

Water Security Agency

Land Location:	SE-1-33-45-02W3	NTS Map:	73B/16
UTM Coordinates:	Z13 417781 E 5863553 N	RM No.:	463
Ground Elevation:		Source:	
Date Sampled:	31-Aug-64	Time Sampled:	
Sample Location:		Sampled by:	
Well name:	SWA Duck Lake #1	Contractor:	
Well owner:	Water Security Agency		
Address:	111 Fairford Street East Moose Jaw, SK S6H 7X9	Tel:	
Sample Depth:	13.3	Date Drilled:	
Depth to Water:		Pump Setting:	
Well Diameter:		Pumping Rate:	
WWRD #	34718	Construction method:	
Analysis No.:		Formation:	Quaternary, undiff
Laboratory:		Aquifer name:	Surficial, unnamed

Constituent	Concentration	Constituent	Concentration
Major Ions		Metals	
Calcium (Ca)	53	Aluminum (Al)	
Magnesium (Mg)	10	Antimony (Sb)	
Sodium (Na)	3	As (arsenic) (µg/L)	
Potassium (K)	0	Barium (Ba)	
Carbonate (CO3)		Beryllium (Be)	
Bicarbonate (HCO3)	233	Boron (B)	
Sulphate (SO4)	4	Cadmium (Cd)	
Chloride (Cl)		Chromium (Cr)	
Fluoride (F)		Cobalt (Co)	
Nitrate - Nitrate (NO3, NO2 + NO3)	0.3	Copper (Cu)	
Total Iron (Fe)	0.6	Lead (Pb)	
Manganese (Mn)		Molybdenum (Mo)	
pH (pH units)	7.15	Nickel (Ni)	
Conductivity (uS/cm)	295	Selenium (Se)	
Sum of Ions	303	Silver (Ag)	
Total Dissolved Solids (TDS)		Strontium (Sr)	
Error in Balance (%)		Thallium (Tl)	
Hardness (as CaCO3)	174	Tin (Sn)	
Total Alkalinity (as CaCO3)	191	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:	SE-1-33-45-02W3	NTS Map:	73B/16
UTM Coordinates:	Z13 417781 E 5863553 N	RM No.:	463
Ground Elevation:		Source:	
Date Sampled:	5-Jun-68	Time Sampled:	
Sample Location:		Sampled by:	
Well name:	SWA Duck Lake #1	Contractor:	
Well owner:	Water Security Agency		
Address:	111 Fairford Street East Moose Jaw, SK S6H 7X9	Tel:	
Sample Depth:	13.3	Date Drilled:	
Depth to Water:		Pump Setting:	
Well Diameter:		Pumping Rate:	
WWRD #	34718	Construction method:	
Analysis No.:		Formation:	Quaternary, undiff
Laboratory:		Aquifer name:	Surficial, unnamed

Constituent	Concentration	Constituent	Concentration
Major Ions		Metals	
Calcium (Ca)	57	Aluminum (Al)	
Magnesium (Mg)	7	Antimony (Sb)	
Sodium (Na)	2	As (arsenic) (µg/L)	
Potassium (K)	0.6	Barium (Ba)	
Carbonate (CO3)		Beryllium (Be)	
Bicarbonate (HCO3)	209	Boron (B)	
Sulphate (SO4)		Cadmium (Cd)	
Chloride (Cl)		Chromium (Cr)	
Fluoride (F)		Cobalt (Co)	
Nitrate - Nitrate (NO3, NO2 + NO3)		Copper (Cu)	
Total Iron (Fe)	1.67	Lead (Pb)	
Manganese (Mn)		Molybdenum (Mo)	
pH (pH units)	7.6	Nickel (Ni)	
Conductivity (uS/cm)	328	Selenium (Se)	
Sum of Ions	276	Silver (Ag)	
Total Dissolved Solids (TDS)		Strontium (Sr)	
Error in Balance (%)		Thallium (Tl)	
Hardness (as CaCO3)	171	Tin (Sn)	
Total Alkalinity (as CaCO3)	171	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:	SE-1-33-45-02W3	NTS Map:	73B/16
UTM Coordinates:	Z13 417781 E 5863553 N	RM No.:	463
Ground Elevation:		Source:	
Date Sampled:	31-Jul-70	Time Sampled:	
Sample Location:		Sampled by:	
Well name:	SWA Duck Lake #1	Contractor:	
Well owner:	Water Security Agency		
Address:	111 Fairford Street East Moose Jaw, SK S6H 7X9	Tel:	
Sample Depth:	13.3	Date Drilled:	
Depth to Water:		Pump Setting:	
Well Diameter:		Pumping Rate:	
WWRD #	34718	Construction method:	
Analysis No.:		Formation:	Quaternary, undiff
Laboratory:		Aquifer name:	Surficial, unnamed

