



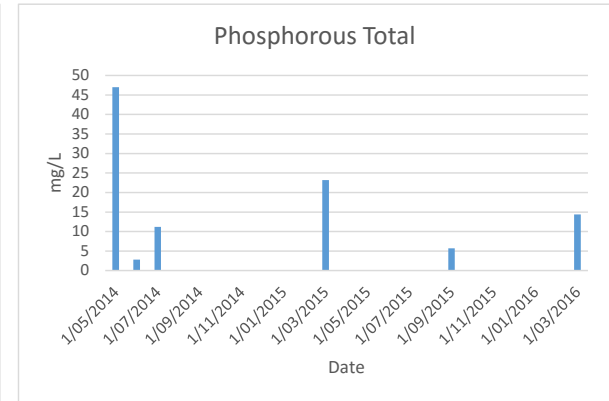
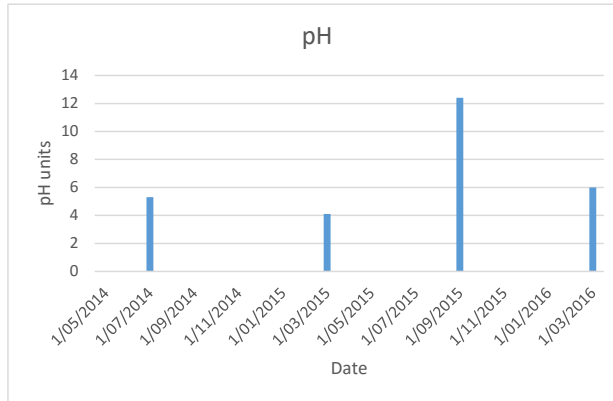
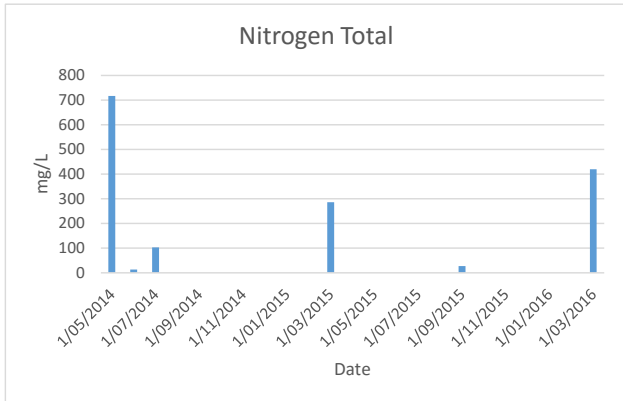
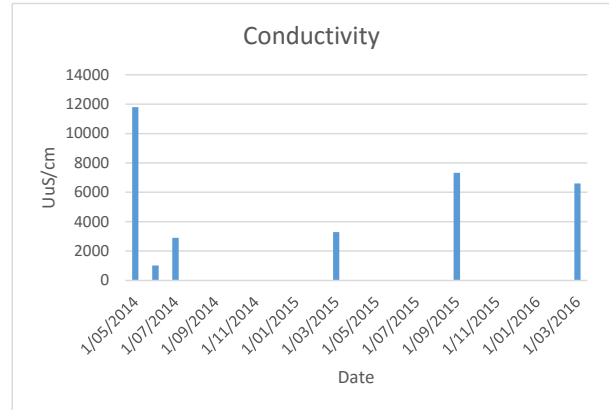
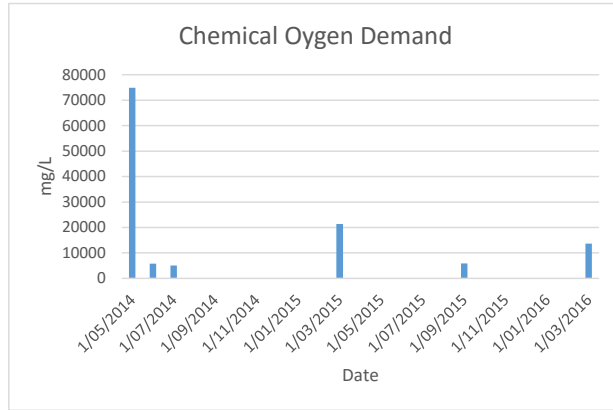
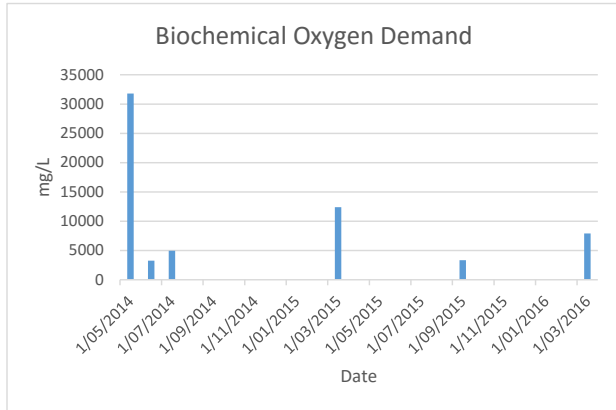
## EPA ENVIRONMENTAL MONITORING

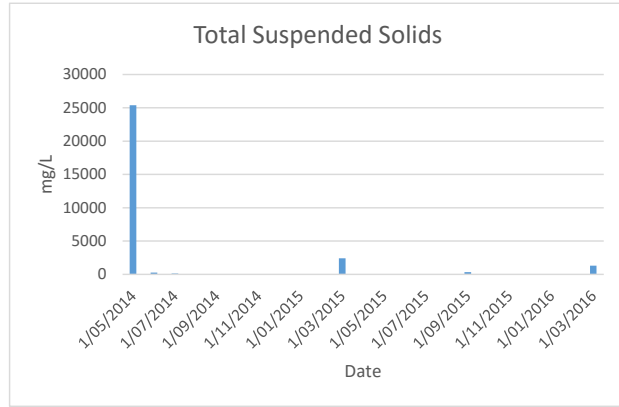
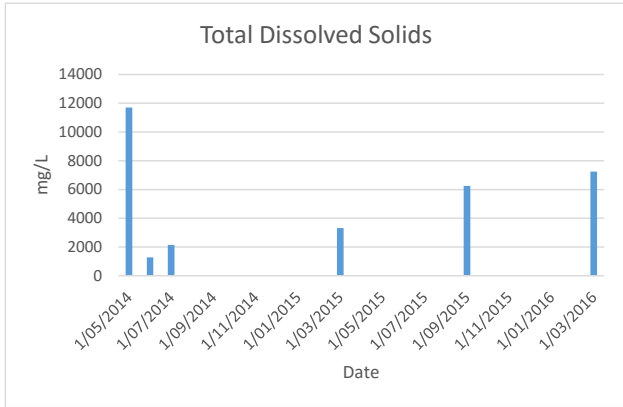
MANDATORY MONITORING																			
EPA Identification point number	Type of Monitoring Point	Type of Discharge Point	How Monitored	Location Description	Detail	Volume	Pollutant												
<a href="#">Point 1</a>	Volume monitoring. Effluent quality monitoring.	Volume monitoring. Effluent quality monitoring.	Volume: flowmeter & cont. logger. Quality: effluent sample.	Inflow to evaporation ponds "EPA 19" on site map.	Test		BOD	COD	EC	N (total)	pH	P (total)	SAR	TDS	TSS				
					unit of measure	kilolitres	mg/L	mg/L	µs/cm	mg/L	pH	mg/L	SAR	mg/L	mg/L				
					frequency	continous during discharge	every 6 months												
					sampling method	flow meter & cont. logger	representative sample												
<a href="#">Point 2</a>	Discharge to utilisation area. Volume monitoring. Effluent quality monitoring.	Discharge to utilisation area. Volume monitoring. Effluent quality monitoring.	Volume: flowmeter. Quality: effluent sample.	Outflow from evaporation ponds "EPA 20" on site map.	Test		BOD	COD	EC	N (total)	pH	P (total)	SAR	TDS	TSS				
					unit of measure	kilolitres	mg/L	mg/L	µs/cm	mg/L	pH	mg/L	SAR	mg/L	mg/L				
					frequency	continous during discharge	every 6 months												
					sampling method	flow meter	representative sample												
EPA Identification point number	Type of Monitoring Point	Type of Discharge Point	How Monitored	Location Description	Detail	Pollutant													
<a href="#">Point 3</a>	Soil quality monitoring		Soil sample.	Soil control point "EPA 12" on site map.	Test	EC	Exch. Ca	Exch. Mg	Exch. K	Exch. Na	Nitrate	N (total)	pH	P (total)	K	SAR	P sorption capacity		
					unit of measure	µs/cm	mmol(+)/k	cmol(+)/kg	cmol(+)/kg	cmol(+)/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg		
					frequency	yearly													
					sampling method	composite sample													
<a href="#">Point 4</a>	Soil quality monitoring		Soil sample.	Soil control point "EPA 14" on site map.	Test	EC	Exch. Ca	Exch. Mg	Exch. K	Exch. Na	Nitrate	N (total)	pH	P (total)	K	SAR	P sorption capacity		
					unit of measure	µs/cm	mmol(+)/k	cmol(+)/kg	cmol(+)/kg	cmol(+)/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg		
					frequency	yearly													
					sampling method	composite sample													
<a href="#">Point 5</a>	Soil quality monitoring		Soil sample.	Soil control point "EPA 16" on site map.	Test	EC	Exch. Ca	Exch. Mg	Exch. K	Exch. Na	Nitrate	N (total)	pH	P (total)	K	SAR	P sorption capacity		
					unit of measure	µs/cm	mmol(+)/k	cmol(+)/kg	cmol(+)/kg	cmol(+)/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg		
					frequency	yearly													
					sampling method	composite sample													
<a href="#">Point 6</a>	Soil quality monitoring		Soil sample.	Soil control point "EPA 24" on site map.	Test	EC	Exch. Ca	Exch. Mg	Exch. K	Exch. Na	Nitrate	N (total)	pH	P (total)	K	SAR	P sorption capacity		
					unit of measure	µs/cm	mmol(+)/k	cmol(+)/kg	cmol(+)/kg	cmol(+)/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg		
					frequency	yearly													
					sampling method	composite sample													



