

Water Security Agency

Land Location:	NE-1-02-44-14W3	NTS Map:	73B/13
UTM Coordinates:	Z13 303200 E 5849298 N	RM No.:	437
Ground Elevation:		Source:	
Date Sampled:	14-Oct-65	Time Sampled:	
Sample Location:		Sampled by:	
Well name:	SWA Lilac	Contractor:	
Well owner:	Water Security Agency		
Address:	111 Fairford Street East Moose Jaw, SK S6H 7X9	Tel:	
Sample Depth:	122.2	Date Drilled:	
Depth to Water:		Pump Setting:	
Well Diameter:		Pumping Rate:	
WWRD #	36203	Construction method:	
Analysis No.:		Formation:	Empress Group
Laboratory:		Aquifer name:	Battleford Valley aquifer

Constituent	Concentration	Constituent	Concentration
Major Ions		Metals	
Calcium (Ca)	134	Aluminum (Al)	
Magnesium (Mg)	47	Antimony (Sb)	
Sodium (Na)	103	As (arsenic) (µg/L)	
Potassium (K)	8	Barium (Ba)	
Carbonate (CO3)		Beryllium (Be)	
Bicarbonate (HCO3)	602	Boron (B)	
Sulphate (SO4)	261	Cadmium (Cd)	
Chloride (Cl)	7	Chromium (Cr)	
Fluoride (F)		Cobalt (Co)	
Nitrate - Nitrate (NO3, NO2 + NO3)		Copper (Cu)	
Total Iron (Fe)	3.25	Lead (Pb)	
Manganese (Mn)		Molybdenum (Mo)	
pH (pH units)	7.5	Nickel (Ni)	
Conductivity (uS/cm)	1290	Selenium (Se)	
Sum of Ions	1162	Silver (Ag)	
Total Dissolved Solids (TDS)		Strontium (Sr)	
Error in Balance (%)		Thallium (Tl)	
Hardness (as CaCO3)	527	Tin (Sn)	
Total Alkalinity (as CaCO3)	493	Titanium (Ti)	
Dissolved Organic Carbon (DOC)		Uranium (U) (µg/L)	
Turbidity (NTU)		Vanadium (V)	
Perchlorate		Zinc (Zn)	
Iodine (I)			

All values in mg/L, unless indicated otherwise

Water Security Agency

Land Location:	NE-1-02-44-14W3	NTS Map:	73B/13
UTM Coordinates:	Z13 303200 E 5849298 N	RM No.:	437
Ground Elevation:		Source:	
Date Sampled:	10-Aug-70	Time Sampled:	
Sample Location:		Sampled by:	
Well name:	SWA Lilac	Contractor:	
Well owner:	Water Security Agency		
Address:	111 Fairford Street East Moose Jaw, SK S6H 7X9	Tel:	
Sample Depth:	122.2	Date Drilled:	
Depth to Water:		Pump Setting:	
Well Diameter:		Pumping Rate:	
WWRD #	36203	Construction method:	
Analysis No.:		Formation:	Empress Group
Laboratory:		Aquifer name:	Battleford Valley aquifer

Constituent	Concentration	Constituent	Concentration
Major Ions		Metals	
Calcium (Ca)	131	Aluminum (Al)	
Magnesium (Mg)	47	Antimony (Sb)	
Sodium (Na)	108	As (arsenic) (µg/L)	
Potassium (K)	8	Barium (Ba)	
Carbonate (CO3)		Beryllium (Be)	
Bicarbonate (HCO3)	604	Boron (B)	
Sulphate (SO4)	276	Cadmium (Cd)	
Chloride (Cl)	10	Chromium (Cr)	
Fluoride (F)		Cobalt (Co)	
Nitrate - Nitrate (NO3, NO2 + NO3)	<2	Copper (Cu)	
Total Iron (Fe)	4.4	Lead (Pb)	
Manganese (Mn)		Molybdenum (Mo)	
pH (pH units)	7.8	Nickel (Ni)	
Conductivity (uS/cm)	1400	Selenium (Se)	
Sum of Ions	1184	Silver (Ag)	
Total Dissolved Solids (TDS)		Strontium (Sr)	
Error in Balance (%)		Thallium (Tl)	
Hardness (as CaCO3)	522	Tin (Sn)	
Total Alkalinity (as CaCO3)	495	Titanium (Ti)	
Dissolved Organic Carbon (DOC)		Uranium (U) (µg/L)	
Turbidity (NTU)		Vanadium (V)	
Perchlorate		Zinc (Zn)	
Iodine (I)			

