

GROUNDWATER LEVELS  
in the  
CAMP CREEK  
DESIGNATED GROUND WATER BASIN

2016



By Matthew A. Sares and Andrew Flor



**COLORADO**  
**Division of Water Resources**

Department of Natural Resources

John W. Hickenlooper  
Governor

Robert W. Randall  
Interim Executive Director

Dick Wolfe  
State Engineer

Matthew A. Sares  
Project Manager

**CAMP CREEK DESIGNATED GROUND WATER BASIN  
WATER LEVEL MEASUREMENTS  
2016**

This report contains the basic groundwater level data collected from wells in the Camp Creek Designated Ground Water Basin during the period from 1993 through 2016, although water levels were not collected in 2009. Acquisition and publication of this information is a cooperative effort between the well owners and the Colorado Division of Water Resources. The project is part of a statewide groundwater level monitoring program funded by Senate Bill 200 (1987 legislative session). This legislation directed that a portion of the fees collected for water well permit applications be used for the establishment of a program to monitor water level trends throughout the state.

The report contains water level measurements for nine wells measured March 22, 2016. The wells are listed by name in numerical order and the locations of those wells in the geographic context of the designated basin are shown on the following map. All of the Camp Creek wells that are monitored are located in Townships 2 and 3 North, Range 54 West of the 6<sup>th</sup> P.M. Depth to groundwater, below land surface, ranged from 13 to 39 feet. Only two wells, CC-01 and CC-02, in the upper reaches of Camp Creek had water levels less than 20 feet below ground surface.

Tabular and graphical data are presented for each well for the available period of record. Analyses of changes in the water level in the aquifer are complicated by unknown pumping schedules.

On average, groundwater levels in wells in the Camp Creek Designated Basin have increased by over 1 foot over the previous year and every well showed an increase in water level. However, basin wide water levels have declined approximately 7.8 feet since 1993 when the Division of Water Resources began the monitoring program. The overall declining trend shows signs of leveling-off in the past 10 years, even showing a slight upturn in several wells over the past 5 years. Of particular note is CC-01, at the upper end of the basin, which has had an increasing trend since the early 2000's and the water level is significantly higher than at the beginning of this monitoring program (12 feet vs. 19ft below ground surface).

Copies of this report can be purchased from the Office of the State Engineer, Records Section, 1313 Sherman St., Room 821, Denver, CO 80203, (303) 866-3581. An electronic copy of this report is available on the Division of Water Resources website <http://water.state.co.us/groundwater/Levels/Pages/HydroGeo.aspx>.

Additionally, all groundwater level data may be accessed and exported using the tools available on the Colorado Decision Support System website:

<http://cdss.state.co.us/onlineTools/Pages/GroundWaterWaterLevels.aspx>

and the Colorado Information Marketplace HydroBase Bulk Data Exporter:

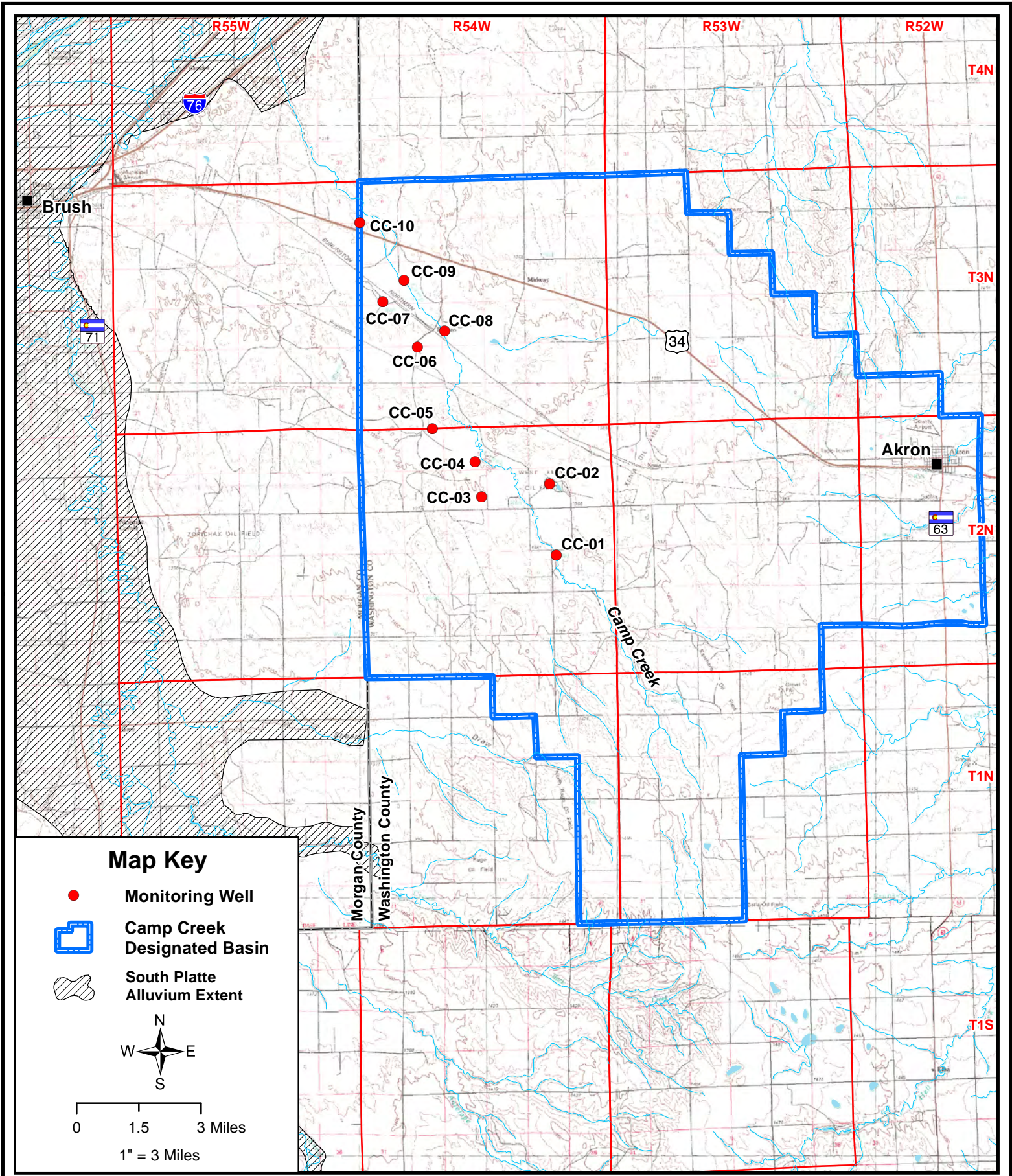
<https://data.colorado.gov/Information-Sharing/DWR-Well-Water-Level/hfwh-wsqi>

or the Colorado Decision Support System MapViewer

<http://water.state.co.us/DataMaps/GISandMaps/MapView/MapView/Pages/FAQ.aspx>

If you have any questions regarding groundwater and the information in this report, please contact the Groundwater Information Desk at (303) 866-3587.

**THIS PAGE INTENTIONALLY BLANK**



**COLORADO**  
 Division of Water Resources  
 Department of Natural Resources

State of Colorado -- Division of Water Resources  
**Camp Creek Designated Basin  
 Monitoring Well Network**

**THIS PAGE INTENTIONALLY BLANK**

# CAMP CREEK

**Well Name:** **CAMP CREEK - 01** **Owner:** LEO & MARY ANN BASLER  
**Permit #:** 2804 - F - **Location #:** SB00205423ABB **USGS Site ID:**  


---

**Division:** 1 **Water District:** 1 **County:** WASHINGTON  
**Location:** Q160 Q40 Q10 Section Twnshp Range PM Distance from section lines:  
NE NW NW 23 2 N 54 W S From N/S line: 720 N From E/W line: 2000 E  
**UTM Coordinates (NAD83):** Northing (UTM y) 4443506.5 Easting (UTM x): 637601.0 GPS  
**Latitude/Longitude (decimal degrees):** 40.130633 -103.384941  

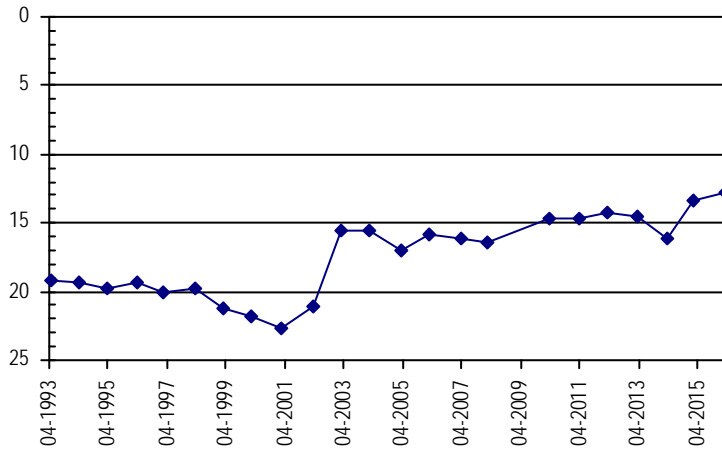

---

**Surface Elevation (ft):** 4585 **Top Perforated Interval (ft):** **Base of grout (ft):** **Water Level Change**  
**Well depth (ft):** 53 **Bottom Perforated Interval (ft):** **1 year:** 0.70  
**Aquifer(s):** QUATERNARY ALLUVIUM **5 year:** 1.91  
**10 year:** 3.15

