

TEP BWQ Surface Water Monitoring Field Form

Project Information			
Project:	TEP 317B	Sample Purpose:	317B Post Completions
Site Name (Well Pad):	RU 32-12	Site API:	05-045-07369
Station Name:	BC 10	Sample Date:	2-14-18
COGCC Facility ID:	755848	Start Time:	1230
Field Sample ID:	100 10	End Time:	1320
Landowner Name:	Youberg Beaver Cr Ranch	Sample Time:	1300
Landowner Address:	215 S 10 th St, Sac City, IA	Sample Team:	SLG, NUS
Water Right/Well Owner:	N/A	Observer:	NUS
Water Right/Well Permit:	N/A	Lead Signature/Date:	J. Jacobson 2-15-18

Station Information			
Station Description: Small clearing upstream of culvert			
Approximate Distance to Well Pad: 1240 ft			
Station Type: <u>Stream</u> / 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: ~55 ft		Sampling Location Depth: ~5"	
GPS Location:	Zone	x -107.831501	y 39.45802 z 7080'

Weather Conditions			
Sky:	Clear / <u>Scattered</u> / Cloudy / Overcast	Estimated Air Temp (deg F): 48	
Precipitation:	<u>None</u> / Light / Moderate / Heavy	Precip Type: <u>None</u> / Rain / Sleet / Hail / Snow	
Wind:	<u>Calm</u> / Light / Mod / Strong	Wind Speed/Direction: 0	

Field Measurements							
Parameter	Units	Reading	Time	Flag Code	Instrument	In-situ or Container	Comments
Water Temp	deg C	0.27	1310		YSI 556	in situ	
pH	s.u.	2.12		Q			
Sp. Conductivity	uS/cm	372					
Conductivity	uS/cm	196					
DO Saturation	%	86.7					
DO	mg/L	12.37					
Baro Press	mmHg	583.1					
ORP	RmV	495.5					
Turbidity	NTU	1.34		AV	micro		1.28, 1.38, 1.34
Discharge		NM					
Spot check pH		13.23	6.77				
Color:	<u>Clear</u> / White / Yellow / Brown / Green / Blue / Other			Light / Med / Dark			
Odor:	<u>None</u> / Mild / Mod / Strong						
Effervescence:	<u>None</u> / Mild / Mod / Strong			Bubbles: <u>None</u> / Low / Mod / High			
Sediment:	<u>None</u> / Light / Mod / Heavy			VOA Headspace: <u>None</u> / ≤ Pea Size / ≥ Pea Size			
Lab Analysis:	Rule 609 / COA 9 / COA 22 / Other <u>317B</u>						
Field Filtered:	<u>Yes</u> / No		Filter Size: <u>N/A</u>	No. Filters used: <u>N/A</u>			

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:

None

Additional information:

Beaver creek ~10ft upstream of culvert. Site has about 1.5-2 ft of snow on surface of creek and ~10" ice layer. Was able to break through the ice to collect a sample. Did not attempt a discharge measurement because of conditions.

no TEP Representatives present for sampling.

Calibration Information			Date: 2-14-18			Location: WNL OFFICE		
Instrument	Parameter	Units	Time	Calibration Standard Value	Calibration Standard Temp (°C)	Instrument Reading of Standard	Adjusted Reading	Comments
YSI 556 ↓	pH	s.u.	734	7.00	21.28	7.07	7.00	
	pH	s.u.	738	10.01	21.31	9.96	10.02	
	pH	s.u.	745	4.01	21.30	3.88	3.99	
	SpC	uS/cm	730	1413	21.27	1453	1413	
	SpC	uS/cm						
	DO	%	754	642.1 mg/l	20.90	82.2	84.5	
	DO	%						
	ORP	RmV						
MicroTRW	Turbidity	NTU	754					