Constituent	Concentration	Constituent	Concentration
Major Ions		Metals	
Calcium (Ca)	57	Aluminum (Al)	
Magnesium (Mg)	10	Antimony (Sb)	
Sodium (Na)	3	As (arsenic) (µg/L)	
Potassium (K)	1	Barium (Ba)	
Carbonate (CO3)		Beryllium (Be)	
Bicarbonate (HCO3)	223	Boron (B)	
Sulphate (SO4)	2	Cadmium (Cd)	
Chloride (Cl)	1	Chromium (Cr)	
Fluoride (F)		Cobalt (Co)	
Nitrate - Nitrate (NO3, NO2 + NO3)	<2	Copper (Cu)	
Total Iron (Fe)	0.6	Lead (Pb)	
Manganese (Mn)		Molybdenum (Mo)	
pH (pH units)	7.6	Nickel (Ni)	
Conductivity (uS/cm)	350	Selenium (Se)	
Sum of Ions	297	Silver (Ag)	
Total Dissolved Solids (TDS)		Strontium (Sr)	
Error in Balance (%)		Thallium (Tl)	
Hardness (as CaCO3)	184	Tin (Sn)	
Total Alkalinity (as CaCO3)	183	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:	SE-1-33-45-02W3	NTS Map:	73B/16
UTM Coordinates:	Z13 417781 E 5863553 N	RM No.:	463
Ground Elevation:		Source:	
Date Sampled:	29-Jun-72	Time Sampled:	
Sample Location:		Sampled by:	
Well name:	SWA Duck Lake #1	Contractor:	
Well owner:	Water Security Agency		
Address:	111 Fairford Street East Moose Jaw, SK S6H 7X9	Tel:	
Sample Depth:	13.3	Date Drilled:	
Depth to Water:		Pump Setting:	
Well Diameter:		Pumping Rate:	
WWRD #	34718	Construction method:	
Analysis No.:		Formation:	Quaternary, undiff
Laboratory:		Aquifer name:	Surficial, unnamed

Constituent	Concentration	Constituent	Concentration
Major Ions		Metals	
Calcium (Ca)	54	Aluminum (Al)	
Magnesium (Mg)	13	Antimony (Sb)	
Sodium (Na)	1.4	As (arsenic) (µg/L)	
Potassium (K)	1	Barium (Ba)	
Carbonate (CO3)		Beryllium (Be)	
Bicarbonate (HCO3)	235	Boron (B)	
Sulphate (SO4)	2	Cadmium (Cd)	
Chloride (Cl)	1	Chromium (Cr)	
Fluoride (F)	0.1	Cobalt (Co)	
Nitrate - Nitrate (NO3, NO2 + NO3)	<0.1	Copper (Cu)	
Total Iron (Fe)	0.4	Lead (Pb)	
Manganese (Mn)		Molybdenum (Mo)	
pH (pH units)	8.2	Nickel (Ni)	
Conductivity (uS/cm)	330	Selenium (Se)	
Sum of Ions	307	Silver (Ag)	
Total Dissolved Solids (TDS)		Strontium (Sr)	
Error in Balance (%)		Thallium (Tl)	
Hardness (as CaCO3)	180	Tin (Sn)	
Total Alkalinity (as CaCO3)	193	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:	SE-1-33-45-02W3	NTS Map:	73B/16
UTM Coordinates:	Z13 417781 E 5863553 N	RM No.:	463
Ground Elevation:		Source:	
Date Sampled:	2-May-75	Time Sampled:	
Sample Location:		Sampled by:	
Well name:	SWA Duck Lake #1	Contractor:	
Well owner:	Water Security Agency		
Address:	111 Fairford Street East Moose Jaw, SK S6H 7X9	Tel:	
Sample Depth:	13.3	Date Drilled:	
Depth to Water:		Pump Setting:	
Well Diameter:		Pumping Rate:	
WWRD #	34718	Construction method:	
Analysis No.:		Formation:	Quaternary, undiff
Laboratory:		Aquifer name:	Surficial, unnamed

