -322 | 433 | | | 682 | 240 | |
| | | | 775 | -342 | 433 | | | 646 | 240 | |
| | | | 795 | -362 | 433 | | | 752 | 270 | |
| | | | 815 | -382 | 433 | | | 752 | 270 | |
| | | | 835 | -402 | 433 | | | 717 | 270 | Fanglomerate |
| | | | 855 | -422 | 433 | | | 670 | 240 | |
| | | | 875 | -442 | 433 | | | 729 | 240 | |
| | | | 895 | -462 | 433 | | | 705 | 240 | |
| | | | 915 | -482 | 433 | | | 693 | 270 | |
| | | | 935 | -502 | 433 | | | 729 | 300 | |
| | | | 955 | -522 | 433 | | | 752 | 300 | |
| | | | 975 | -542 | 433 | | | 740 | 270 | |
| | | | 995 | -562 | 433 | | | 705 | 270 | |
| | | | 1,015 | -582 | 433 | | | 747 | 270 | |
| 39 | CH2M Hill and Boyle Engineering,1995/ DWR, 1963 | 1/1986 (TDS) 6/12/1961 (Chloride) | 853 to 1,083 | -410.06 to -640.06 | 442.94 | 1,139 | 853 to 1,083 | 786 | 216 | Fanglomerate |
| 42 | CH2M Hill and Boyle Engineering, 1995/ Woodward-Clyde Consultants, 1986 | 5/1988 (TDS) 8/24/83 (Chloride | 738 to 1,100 | -268.00 to -630.00 | 470.00 | 1,100 | 738 to 1,100 | 765 | 199 | Bouse Formation/ Fanglomerate |
| 43 | Kennedy/Jenks/Chilton, 198 | Jan-86 | 510 to 780 | -4.40 to -274.40 | 505.60 | 830 | 510 to 600 and 680 to 78 | 1,150 | 460 | Bouse Formation |
| 47 | Kennedy/Jenks/Chilton, 198 | Jan-86 | 500 to 850 | 121 to -229 | 621 | 872 | 500 to 580, 620 to 640, 710 to 850 | 1,350 | 520 | Bouse Formation |
| | Woodward-Clyde Consultants, 1986 | 1/4/1984 | 490 | 131 | 621 | | | 2,090 | 550 | |
| | Woodward-Clyde Consultants, 1986 | 1/5/1984 | 590 | 31 | 621 | | | 1,740 | 586 | |
| | Woodward-Clyde Consultants, 198 | 2/7/1984 | 850 | -229 | 621 | | | 1,380 | 570 | |
| 50 | DWR, 1963 | 1959 | ? to 818 | ? to -252 | 566 | 818 | -- | -- | 131 | ?/Bouse Formation |

Notes:
1. -- = information not availible or not applicable
2. amsl = above mean sea level
3. bgs = below ground surface
4. TDS = total dissolved solids
5. mg/L = milligrams per liter
6. ? = unkown
7. DWR, 1963, Data on Water Wells and Springs in the Chuckwalla Valley Area. DWR Bull. 91-7
8. Kennedy/Jenks/Chilton, 1986. Final Report Sampling and Analysis in the Wiley's Well Area. Dated March 19.
9. CH2M Hill and Boyle Engineering, 1995. Technical Memorandum, Water Treatment Plant Evaluation - Phase I. Dated March 30
10. Woodward-Clyde Consultants, 1986. Final Report, Groundwater Quality Investigation, Wiley Well Area. Dated March 13.
11. Engineering Science, 1990. Water and Wastewater Facilities Engineering Study, California State Prison - Chuckawalla Valley. Dated September.
12. The TDS concentrations for well 38 were calculated based on electrical conductivity values and a converstion factor (TDS = EC x 0.47) reported by Woodward-Clyde Consultants, 1986
13. USGS-NWIS, 2009. United States Geological Survey - National Water Information System (USGS-NWIS) database. http://nwis.waterdata.usgs.gov/usa/nwis/gwdata