Point 1

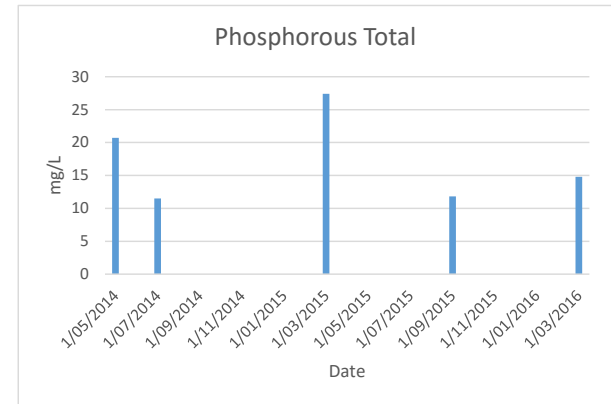
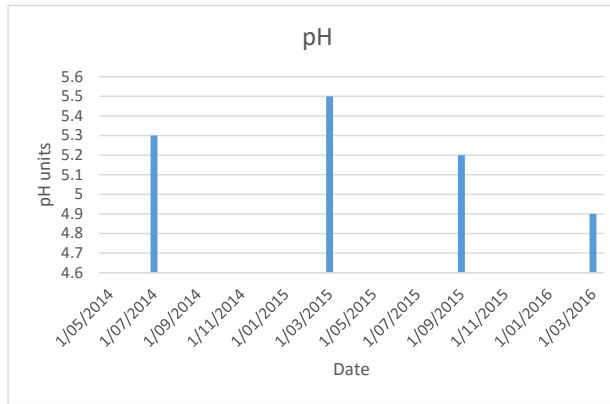
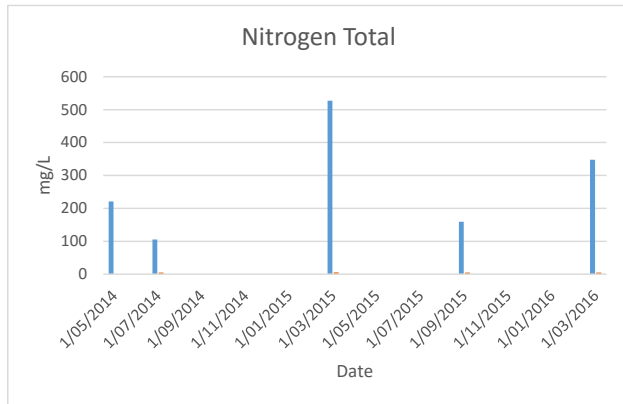
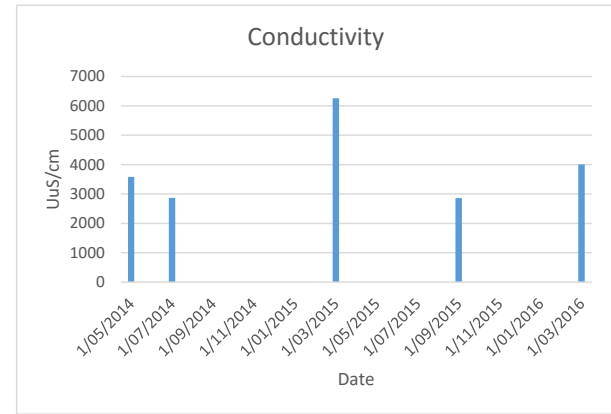
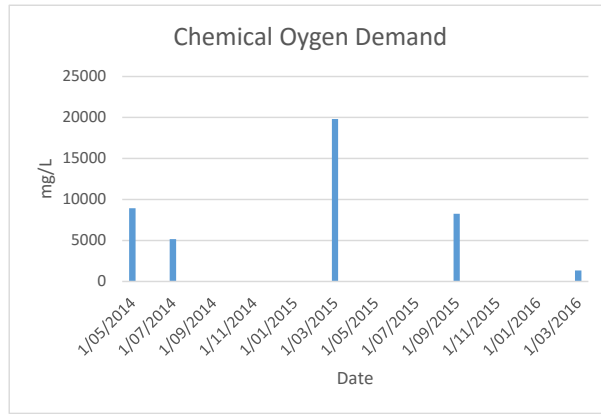
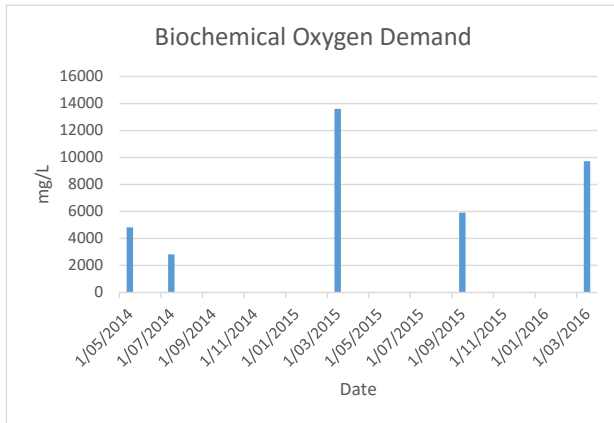
type	test	units	Date																			
			14/05/2014	14/06/2014	14/07/2014	15/03/2015	22/09/2015	2/03/2016														
quality monitoring	BOD	mg/L	31800	3260	4950	12400	3320	7920														
quality monitoring	COD	mg/L	74900	5820	5060	21400	5850	13700														
quality monitoring	EC	µs/cm	11800	1020	2900	3290	7330	6610														
quality monitoring	N (total)	mg/L	717	13	103	286	27	420														
quality monitoring	pH	pH	n/a	n/a	5.3	4.1	12.4	6														
quality monitoring	P (total)	mg/L	47	2.8	11.2	23.2	5.69	14.4														
quality monitoring	SAR	SAR	<1	2	2	1	2	2														
quality monitoring	TDS	mg/L	11700	1280	2140	3310	6250	7240														
quality monitoring	TSS	mg/L	25400	254	144	2410	322	1310														



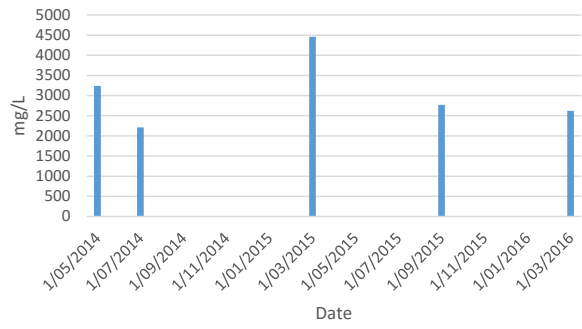


Point 2

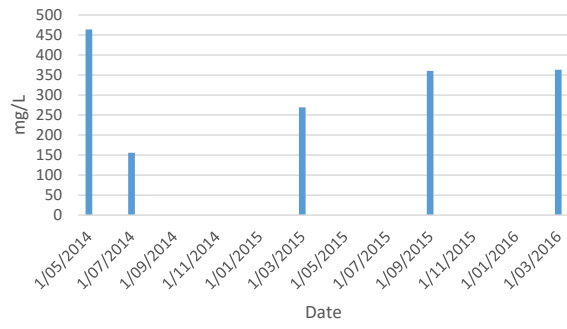
type	test	units	Date															
			14/05/2014	14/07/2014	15/03/2015	22/09/2015	2/03/2016											
quality monitoring	BOD	mg/L	4830	2820	13600	5920	9730											
quality monitoring	COD	mg/L	8940	5160	19800	8260	1350											
quality monitoring	EC	µs/cm	3580	2870	6260	2860	4010											
quality monitoring	N (total)	mg/L	221	105	527	159	348											
quality monitoring	pH	pH		5.3	5.5	5.2	4.9											
quality monitoring	P (total)	mg/L	20.7	11.5	27.4	11.8	14.8											
quality monitoring	SAR	SAR	1	2	1	1	2											
quality monitoring	TDS	mg/L	3240	2210	4460	2770	2620											
quality monitoring	TSS	mg/L	464	156	269	360	363											



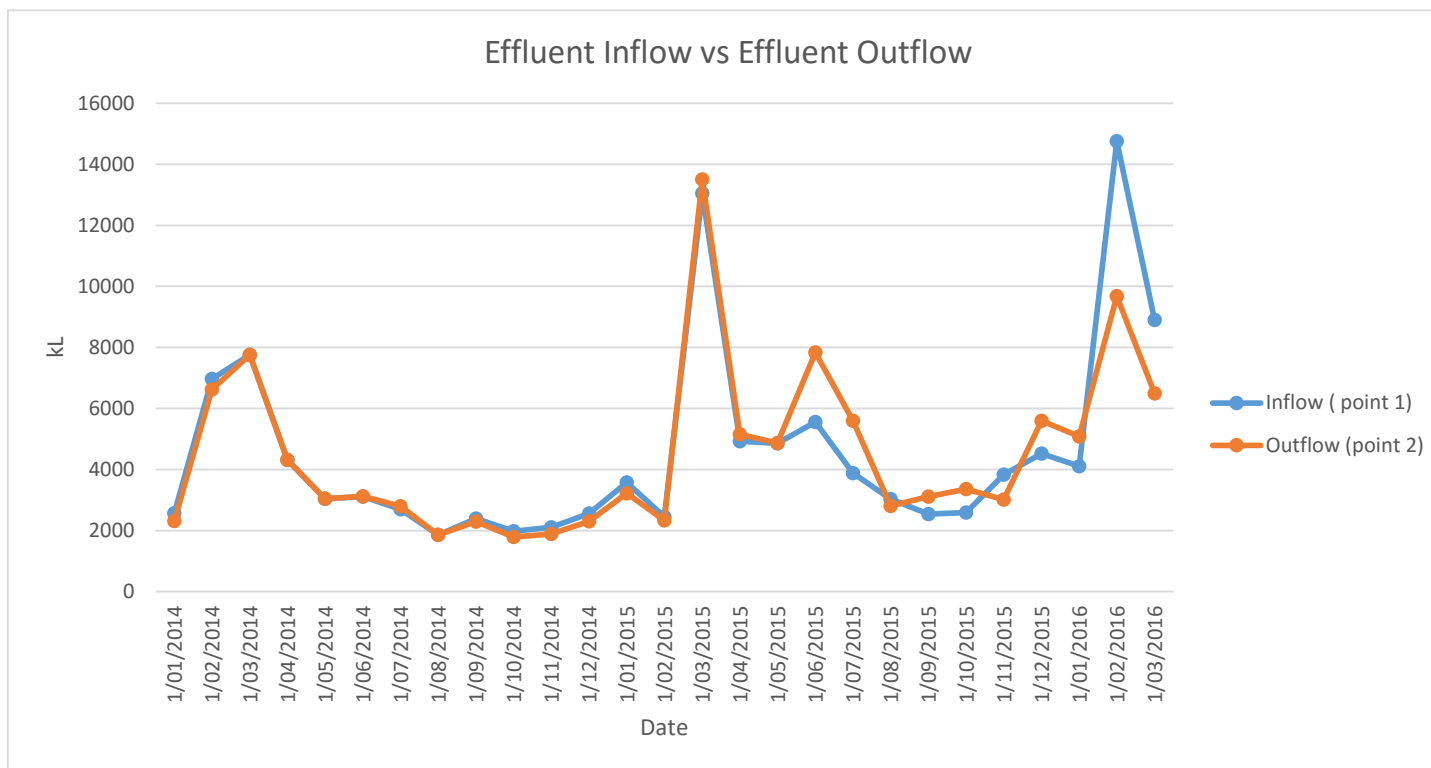
Total Dissolved Solids



Total Suspended Solids

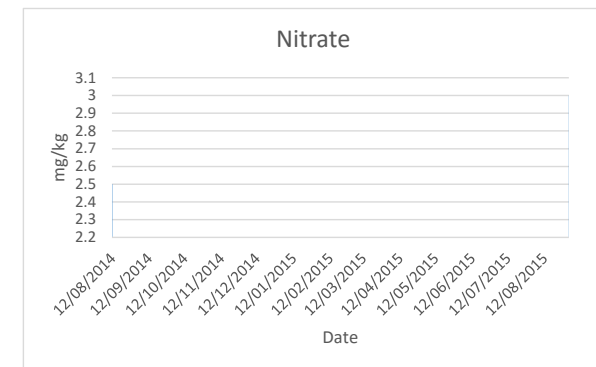
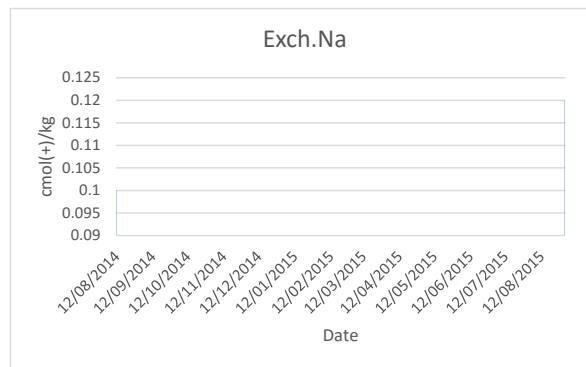
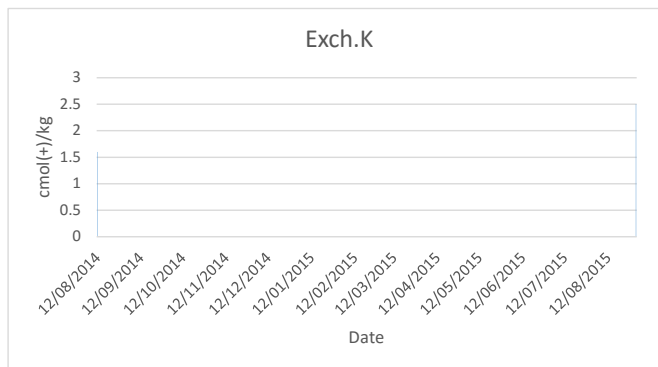
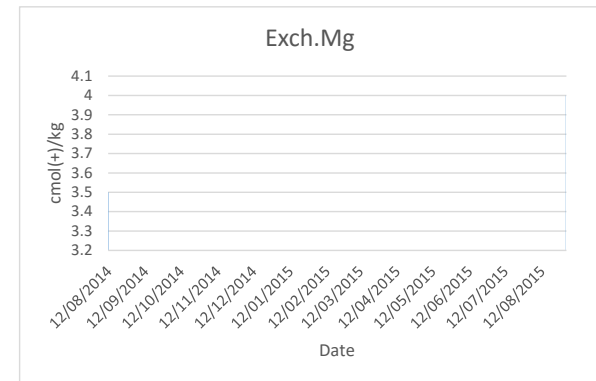
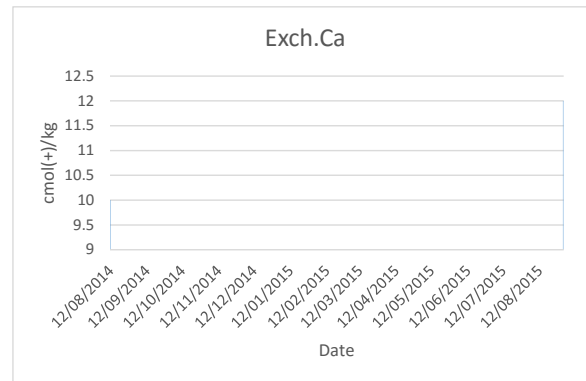
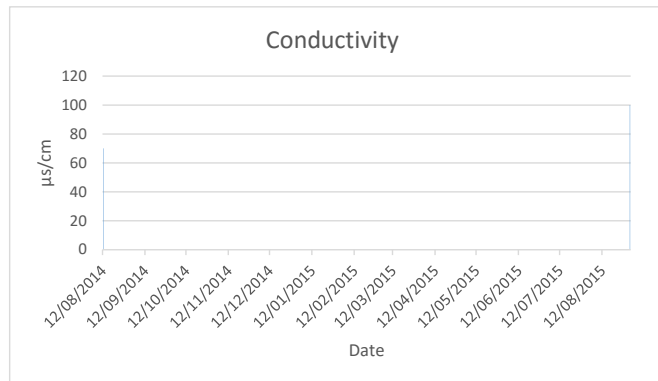


