Set Index	Year	Sample_Type	Set Type	Rotation Name	Min_ID	Max_ID	CountOfSamples	Start Date	End Date	MinDepth	MaxDepth	Increments	Sampling Method	#BD
1	2008	Bulk Density	Surface	Annual	1	12	12	29-Aug-08	29-Aug-08	0	15	1	Brass Ring	12
2	2011	Bulk Density	Mixed	Annual	13	96	48	6-Sep-11	8-Sep-11	0	15	1	Bulb Planter	48
2	2011	Bulk Density	Mixed	Perennial	25	108	48	6-Sep-11	7-Sep-11	0	15	1	Bulb Planter	48
2	2011	Bulk Density	Mixed	Annual	109	143	20	2-Sep-11	2-Sep-11	0	117	5	Giddings	20
2	2011	Bulk Density	Mixed	Perennial	114	148	20	2-Sep-11	2-Sep-11	0	117	5	Giddings	20
3	2012	Bulk Density	Detailed	Annual	149	183	20	23-Aug-12	27-Aug-12	0	120	5	Giddings	20
3	2012	Bulk Density	Detailed	Perennial	154	188	20	23-Aug-12	27-Aug-12	0	120	5	Giddings	20

Notes:
Deep Bulk Density samples were collected from selected plots; typically Synthetically Fertilized.
Depth Increments are 0-15, 15-30, 30-60, 60-90, 90-120

Set_Index	Sample_Type	Year	Set Type	Rotation Name	Min_ID	Max_ID	CountOfSamples	Start Date	End Date	Harvested	Partitioned	Residual Material	#Moisture	#TN_WP	#TN_G	#TN_S	#TP_WP	#TP_G	#TP_S	#K	#Mg	#Ca	#G_Yield	#DM_Yield
1	Biomass	2008	Harvest	Perennial	1	48	48	16-Jul-08	17-Jul-08	TRUE	FALSE	removed, silage	0	48	0	0	48	0	0	48	48	48	0	48
1	Biomass	2008	Harvest	Annual	49	96	48	16-Jul-08	17-Jul-08	TRUE	FALSE	removed, silage	0	48	0	0	48	0	0	48	48	48	0	48
2	Biomass	2009	Mid-Season	Annual	97	144	48	27-Jul-09	27-Jul-09	FALSE	FALSE		0	48	0	0	48	0	0	0	0	0	0	0
3	Biomass	2009	Mid-Season	Perennial	145	192	48	6-Jul-09	6-Jul-09	TRUE	FALSE	removed	0	48	0	0	48	0	0	48	48	48	0	48
4	Biomass	2009	Harvest	Annual	193	240	48	9-Sep-09	9-Sep-09	TRUE	TRUE	spread, chopped	48	0	48	48	0	48	48	0	0	0	48	48
5	Biomass	2009	Harvest	Perennial	241	288	48	10-Sep-09	10-Sep-09	TRUE	FALSE	removed	48	48	0	0	48	0	0	48	48	48	0	48
6	Biomass	2010	Mid-Season	Annual	289	336	48	21-Jul-10	21-Jul-10	FALSE	FALSE		48	48	0	0	48	0	0	0	0	0	0	48
7	Biomass	2010	Mid-Season	Perennial	337	384	48	5-Jul-10	10-Aug-10	TRUE	FALSE	removed, baled	48	48	0	0	48	0	0	48	48	48	0	48
8	Biomass	2010	Harvest	Annual	385	432	48	25-Aug-10	25-Aug-10	TRUE	TRUE	removed, baled	48	0	48	48	0	48	48	0	0	0	48	48
9	Biomass	2010	Harvest	Perennial	433	480	24	1-Oct-10	1-Oct-10	TRUE	FALSE	removed, baled	24	24	0	0	24	0	0	24	24	24	0	24
10	Biomass	2010	Harvest	Perennial	445	468	24	1-Oct-10	1-Oct-10	FALSE	FALSE		24	24	0	0	24	0	0	24	24	24	0	24
11	Biomass	2011	Mid-Season Terminal	Perennial	481	528	48	29-Jun-11	29-Jun-11	TRUE	FALSE		48	48	0	0	48	0	0	48	48	48	0	48
12	Biomass	2011	Mid-Season	Annual	529	576	48	12-Jun-11	12-Jun-11	FALSE	FALSE		48	48	0	0	48	0	0	48	48	48	0	48
13	Biomass	2011	Harvest	Annual	577	624	48	9-Aug-11	15-Aug-11	TRUE	TRUE	chopped and spread	48	0	48	48	0	48	48	0	0	0	48	48
14	Biomass	2012	Mid-Season	Annual	625	672	48	28-Jun-12	28-Jun-12	FALSE	FALSE		48	0	0	0	0	0	0	0	0	0	0	48
14	Biomass	2012	Mid-Season	Perennial	673	720	48	29-Jun-12	29-Jun-12	FALSE	FALSE		48	0	0	0	0	0	0	0	0	0	0	48
15	Biomass	2012	Harvest	Annual	721	768	48	20-Aug-12	21-Aug-12	TRUE	TRUE	Straw was Baled	48	0	48	48	0	48	48	0	0	0	48	48
15	Biomass	2012	Harvest	Perennial	769	816	48	20-Aug-12	21-Aug-12	TRUE	TRUE	Straw was Baled	48	0	48	48	0	48	48	0	0	0	48	48

