

WPX BWQ Surface Water Monitoring Field Form

Project Information			
Project:	Ru 11-7 BWQ	Sample Purpose:	COA 9 Subsequent #2
Site Name (Well Pad):	Ru 11-7	Site API:	045-06818
Station Name:	Savage Beaver Creek 2	Sample Date:	12-18-14
COGCC Facility ID:	753174	Start Time:	1230
Field Sample ID:	Beaver Cr 2	End Time:	1420
Landowner Name:	Jean Savage	Sample Time:	1250
Landowner Address:	PO Box 1926, Rifle, CO 81650	Sample Team:	NWS, SLK
Water Right/Well Owner:	N/A	Observer:	SLK
Water Right/Well Permit:	N/A	Lead Signature/Date:	[Signature] 12-18-14

Station Information			
Station Description: Weak riffle section ~ 100 ft off Beaver Creek road			
Approximate Distance to Well Pad: 5,340 ft			
Station Type: Stream / Spring / Seep / Pond / Lake / NPDES Outfall / Other:			
Sampling Location: Bank / Pipe / <u>Wading</u> / Boat / Bridge / Hose bib / Tank / Other:			
Sampling Location Description: Pool / <u>Riffle</u> / Eddy / Backwater / Open / Channel / Braided / Other:			
Sampling Location Width: 6 ft		Sampling Location Depth: 0.5 ft	
GPS Location:	Zone	x -107.83228	y 39.4722 z 6416

Weather Conditions	
Sky: Clear / Scattered / Cloudy / Overcast	Estimated Air Temp (deg F): 40
Precipitation: None / Light / Moderate / Heavy	Precip Type: None / Rain / Sleet / Hail / Snow
Wind: Calm / Light / Mod / Strong	Wind Speed/Direction: NM

Field Measurements							
Parameter	Units	Reading	Time	Flag Code	Instrument	In-situ or Container	Comments
Water Temp	deg C	0.57	1308		YSI 556	In-situ	
pH	s.u.	8.06					
Sp. Conductivity	uS/cm	347					
Conductivity	uS/cm	180					
DO Saturation	%	70.5					
DO	mg/L	10.09					
Baro Press	mmHg	592.3					
ORP	RmV	226.8					
Turbidity	NTU	2.08		AV	Micro TPW	Container	2.15, 2.10, 1.99
Discharge	CFS	2.37	1340		Marsh-Matthews	In-situ	
H ₂ S	mg/L	0.01	1330	AV	Colorimeter	Container	0.01, 0.01
Color:	Clear / White / Yellow / Brown / Green / Blue / Other			Light / Med / Dark			
Odor:	None / Mild / Mod / Strong						
Effervescence:	None / Mild / Mod / Strong			Bubbles: None / Low / Mod / High			
Sediment:	None / Light / Mod / Heavy			VOA Headspace: None / ≤ Pea Size / ≥ Pea Size			
Lab Analysis:	Rule 609 / COA 9 / COA 22 / Other						
Field Filtered:	Yes / No		Filter Size:	NA		No. Filters used: 0	

Flag Codes: NM (not measured), E (estimated), N/A (not applicable), I (insufficient sample), Q (uncertain value), Y (calculated value), AV (averaged value), EC (exceeds calibration range), OT (other flag to be defined later), NS (not stabilized), VAR (variable)

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Landowner Comments on water quality:

N/A

Additional information:

Water was frozen along the edges of the stream channel.
 Couple inches of snow on the ground & on the frozen
 edges of the channel.

No WPX representative or landowner present for sampling.

Calibration info on "Porcupine Well No 1"

Calibration Information			Date:		Location:			
Instrument	Parameter	Units	Time	Calibration Standard Value	Calibration Standard Temp (°C)	Instrument Reading of Standard	Adjusted Reading	Comments
	pH	s.u.						
	pH	s.u.						
	pH	s.u.						
	SpC	uS/cm						
	SpC	uS/cm						
	DO	%						
	DO	%						
	ORP	RmV						
	Turbidity	NTU						

MEASUREMENT DATA									
Station	Distance from N/S/E/W Bank	Width	Depth	Observation Depth	Velocity ft/s m/s	Time seconds	Area	Discharge	Comments
13.0	1.3	0.25	0.5	set	0.28	30	0.125	0.35	
12.5	1.8	0.5	0.22	by wading	-0.04		0.22	-0.088	rock in front of probe
12.0	2.3	0.5	0.10	rod	0.38		0.05	0.019	on rock; probe to submerged
11.5	2.8	0.5	0.17		0.36		0.85	0.306	on rock
11.0	3.3	0.5	0.60		0.43		0.30	0.129	
10.5	3.8	0.5	0.70		0.48		0.35	0.168	
10.0	4.3	0.5	0.71		0.61		0.355	0.217	
9.5	4.8	0.5	0.55		1.02		0.275	0.281	
9.0	5.3	0.5	0.80		1.07		0.40	0.428	
8.5	5.8	0.5	0.78		1.02		0.39	0.398	
8.0	6.3	0.5	0.55		0.42		0.275	0.116	
7.5	6.8	0.5	0.30		0.6		0.15	0.018	
7.0	7.3	0.5	0.10		-0.36		0.05	-0.018	on rock; probe to submerged
6.5	7.8	Rock no measurement					0	0	
6.0	8.3	0.25	0.20		0.37		0.10	-0.037	
5.0	8.8	0.5	0				0	0	
	9.3	Too shallow for measurement						0	
								2.366 cfs	
<u>Spot check</u>									
	12.5			← 0.25	0.28				behind rock
	9.0			← 0.75	1.02				
	7.5			← 0.32	0.37				

Field Notes:

Right bank Facing downstream @ 14.3'

Left " " " @ 5.0'

13.0' to bank to shallow for measurement

Substrate composed of cobble to small boulders sized rocks

6.0' to 5.0' to shallow for measurement