Constituent	Concentration	Constituent	Concentration
Major Ions		Metals	
Calcium (Ca)	59	Aluminum (Al)	
Magnesium (Mg)	13	Antimony (Sb)	
Sodium (Na)	0.8	As (arsenic) (µg/L)	
Potassium (K)	0.8	Barium (Ba)	
Carbonate (CO3)		Beryllium (Be)	
Bicarbonate (HCO3)	229	Boron (B)	
Sulphate (SO4)	5	Cadmium (Cd)	
Chloride (Cl)	4	Chromium (Cr)	
Fluoride (F)	0.3	Cobalt (Co)	
Nitrate - Nitrate (NO3, NO2 + NO3)	0.04	Copper (Cu)	
Total Iron (Fe)	0.8	Lead (Pb)	
Manganese (Mn)	0.36	Molybdenum (Mo)	
pH (pH units)	7.7	Nickel (Ni)	
Conductivity (uS/cm)	368	Selenium (Se)	
Sum of Ions	312	Silver (Ag)	
Total Dissolved Solids (TDS)		Strontium (Sr)	
Error in Balance (%)		Thallium (Tl)	
Hardness (as CaCO3)	202	Tin (Sn)	
Total Alkalinity (as CaCO3)	188	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:	SE-1-33-45-02W3	NTS Map:	73B/16
UTM Coordinates:	Z13 417781 E 5863553 N	RM No.:	463
Ground Elevation:		Source:	
Date Sampled:	4-Aug-78	Time Sampled:	
Sample Location:		Sampled by:	
Well name:	SWA Duck Lake #1	Contractor:	
Well owner:	Water Security Agency		
Address:	111 Fairford Street East Moose Jaw, SK S6H 7X9	Tel:	
Sample Depth:	13.3	Date Drilled:	
Depth to Water:		Pump Setting:	
Well Diameter:		Pumping Rate:	
WWRD #	34718	Construction method:	
Analysis No.:		Formation:	Quaternary, undiff
Laboratory:		Aquifer name:	Surficial, unnamed

Constituent	Concentration	Constituent	Concentration
Major Ions		Metals	
Calcium (Ca)	54	Aluminum (Al)	
Magnesium (Mg)	14	Antimony (Sb)	
Sodium (Na)	6.9	As (arsenic) (µg/L)	
Potassium (K)	0.71	Barium (Ba)	
Carbonate (CO3)		Beryllium (Be)	
Bicarbonate (HCO3)	216	Boron (B)	
Sulphate (SO4)	1.1	Cadmium (Cd)	
Chloride (Cl)	15	Chromium (Cr)	
Fluoride (F)	0.21	Cobalt (Co)	
Nitrate - Nitrate (NO3, NO2 + NO3)	1.01	Copper (Cu)	
Total Iron (Fe)	3.3	Lead (Pb)	
Manganese (Mn)	0.48	Molybdenum (Mo)	
pH (pH units)	8.3	Nickel (Ni)	
Conductivity (uS/cm)	395	Selenium (Se)	
Sum of Ions	309	Silver (Ag)	
Total Dissolved Solids (TDS)		Strontium (Sr)	
Error in Balance (%)		Thallium (Tl)	
Hardness (as CaCO3)	192	Tin (Sn)	
Total Alkalinity (as CaCO3)	177	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:	SE-1-33-45-02W3	NTS Map:	73B/16
UTM Coordinates:	Z13 417781 E 5863553 N	RM No.:	463
Ground Elevation:		Source:	
Date Sampled:	13-Sep-83	Time Sampled:	
Sample Location:		Sampled by:	
Well name:	SWA Duck Lake #1	Contractor:	
Well owner:	Water Security Agency		
Address:	111 Fairford Street East Moose Jaw, SK S6H 7X9	Tel:	
Sample Depth:	13.3	Date Drilled:	
Depth to Water:		Pump Setting:	
Well Diameter:		Pumping Rate:	
WWRD #	34718	Construction method:	
Analysis No.:		Formation:	Quaternary, undiff
Laboratory:		Aquifer name:	Surficial, unnamed

