

Date: 5/23/12						
Sample: Prairie Sample 5	Notes about sample: This sample was taken					
ALL BACTERIAL, FUNGAL, PROTOZOAN ASSESSMENTS DONE AT 400X TOTAL MAGNIFICATION						
Dilution used:	for bacteria					Could stop
Field #	1	2	3	4	5	6
Bacterial #	7	4	6	13	11	9
Actinobacteria						
Bacterial size/shape						
Dilution used for fungi:	1 to 5					
Fungal	0	0	0	0	0	0
Diameters $\mu\text{m}$ (visual average)						
Color						
Dilution used for protozoa:	1 to 5					
Flagellates	0	0	0	0	0	0
Amoeba	0	0	0	0	0	0
Ciliates	0	0	0	0	0	0
Nematode Scan of slide at 1:5 dilution						
Bacterial Feeders	0					
Fungal Feeders	0					
Predatory	0					
Root Feeders	0					
Note Microarthropods						
What to look for in results-						
Bacteria						
Bacteria should always be above 200,000,000						
Always require more than 300 ug per gram soil for healthy systems, unless weeds desired						
Less than 300 ug, will have trouble holding nutrients, will have poor soil structure, will have						
F:B BASED ON THE PLANT DESIRED						
conv ag	-					no prots, no good nemas
weeds	-					Less than 0.7 per field

annuals;; vegetables	-		1 to 1.5 per field IN SPRING
productive pasture:	-		1.5 to 5 per field IN GROWING SE
shrubs, decid forest	-		3 or more per field through the g
conifer/old growth	-		EITHER 1 to 2 protozoa per field (



			At least 1 bacterial feeder and possibly fungal feeders
ASON			1 - 2 bacterial feeder and possibly fungal feeders present
rowing season OR			1 to 5 bacterial-feeders, 1 to 3 fungal-feeders; 1 predator
OR			1 to 5 bacterial-feeders, 1 to 3 fungal-feeders; 1 predator



present							
ent							
ory nematode desirable							
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rium on average weighs 2 picograms		
cm of fungal biomass = 0.33 g per cubic cm		
ED ON HYPHAE AVG DIAMETER READING WITH TABLE BELOW		
( 16)---	Avg diameter	Mult factor
: B	2	0.0052
###	2.5	0.0081
###	3	0.0117
	3.5	0.0159
	4	0.0207
	4.5	0.0262
	5	0.0324
	5.5	0.0392
	6	0.0466
	6.5	0.0547
	7	0.0635
	7.5	0.0729
	8	0.0829
	8.5	0.0936
	9	0.1049
	9.5	0.1169
	10	0.1295







