

# Low Flow Groundwater Sampling Field Form



<b>Project Name:</b>	Buck Steam Station	<b>Purge Date:</b>	September 28, 2016
<b>Project Location:</b>	Salisbury, NC	<b>Purge Time:</b>	90 Minutes
<b>Project Number:</b>	7126-16-032A	<b>Sample Date:</b>	September 28, 2016
<b>Source Well:</b>	GWA-17S	<b>Sample Time:</b>	16:00
<b>Locked?:</b>	yes	<b>Weather:</b>	Sunny
<b>Sampled By:</b>	James Waters	<b>Air Temp:</b>	80 ° F
<b>Flow Through Cell Serial No.:</b>	15C101918	<b>Pump Serial No.:</b>	PRO1527
		<b>Calibration Date:</b>	September 28, 2016

### Water Level & Well Data

<b>Measuring Point:</b>		Top of Casing	
<b>Depth to Water:</b>	36.44	ft-TOC	
<b>Total Well Depth:</b>	41.00	ft-TOC	
<b>Height of Water Column:</b>	4.56	feet	
<b>Screen Length:</b>	10	feet	<b>Stickup:</b> 3 ft-GRD

<b>Well Volume</b>		
<b>Well Diameter</b>	2	inch
<b>Water Volume</b>	0.7	Gal
<b>3 * Well Volume</b>	2.23	Gal
<b>5 * Well Volume</b>	3.72	Gal

### Well Purging Information

<b>Purge Method:</b>	Submersible Pump	<b>Start Time:</b>	14:30	<b>End Time:</b>	16:00
<b>(If Used) Bladder Pump Control Settings:</b>	<b>On (sec):</b>	<b>Off (sec):</b>		<b>Pressure:</b>	psi
<b>Pump Intake Depth from Top of Casing:</b>	40	ft-TOC			
<b>Water Column Above Pump Intake:</b>	3.56	feet			
<b>DTW-TOC at 25% Drawdown of WC Above Pump:</b>	37.33	ft-TOC			
<b>Final Volume Purged:</b>	2.8	Gallons			
<b>Final Volume Purge Rate:</b>	100	mL/min			
<b>Well Purged Dry?:</b>	No	(Yes/No)			
<b>Flow Through Cell Vol:</b>		500	mL		
<b>Comments:</b>					

### Field Parameters (Taken at time intervals with purge volumes ≥ 2 Flow Through Cell Volumes)

Time	Volume Purged (gal)	Flow Rate (mL/min)	Depth to Water (ft)	Temp (°C)	pH (s.u.)	Spec. Cond. (µS/cm)	Dissolved Oxygen (mg/L)	ORP* (mV)	Turbidity (NTU)	Comment	
14:30	0.0									Start Purging	
14:35	0.3	200	37.70	19.0	6.5	280	0.5	-75	388		
14:40	0.5	200	37.14	19.0	6.5	287	0.3	-115	447		
14:45	0.7	150	37.17	19.7	6.5	281	0.3	-122	334		
14:50	0.9	150	37.31	19.8	6.5	270	0.4	-108	196		
14:55	1.1	100	37.29	20.1	6.4	253	0.5	-90	114		
15:00	1.2	100	37.17	20.7	6.5	252	0.5	-91	80.1		
15:05	1.3	100	37.14	21.4	6.5	251	0.6	-86	76.0		
15:10	1.5	100	37.03	21.9	6.5	248	0.6	-55	40.0		
15:15	1.6	100	36.99	22.3	6.5	245	0.6	-59	36.9		
15:20	1.7	100	36.98	21.1	6.4	236	0.9	-45	29.6		
15:25	1.8	100	36.99	21.1	6.4	234	0.9	-42	20.0		
15:30	2.0	100	36.99	21.3	6.4	231	1.0	-35	18.8		
15:35	2.1	100	36.99	21.3	6.4	229	0.9	-22	13.5		
15:40	2.2	100	36.99	21.4	6.4	223	1.2	-10	16.4		
15:45	2.4	100	36.99	21.2	6.4	221	1.0	-7	11.7		
15:50	2.5	100	36.99	21.3	6.4	220	1.0	-3	9.4		
15:55	2.6	100	36.99	21.4	6.4	218	1.0	3	9.2		
16:00	2.8	100	36.99	21.4	6.4	217	1.1	3	9.0	Sampling Time	
<b>Final:</b>	16:00	2.8	100	36.99	21.4	6.4	217	1.1	3	9.0	End of Purging

**Sample Method:** Peristaltic Pump      **Sample Start Time:** 16:00      **Sample End Time:** 16:05

### Analytical Data

Method	Qty	Container	Preservative	Method	Qty	Container	Preservative
TSS	1	PET	Ice	TOC	3	Glass	Phosphoric Acid
TDS	1	PET	Ice	Nitrate-Nitrite	1	PET	H2SO4
Methane RSK-175	3	Glass	HCl	Radium 226 & 228	3	PET	HNO3
Cl, SO4	1	PET	Ice	Metals- Total	1	HDPE	HNO3
Alkalinity, Bicarbonate, Carbonate	1	PET	Ice	Metals - Dissolved	1	HDPE	HNO3
Sulfate	1	PET	Zinc Acetate/ NaOH	Hex Chromium 218.7	1	PET	(NH4)2 SO4 & NH4OH

Name	Signature	Date
(1) James Waters	_____	9/28/2016
(2) Travis O'Quinn	_____	9/28/2016

**Notes:** To convert ORP to Eh, add 205 mv to ORP.