Constituent	Concentration	Constituent	Concentration
Major Ions		Metals	
Calcium (Ca)	66	Aluminum (Al)	
Magnesium (Mg)	10	Antimony (Sb)	
Sodium (Na)	3	As (arsenic) (µg/L)	
Potassium (K)	0.8	Barium (Ba)	
Carbonate (CO3)		Beryllium (Be)	
Bicarbonate (HCO3)	240	Boron (B)	
Sulphate (SO4)	5.2	Cadmium (Cd)	
Chloride (Cl)	1.8	Chromium (Cr)	
Fluoride (F)	0.16	Cobalt (Co)	
Nitrate - Nitrate (NO3, NO2 + NO3)	<0.02	Copper (Cu)	
Total Iron (Fe)	0.59	Lead (Pb)	
Manganese (Mn)	0.4	Molybdenum (Mo)	
pH (pH units)	8	Nickel (Ni)	
Conductivity (uS/cm)	366	Selenium (Se)	
Sum of Ions	327	Silver (Ag)	
Total Dissolved Solids (TDS)		Strontium (Sr)	
Error in Balance (%)		Thallium (Tl)	
Hardness (as CaCO3)	195	Tin (Sn)	
Total Alkalinity (as CaCO3)	197	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:	SE-1-33-45-02W3	NTS Map:	73B/16
UTM Coordinates:	Z13 417781 E 5863553 N	RM No.:	463
Ground Elevation:		Source:	
Date Sampled:	20-Sep-05	Time Sampled:	
Sample Location:		Sampled by:	
Well name:	SWA Duck Lake #1	Contractor:	
Well owner:	Water Security Agency		
Address:	111 Fairford Street East Moose Jaw, SK S6H 7X9	Tel:	
Sample Depth:	13.3	Date Drilled:	
Depth to Water:		Pump Setting:	
Well Diameter:		Pumping Rate:	
WWRD #	34718	Construction method:	
Analysis No.:		Formation:	Quaternary, undiff
Laboratory:		Aquifer name:	Surficial, unnamed

Constituent	Concentration	Constituent	Concentration
Major Ions		Metals	
Calcium (Ca)	73	Aluminum (Al)	0.0020
Magnesium (Mg)	14	Antimony (Sb)	< 0.0002
Sodium (Na)	3.3	As (arsenic) (µg/L)	0.011
Potassium (K)	0.7	Barium (Ba)	0.30
Carbonate (CO3)	<1	Beryllium (Be)	< 0.0001
Bicarbonate (HCO3)	290	Boron (B)	0.02
Sulphate (SO4)	8.2	Cadmium (Cd)	< 0.0005
Chloride (Cl)	2	Chromium (Cr)	< 0.005
Fluoride (F)	0.18	Cobalt (Co)	0.0003
Nitrate - Nitrate (NO3, NO2 + NO3)	<0.04	Copper (Cu)	< 0.0002
Total Iron (Fe)	0.69	Lead (Pb)	< 0.0001
Manganese (Mn)	0.33	Molybdenum (Mo)	0.0011
pH (pH units)	7.71	Nickel (Ni)	0.013
Conductivity (uS/cm)	450	Selenium (Se)	< 0.0001
Sum of Ions	391	Silver (Ag)	< 0.0001
Total Dissolved Solids (TDS)	282	Strontium (Sr)	0.11
Error in Balance (%)		Thallium (Tl)	< 0.0002
Hardness (as CaCO3)	240	Tin (Sn)	0.0003
Total Alkalinity (as CaCO3)	238	Titanium (Ti)	
		Uranium (U) (µg/L)	0.0008
Dissolved Organic Carbon (DOC)		Vanadium (V)	0.0001
Turbidity (NTU)	4	Zinc (Zn)	< 0.005
Perchlorate			
Iodine (I)			

All values in mg/L, unless indicated otherwise