Date	Inflow (point 1)	Outflow (point 2)
27/01/2014	2566	2309
24/02/2014	6970	6622
31/03/2014	7760	7760
28/04/2014	4315	4316
26/05/2014	3043	3044
30/06/2014	3110	3122
28/07/2014	2698	2798
25/08/2014	1854	1854
29/09/2014	2391	2290
27/10/2014	1979	1787
24/11/2014	2100	1890
29/12/2014	2554	2300
26/01/2015	3578	3220
23/02/2015	2451	2330
30/03/2015	13047	13503
27/04/2015	4927	5155
25/05/2015	4858	4865
29/06/2015	5558	7839
27/07/2015	3882	5593
31/08/2015	3027	2800
28/09/2015	2543	3110
26/10/2015	2584	3360
30/11/2015	3826	3010
31/12/2015	4524	5600
31/01/2016	4110	5080
29/02/2016	14760	9680
31/03/2016	8900	6490

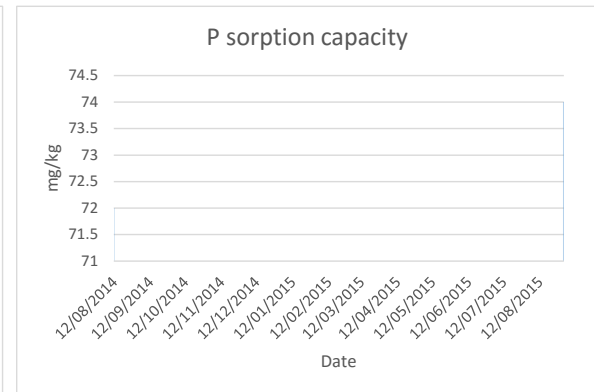
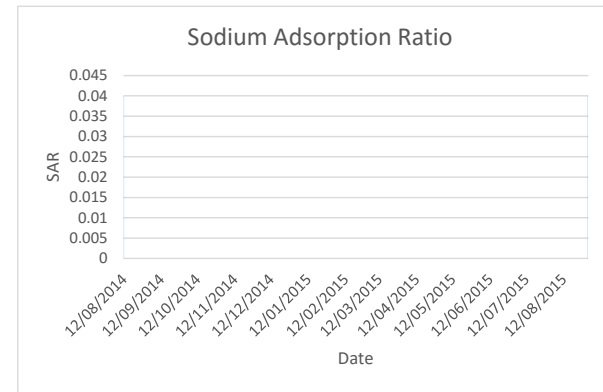
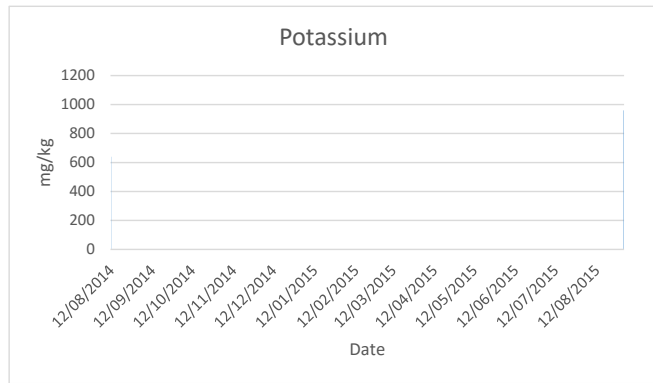
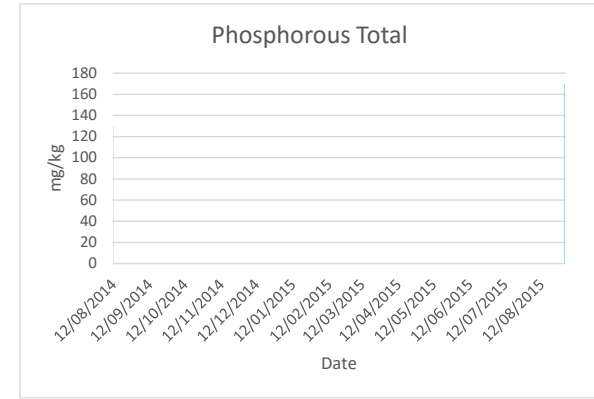
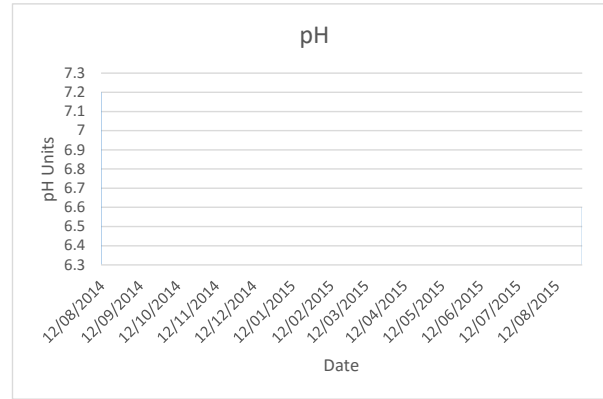
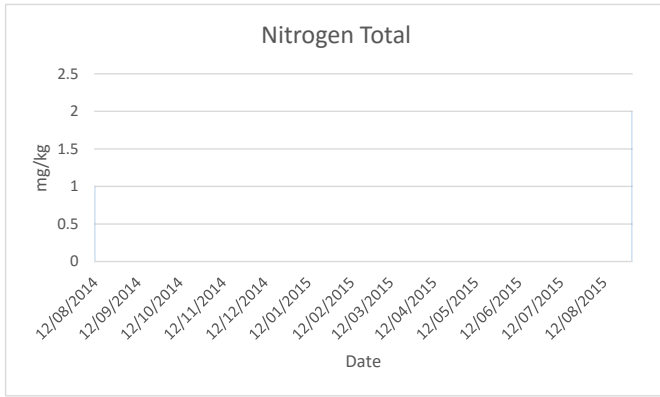


Point 3

type	test	units	Date																	
			12/08/2014	1/09/2015																
quality monitoring	EC	µs/cm	70	100																
quality monitoring	Exch. Ca	cmol(+)/kg	10	12																
quality monitoring	Exch. Mg	cmol(+)/kg	3.5	4																
quality monitoring	Exch. K	cmol(+)/kg	1.6	2.5																
quality monitoring	Exch. Na	cmol(+)/kg	0.1	0.12																
quality monitoring	Nitrate	mg/kg	2.5	3																
quality monitoring	N (total)	mg/kg	1	2																
quality monitoring	pH	pH	7.2	6.6																
quality monitoring	P (total)	mg/kg	130	170																
quality monitoring	K	mg/kg	640	960																
quality monitoring	SAR	SAR	0.04	0.04																
quality monitoring	P sorption capacity	mg/kg	72	74																

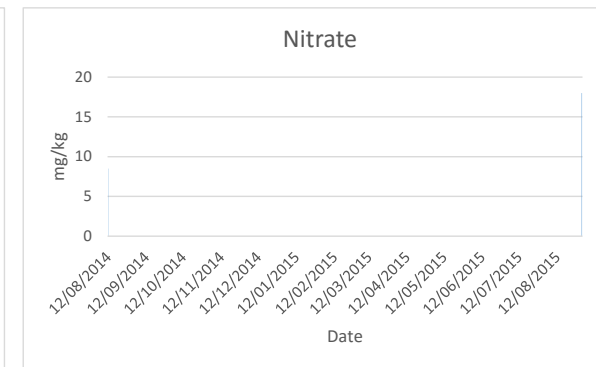
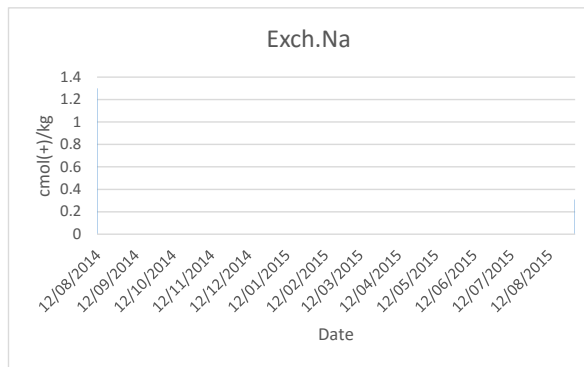
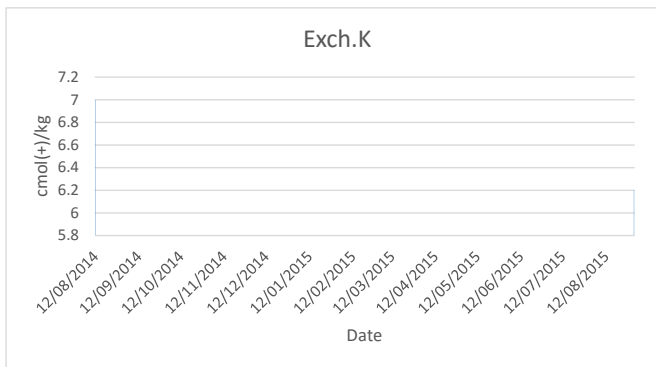
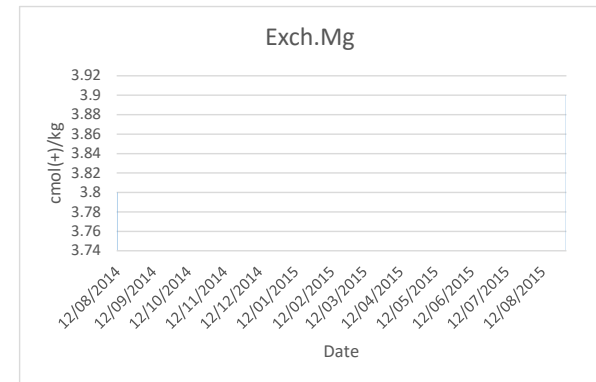
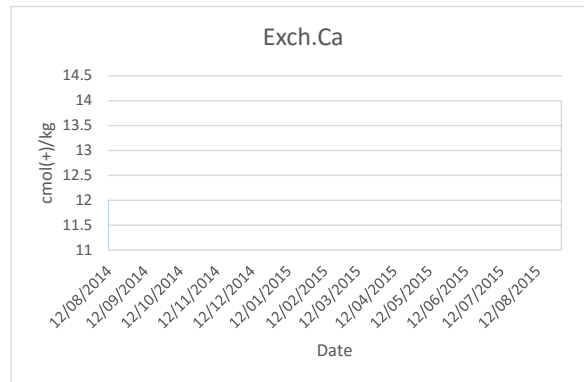
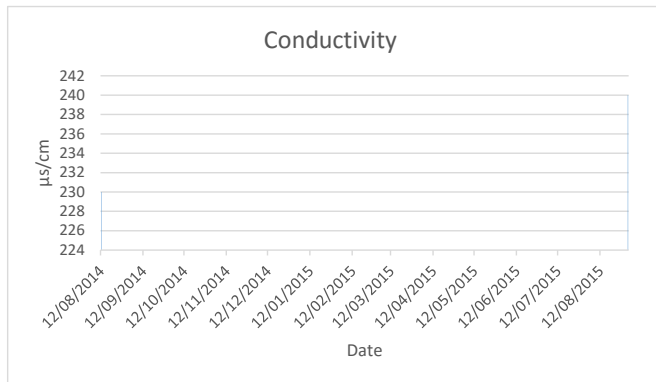