**Measurements from last 10 years**

Date	Depth to WL (ft)	Elev of WL (ft)	Change (ft)
2/28/2006	15.87	4569.13	1.18
3/28/2007	16.10	4568.90	-0.23
2/27/2008	16.48	4568.52	-0.38
3/3/2010	14.74	4570.26	1.74
3/1/2011	14.63	4570.37	0.11
3/28/2012	14.21	4570.79	0.42
3/6/2013	14.51	4570.49	-0.30
3/6/2014	16.07	4568.93	-1.56
2/9/2015	13.42	4571.58	2.65
3/22/2016	12.72	4572.28	0.70

**All Historic Measurements**



**Well Name:** **CAMP CREEK - 02** **Owner:** MARGARET GROOMS  
**Permit #:** 2297 - F - **Location #:** SB00205411ACC **USGS Site ID:**  


---

**Division:** 1 **Water District:** 1 **County:** WASHINGTON  
**Location:** Q160 Q40 Q10 Section Twnshp Range PM Distance from section lines:  
NE SW SW 11 2 N 54 W S From N/S line: 2140 N From E/W line: 2550 E  
**UTM Coordinates (NAD83):** Northing (UTM y) 4446264.5 Easting (UTM x): 637345.0 GPS  
**Latitude/Longitude (decimal degrees):** 40.155513 -103.387357  

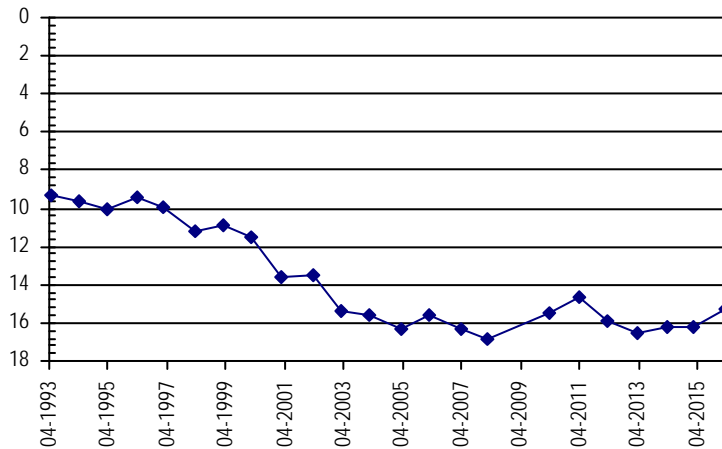

---

**Surface Elevation (ft):** 4470 **Top Perforated Interval (ft):** **Base of grout (ft):** **Water Level Change**  
**Well depth (ft):** 52 **Bottom Perforated Interval (ft):** **1 year:** 1.00  
**Aquifer(s):** QUATERNARY ALLUVIUM **5 year:** -0.66  
**10 year:** 0.36

**Measurements from last 10 years**

Date	Depth to WL (ft)	Elev of WL (ft)	Change (ft)
2/28/2006	15.62	4454.38	0.67
3/28/2007	16.32	4453.68	-0.70
2/27/2008	16.84	4453.16	-0.52
3/3/2010	15.49	4454.51	1.35
3/1/2011	14.60	4455.40	0.89
3/28/2012	15.87	4454.13	-1.27
3/6/2013	16.57	4453.43	-0.70
3/6/2014	16.27	4453.73	0.30
2/9/2015	16.26	4453.74	0.01
3/22/2016	15.26	4454.74	1.00