Set Index	Year	Sample_Type	Set Type	Min_ID	Max_ID	CountOfSamples	Start Date	End Date	Timing	Unusual	#DM	#pH	#EC	#C	#TN	#NH3N	#NO3N	#Ca	#P	#K	#Mg	#Na	#S
1	0	Manure	Other (explain)	15	16	2	4-Oct-08	5-Oct-08	As Applied	TRUE	2	2	2	0	2	2	0	2	2	2	2	2	0
1	0	Manure	Other (explain)	5	18	6	1-Sep-08	30-Oct-08	Pre-Application	TRUE	6	2	2	0	6	6	0	2	3	2	2	2	0
2	2007	Manure	Fall Application	25	28	4	25-Oct-07	30-Oct-07	As Applied	FALSE	4	4	4	0	4	4	4	4	4	4	4	0	0
2	2007	Manure	Fall Application	1	4	4	30-Oct-07	31-Oct-07	Farm Application	FALSE	4	4	4	0	4	4	0	4	4	4	4	4	4
2	2007	Manure	Fall Application	11	13	3	1-Oct-07	1-Oct-07	Pre-Application	TRUE	3	0	0	0	3	3	0	0	3	0	0	0	0
2	2007	Manure	Fall Application	14	14	1	1-Oct-07	1-Oct-07	Pre-Application	FALSE	1	0	0	0	1	1	0	0	1	0	0	0	0
3	2007	Manure	Fall Application	36	42	4	1-Sep-07	1-Sep-07	As Applied	TRUE	4	0	0	0	0	0	0	0	0	0	0	0	0
4	2008	Manure	Fall Application	33	35	3	1-Sep-08	1-Sep-08	As Applied	FALSE	3	2	2	0	2	2	2	2	2	2	2	0	0
4	2008	Manure	Fall Application	9	10	2	1-Sep-08	1-Sep-08	Pre-Application	TRUE	2	0	0	0	2	2	0	0	2	0	0	0	0
5	2009	Manure	Summer Application	19	21	3	1-Jul-09	1-Jul-09	As Applied	FALSE	3	0	0	0	0	3	3	0	0	0	0	0	0
6	2009	Manure	Fall Application	22	24	3	1-Oct-09	1-Oct-09	As Applied	FALSE	3	3	3	0	3	3	3	3	3	3	3	0	0
7	2010	Manure	Fall Application	39	41	3	13-Oct-10	15-Oct-10	As Applied	FALSE	3	3	3	0	3	3	3	3	3	3	3	0	0
8	2011	Manure	Fall Application	51	53	3	11-Oct-11	14-Oct-11	As Applied	FALSE	3	3	3	0	3	3	3	3	3	3	3	0	0
8	2011	Manure	Fall Application	43	50	8	1-Oct-11	1-Oct-11	Pre-Application	TRUE	8	0	0	0	8	8	8	0	0	0	0	0	0
9	2012	Manure	Fall Application	54	56	3	15-Oct-12	30-Oct-12	As Applied	FALSE	3	3	3	0	0	0	0	0	0	0	0	0	0

Notes

"Unusual" Column is an indicator of wheather or not these samples should be used for calculating nutrient balances.

Set 1 (Year = 0) simply holds analysis for farm samples that do not fit in any other set.

As Applied samples were collected during application to the plots.