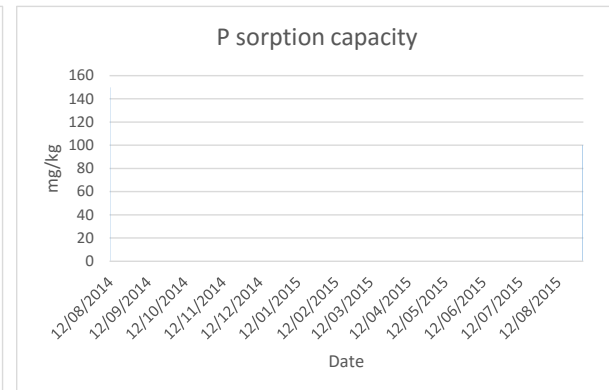
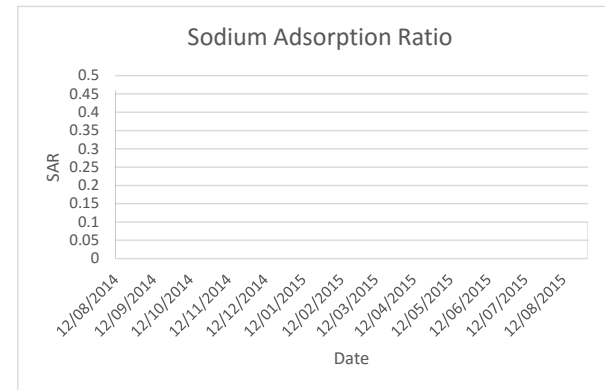
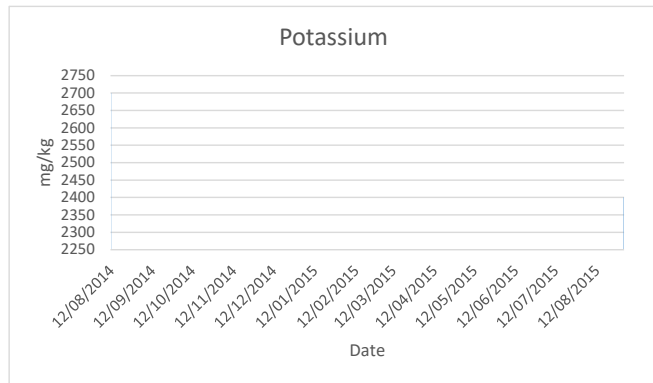
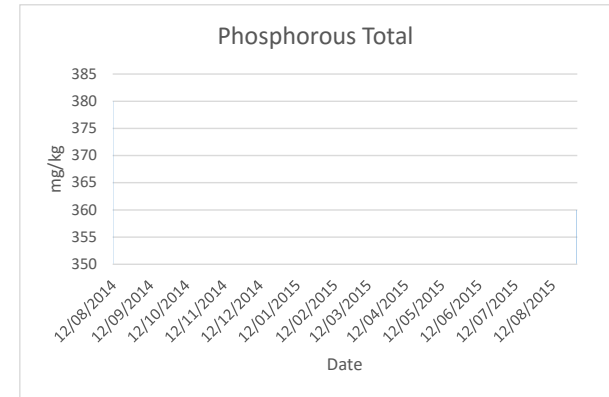
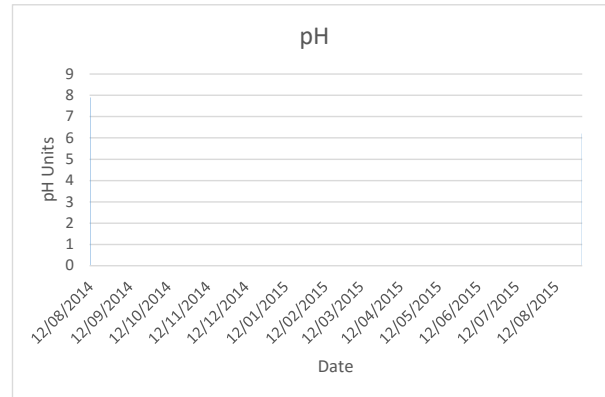
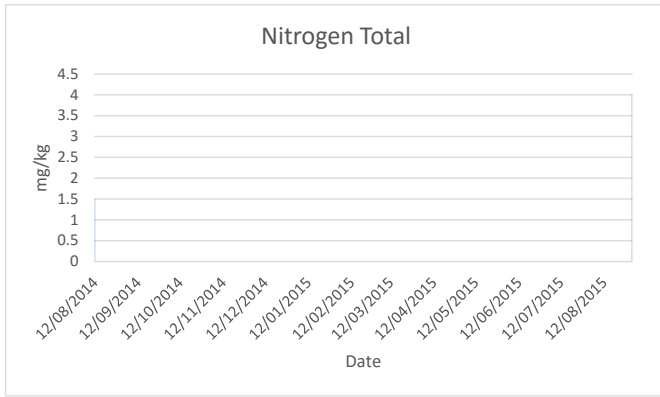




Point 4

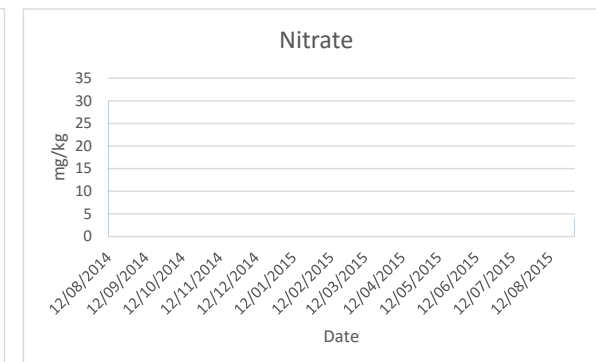
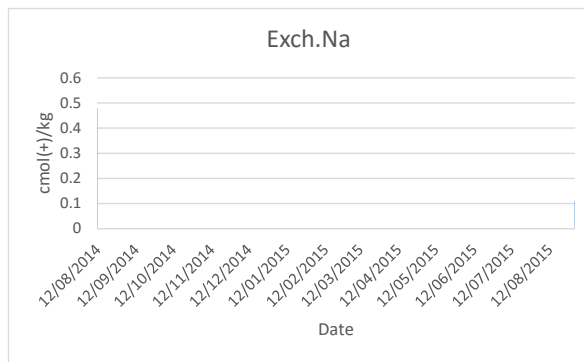
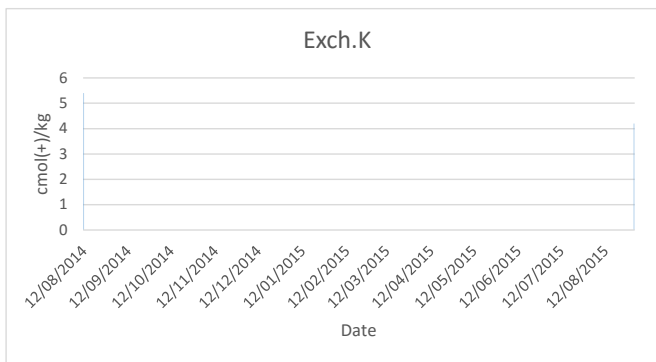
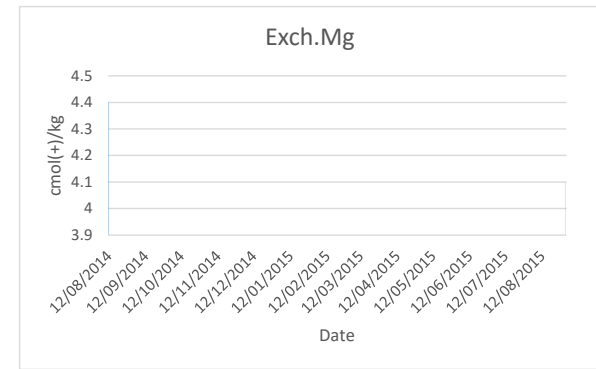
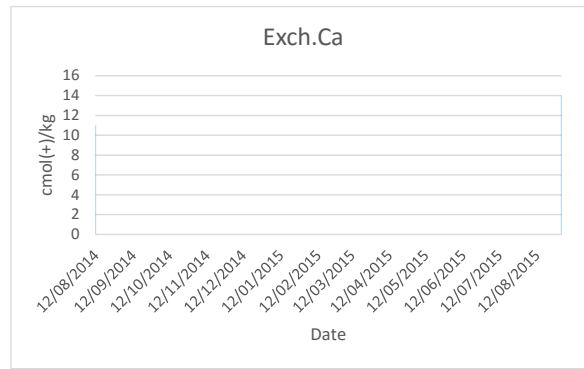
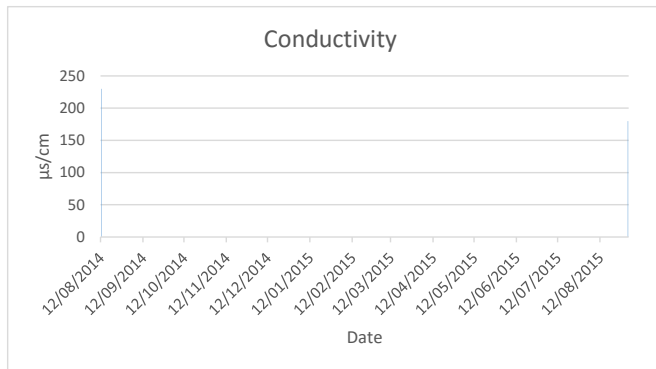
type	test	units	Date																	
			12/08/2014	1/09/2015																
quality monitoring	EC	µs/cm	230	240																
quality monitoring	Exch. Ca	cmol(+)/kg	12	14																
quality monitoring	Exch. Mg	cmol(+)/kg	3.8	3.9																
quality monitoring	Exch. K	cmol(+)/kg	7	6.2																
quality monitoring	Exch. Na	cmol(+)/kg	1.3	0.31																
quality monitoring	Nitrate	mg/kg	8.5	18																
quality monitoring	N (total)	mg/kg	1.5	4																
quality monitoring	pH	pH	7.9	6.2																
quality monitoring	P (total)	mg/kg	380	360																
quality monitoring	K	mg/kg	2700	2400																
quality monitoring	SAR	SAR	0.46	0.1																
quality monitoring	P sorption capacity	mg/kg	150	100																

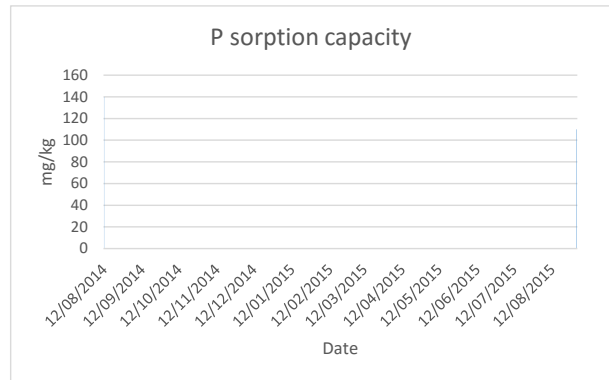
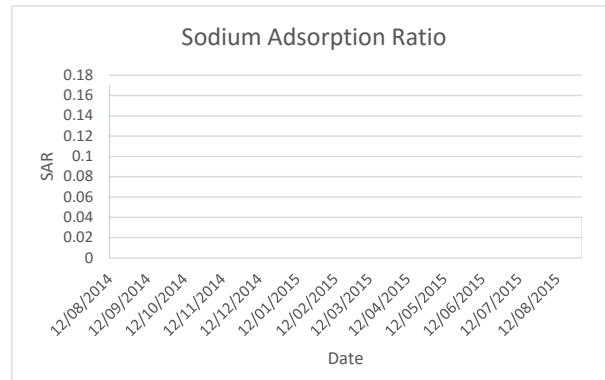
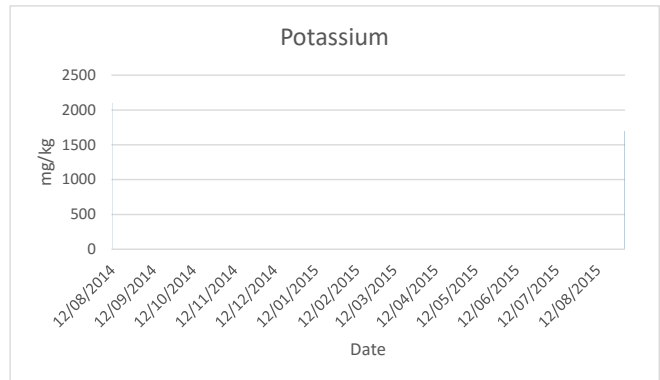
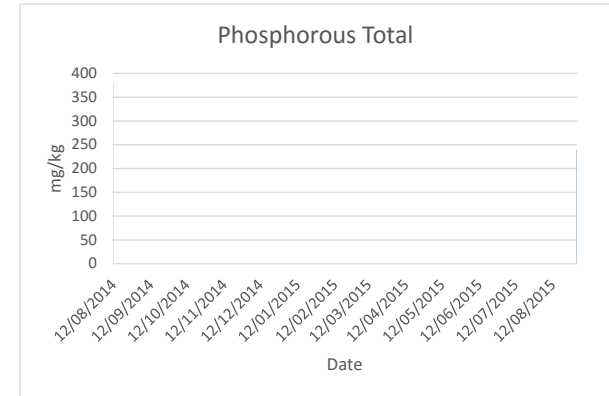
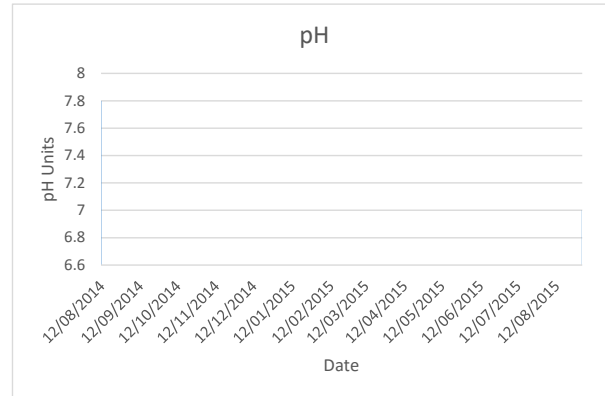
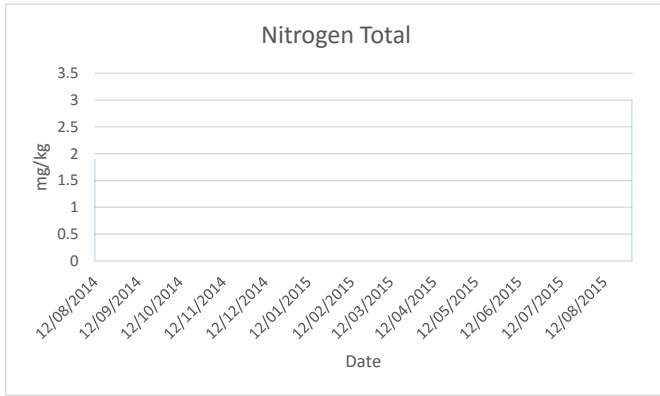