All values in mg/L, unless indicated otherwise

Water Security Agency

Land Location:	NE-1-02-44-14W3	NTS Map:	73B/13
UTM Coordinates:	Z13 303200 E 5849298 N	RM No.:	437
Ground Elevation:		Source:	
Date Sampled:	10-Aug-78	Time Sampled:	
Sample Location:		Sampled by:	
Well name:	SWA Lilac	Contractor:	
Well owner:	Water Security Agency		
Address:	111 Fairford Street East Moose Jaw, SK S6H 7X9	Tel:	
Sample Depth:	122.2	Date Drilled:	
Depth to Water:		Pump Setting:	
Well Diameter:		Pumping Rate:	
WWRD #	36203	Construction method:	
Analysis No.:		Formation:	Empress Group
Laboratory:		Aquifer name:	Battleford Valley aquifer

Constituent	Concentration	Constituent	Concentration
Major Ions		Metals	
Calcium (Ca)	117	Aluminum (Al)	
Magnesium (Mg)	51	Antimony (Sb)	
Sodium (Na)	111	As (arsenic) (µg/L)	
Potassium (K)	7.2	Barium (Ba)	
Carbonate (CO3)		Beryllium (Be)	
Bicarbonate (HCO3)	561	Boron (B)	
Sulphate (SO4)	255	Cadmium (Cd)	
Chloride (Cl)	13	Chromium (Cr)	
Fluoride (F)	0.18	Cobalt (Co)	
Nitrate - Nitrate (NO3, NO2 + NO3)	0.33	Copper (Cu)	
Total Iron (Fe)	5.7	Lead (Pb)	
Manganese (Mn)	0.16	Molybdenum (Mo)	
pH (pH units)	7.63	Nickel (Ni)	
Conductivity (uS/cm)	1113	Selenium (Se)	
Sum of Ions	1116	Silver (Ag)	
Total Dissolved Solids (TDS)		Strontium (Sr)	
Error in Balance (%)		Thallium (Tl)	
Hardness (as CaCO3)	500	Tin (Sn)	
Total Alkalinity (as CaCO3)	460	Titanium (Ti)	
		Uranium (U) (µg/L)	
Dissolved Organic Carbon (DOC)		Vanadium (V)	
Turbidity (NTU)		Zinc (Zn)	
Perchlorate			
Iodine (I)			

All values in mg/L, unless indicated otherwise

Water Security Agency

Land Location:	NE-1-02-44-14W3	NTS Map:	73B/13
UTM Coordinates:	Z13 303200 E 5849298 N	RM No.:	437
Ground Elevation:		Source:	
Date Sampled:	25-Oct-83	Time Sampled:	
Sample Location:		Sampled by:	
Well name:	SWA Lilac	Contractor:	
Well owner:	Water Security Agency		
Address:	111 Fairford Street East Moose Jaw, SK S6H 7X9	Tel:	
Sample Depth:	122.2	Date Drilled:	
Depth to Water:		Pump Setting:	
Well Diameter:		Pumping Rate:	
WWRD #	36203	Construction method:	
Analysis No.:		Formation:	Empress Group
Laboratory:		Aquifer name:	Battleford Valley aquifer

Constituent	Concentration	Constituent	Concentration
Major Ions		Metals	
Calcium (Ca)	134	Aluminum (Al)	
Magnesium (Mg)	54	Antimony (Sb)	
Sodium (Na)	102	As (arsenic) (µg/L)	
Potassium (K)	6.9	Barium (Ba)	
Carbonate (CO3)		Beryllium (Be)	
Bicarbonate (HCO3)	608	Boron (B)	
Sulphate (SO4)	258	Cadmium (Cd)	
Chloride (Cl)	8	Chromium (Cr)	
Fluoride (F)	0.22	Cobalt (Co)	
Nitrate - Nitrate (NO3, NO2 + NO3)	<0.02	Copper (Cu)	
Total Iron (Fe)	3.4	Lead (Pb)	
Manganese (Mn)	0.13	Molybdenum (Mo)	
pH (pH units)	7.73	Nickel (Ni)	
Conductivity (uS/cm)	1230	Selenium (Se)	
Sum of Ions	1171	Silver (Ag)	
Total Dissolved Solids (TDS)		Strontium (Sr)	
Error in Balance (%)		Thallium (Tl)	
Hardness (as CaCO3)	557	Tin (Sn)	
Total Alkalinity (as CaCO3)	498	Titanium (Ti)	
		Uranium (U) (µg/L)	
Dissolved Organic Carbon (DOC)		Vanadium (V)	
Turbidity (NTU)		Zinc (Zn)	
Perchlorate			
Iodine (I)			

