GROUND WATER LEVELS CAMP CREEK DESIGNATED GROUND WATER BASIN

2013



By Kevin C. Donegan

John W. Hickenlooper Governor

Mike King Executive Director

Dick Wolfe State Engineer Matthew A. Sares Project Manager

CAMP CREEK DESIGNATED GROUND WATER BASIN WATER LEVEL MEASUREMENTS 2013

This report contains the basic ground water level data collected from wells in the Camp Creek Designated Ground Water Basin during the period from 1993 through 2013. Acquisition and publication of this information is a cooperative effort between the well owners the Colorado Division of Water Resources. The project is part of a statewide ground water 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 ten wells measured March 6, 2013. The locations of those wells in 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 6th P.M. Depth to ground water, below land surface, ranged from 14 to 40 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.

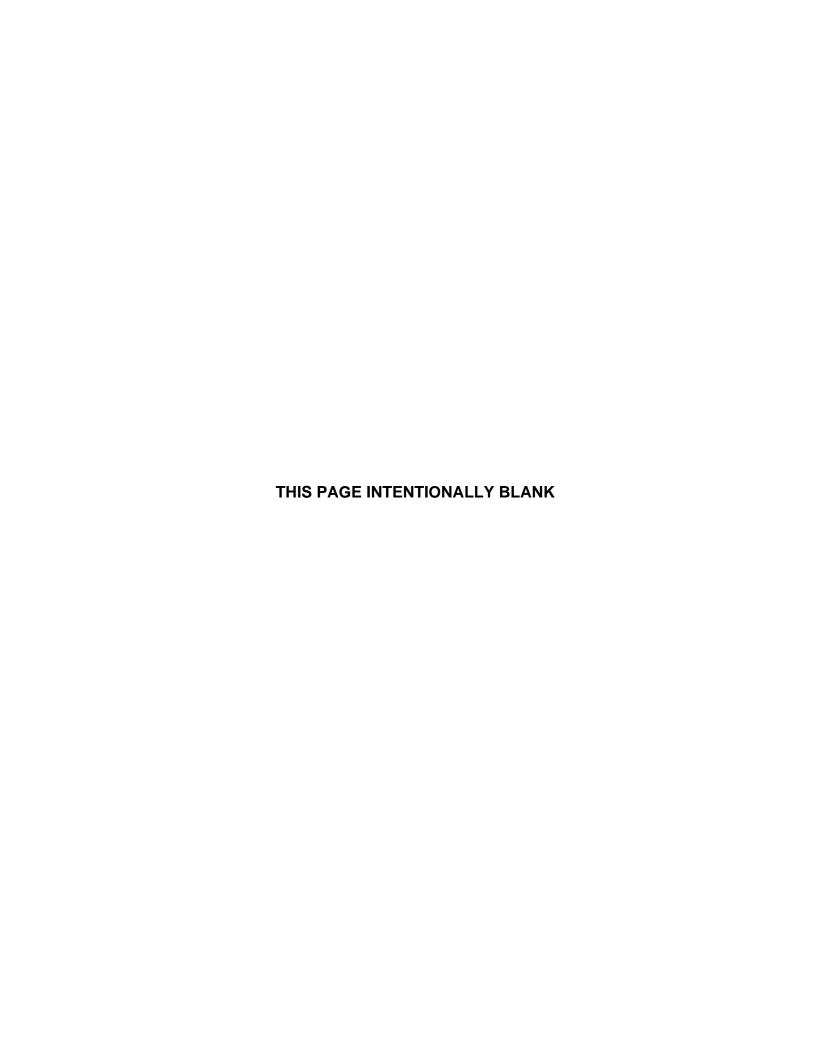
Pre-1993 water level information has also been included where available. The pre-1993 data is generally taken from well completion reports or pump installation reports submitted by drilling or pump installation contractors at the time the well was constructed or a permanent pump installed.