Point 5

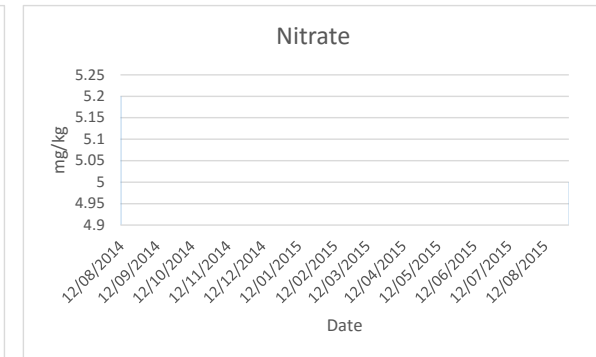
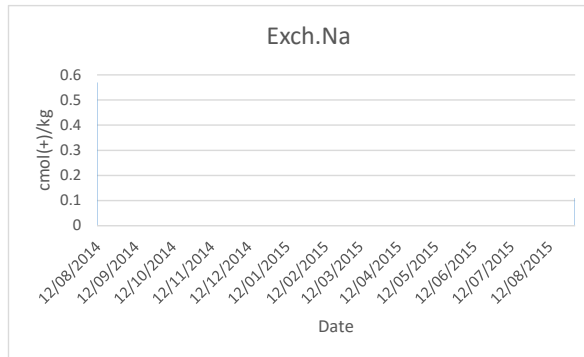
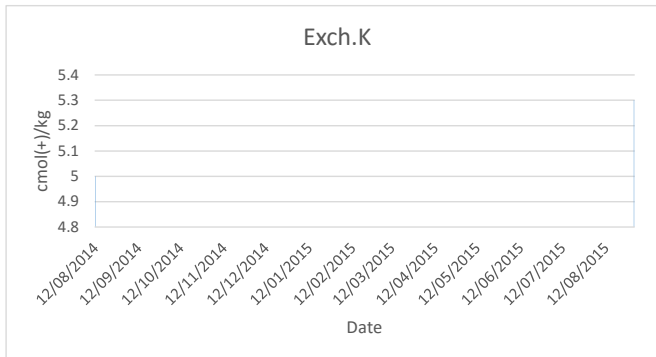
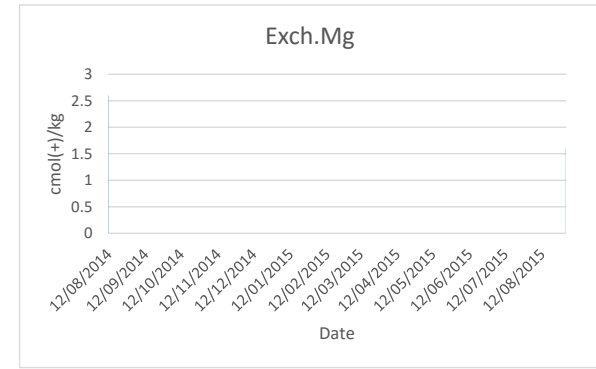
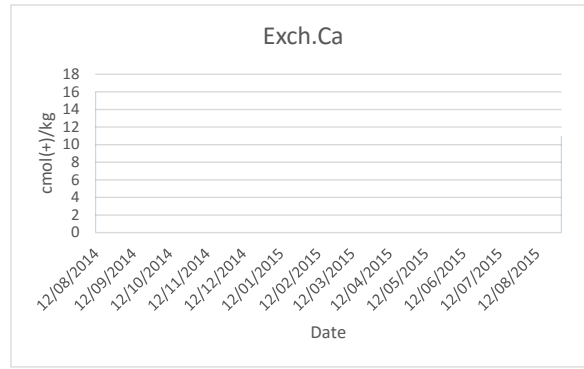
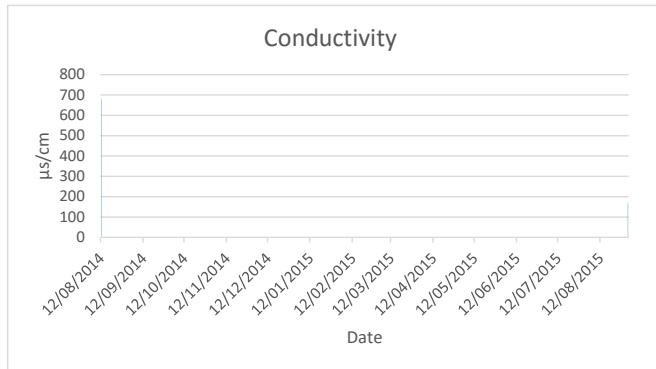
type	test	units	Date																	
			12/08/2014	1/09/2015																
quality monitoring	EC	µs/cm	230	180																
quality monitoring	Exch. Ca	cmol(+)/kg	11	14																
quality monitoring	Exch. Mg	cmol(+)/kg	4.4	4.1																
quality monitoring	Exch. K	cmol(+)/kg	5.4	4.2																
quality monitoring	Exch. Na	cmol(+)/kg	0.48	0.11																
quality monitoring	Nitrate	mg/kg	30	4																
quality monitoring	N (total)	mg/kg	1.9	3																
quality monitoring	pH	pH	7.8	7																
quality monitoring	P (total)	mg/kg	380	240																
quality monitoring	K	mg/kg	2100	1700																
quality monitoring	SAR	SAR	0.17	0.04																
quality monitoring	P sorption capacity	mg/kg	140	110																

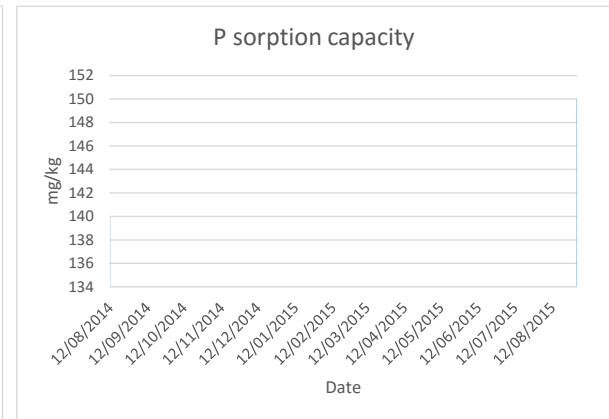
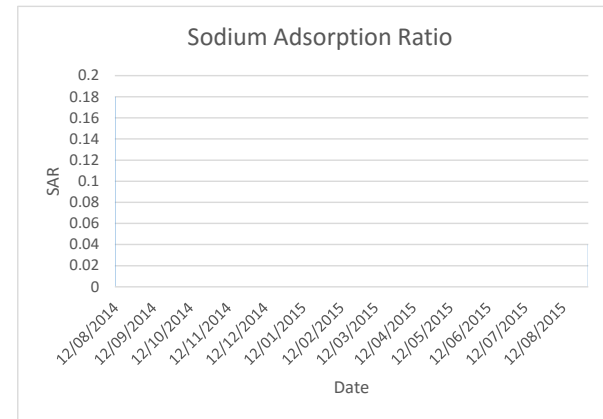
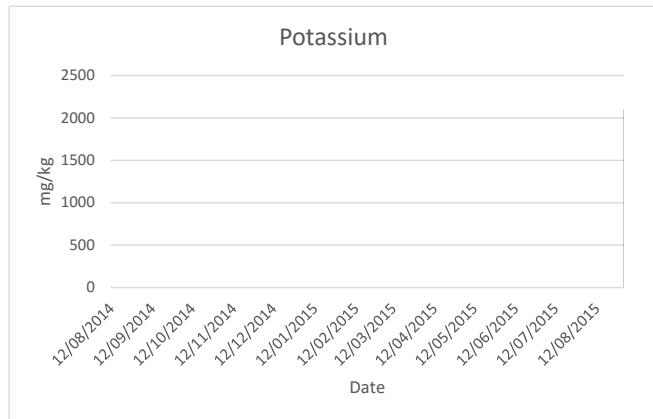
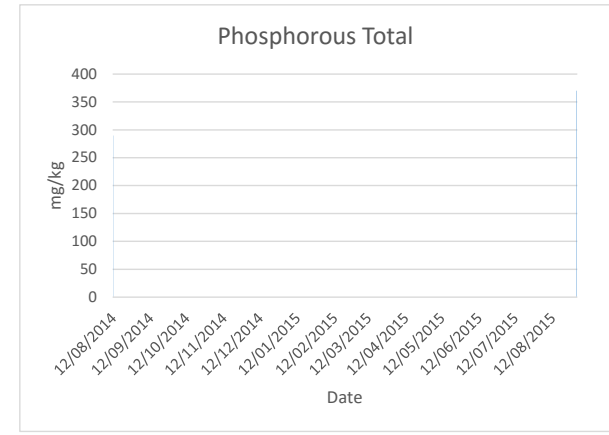
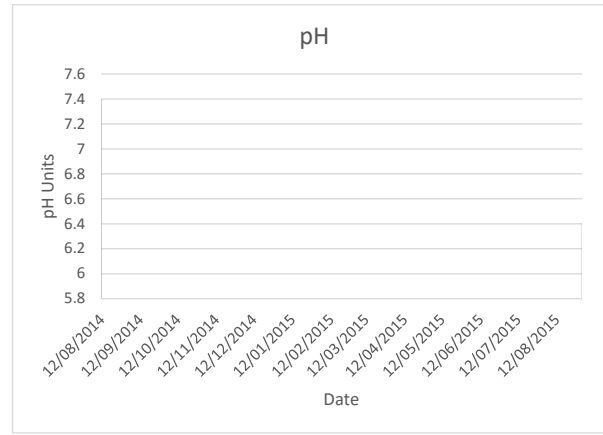
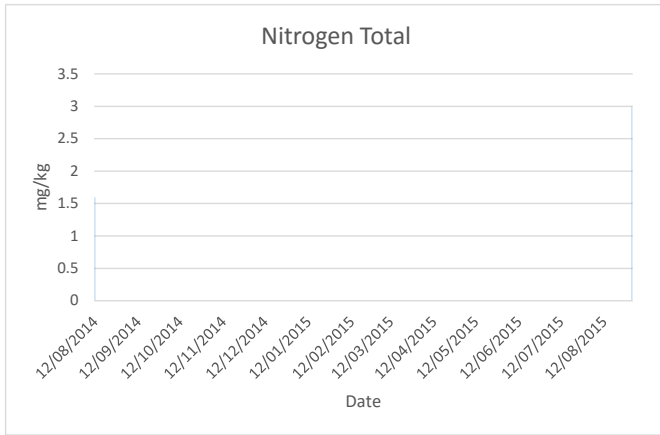