All values in mg/L, unless indicated otherwise

Water Security Agency

Land Location:	NE-1-02-44-14W3	NTS Map:	73B/13
UTM Coordinates:	Z13 303200 E 5849298 N	RM No.:	437
Ground Elevation:		Source:	
Date Sampled:	29-May-91	Time Sampled:	
Sample Location:		Sampled by:	
Well name:	SWA Lilac	Contractor:	
Well owner:	Water Security Agency		
Address:	111 Fairford Street East Moose Jaw, SK S6H 7X9	Tel:	
Sample Depth:	122.2	Date Drilled:	
Depth to Water:		Pump Setting:	
Well Diameter:		Pumping Rate:	
WWRD #	36203	Construction method:	
Analysis No.:		Formation:	Empress Group
Laboratory:		Aquifer name:	Battleford Valley aquifer

Constituent	Concentration	Constituent	Concentration
Major Ions		Metals	
Calcium (Ca)	136	Aluminum (Al)	
Magnesium (Mg)	49	Antimony (Sb)	
Sodium (Na)	102	As (arsenic) (µg/L)	
Potassium (K)	7.2	Barium (Ba)	
Carbonate (CO3)		Beryllium (Be)	
Bicarbonate (HCO3)	571	Boron (B)	
Sulphate (SO4)	254	Cadmium (Cd)	
Chloride (Cl)	49	Chromium (Cr)	
Fluoride (F)	0.24	Cobalt (Co)	
Nitrate - Nitrate (NO3, NO2 + NO3)	0.18	Copper (Cu)	
Total Iron (Fe)	3.1	Lead (Pb)	
Manganese (Mn)	0.14	Molybdenum (Mo)	
pH (pH units)	7.61	Nickel (Ni)	
Conductivity (uS/cm)	1280	Selenium (Se)	
Sum of Ions	1168	Silver (Ag)	
Total Dissolved Solids (TDS)		Strontium (Sr)	
Error in Balance (%)		Thallium (Tl)	
Hardness (as CaCO3)	541	Tin (Sn)	
Total Alkalinity (as CaCO3)	468	Titanium (Ti)	
		Uranium (U) (µg/L)	
Dissolved Organic Carbon (DOC)		Vanadium (V)	
Turbidity (NTU)		Zinc (Zn)	
Perchlorate			
Iodine (I)			

All values in mg/L, unless indicated otherwise

Water Security Agency

Land Location:	NE-1-02-44-14W3	NTS Map:	73B/13
UTM Coordinates:	Z13 303200 E 5849298 N	RM No.:	437
Ground Elevation:		Source:	
Date Sampled:	8-Nov-05	Time Sampled:	
Sample Location:		Sampled by:	
Well name:	SWA Lilac	Contractor:	
Well owner:	Water Security Agency		
Address:	111 Fairford Street East Moose Jaw, SK S6H 7X9	Tel:	
Sample Depth:	122.2	Date Drilled:	
Depth to Water:		Pump Setting:	
Well Diameter:		Pumping Rate:	
WWRD #	36203	Construction method:	
Analysis No.:		Formation:	Empress Group
Laboratory:		Aquifer name:	Battleford Valley aquifer

Constituent	Concentration	Constituent	Concentration
Major Ions		Metals	
Calcium (Ca)	127	Aluminum (Al)	0.0006
Magnesium (Mg)	49	Antimony (Sb)	< 0.0002
Sodium (Na)	103	As (arsenic) (µg/L)	0.015
Potassium (K)	7.4	Barium (Ba)	0.03
Carbonate (CO3)	<1	Beryllium (Be)	< 0.0001
Bicarbonate (HCO3)	611	Boron (B)	0.24
Sulphate (SO4)	250	Cadmium (Cd)	< 0.0005
Chloride (Cl)	6	Chromium (Cr)	< 0.005
Fluoride (F)	0.21	Cobalt (Co)	0.0005
Nitrate - Nitrate (NO3, NO2 + NO3)	<0.04	Copper (Cu)	< 0.0002
Total Iron (Fe)	0.21	Lead (Pb)	< 0.0001
Manganese (Mn)	0.12	Molybdenum (Mo)	0.008
pH (pH units)	7.8	Nickel (Ni)	0.002
Conductivity (uS/cm)		Selenium (Se)	< 0.0001
Sum of Ions	1153	Silver (Ag)	< 0.0001
Total Dissolved Solids (TDS)	876	Strontium (Sr)	0.8
Error in Balance (%)		Thallium (Tl)	< 0.0002
Hardness (as CaCO3)	518	Tin (Sn)	0.0001
Total Alkalinity (as CaCO3)	501	Titanium (Ti)	
		Uranium (U) (µg/L)	0.0019
Dissolved Organic Carbon (DOC)		Vanadium (V)	0.0001
Turbidity (NTU)	32	Zinc (Zn)	< 0.005
Perchlorate			
Iodine (I)	0.0174		

All values in mg/L, unless indicated otherwise