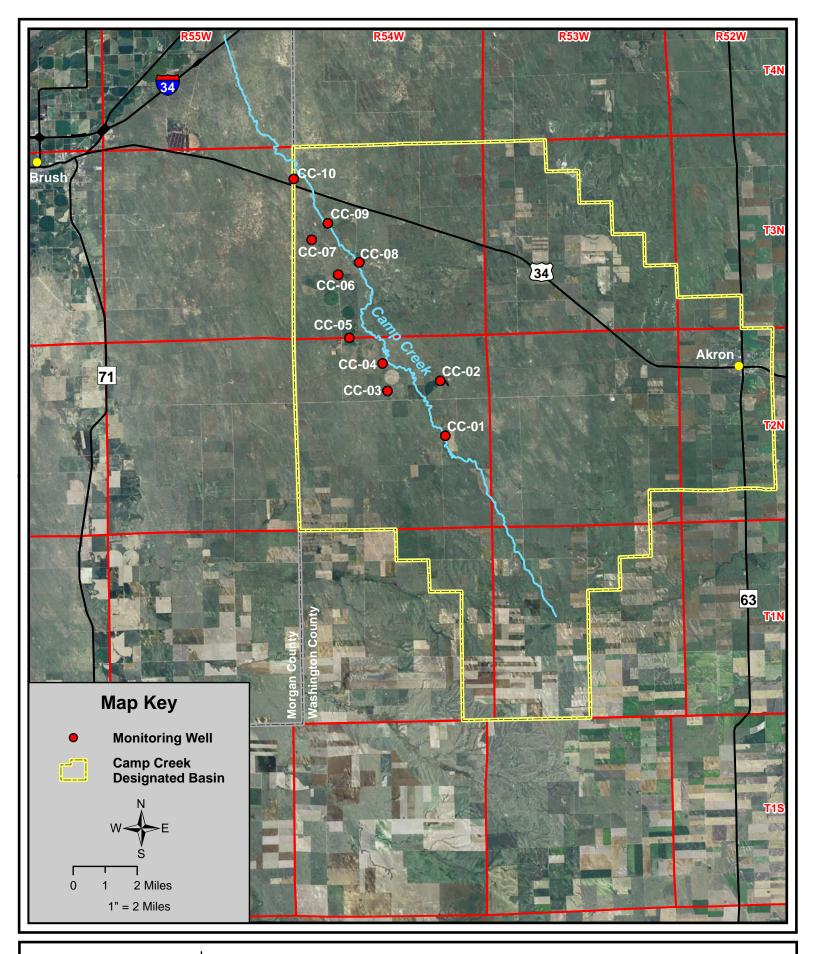
Tabular and graphical data are presented for each well for the available period of record. Analyses of changes in the water level in the aquifer are complicated by unknown pumping schedules.

On average, ground water levels in wells measured by the Division of Water Resources have declined by approximately three feet over the last ten-year period. Average ground water levels are generally the same as they were in 2008 and have declined by approximately a foot and a half between 2012 and 2013. Over the full 20 years of measurement by Division of Water Resources water levels have declined approximately nine feet on average across the Camp Creek Designated Basin.

The 2013 report will be available as a digital version, in Adobe PDF format, and may be viewed or downloaded from the Division's website, http://water.state.co.us/groundwater/Pages/HydroGeo.aspx.

The data may be accessed on the internet at the Colorado Decision Support System website http://cdss.state.co.us and can be exported to in number of different formats.









State of Colorado -- Division of Water Resources

Camp Creek Designated Basin Monitoring Well Network

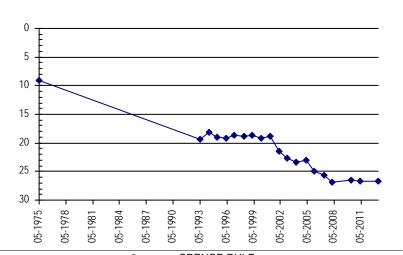


Well Name: Permit #:	CAMP CRI 19358 -		-	ocation #: SI	30020	5404	DDB	Own	er:	SPENCI	E RULE USGS Site	· ID:	
Division:	1			Water Distri	ct:	1				County:	WASHING	TON	
Location:	Q160 Q	40 Q10	Section	Twnshp	Rang	е	PM		Dist	ance from se	ection lines:		
	SE S	E NW	4	2 N	54	W	S		Fro	m N/S line	e: 930 S	From E/W	/ line: 1310 E
UTM Coordinates (NAD83): Nor	thing (U1	М у):	4447137.5	East	ting (UТМ	x):	6344	43.1 <i>GPS</i>	;		
Latitude/Longitude	(decimal degre	es):		40.163845				-10	3.42°	1236			
Surface Elevation (<i>ft):</i> 4420	Тор Р	erforated	I Interval (ft):				Base	of gr	rout (ft):		Water Lev	vel Change
Well depth (ft):	83	Botto	m Perfora	ated Interval (ft):							1 year:	_
Aquifer(s):	QUATER	rnary al	LUVIUM									5 year:	0.19
												10 year:	-4.01