Point 6

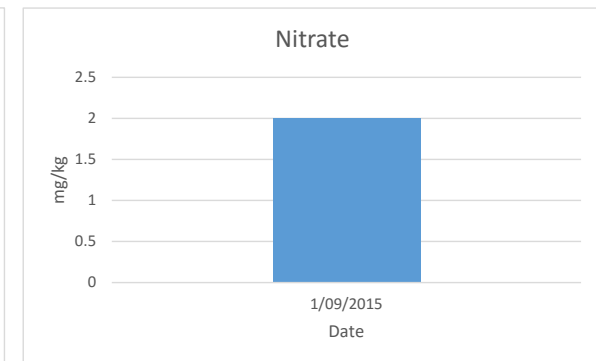
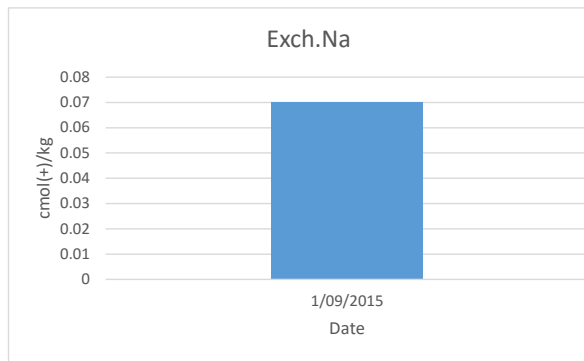
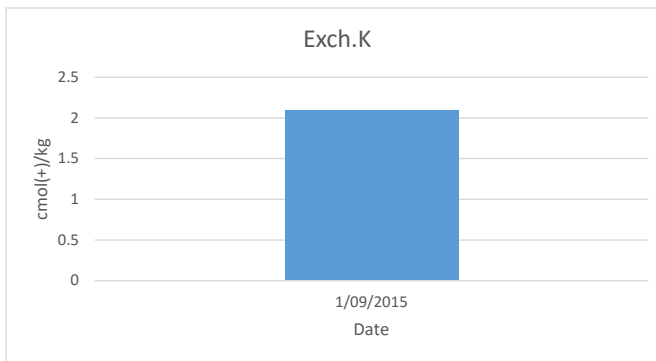
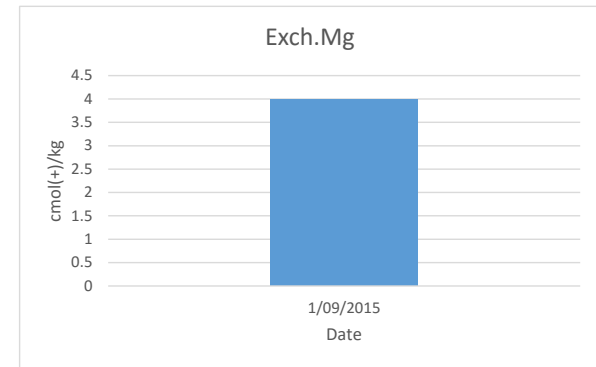
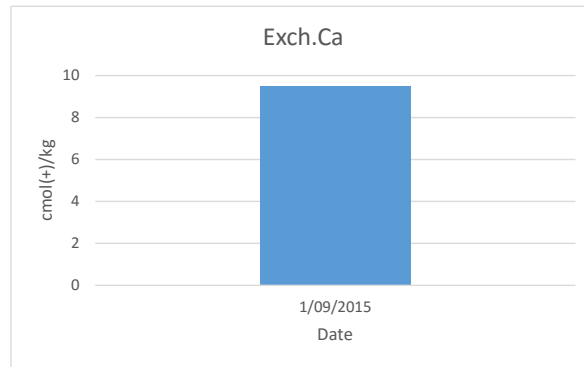
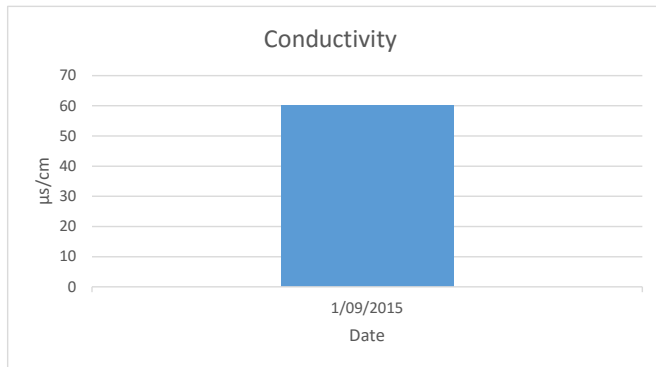
type	test	units	Date															
			12/08/2014	1/09/2015														
quality monitoring	EC	µs/cm	680	170														
quality monitoring	Exch. Ca	cmol(+)/kg	16	11														
quality monitoring	Exch. Mg	cmol(+)/kg	2.6	1.6														
quality monitoring	Exch. K	cmol(+)/kg	5	5.3														
quality monitoring	Exch. Na	cmol(+)/kg	0.57	0.11														
quality monitoring	Nitrate	mg/kg	5.2	5														
quality monitoring	N (total)	mg/kg	1.6	3														
quality monitoring	pH	pH	7.4	6.4														
quality monitoring	P (total)	mg/kg	290	370														
quality monitoring	K	mg/kg	21	2100														
quality monitoring	SAR	SAR	0.18	0.04														
quality monitoring	P sorption capacity	mg/kg	140	150														



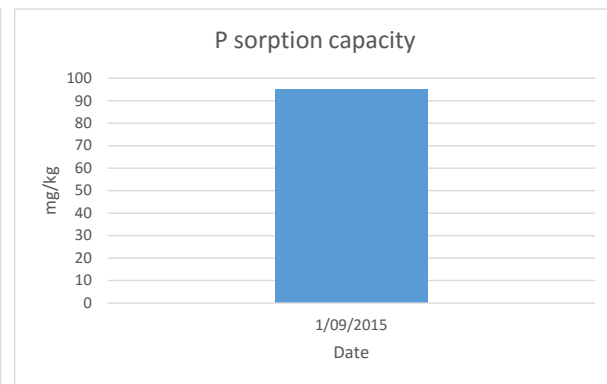
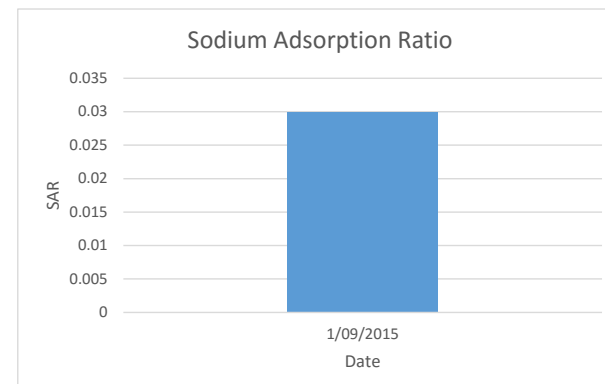
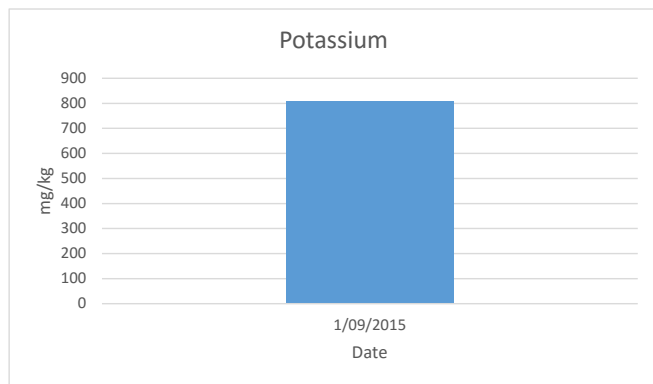
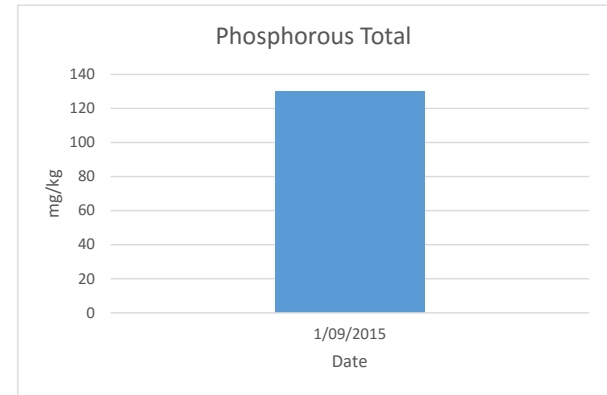
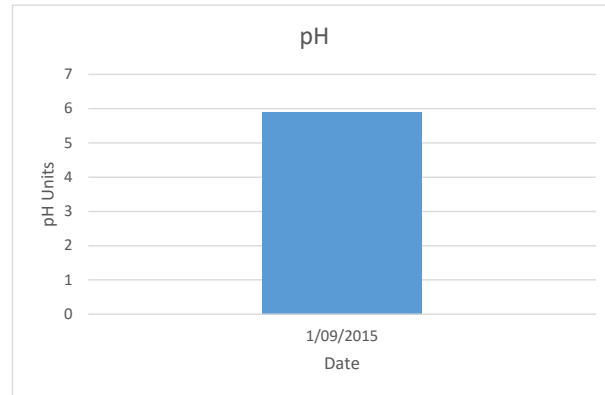
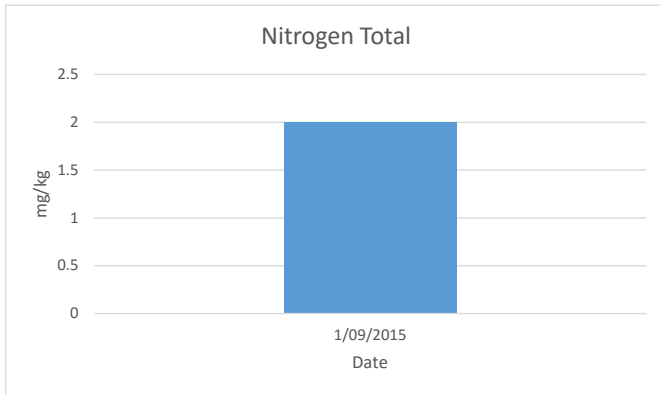


Point 11

type	test	units	Date																	
			1/09/2015																	
quality monitoring	EC	µs/cm	60																	
quality monitoring	Exch. Ca	cmol(+)/kg	9.5																	
quality monitoring	Exch. Mg	cmol(+)/kg	4																	
quality monitoring	Exch. K	cmol(+)/kg	2.1																	
quality monitoring	Exch. Na	cmol(+)/kg	0.07																	
quality monitoring	Nitrate	mg/kg	2																	
quality monitoring	N (total)	mg/kg	2																	
quality monitoring	pH	pH	5.9																	
quality monitoring	P (total)	mg/kg	130																	
quality monitoring	K	mg/kg	810																	
quality monitoring	SAR	SAR	0.03																	
quality monitoring	P sorption capacity	mg/kg	95																	



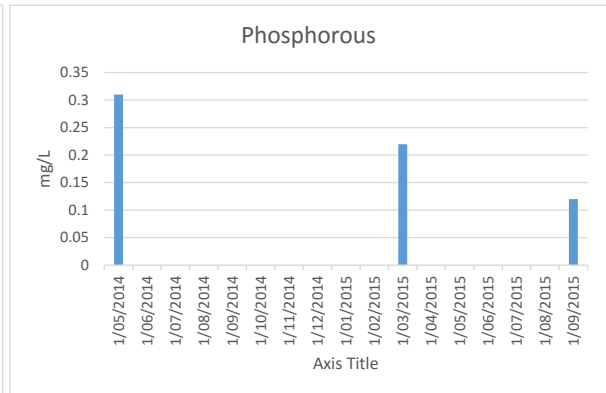
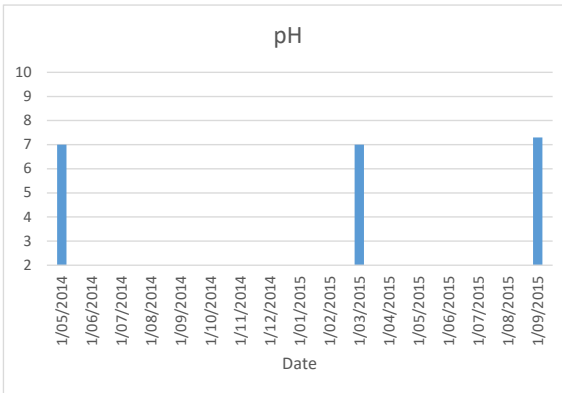
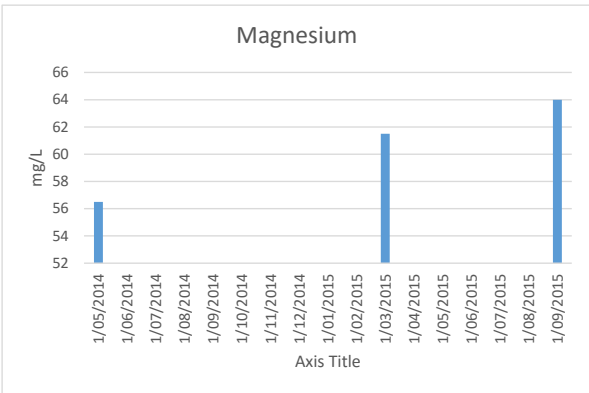
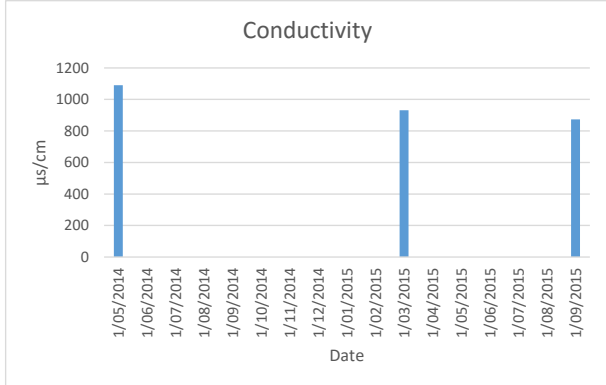
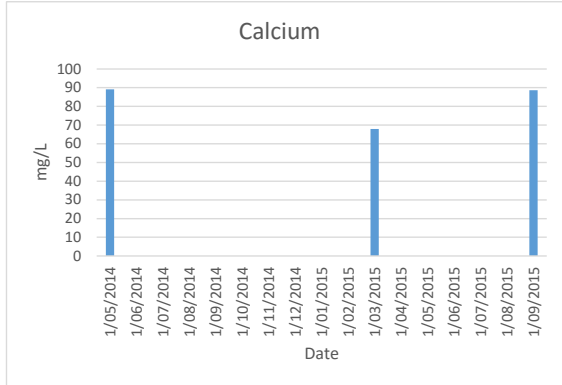
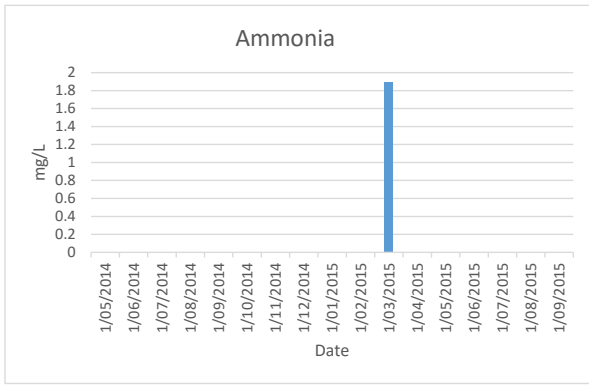