**All Historic Measurements**



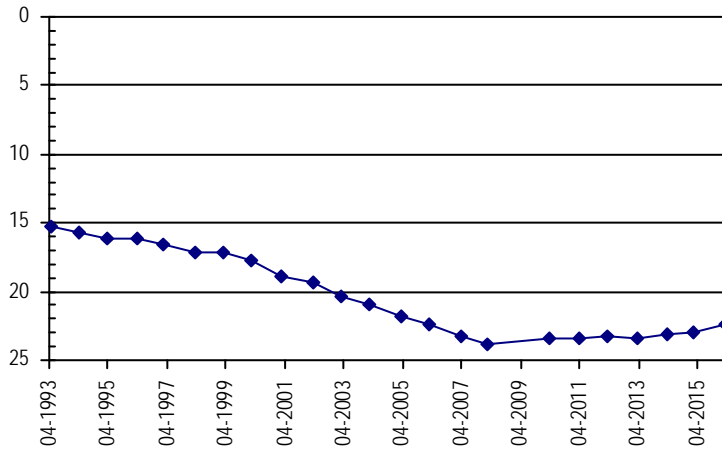
## CAMP CREEK

<b>Well Name:</b>	<b>CAMP CREEK - 03</b>	<i>Owner:</i>	ED BASLER
<i>Permit #:</i>	20791 - F -	<i>Location #:</i>	SB00205409DAD
<i>USGS Site ID:</i>			
<i>Division:</i>	1	<i>Water District:</i>	1
		<i>County:</i>	WASHINGTON
<i>Location:</i>	Q160 Q40 Q10 Section	Twnshp Range PM	Distance from section lines:
	SE NE SE 9	2 N 54 W S	From N/S line: 1690 S From E/W line: 680 E
<i>UTM Coordinates (NAD83):</i>	<i>Northing (UTM y)</i>	4445757.5	<i>Easting (UTM x):</i> 634691.0 <i>GPS</i>
<i>Latitude/Longitude (decimal degrees):</i>	40.151377		-103.418613
<i>Surface Elevation (ft):</i>	4435	<i>Top Perforated Interval (ft):</i>	<i>Base of grout (ft):</i>
<i>Well depth (ft):</i>	82	<i>Bottom Perforated Interval (ft):</i>	<b>Water Level Change</b>
<i>Aquifer(s):</i>	QUATERNARY ALLUVIUM		<b>1 year:</b> 0.59
			<b>5 year:</b> 1.04
			<b>10 year:</b> 0.06

### Measurements from last 10 years

Date	Depth to WL (ft)	Elev of WL (ft)	Change (ft)
2/28/2006	22.43	4412.57	-0.56
3/28/2007	23.25	4411.75	-0.82
2/27/2008	23.79	4411.21	-0.54
3/3/2010	23.34	4411.66	0.45
3/1/2011	23.41	4411.59	-0.07
3/28/2012	23.21	4411.79	0.20
3/6/2013	23.39	4411.61	-0.18
3/6/2014	23.13	4411.87	0.26
2/9/2015	22.96	4412.04	0.17
3/22/2016	22.37	4412.63	0.59