Measurements from last 10 years

Date	Depth to WL (ft)	Elev of WL (ft)	Change (ft)
2/10/2004	23.38	4396.62	-0.68
3/2/2005	23.03	4396.97	0.35
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
1/1/2009			
3/3/2010	26.48	4393.52	
3/1/2011	26.69	4393.31	-0.21
3/28/2012			
3/6/2013	26.71	4393.29	

All Historic Measurements



Well Name: Permit #:	CAMP CREE 25969 - F	K - 0	-	ocation #: SE	300205405ABB	Owner: SPEN	CE RULE USGS Site	ID:
Division:	1			Water Distric	ct: 1	County:	WASHING	TON
Location:	Q160 Q40	Q10	Section	Twnshp	Range PM	Distance from	section lines:	
	NE NW	NW	5	2 N	54 W S	From N/S I	ine: 20 N	From E/W line: 1310 E
UTM Coordinates	(NAD83): North	ing (UT	ГМ y):	4448422.5	Easting (UTN	(x): 632777.1 <i>Gi</i>	PS	
Latitude/Longitude	e (decimal degrees	:):		40.175683		-103.440528		
Surface Elevation	(ft): 4405	Top P	Perforated	I Interval (ft):		Base of grout (ft):		Water Level Change

Well depth (ft): 92 Bottom Perforated Interval (ft): Base or grout (ft): Water Level Change 1 year: -0.16

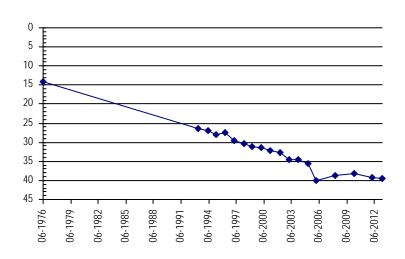
Aquifer(s): QUATERNARY ALLUVIUM 5 year: -0.78

10 year: -4.80

Measurements from last 10 years

Date	Depth to WL (ft)	Elev of WL (ft)	Change (ft)
Date	Deptil to WL (II)	LIEV OF WL (II)	Change (ii)
2/10/2004	34.62	4370.38	0.01
3/2/2005	35.55	4369.45	-0.93
2/28/2006	40.03	4364.97	-4.48
3/28/2007			
2/27/2008	38.65	4366.35	
1/1/2009			
3/3/2010	38.15	4366.85	
3/1/2011			
3/28/2012	39.27	4365.73	
3/6/2013	39.43	4365.57	-0.16

All Historic Measurements

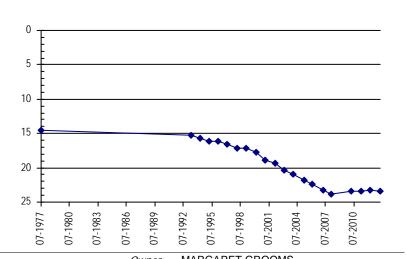


Well Name: Permit #:	CAMP CRE 20791 - F		-	ocation #: SE	30020	5409	DAD	Owi	ner:	ED BASI	LER USGS Site	e ID:	
Division:	1			Water Distric	et:	1				County:	WASHING	TON	
Location:	Q160 Q4	Q10	Section	Twnshp	Rang	je	PM		Dist	tance from se	ction lines:		
	SE NE	SE	9	2 N	54	W	S		Fro	om N/S line	: 1690 S	From E/W line:	680 E
UTM Coordinates (I	NAD83): Norti	hing (UT	ГМ у):	4445757.5	Eas	ting	(UTM	x):	6346	91.0 <i>GPS</i>			
Latitude/Longitude ((decimal degree	es):		40.151377				-10	03.41	8613			
Surface Elevation (f	<i>t):</i> 4435	Тор Р	Perforated	I Interval (ft):				Base	of g	rout (ft):		Water Level C	hange
Well depth (ft):	82	Botto	m Perfora	ated Interval (i	t):							1 year:	-0.18
Aquifer(s):	QUATERI	NARY AI	LUVIUM									5 year:	0.40
												10 year:	-2.97