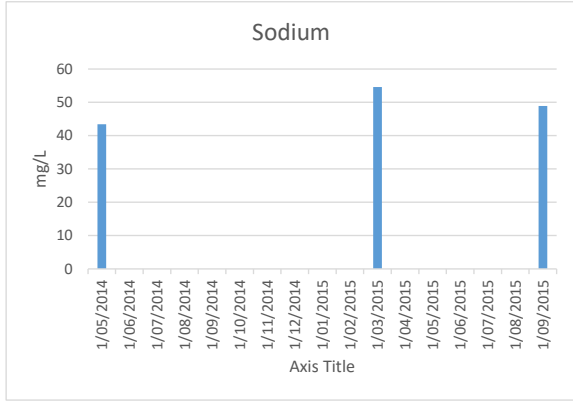
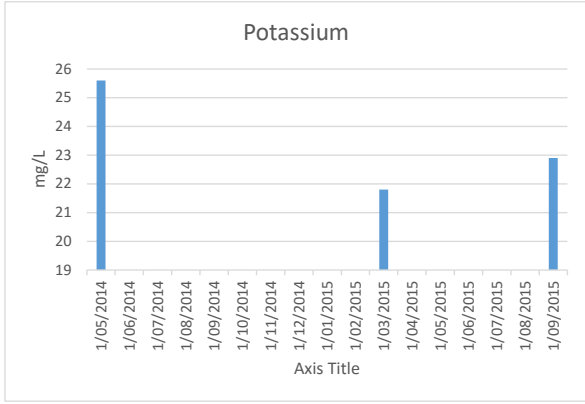




Point 7

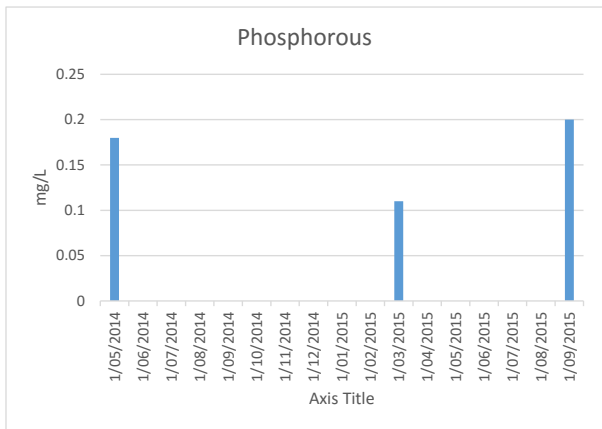
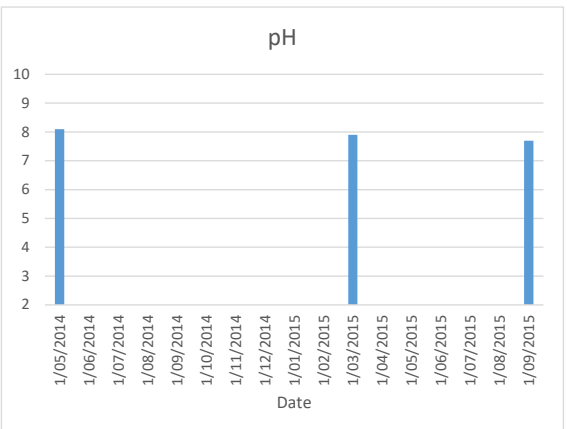
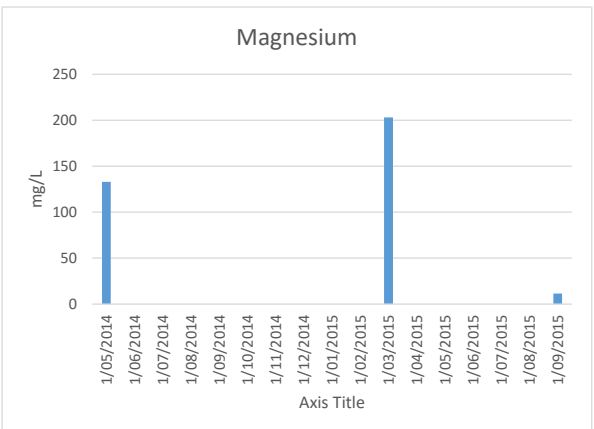
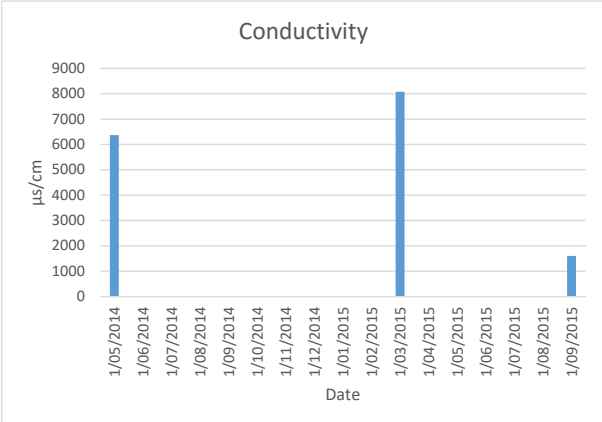
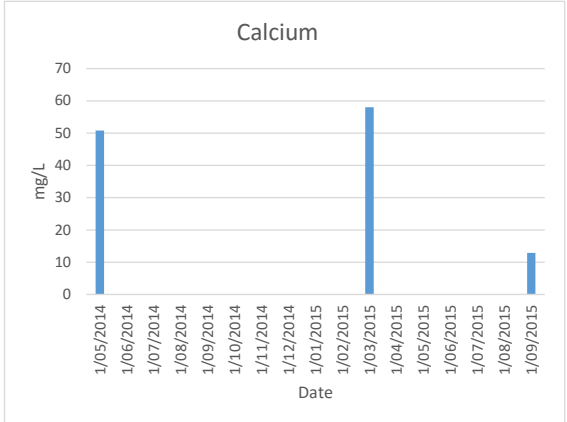
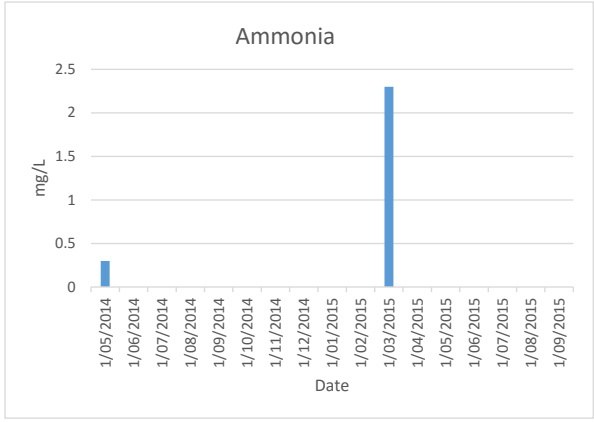
type	test	units	Date																
			6/05/2014	11/03/2015	22/09/2015														
quality monitoring	ammonia	mg/L	<0.2	1.9	<0.2														
quality monitoring	Ca	mg/L	89.1	67.9	88.6														
quality monitoring	EC	µs/cm	1090	931	874														
quality monitoring	Mg	mg/L	56.5	61.5	64														
quality monitoring	N( nitrate)	mg/L	<0.5	<1	<0.5														
quality monitoring	N(total)	mg/L	2	<2	2														
quality monitoring	pH	pH	7	7	7.3														
quality monitoring	P	mg/L	0.31	0.22	0.12														
quality monitoring	K	mg/L	25.6	21.8	22.9														
quality monitoring	Na	mg/L	43.4	54.6	48.9														

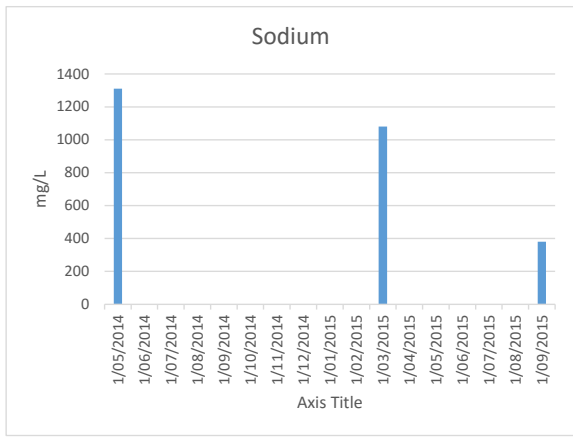
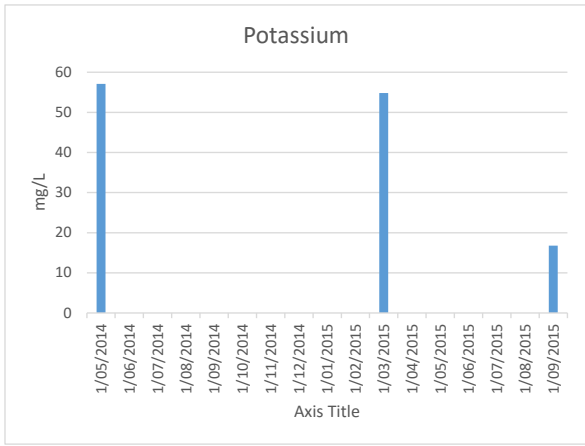




