



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
GROUND WATER SAMPLING FIELD LOG SHEET

Watershed Monitoring Section

October 2013

SAMPLING AGENCY: 8034	FLUWID: AA13411	OWNER: Arndt Dairy
STATUS RANDOM ID: MSF MW #5	STATION NAME: MSF MW #5	PROJECT: SPRS1310
LAND SURFACE ELEV.(LSE):	CASING MATERIAL: PVC	TOTAL DEPTH: 60'
MEASURING POINT ELEV.(MPE):	CASING DIAMETER: 4"	

All Times Are: ETZ or CTZ (circle one) Date/Time On Site: 3/18/14 15:20 Date/Time Off Site: 3/18/14 16:00
Field Sheet Completed By: ME WQ Samples Collected By: PB

POTENTIOMETRIC METHOD

(Stickup is MPE - LSE)

Total Depth - (Depth to Water - Stickup) = Water Column Height (*DTW = N/A if not measurable)	Second Reading
<u>60</u> - (<u>46.08</u> - <u>3.25</u>) = <u>17.17</u> ft	<u>17.17</u> ft
DTW - SU = <u>42.83</u> (WCH)	(WCH)

TAPE / CHALK METHOD

Total Depth - ((Held at - Wetted At) - SU) = Water Column Height
1. _____ - ((_____ - _____) - _____) = _____
2. _____ - ((_____ - _____) - _____) = _____
DTW - SU = _____

PURGE METHOD (Check one):

- ☒ 1) 1.5 well volumes and stability ☐ 2) In-place plumbing purge and stability (continuous and intermittently running wells)
☐ 3) More than 1.5 well volumes and stability ☐ 4) Fully dry purge (not recommended)
☐ 5) Purged 5 or more well volumes without stability (explain in comments) ☐ 6) Other (explain in comments)

MINIMUM PURGE VOLUME DETERMINATION

.041 X Diameter X Diameter X Water Column Height X # Well Purge Volumes = Min. Purge Volume (gal.)

.041 X _____ X _____ X _____ X 1.5 = _____

Water Column Height (WCH) X Gfw (gallons per foot of water) X # Well Purge Volumes = Min. Purge Volume (gal)

17.17 X 0.65 X 1.5 = 16.74 (gal.)

1 Well Purge Volume: 11.16 (gal.)

1/4 Well Purge Volume: 2.79 (gal.)

Volume of tank (if required to purge): _____ (gal.)

Well Diameter (inches) → Gfw (Gallons per foot of water): 0.75" → 0.02; 1" → 0.04; 1.25" → 0.06; 2" → 0.16; 3" → 0.37;
4" → 0.65; 5" → 1.02; 6" → 1.47; 8" → 2.62; 10" → 4.10; 12" → 5.88

Purge Equipment Used: Redi-flo II #1 Sample Equipment Used: Redi-flo / Tubing / Floccell
Please include type of pump (peristaltic, submersible, etc.) AND pump ID# (ex. Redi-flo #1, Grundfos #2, etc.)

Minimum Purge Time: (Min. Purge Volume/Purge Rate) 16.74 (min.)

Time Purge Begin: 15:25 (24hr)

Time Purge Stop: 15:42 (24hr)

Purge Rate: 1 (gal/min)

Total Purge Time: 17 (min.)

Total Purge Volume: 17 (gal.)

(Purge rate X Total purge Time)

Time Sampling Begin: 15:43 (24 hr)

Time Sampling Stop: 15:47 (24 hr)

PLACE
FLUWID LABEL HERE
(if applicable)

PLACE
SITE LABEL HERE

PLACE QA/QC LABEL HERE
(if applicable)

QA/QC Sample: N/A Field Blank Equipment Blank Time (24hr): _____
 (Circle One) (Field-cleaned) (Lab-cleaned)
 Equipment Used: _____ Collected by: _____

Well Condition: Normal Fuel-Powered Equipment Used? Yes No
 (Circle One)

Placement Depth of Tubing or Pump Intake: to 48'

Drawdown Monitored? (Circle One) No (N/A) X Yes, no drawdown Yes, drawdown noticed and corrected for
 This is verified by recording depth to water in the Chemical Stability Monitoring section.

Sulfur Odor?: (Circle One) Yes No Color: Clear

Personnel/Visitors On Site: Eckles / Blair

Weather Conditions: Cloudy

Photos Taken? Yes No (Indicate why in comments) Micro Land Use? Yes No (Indicate why in comments)
 (Circle One. Required for all Status sites. Required Annually for Trend Sites.) (Circle One. Required for all Status sites. Required Annually for Trend Sites.)

PRESERVATION INFORMATION ☐ N/A (No samples collected; non-quarterly Trend month, etc.)

Were all appropriate samples (including QA/QC blanks) preserved within 15 minutes including the following: wet ice $\leq 6^{\circ}\text{C}$; nutrient samples with 1 mL sulfuric acid; metal samples with 1 mL nitric acid; ortho-phosphate sample filtered with a .45 μm filter; and anion, metal and nutrient samples filtered with a .45 μm filter (for Oct. TREND network only) Yes No

Were all acidified samples verified that the pH was less than 2 SU? Yes No Preserved By: ME

Preservative Lot #s: Sulfuric 126185 Nitric 1113040
 (Please describe any variations to this preservation protocol in the comments section below.)

COMMENTS: (Include any variations from normal preservation protocols; ex. adding more than 1 ml acid, unable to monitor depth to water because..., etc.)

Stick up from previous field sheet

CHEMICAL STABILITY MONITORING										Meter ID# <u>YSI 600 X/cm #11</u>		Read By: <u>ME</u>	
	Time (24hr.)	Volume Purged (gallons)	Purge Rate (gal/min)	Depth to Water (feet)***	Temp. ($^{\circ}\text{C}$)	Specific Conductance ($\mu\text{mhos/cm}$)	DO (%)	DO (mg/L)	pH (SU)	Turbidity (NTU)	Comments		
1	15:37	12	1	46.17	23.4	529	78.4	6.66	7.2	1.00			
2	15:40	15	1	46.17	23.4	528	78.1	6.65	7.2	0.81			
3	15:42	17	1	46.17	23.4	524	77.8	6.62	7.2	0.69			
4							7.78		7.2				
5													
6													
7													
8													
9													
10													
Stability Criteria: Temp. $\pm 0.2^{\circ}\text{C}$ Specific Conductance $\pm 5.0\%$ of reading DO $\leq 20\%$ pH ± 0.2 SU Turbidity ≤ 20 NTUs													
If DO $> 20\%$ or Turbidity > 20 NTUs then: DO ± 0.2 mg/L or 10%, whichever is greater and Turbidity ± 5 NTUs or 10%, whichever is greater													

*** Depth to Water needs to be documented if well diameter allows room for both tubing/pump and potentiometer. Not applicable to wells with in-place plumbing. If not applicable, please write "N/A" for this column.

Sampler Names: M.A. Eckles
 (Please PRINT)

Sampler Signatures: _____

P.M. Blair
P.M. Blair

OFFICE USE ONLY

Reviewed for completion by: _____

Date: _____