Set Index	Year	Sample_Type	Set Type	Rotation Name	Start Date	End Date	MinDepth	MaxDepth	Increments	Min_ID	Max_ID	CountOfSamples	#EC	#pH	#NH4N	#NO3N	#P	#S	#Ca	#K	#Mg	#Cu	#Fe	#Mn	#Zn	#TC
1	2007	Soil Nutrient	Benchmark	Annual	26-Sep-07	4-Oct-07	0	360	13	1	1092	624	623	623	624	624	96	624	96	96	96	96	96	96	96	0
1	2007	Soil Nutrient	Benchmark	Perennial	27-Sep-07	5-Oct-07	0	360	13	157	1248	624	623	623	624	624	96	624	96	96	96	96	96	96	96	0
2	2008	Soil Nutrient	Harvest	Annual	22-Jul-08	11-Aug-08	0	150	5	1489	1728	241	239	239	241	241	96	240	96	96	96	96	96	96	96	0
2	2008	Soil Nutrient	Harvest	Perennial	22-Jul-08	11-Aug-08	0	120	5	1249	1488	240	238	238	240	240	96	240	94	94	94	94	94	94	94	0
3	2009	Soil Nutrient	Mid-Season	Annual	28-Jul-09	28-Jul-09	0	60	3	2144	2311	144	0	0	138	138	0	0	0	0	0	0	0	0	0	0
3	2009	Soil Nutrient	Mid-Season	Perennial	7-Jul-09	7-Jul-09	0	60	3	2000	2143	144	0	0	144	144	0	0	0	0	0	0	0	0	0	0
4	2009	Soil Nutrient	Harvest	Annual	15-Sep-09	23-Sep-09	0	120	5	2312	2730	240	240	240	240	240	96	240	96	96	96	96	96	96	96	0
4	2009	Soil Nutrient	Harvest	Perennial	16-Sep-09	22-Sep-09	0	120	5	2372	2790	240	240	240	240	240	96	240	96	96	96	96	96	96	96	0
5	2010	Soil Nutrient	Mid-Season	Annual	21-Jul-10	21-Jul-10	0	60	3	2935	3078	144	0	0	144	144	0	0	0	0	0	0	0	0	0	0
5	2010	Soil Nutrient	Mid-Season	Perennial	12-Jul-10	11-Aug-10	0	60	3	2791	2934	144	0	0	144	144	0	0	0	0	0	0	0	0	0	0
6	2010	Soil Nutrient	Harvest	Annual	27-Aug-10	27-Aug-10	0	120	5	3079	3318	240	240	240	240	240	96	240	96	96	96	96	96	96	96	0
6	2010	Soil Nutrient	Harvest	Perennial	4-Oct-10	5-Oct-10	0	120	5	3319	3558	240	240	240	240	240	96	240	96	96	96	0	0	0	0	0
7	2011	Soil Nutrient	Mid-Season	Annual	18-Jul-11	18-Jul-11	0	60	3	3559	3702	144	0	0	144	144	0	0	0	0	0	0	0	0	0	0
7	2011	Soil Nutrient	Mid-Season	Perennial	5-Jul-11	5-Jul-11	0	60	3	3703	3846	144	0	0	144	144	0	0	0	0	0	0	0	0	0	0
8	2011	Soil Nutrient	Harvest	Annual	9-Sep-11	13-Sep-11	0	120	5	3847	4086	240	0	0	239	239	96	239	95	95	95	95	95	95	95	0
8	2011	Soil Nutrient	Harvest	Perennial	12-Sep-11	13-Sep-11	0	120	5	4087	4326	240	0	0	240	240	96	240	96	96	96	96	96	96	96	0
9	2012	Soil Nutrient	Mid-Season	Annual	3-Jul-12	3-Jul-12	0	60	3	4327	4470	144	0	0	144	144	48	0	0	0	0	0	0	0	0	0
9	2012	Soil Nutrient	Mid-Season	Perennial	5-Jul-12	5-Jul-12	0	60	3	4471	4614	144	0	0	144	144	48	0	0	0	0	0	0	0	0	0
10	2012	Soil Nutrient	Harvest	Annual	23-Aug-12	27-Aug-12	0	120	5	4615	4854	240	240	240	240	240	96	0	0	0	0	0	0	0	0	0
10	2012	Soil Nutrient	Harvest	Perennial	23-Aug-12	27-Aug-12	0	120	5	4855	5094	240	240	240	240	240	96	0	0	0	0	0	0	0	0	0

Notes:
Depth Increments are 0-15, 15-30, 30-60, 60-90, 90-120, 120-150, 150-180, 180-210, 210-240, 240-270, 270-300, 300-330, 330-360

Set_Index	Year	Sample_Type	Set Type	Rotation Name	Min_ID	Max_ID	CountOfSamples	Start Date	End Date	Min Depth	Max Depth	Increments	Sampling Method	#TC	#Carbonates	#NH4N	#NO3N	#K	#Ca	#Mg	#pH	#EC
1	2011	Soil Stratification	Basic	Annual	1	96	96	27-Jul-11	27-Jul-11	0	15	2	Bulb Planter	0	0	95	95	95	95	95	0	0
1	2011	Soil Stratification	Basic	Perennial	97	192	96	27-Jul-11	27-Jul-11	0	15	2	Bulb Planter	0	0	96	96	96	96	96	0	0

Notes:
Depth Increments are 0-5, 5-15

Set Index	Year	Sample_Type	Set Type	Start Date	End Date	Min_ID	Max_ID	CountOfSamples
1	2007	DNA	Pre-Manure	11-Oct-07	11-Oct-07	1	112	112
2	2008	DNA	Mid-Season	27-Aug-08	29-Aug-08	113	224	112
4	2010	DNA	Spring	16-Jun-10	16-Jun-10	225	240	16
5	2010	DNA	Mid-Season	11-Aug-10	11-Aug-10	241	256	16
6	2010	DNA	Fall	7-Oct-10	7-Oct-10	257	272	16

Notes:
Samples are stored at -80C