Measurements from last 10 years

		J	_
Date	Depth to WL (ft)	Elev of WL (ft)	Change (ft)
2/10/2004	20.99	4414.01	-0.57
3/2/2005	21.87	4413.13	-0.88
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
1/1/2009			
3/3/2010	23.34	4411.66	
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

All Historic Measurements



Well Name:	CAMP CREEK - 02	2			Owner: MARGARET GROOM	MS
Permit #:	2297 - F -	Lo	ocation #: SI	B00205411ACC	USGS Site I	ID:
Division:	1		Water Distri	ct: 1	County: WASHINGT	ON
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 (UT	M y):	4446264.5	Easting (UTM x	c): 637345.0 <i>GPS</i>	
Latitude/Longitude	e (decimal degrees):		40.155513		-103.387357	

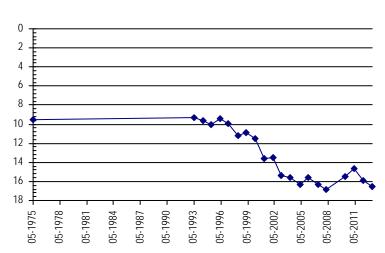
Surface Elevation (ft): 4470 Top Perforated Interval (ft): Base of grout (ft): Water Level Change -0.70 Well depth (ft): 52 Bottom Perforated Interval (ft): 1 year: 0.27 5 year:

Aquifer(s): QUATERNARY ALLUVIUM

Measurements from last 10 years

Date	Depth to WL (ft)	Elev of WL (ft)	Change (ft)
2/10/2004	15.57	4454.43	-0.21
3/2/2005	16.29	4453.71	-0.72
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
1/1/2009			
3/3/2010	15.49	4454.51	
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

All Historic Measurements



-1.21

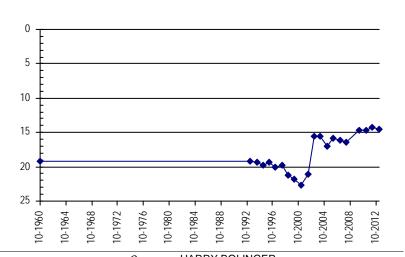
10 year:

Well Name: Permit #:	CAMP CRE 2804 - F		-	ocation #: S	B0020	5423		Owner	: LEO & I	MARY ANN USGS Site		
Division:	1			Water Distr	ict:	1			County:	WASHING	TON	
Location:	Q160 Q4	0 Q10	Section	Twnshp	Ran	ge	PM		Distance from s	ection lines:		
	NE NV	WN W	23	2 N	54	W	S	ŀ	From N/S lin	e: 720 N	From E/W	line: 2000 E
UTM Coordinates (I	NAD83): Non	thing (U1	^Т М у):	4443506.5	Eas	sting	(UTM x	·): 63	37601.0 <i>GPS</i>	S		
Latitude/Longitude ((decimal degre	es):		40.130633				-103.	384941			
Surface Elevation (f	<i>t):</i> 4585	Тор Р	Perforated	Interval (ft).			Б	Base of	grout (ft):		Water Lev	el Change
Well depth (ft):	53	Botto	m Perfora	ated Interval	(ft):						1 year:	-0.30
Aquifer(s):	QUATER	NARY AL	LUVIUM								5 year:	1.97
											10 year:	1.03

Measurements from last 10 years

Date	Depth to WL (ft)	Elev of WL (ft)	Change (ft)
2/10/2004	15.57	4569.43	-0.03
3/1/2005	17.05	4567.95	-1.48
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
1/1/2009			
3/3/2010	14.74	4570.26	
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