Point 8

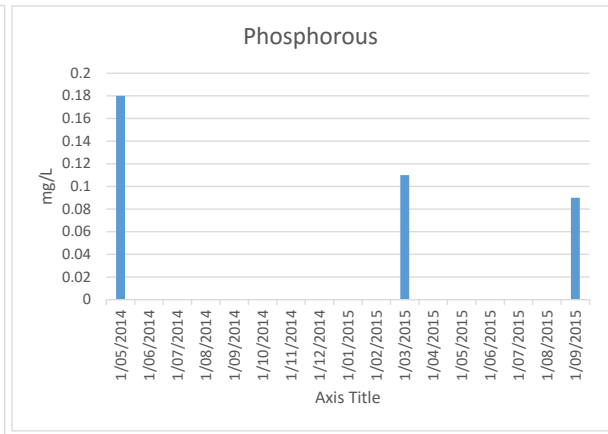
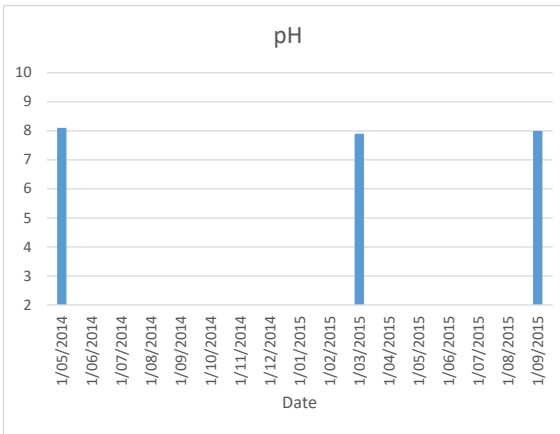
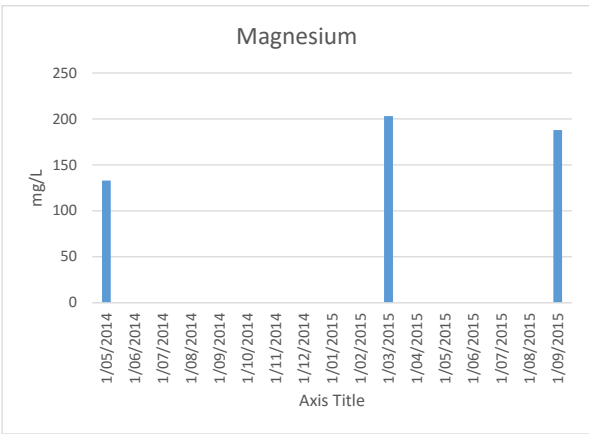
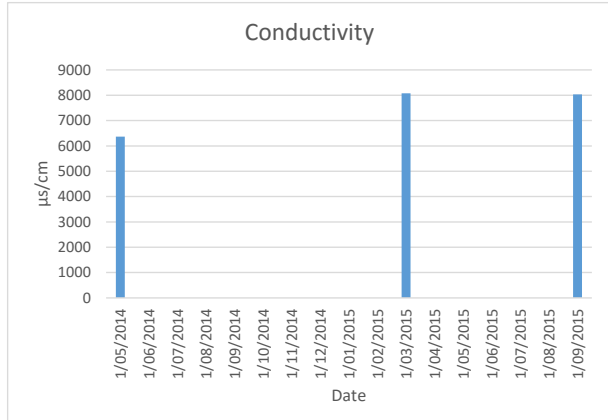
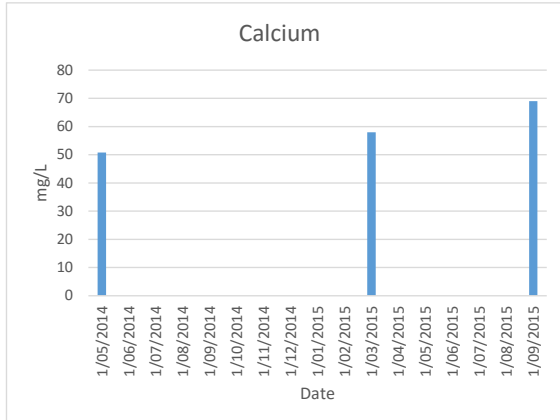
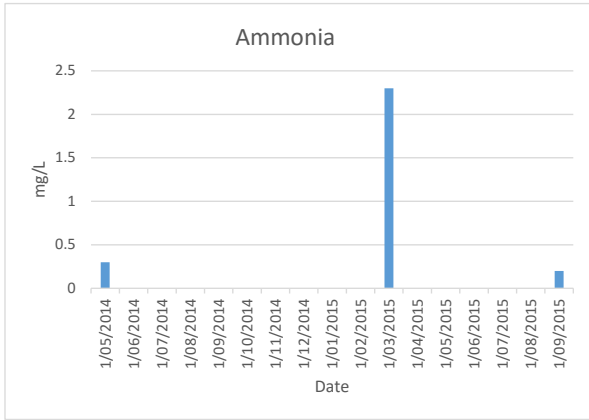
type	test	units	Date																
			6/05/2014	11/03/2015	22/09/2015														
quality monitoring	ammonia	mg/L	0.3	2.3	<0.2														
quality monitoring	Ca	mg/L	50.8	58	12.9														
quality monitoring	EC	µs/cm	6370	8080	1600														
quality monitoring	Mg	mg/L	133	203	11.4														
quality monitoring	N( nitrate)	mg/L	<0.5	<1.0	<0.5														
quality monitoring	N(total)	mg/L	2	<2	2														
quality monitoring	pH	pH	8.1	7.9	7.7														
quality monitoring	P	mg/L	0.18	0.11	0.2														
quality monitoring	K	mg/L	57.1	54.8	16.8														
quality monitoring	Na	mg/L	1310	1080	380														

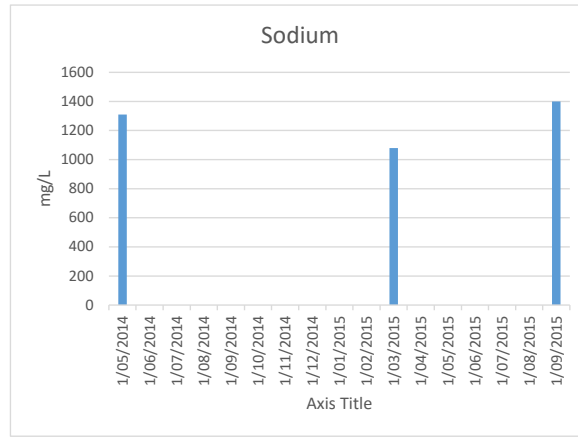
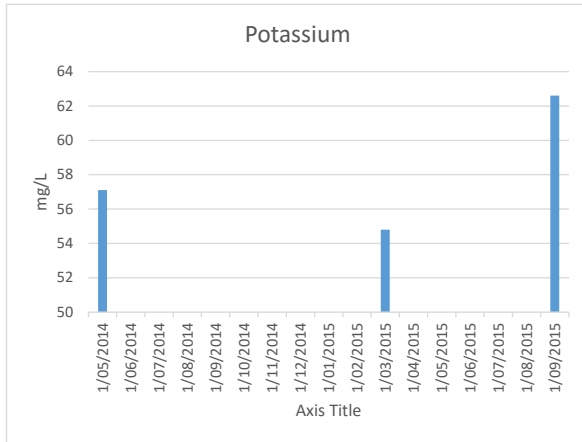




Point 9

type	test	units	Date																
			6/05/2014	11/03/2015	22/09/2015														
quality monitoring	ammonia	mg/L	0.3	2.3	0.2														
quality monitoring	Ca	mg/L	50.8	58	69														
quality monitoring	EC	µs/cm	6370	8080	8030														
quality monitoring	Mg	mg/L	133	203	188														
quality monitoring	N( nitrate)	mg/L	<0.5	<1	<0.5														
quality monitoring	N(total)	mg/L	2	<2	<2														
quality monitoring	pH	pH	8.1	7.9	8														
quality monitoring	P	mg/L	0.18	0.11	0.09														
quality monitoring	K	mg/L	57.1	54.8	62.6														
quality monitoring	Na	mg/L	1310	1080	1400														



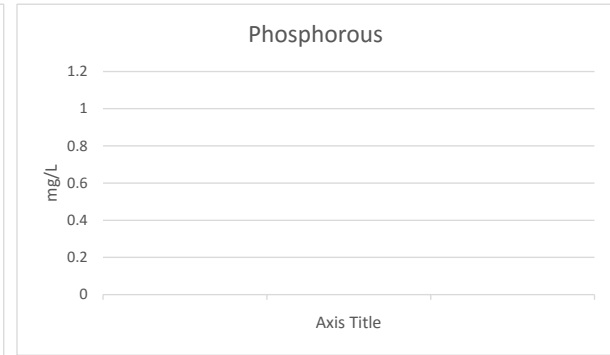
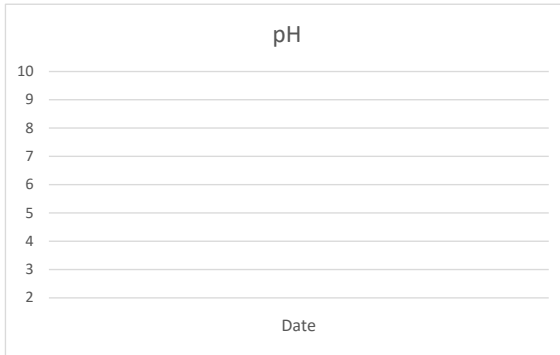
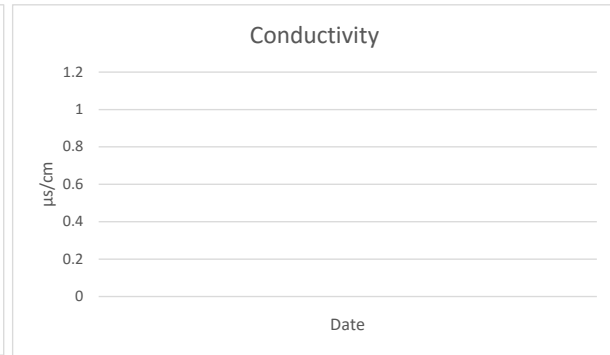
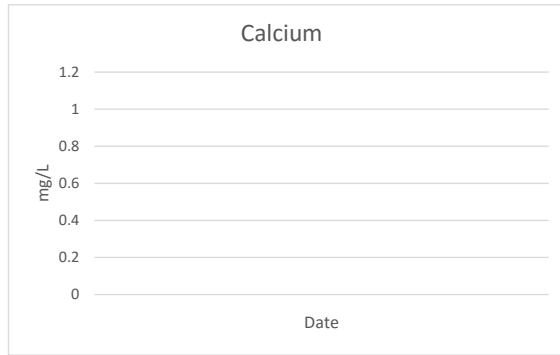
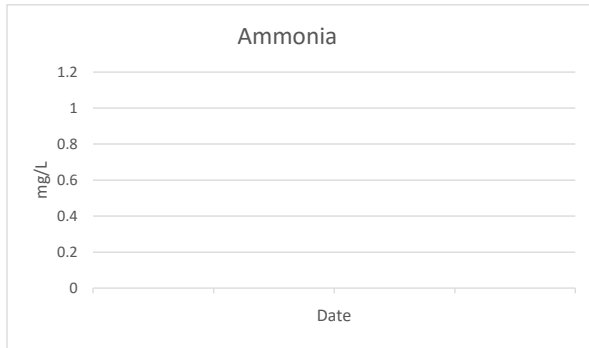


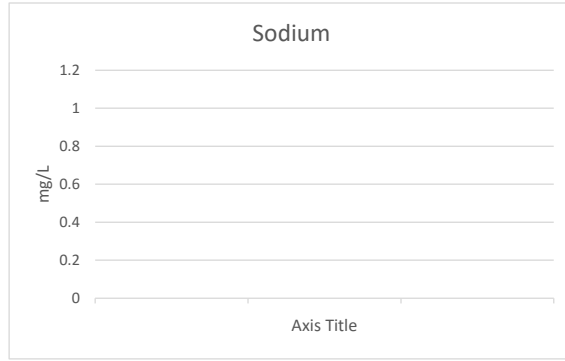
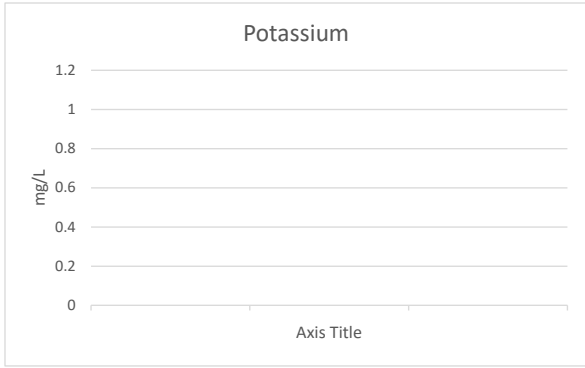


Point 10

Date

type	test	units																					
quality monitoring	ammonia	mg/L																					
quality monitoring	Ca	mg/L																					
quality monitoring	EC	µs/cm																					
quality monitoring	Mg	mg/L																					
quality monitoring	N( nitrate)	mg/L																					
quality monitoring	N(total)	mg/L																					
quality monitoring	pH	pH																					
quality monitoring	P	mg/L																					
quality monitoring	K	mg/L																					
quality monitoring	Na	mg/L																					





**EPA ENVIRONMENTAL MONITORING**

Type of Monitoring Point	How Monitored	Location Description	Frequency
Odour	Odour Intensity and Descriptor Sheet; observation.	Boundary of evaporation ponds "EPA 21" & "EPA 22" on site map.	Daily (working days)

Type of Monitoring Point	How Monitored	Location Description	Frequency
Weather conditions other than rainfall - temperature, wind speed, wind direction, humidity	Handheld weather meter	Boundary of evaporation ponds "EPA 21" & "EPA 22" on site map.	Daily (working days)

Type of Monitoring Point	How Monitored	Location Description	Frequency
Rainfall	Rain gauge	Boundary of evaporation ponds "EPA 21" & "EPA 22" on site map.	Daily (working days)

Type of Monitoring Point	How Monitored	Location Description	Frequency
Biosolids Cake	Biosolids sample, laboratory analysis	Evaporation ponds sludge	As required

<b>Test Type</b>	<b>EPA Reference Points</b>	<b>Frequency of Monitoring</b>	<b>Next Sample Date</b>
Soil quality monitoring	3, 4, 5, 6, 11	Annual	1/09/2016
Groundwater quality monitoring	7, 8, 9, 10	Annual	11/03/2016
Groundwater standing level	7, 8, 9, 10	6 monthly	16/03/2016
Effluent quality monitoring: inflow and outflow	1, 2	6 monthly	15/03/2016
Effluent volume monitoring: inflow and outflow	1,2	Monthly	28/10/2015