### All Historic Measurements

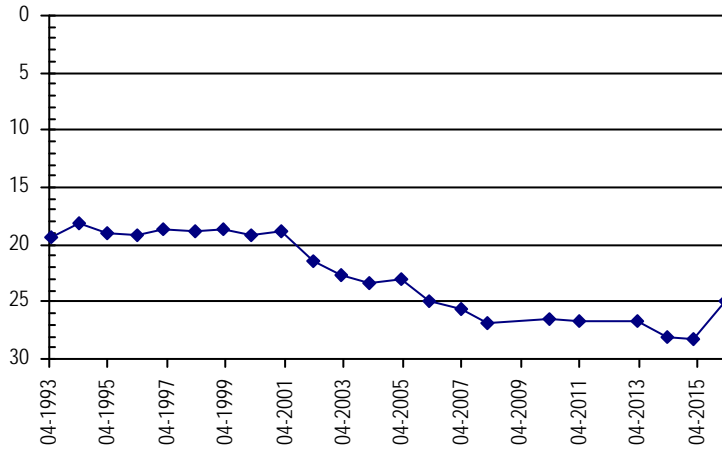


<b>Well Name:</b>	<b>CAMP CREEK - 04</b>	<i>Owner:</i>	SPENCE RULE
<i>Permit #:</i>	19358 - F -	<i>Location #:</i>	SB00205404DDB
<i>USGS Site ID:</i>			
<i>Division:</i>	1	<i>Water District:</i>	1
		<i>County:</i>	WASHINGTON
<i>Location:</i>	Q160 Q40 Q10 Section	Twnshp Range PM	Distance from section lines:
	SE SE NW 4	2 N 54 W S	From N/S line: 930 S From E/W line: 1310 E
<i>UTM Coordinates (NAD83):</i>	<i>Northing (UTM y)</i>	4447137.5	<i>Easting (UTM x):</i> 634443.1 <i>GPS</i>
<i>Latitude/Longitude (decimal degrees):</i>	40.163845		-103.421236
<i>Surface Elevation (ft):</i>	4420	<i>Top Perforated Interval (ft):</i>	<i>Base of grout (ft):</i>
<i>Well depth (ft):</i>	83	<i>Bottom Perforated Interval (ft):</i>	<b>Water Level Change</b>
<i>Aquifer(s):</i>	QUATERNARY ALLUVIUM		<b>1 year:</b> 3.35
			<b>5 year:</b> 1.78
			<b>10 year:</b> 0.10

### Measurements from last 10 years

Date	Depth to WL (ft)	Elev of WL (ft)	Change (ft)
2/28/2006	25.01	4394.99	-1.98
3/28/2007	25.57	4394.43	-0.56
2/27/2008	26.90	4393.10	-1.33
3/3/2010	26.48	4393.52	0.42
3/1/2011	26.69	4393.31	-0.21
3/28/2012			
3/6/2013	26.71	4393.29	
3/6/2014	28.02	4391.98	-1.31
2/9/2015	28.26	4391.74	-0.24
3/22/2016	24.91	4395.09	3.35

### All Historic Measurements



**CAMP CREEK**

**Well Name:** **CAMP CREEK - 05** **Owner:** SPENCE RULE  
**Permit #:** 25969 - F - **Location #:** SB00205405ABB **USGS Site ID:**

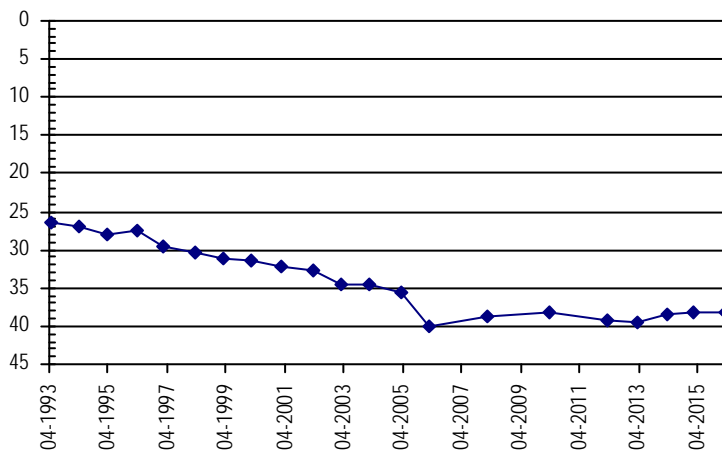
**Division:** 1 **Water District:** 1 **County:** WASHINGTON  
**Location:** Q160 Q40 Q10 Section Twnshp Range PM Distance from section lines:  
 NE NW NW 5 2 N 54 W S **From N/S line:** 20 N **From E/W line:** 1310 E  
**UTM Coordinates (NAD83):** **Northing (UTM y)** 4448422.5 **Easting (UTM x):** 632777.1 *GPS*  
**Latitude/Longitude (decimal degrees):** 40.175683 -103.440528

**Surface Elevation (ft):** 4405 **Top Perforated Interval (ft):** **Base of grout (ft):** **Water Level Change**  
**Well depth (ft):** 92 **Bottom Perforated Interval (ft):** **1 year:** 0.12  
**Aquifer(s):** QUATERNARY ALLUVIUM **5 year:**  
**10 year:** 1.93

**Measurements from last 10 years**

Date	Depth to WL (ft)	Elev of WL (ft)	Change (ft)
2/28/2006	40.03	4364.97	-4.48
3/28/2007			
2/27/2008	38.65	4366.35	
3/3/2010	38.15	4366.85	0.50
3/1/2011			
3/28/2012	39.27	4365.73	
3/6/2013	39.43	4365.57	-0.16
3/6/2014	38.36	4366.64	1.07
2/9/2015	38.22	4366.78	0.14
3/22/2016	38.10	4366.90	0.12

**All Historic Measurements**



**Well Name:** **CAMP CREEK - 06** **Owner:** SPENCE RULE  
**Permit #:** 19966 - F - **Location #:** SB00305429BAA **USGS Site ID:**

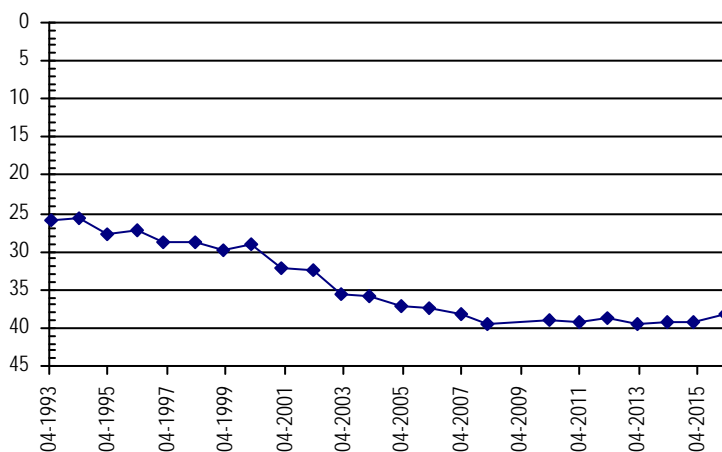
**Division:** 1 **Water District:** 1 **County:** WASHINGTON  
**Location:** Q160 Q40 Q10 Section Twnshp Range PM Distance from section lines:  
 NW NE NE 29 3 N 54 W S **From N/S line:** 110 N **From E/W line:** 2290 W  
**UTM Coordinates (NAD83):** **Northing (UTM y)** 4451589.5 **Easting (UTM x):** 632211.1 *GPS*  
**Latitude/Longitude (decimal degrees):** 40.204295 -103.446522

**Surface Elevation (ft):** 4370 **Top Perforated Interval (ft):** **Base of grout (ft):** **Water Level Change**  
**Well depth (ft):** 99 **Bottom Perforated Interval (ft):** **1 year:** 1.00  
**Aquifer(s):** QUATERNARY ALLUVIUM **5 year:** 1.02  
**10 year:** -0.64

**Measurements from last 10 years**

Date	Depth to WL (ft)	Elev of WL (ft)	Change (ft)
2/28/2006	37.54	4332.46	-0.40
3/28/2007	38.23	4331.77	-0.69
2/27/2008	39.62	4330.38	-1.39
3/3/2010	38.94	4331.06	0.68
3/1/2011	39.20	4330.80	-0.26
3/28/2012	38.61	4331.39	0.59
3/6/2013	39.59	4330.41	-0.98
3/6/2014	39.26	4330.74	0.33
2/9/2015	39.18	4330.82	0.08
3/22/2016	38.18	4331.82	1.00

**All Historic Measurements**





## CAMP CREEK

**Well Name:** **CAMP CREEK - 07**

**Owner:** VAUGHEY & VAUGHEY

**Permit #:** 21077 - S -

**Location #:** SB00305418DCC

**USGS Site ID:**

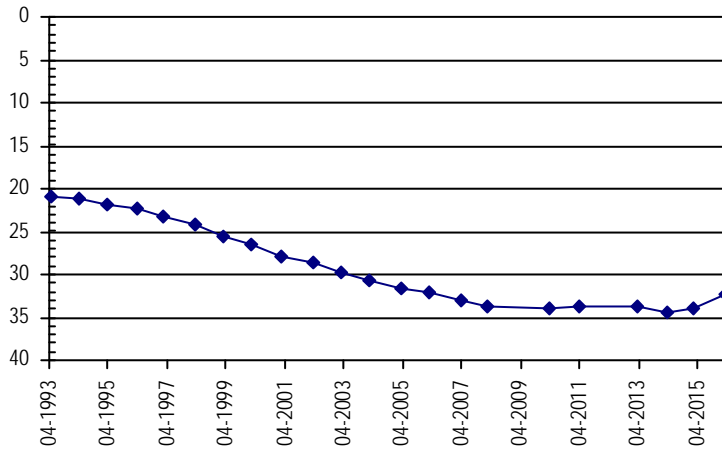
**Division:** 1      **Water District:** 1      **County:** WASHINGTON  
**Location:** Q160 Q40 Q10 Section    **Twnshp**    **Range**    **PM**      **Distance from section lines:**  
    SE SW SW 18      3 N      54 W S      **From N/S line:** 370 S    **From E/W line:** 2040 E  
**UTM Coordinates (NAD83):**    **Northing (UTM y)**    4453344.5    **Easting (UTM x):** 630876.1    *GPS*  
**Latitude/Longitude (decimal degrees):**    40.220310      -103.461846

**Surface Elevation (ft):** 4355      **Top Perforated Interval (ft):**      **Base of grout (ft):**      **Water Level Change**  
**Well depth (ft):** 115      **Bottom Perforated Interval (ft):**      **1 year:** 1.56  
**Aquifer(s):** QUATERNARY ALLUVIUM      **5 year:** 1.27  
    **10 year:** -0.27

**Measurements from last 10 years**

Date	Depth to WL (ft)	Elev of WL (ft)	Change (ft)
2/28/2006	32.13	4322.87	-0.59
3/28/2007	33.00	4322.00	-0.87
2/27/2008	33.63	4321.37	-0.63
3/3/2010	33.84	4321.16	-0.21
3/1/2011	33.67	4321.33	0.17
3/28/2012			
3/6/2013	33.81	4321.19	
3/6/2014	34.35	4320.65	-0.54
2/9/2015	33.96	4321.04	0.39
3/22/2016	32.40	4322.60	1.56

**All Historic Measurements**



**Well Name:** **CAMP CREEK - 08**

**Owner:** SPENCE RULE

**Permit #:** 21958 - F -

**Location #:** SB00305421CBB

**USGS Site ID:**

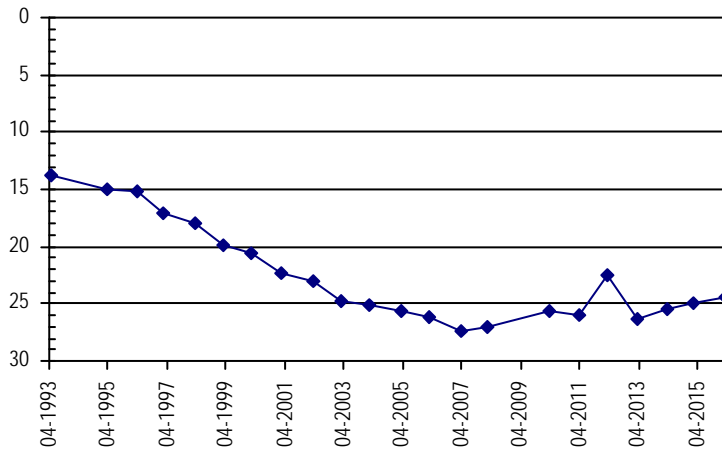
**Division:** 1      **Water District:** 1      **County:** WASHINGTON  
**Location:** Q160 Q40 Q10 Section    **Twnshp**    **Range**    **PM**      **Distance from section lines:**  
    SW NW NW 21      3 N      54 W S      **From N/S line:** 1800 S    **From E/W line:** 420 W  
**UTM Coordinates (NAD83):**    **Northing (UTM y)**    4452214.5    **Easting (UTM x):** 633269.1    *GPS*  
**Latitude/Longitude (decimal degrees):**    40.209756      -103.433966

**Surface Elevation (ft):** 4363      **Top Perforated Interval (ft):**      **Base of grout (ft):**      **Water Level Change**  
**Well depth (ft):** 83      **Bottom Perforated Interval (ft):**      **1 year:** 0.56  
**Aquifer(s):** QUATERNARY ALLUVIUM      **5 year:** 1.65  
    **10 year:** 1.73

**Measurements from last 10 years**

Date	Depth to WL (ft)	Elev of WL (ft)	Change (ft)
2/28/2006	26.12	4336.88	-0.52
3/28/2007	27.37	4335.63	-1.25
2/27/2008	27.05	4335.95	0.32
3/3/2010	25.68	4337.32	1.37
3/1/2011	26.04	4336.96	-0.36
3/28/2012	22.44	4340.56	3.60
3/6/2013	26.25	4336.75	-3.81
3/6/2014	25.38	4337.62	0.87
2/9/2015	24.95	4338.05	0.43
3/22/2016	24.39	4338.61	0.56

**All Historic Measurements**



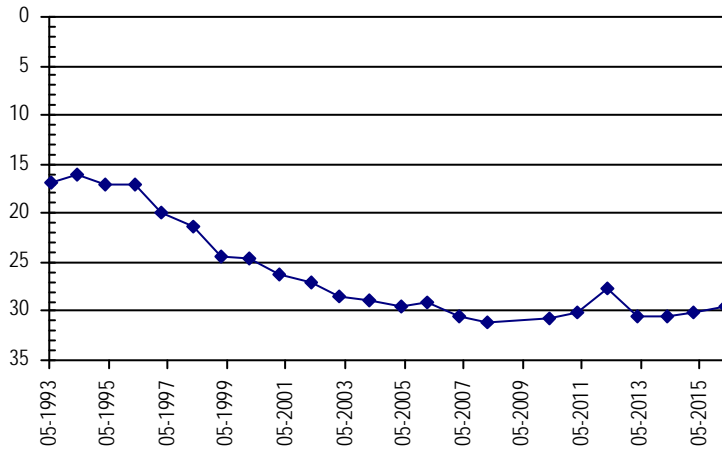
**CAMP CREEK**

<b>Well Name:</b> CAMP CREEK - 09			<i>Owner:</i> SPENCE RULE		
<i>Permit #:</i> 15356 - F -	<i>Location #:</i> SB00305417BCC	<i>USGS Site ID:</i>			
<i>Division:</i> 1	<i>Water District:</i> 1	<i>County:</i> WASHINGTON			
<i>Location:</i> Q160 Q40 Q10 Section NW SW SW 17	<i>Twnshp</i> 3 N	<i>Range</i> 54 W	<i>PM</i> S	<i>Distance from section lines:</i> <i>From N/S line:</i> 2500 N <i>From E/W line:</i> 620 W	
<i>UTM Coordinates (NAD83): Northing (UTM y)</i> 4454178.4		<i>Easting (UTM x):</i> 631687.1 <i>GPS</i>			
<i>Latitude/Longitude (decimal degrees):</i> 40.227694		-103.452147			
<i>Surface Elevation (ft):</i> 4340	<i>Top Perforated Interval (ft):</i>	<i>Base of grout (ft):</i>		<b>Water Level Change</b>	
<i>Well depth (ft):</i> 99	<i>Bottom Perforated Interval (ft):</i>		<b>1 year:</b> 0.68		
<i>Aquifer(s):</i> QUATERNARY ALLUVIUM			<b>5 year:</b> 0.64		
			<b>10 year:</b> -0.40		

**Measurements from last 10 years**

Date	Depth to WL (ft)	Elev of WL (ft)	Change (ft)
2/28/2006	29.11	4310.89	0.30
3/28/2007	30.43	4309.57	-1.32
2/27/2008	31.18	4308.82	-0.75
3/3/2010	30.73	4309.27	0.45
3/1/2011	30.15	4309.85	0.58
3/28/2012	27.69	4312.31	2.46
3/6/2013	30.58	4309.42	-2.89
3/6/2014	30.60	4309.40	-0.02
2/9/2015	30.19	4309.81	0.41
3/22/2016	29.51	4310.49	0.68

**All Historic Measurements**



<b>Well Name:</b> CAMP CREEK - 10			<i>Owner:</i> HARRY BOLINGER		
<i>Permit #:</i> 21217 - F -	<i>Location #:</i> SB00305407BBB	<i>USGS Site ID:</i>			
<i>Division:</i> 1	<i>Water District:</i> 1	<i>County:</i> WASHINGTON			
<i>Location:</i> Q160 Q40 Q10 Section NW NW NW 7	<i>Twnshp</i> 3 N	<i>Range</i> 54 W	<i>PM</i> S	<i>Distance from section lines:</i> <i>From N/S line:</i> 30 N <i>From E/W line:</i> 90 W	
<i>UTM Coordinates (NAD83): Northing (UTM y)</i> 4456400.4		<i>Easting (UTM x):</i> 629969.1 <i>GPS</i>			
<i>Latitude/Longitude (decimal degrees):</i> 40.247974		-103.471883			
<i>Surface Elevation (ft):</i> 4328	<i>Top Perforated Interval (ft):</i> 41	<i>Base of grout (ft):</i>		<b>Water Level Change</b>	
<i>Well depth (ft):</i> 126	<i>Bottom Perforated Interval (ft):</i> 126		<b>1 year:</b>		
<i>Aquifer(s):</i> QUATERNARY ALLUVIUM			<b>5 year:</b>		
			<b>10 year:</b>		

**Measurements from last 10 years**

Date	Depth to WL (ft)	Elev of WL (ft)	Change (ft)
2/28/2006	27.84	4300.16	-0.45
3/28/2007	28.34	4299.66	-0.50
2/27/2008	29.02	4298.98	-0.68
3/3/2010	29.75	4298.25	-0.73
3/1/2011	29.96	4298.04	-0.21
3/28/2012	29.97	4298.03	-0.01
3/6/2013	32.32	4295.68	-2.35
3/6/2014	32.69	4295.31	-0.37
2/9/2015	31.58	4296.42	1.11
3/22/2016			

**All Historic Measurements**