All Historic Measurements

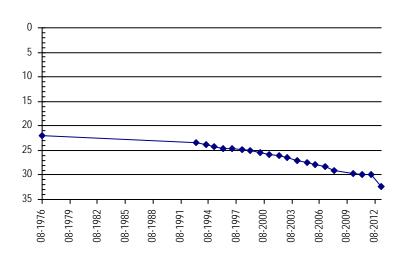


Well Name:	CAMP CRE	EK - 1	0			(<i>Owner:</i> HARR\	Y BOLINGER	{	
Permit #:	21217 - F	-	Lo	ocation #:	SB00305	407BBB		USGS Site	ID:	
Division:	1			Water Di	istrict:	1	County:	WASHING.	TON	
Location:	Q160 Q4	0 Q10	Section	Twnshp	Range	e PM	Distance from	section lines:		
	NW N\	V NW	7	3 N	J 54	W S	From N/S lir	ne: 30 N	From E/W line:	90 W
UTM Coordinates	(NAD83): Non	hing (U1	ГМ у):	4456400	0.4 Easti	ng (UTM x): 629969.1 <i>GP</i>	S		
Latitude/Longitude	(decimal degre	es):		40.2479	74		-103.471883			
Surface Elevation ((ft): 4328	Тор Р	Perforated	l Interval (<i>(ft):</i> 4	1 <i>B</i>	Pase of grout (ft):		Water Level C	hange
Well depth (ft):	126	Botto	m Perfora	ated Interv	<i>ral (ft):</i> 12	26			1 year:	-2.35
Aquifer(s):	QUATER	nary ai	LUVIUM					,	5 year:	-3.30
									10 year:	-5.89

Measurements from last 10 years

Date	Depth to WL (ft)	Elev of WL (ft)	Change (ft)
2/10/2004	27.13	4300.87	-0.70
3/2/2005	27.39	4300.61	-0.26
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
1/1/2009			
3/3/2010	29.75	4298.25	
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

All Historic Measurements

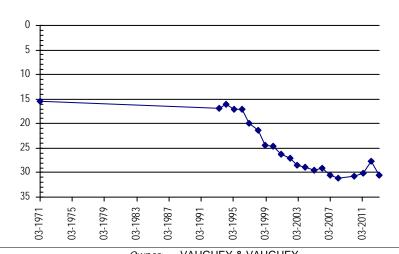


Well Name: Permit #:	CAMP CRI 15356 -		-	ocation #: SI	30030	5417		wner: SPEN	CE RULE USGS Site	e ID:	
Division:	1			Water Distri	ct:	1		County:	WASHING	TON	
Location:	Q160 Q	40 Q10	Section	Twnshp	Rang	je	PM	Distance from	section lines:		
	NW S	w sw	17	3 N	54	W	S	From N/S li	ne: 2500 N	From E/W line:	620 W
UTM Coordinates (NAD83): Noi	thing (U	ГМ у):	4454178.4	Eas	ting ((UTM x).	631687.1 <i>GF</i>	PS		
Latitude/Longitude	(decimal degre	es):		40.227694			-	-103.452147			
Surface Elevation (i	ft): 4340	Тор Р	Perforated	d Interval (ft):			Ва	se of grout (ft):		Water Level C	hange
Well depth (ft):	99	Botto	m Perfora	ated Interval (ft):					1 year:	-2.89
Aquifer(s):	QUATER	RNARY AI	LUVIUM							5 year:	0.60
										10 year:	-2.10

Measurements from last 10 years

Date	Depth to WL (ft)	Elev of WL (ft)	Change (ft)
2/10/2004	28.91	4311.09	-0.43
3/2/2005	29.41	4310.59	-0.50
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
1/1/2009			
3/3/2010	30.73	4309.27	
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

All Historic Measurements



Well Name:	CAMP CREE	K - 0	7			<i>Owner:</i> VF	AUGHEY	& VAUG	HEY
Permit #:	21077 - S	-	Lo	ocation #:	SB00305418DCC	:	US	SGS Site	ID:
Division:	1			Water Dis	strict: 1	Cou	ınty: W	ASHINGT	ON
Location:	Q160 Q40	Q10	Section	Twnshp	Range PM	Distance	from secti	on lines:	
	SE SW	SW	18	3 N	54 W S	From ∧	I/S line:	370 S	From E/W line: 2040 E
UTM Coordinates	(NAD83): Northi	ng (U1	ГМ у):	4453344	.5 Easting (UTM	1 x): 630876. ⁴	GPS		
Latitude/Longitud	e (decimal degrees):		40.22031	10	-103.461846	3		

Base of grout (ft): Surface Elevation (ft): 4355 Top Perforated Interval (ft): Water Level Change Well depth (ft): 115 Bottom Perforated Interval (ft):

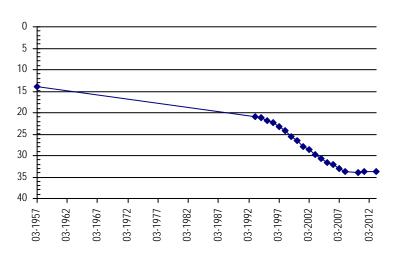
1 year:

-0.18 Aquifer(s): QUATERNARY ALLUVIUM 5 year: -4.00 10 year:

Measurements from last 10 years

Date	Depth to WL (ft)	Elev of WL (ft)	Change (ft)
2/10/2004	30.72	4324.28	-0.91
3/2/2005	31.54	4323.46	-0.82
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
1/1/2009			
3/3/2010	33.84	4321.16	
3/1/2011	33.67	4321.33	0.17
3/28/2012			
3/6/2013	33.81	4321.19	

All Historic Measurements

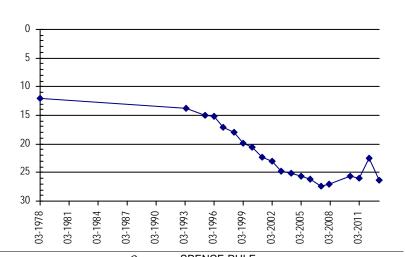


Well Name: Permit #:	21958 - F			ocation #: SI	300305	5421		wner:	SPENCE	RULE USGS Site	e ID:	
Division:	1			Water Distri	ct:	1			County: \	WASHING	TON	
Location:	Q160 Q4	0 Q10	Section	Twnshp	Rang	е	PM	Dis	stance from se	ction lines:		
	SW N\	V NW	21	3 N	54	W	S	Fr	om N/S line	: 1800 S	From E/W line:	420 W
UTM Coordinates (NAD83): Nor	hing (U1	M y):	4452214.5	East	ing ((UTM x).	633	269.1 <i>GPS</i>			
Latitude/Longitude	(decimal degre	es):		40.209756			-	103.43	33966			
Surface Elevation (<i>ft):</i> 4363	Тор Р	erforated	d Interval (ft):			Ва	se of g	grout (ft):		Water Level C	hange
Well depth (ft):	83	Botto	m Perfora	ated Interval (ft):						1 year:	-3.81
Aquifer(s):	QUATER	NARY AL	LUVIUM								5 year:	0.80
											10 year:	-1.41

Measurements from last 10 years

_				
ſ	Date	Depth to WL (ft)	Elev of WL (ft)	Change (ft)
	2/10/2004	25.11	4337.89	-0.27
	3/2/2005	25.60	4337.40	-0.49
	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
	1/1/2009			
	3/3/2010	25.68	4337.32	
	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

All Historic Measurements



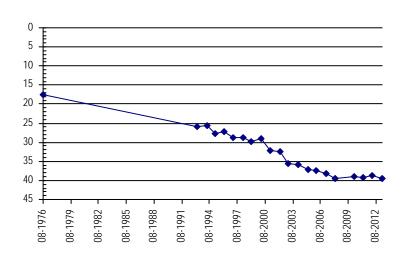
Well Name:	CAMP CRE	EK - 0	16		(<i>Owner:</i> SPENC	ERULE		
Permit #:	19966 - F	-	Lo	ocation #: SE	300305429BAA		USGS Site	ID:	
Division:	1			Water Distric	ct: 1	County:	WASHING	TON	
Location:	Q160 Q40	Q10	Section	Twnshp	Range PM	Distance from s	section lines:		
	NW NE	NE	29	3 N	54 W S	From N/S lin	e: 110 N	From E/W line: 2	290 W
UTM Coordinates ((NAD83): Norti	ning (U	ГМ у):	4451589.5	Easting (UTM x): 632211.1 <i>GP</i> .	S		
Latitude/Longitude	(decimal degree	s):		40.204295		-103.446522			
Surface Elevation (<i>(ft):</i> 4370	Тор Р	Perforated	Interval (ft):	В	Pase of grout (ft):		Water Level Ch	ange
Well denth (ft).	00	Rotto	m Parfor	ated Interval	(ft)·			1 4004	-0 98

Well depth (ft): 99 Bottom Perforated Interval (ft): 1 year:
Aquifer(s): QUATERNARY ALLUVIUM 5 year:

Measurements from last 10 years

Date	Depth to WL (ft)	Elev of WL (ft)	Change (ft)
2/10/2004	35.92	4334.08	-0.33
3/2/2005	37.14	4332.86	-1.22
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
1/1/2009			
3/3/2010	38.94	4331.06	
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

All Historic Measurements



0.03

-4.00

10 year: