

**ASSESSMENT STUDY OF  
WATER AND WASTEWATER SYSTEMS  
AND ASSOCIATED  
WATER MANAGEMENT PRACTICES  
AT TSAWWASSEN FIRST NATION**

**A  
REPORT  
TO  
INDIAN AND NORTHERN AFFAIRS CANADA  
BC REGION**

** NovaTec Consultants Inc.**  
*Environmental Engineers and Scientists*

July 2002

File No.: 1407.09/7

**Appendix C**  
**Water Testing Results**

# WATER SAMPLING AND TESTING PROGRAM

Water Source	Parameter	Test Frequency
Well #1	total coliforms, faecal coliforms, turbidity, pH, temperature, heterotrophic plate counts	weekly
Well #1	benzene, toluene, ethylbenzene, total xylenes	quarterly
Well #1	methyl t-butyl ether	quarterly
Well #1	dibromofluoromethane, toluene-d8, bromofluorobenzene	quarterly
Well #1	electrical conductivity, total dissolved solids, total suspended solids, ammonium-N, potassium, calcium, magnesium, sodium, iron, copper, zinc, manganese, phosphate-P, sulphate, chloride, fluoride, boron, carbonate, hardness, nitrate, nitrate-N	quarterly
Well #1	arsenic, barium, cadmium, chromium, lead, mercury, selenium, uranium	quarterly
Well #1	acephate, alachlor, aldicarb, aldicarb sulfone, aldicarb sulfoxide, aldrin, allethrin, ametryn, aspon, atrazine, atrazine-de-ethyl, azinphos-ethyl, azinphos-methyl, benfluralin, benzoylprop-ethyl, BCH-alpha, BCH-beta, BCH-delta, bifenoxy, BPMC, bromacil, bromophos, bromophos-ethyl, bromopropylate, butralin, butylate, captan, carbaryl, carbofuran, carbophenothion, carboxin, chlorbenside, chlorbenzilate, chlorbromuron, chlordane-cis, chlordane-trans, chlordimeform, chlorfenson, chlorfenvinphos, chlorflurenol-methyl, chlomephos, chlorothalonil, chlorpropham, chlorpyrifos, chlorpyrifos-methyl, chlorthal-dimethyl, chlorthiophos, chlozolate, clomazone, coumaphos, crotoxyphos, crufomate, cyanazine, cyanophos, cyhalothrin lambda, cypermethrin, cyprazine, DDD-p,p', DDE-p,p', DDT-o,p', DDT-p,p', deltamethrin, demeton, demeton-s-methyl, desmetryn, dialifos, diallate, diazinon, dibron/naled, dichlobenil, dichlofenthion, dichlofluanid, dichlorvos, dicloran, dicofol, dicrotophos, dieldrin, dimethachlor, dimethoate, dinitramine, dioxathion, diphenamid, diphenylamine, disulfoton, diuron, endosulfan 1, endosulfan 11, endosulfan sulfate, endrin, EPN, eptam, ethalfuralin, ethion, ethoprophos, etridiazol, etrimfos, fenarimol, fenchlorphos, fenitrothion, fenson, fensulfathion, fenthion, fenvalerate, flupropr-methyl, fuchloralin, folpet, fonofos, heptachlor, heptachlor epoxide, heptenophos, hexachlorobenzene, hexazinone, imidacloprid, iodofenphos, iprodione, isofenphos, leptophos, lindane, linuron, malaoxon, malathion, metalaxyl, metazachlor, methamidophos, methidathion, metiocarb, methomyl, methoprene, methoprotryn, methoxychlor, metobromuron, metolachlor, metribuzin, mevinphos, mirex, monocrotophos, monolinuron, myclobutanil, nitalin, nitrapyrin, nitrofen, norflurazon, omethoate, oxadiazon, oxamyl, oxylchlordane, paraoxon, parathion, parathion-methyl, pebulate, pendimethalin, permithrin-cis, permithrin-trans, phorate, phosalone, phosmet, phosphamidon, pirimicarb, pirimiphos-ethyl, pirimiphos-methyl, procymidone, profenphos, profluralin, prometon, prometryn, pronamide, propanil, propazine, propetamphos, propiconazole, propoxur, prothiophos, pyrazophos, pyridaben, quinalphos, quinomethionate, quintozone, schradin, simazine, sulfotep, tebufenozide, tecnazine, terbacil, terbufos, terbutylazine, terbutryn, tetrachlorvinphos, tetradifon, tetramethrin, tolylfluanid, triadimefon, triadimenol, triallate, triazophos, trichlorfon, trifluralin, vernolate, vinclozolin.	quarterly

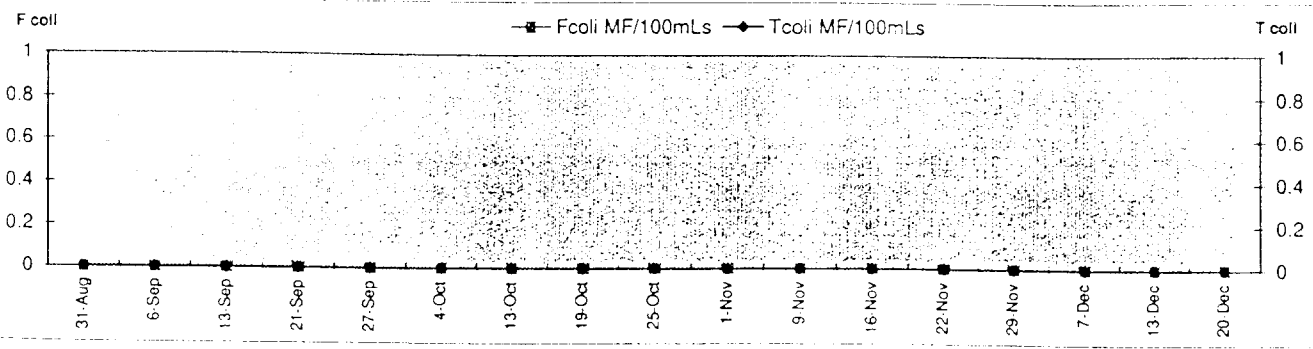
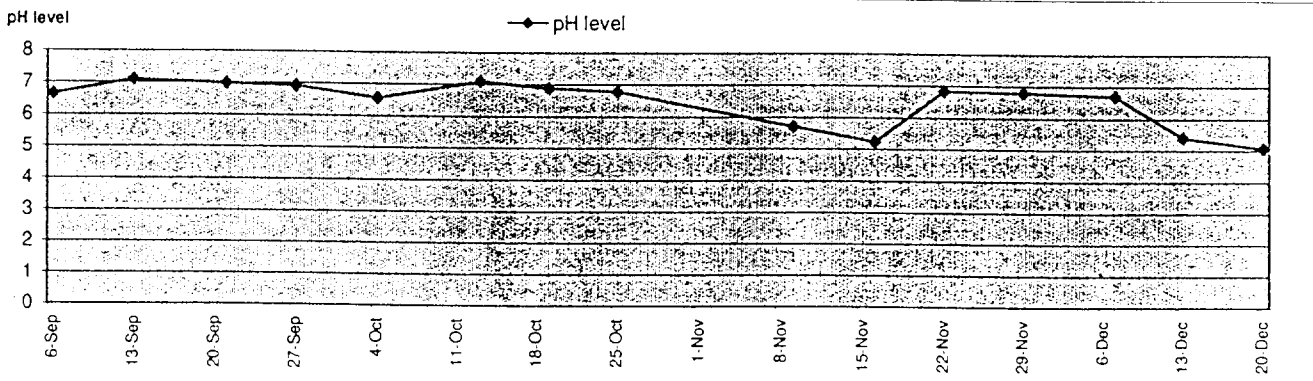
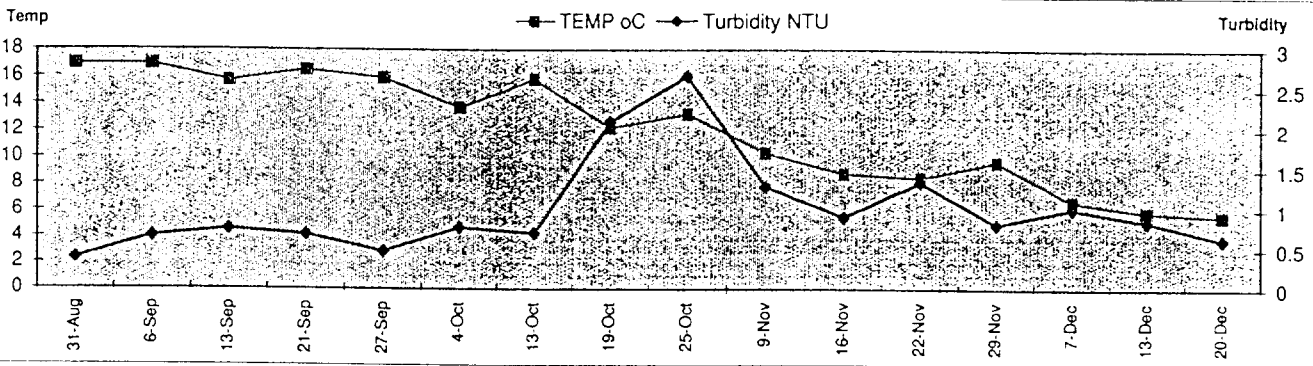
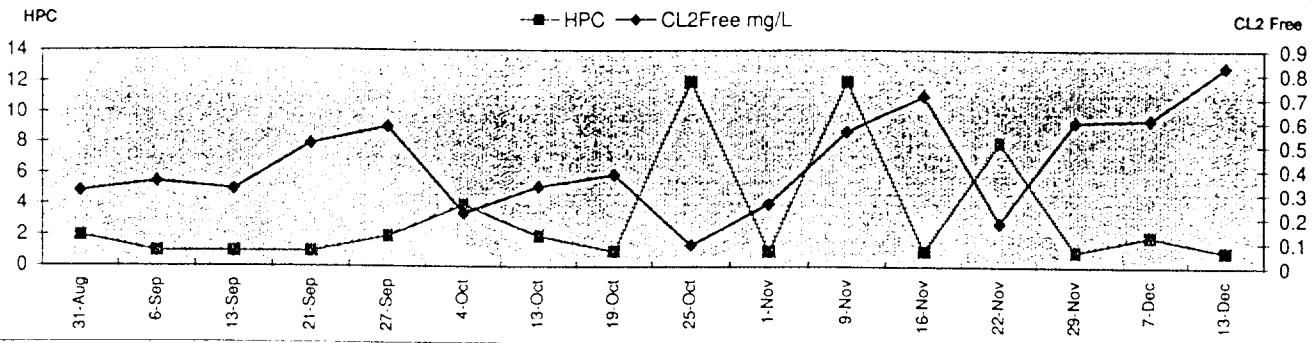
# WATER SAMPLING AND TESTING PROGRAM

Water Source	Parameter	Test Frequen
Well #3	total coliforms, faecal coliforms, turbidity, pH, temperature, heterotrophic plate counts	
Well #3	benzene, toluene, ethylbenzene, total xylenes	weekly
Well #3	methyl t-butyl ether	quarterly
Well #3	dibromofluoromethane, toluene-d8, bromofluorobenzene	quarterly
Well #3	electrical conductivity, total dissolved solids, total suspended solids, ammonium-N, potassium, calcium, magnesium, sodium, iron, copper, zinc, manganese, phosphate-P, sulphate, chloride, fluoride, boron, carbonate, hardness, nitrate, nitrate-N	quarterly
Well #3	arsenic, barium, cadmium, chromium, lead, mercury, selenium, uranium	quarterly
Well #3	acephate, alachlor, aldicarb, aldicarb sulfone, aldicarb sulfoxide, aldrin, allethrin, ametryn, aspon, atrazine, atrazine-de-ethyl, azinphos-ethyl, azinphos-methyl, benfluralin, benzoylprop-ethyl, BCH-alpha, BCH-beta, BCH-delta, bifenox, BPMC, bromacil, bromophos, bromophos-ethyl, bromopropylate, butralin, butylate, captafol, captan, carbaryl, carbofuran, carbophenothion, carboxin, chlorbenside, chlorbenzilate, chlorbromuron, chlordane-cis, chlordane-trans, chlordimeform, chlordifensol, chlordifensol, chlorlurenil-methyl, chlomephos, chlorothalonil, chlorpropham, chlorpyrifos, chlorpyrifos-methyl, chlorthal-dimethyl, chlorthiophos, chlozolinate, clomazone, coumaphos, crotoxyphos, crufomate, cyanazine, cyanophos, cyhalothrin lambda, cypermethrin, cyprazine, DDD-p,p', DDE-p,p', DDT-o,p', DDT-p,p', deltamethrin, demeton, demeton-s-methyl, desmetryn, dialifos, diallate, diazinon, dibrom/naled, dichlobenil, dichlofenthion, dichlofluanid, dichlorvos, dicloran, dicofol, dicrotophos, dieldrin, dimethachlor, dimethoate, dinitramine, dioxathion, diphenamid, diphenylamine, disulfoton, diuron, endosulfan 1, endosulfan 11, endosulfan sulfate, endrin, EPN, eptam, ethalfluralin, ethion, ethoprophos, etridiazol, etrimfos, fenarimol, fenchlorphos, fenitrthion, fenson, fensulfathion, fenthion, fenvalerate, flamprop-methyl, fuchloralin, folpet, fonofos, heptachlor, heptachlor epoxide, heptenophos, hexachlorobenzene, hexazinone, imidacloprid, iodofenphos, iprodione, isofenphos, leptophos, lindane, linuron, malaoxon, malathion, metalaxyl, metazachlor, methamidophos, methidathion, metiocarb, methomyl, methoprene, methoprotryn, methoxychlor, metobromuron, metolachlor, metribuzin, mevinphos, mirex, monocrotophos, monolinuron, myclobutanil, nitralin, nitrapyrin, nitrofen, norflurazon, omethoate, oxadiazon, oxamyl, oxychlordane, paraoxon, parathion, parathion-methyl, pebulate, pendimethalin, permithrin-cis, permithrin-trans, phorate, phosalone, phosmet, phosphamidon, pirimicarb, pirimiphos-ethyl, pirimiphos-methyl, procymidone, profenphos, profluralin, prometon, prometryn, pronamide, propanil, propazine, propetamphos, propiconazole, propoxur, prothiophos, pyrazophos, pyridaben, quinalphos, quinomethionate, quintozone, schradin, simizine, sulfotep, tebufenozide, tecnazine, terbacil, terbufos, terbutylazine, terbutryn, tetrachlorvinphos, tetradifon, tetramethrin, tolylfluanid, triadimefon, triadimenol, triallate, triazophos, trichlorfon, trifluralin, vernolate, vinclozolin.	quarterly

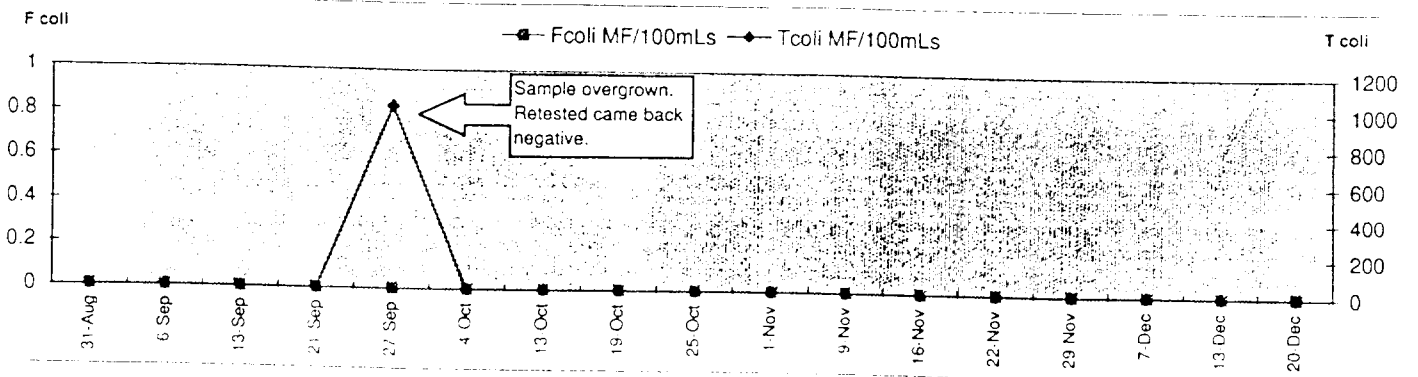
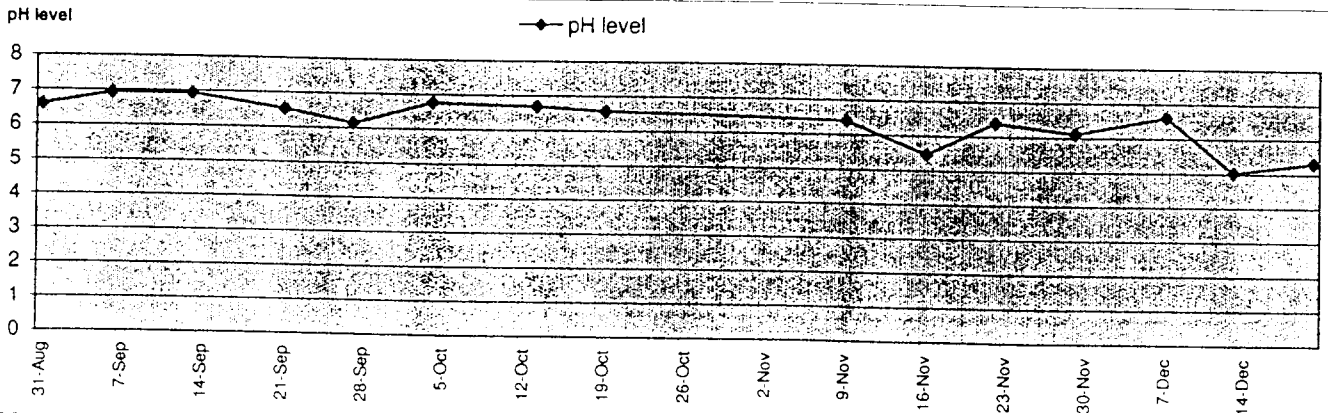
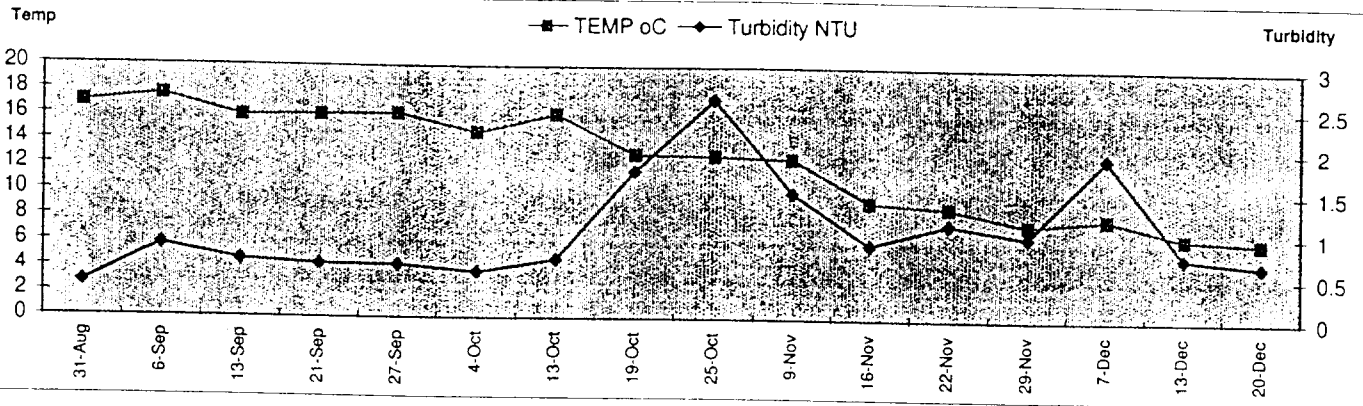
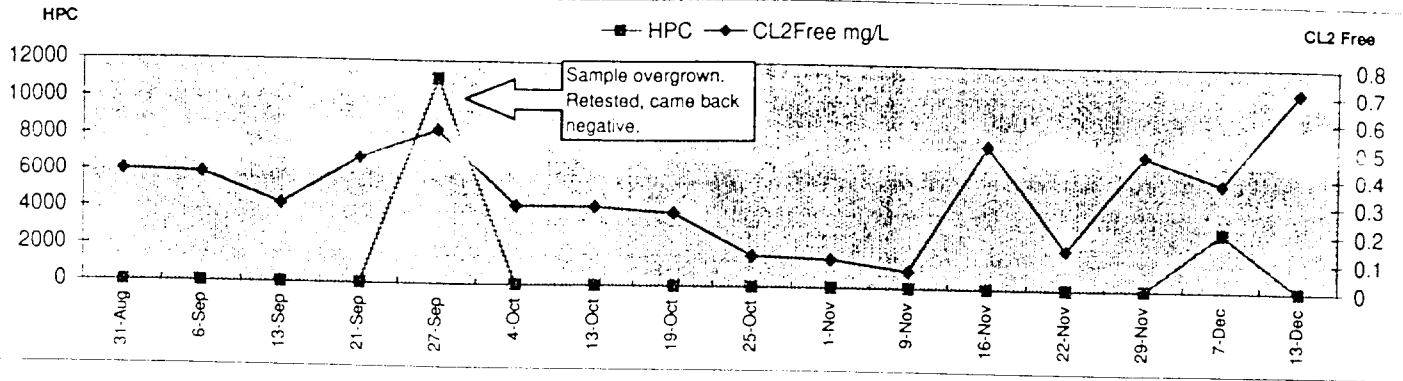
# WATER SAMPLING AND TESTING PROGRAM

Water Source	Parameter	Test Frequency
Well #5	total coliforms, faecal coliforms, turbidity, pH, temperature, heterotrophic plate counts	weekly
Well #5	benzene, toluene, ethylbenzene, total xylenes	quarterly
Well #5	methyl t-butyl ether	quarterly
Well #5	dibromofluoromethane, toluene-d8, bromofluorobenzene	quarterly
Well #5	electrical conductivity, total dissolved solids, total suspended solids, ammonium-N, potassium, calcium, magnesium, sodium, iron, copper, zinc, manganese, phosphate-P, sulphate, chloride, fluoride, boron, carbonate, hardness, nitrate, nitrate-N	quarterly
Well #5	arsenic, barium, cadmium, chromium, lead, mercury, selenium, uranium	quarterly
Well #5	acephate, alachlor, aldicarb, aldicarb sulfone, aldicarb sulfoxide, aldrin, allethrin, ametryn, aspon, atrazine, atrazine-de-ethyl, azinphos-ethyl, azinphos-methyl, benfluralin, benzoylprop-ethyl, BCH-alpha, BCH-beta, BCH-delta, bifenox, BPMC, bromacil, bromophos, bromophos-ethyl, bromopropylate, butralin, butylate, captan, captan, carbaryl, carbofuran, carbophenothion, carboxin, chlorbenside, chlorbenzilate, chlorbromuron, chlordane-cis, chlordane-trans, chlordimeform, chlorfenson, chlorfenvinphos, chlorflurenol-methyl, chlomephos, chlorothalonil, chlorpropham, chlorpyrifos, chlorpyrifos-methyl, chlorthal-dimethyl, chlorthiophos, chlozolate, clomazone, coumaphos, crotoxyphos, crufomate, cyanazine, cyanophos, cyhalothrin lambda, cypermethrin, cyprazine, DDD-p,p', DDE-p,p', DDT-o,p', DDT-p,p', deltamethrin, demeton, demeton-s-methyl, desmetryn, dialifos, diallate, diazinon, dibrom/naled, dichlobenil, dichlofenthion, dichlofluanid, dichlorvos, dicloran, dicofol, dicrotophos, dieldrin, dimethachlor, dimethoate, dinitramine, dioxathion, diphenamid, diphenylamine, disulfoton, diuron, endosulfan 1, endosulfan 11, endosulfan sulfate, endrin, EPN, eptam, ethalfluralin, ethion, ethoprophos, etridiazol, etrimfos, fenarimol, fenchlorphos, fenitrothion, fenson, fensulfothion, fenthion, fenvalerate, flupropr-methyl, fuchloralin, folpet, fonofos, heptachlor, heptachlor epoxide, heptenophos, hexachlorobenzene, hexazinone, imidacloprid, iodofenphos, iprodione, isofenphos, leptophos, lindane, linuron, malaoxon, malathion, metalaxyl, metazachlor, methamidophos, methidathion, metiocarb, methomyl, methoprene, methoprotryn, methoxychlor, metobromuron, metolachlor, metribuzin, mevinphos, mirex, monocrotophos, monolinuron, myclobutanil, nitalin, nitrapyrin, nitrofen, norflurazon, omethoate, oxadiazon, oxamyl, oxylchlordane, paraoxon, parathion, parathion-methyl, pebulate, pendimethalin, permithrin-cis, permithrin-trans, phorate, phosalone, phosmet, phosphamidon, pirimicarb, pirimiphos-ethyl, pirimiphos-methyl, procymidone, profenphos, profluralin, prometron, prometryn, pronamide, propanil, propazine, propetamphos, propiconazole, propoxur, prothiophos, pyrazophos, pyridaben, quinalphos, quinomethionate, quintozone, schradin, simazine, sulfotep, tebufenozide, tecnazine, terbacil, terbufos, terbutylazine, terbutryn, tetrachlorvinphos, tetradifon, tetramethrin, tolyfluanid, triadimefon, triadimenol, triallate, triazophos, trichlorfon, trifluralin, vernolate, vinclozolin.	quarterly

Sample Site 315  
2760 41B Street Ladner



Sample Site 316  
5400 18th Avenue Tsawwassen





Work Order Number: 50901  
Date Issued:

## CERTIFICATION OF POTABILITY

Sample Id: WELL # 1 JAN 20/00

Norwest Soil Research Ltd. certifies that the above mentioned water sample number 50901-1 supplied by Corporation Of Delta meets the chemical and bacteriological requirements specified by the 1996 Guidelines for Canadian Drinking Water Quality for the constituents tested.

Approved by:

John Davidson, Dipl. T., C.P.H.I. (C)  
Supervisor, Inorganics Lab

**Note:**

All reports are the confidential property of our clients. Publication of statements, conclusions or extracts from or regarding our report is not permitted without our written approval. Any liability attached thereto is limited to the fee charged.

### How to read your report:

1. The **Analyte** column contains the names of the substances analyzed.
2. The **Result** column contains the values we obtained from analyzing your water. The symbol "<" means less than and the symbol ">" means greater than.
3. The **Detection Limit** column shows the lowest concentration we can detect with our instruments.
4. The **Units** column shows the reporting units for each analyte. The unit mg/L (milligrams per Liter) is the same as ppm (parts per million).
5. The **Guidelines / Recommendations Drinking Water** column shows the guideline value for each substance from the 1996 Guidelines for Canadian Drinking Water Quality.
  - a) **Maximum Acceptable** - These concentrations have been established for certain substances that are known or suspected to cause adverse effects on health. All substances tested must be below the Maximum Acceptable level for the water to be designated Potable (Safe for Drinking Water).
  - b) **Interim Maximum Acceptable** - These concentrations have a larger safety factor built in to compensate for insufficient information on the toxic effects of the substance. The substances tested must also be below the guideline level for the water to be designated Potable.
  - c) **Aesthetic Objective** - These guideline levels are not considered to constitute a health hazard. If the concentration is well above the limit, there is a possibility of a health hazard. Two of the substances tested can be above the Aesthetic Objective and the water may still be designated Potable.



**NORWEST  
LABS**

Surrey  
Edmonton  
Calgary  
Lethbridge  
Winnipeg

Ph (604) 514-3322  
Ph (780) 438-5522  
Ph (403) 291-2022  
Ph (403) 329-9266  
Ph (204) 982-8630

FAX (604) 514-3323  
FAX (780) 438-0396  
FAX (403) 291-2021  
FAX (403) 327-8527  
FAX (204) 275-6019

Work Order Number: 50901

Date Issued:

## CERTIFICATION OF POTABILITY

Sample Id: WELL # 3 JAN 20/00

Norwest Soil Research Ltd. certifies that the above mentioned water sample number **50901-2** supplied by Corporation Of Delta meets the chemical and bacteriological requirements specified by the 1996 Guidelines for Canadian Drinking Water Quality for the constituents tested.

Approved by:

John Davidson, Dipl. T., C.P.H.I. ( C )  
Supervisor, Inorganics Lab

**Note:**

All reports are the confidential property of our clients. Publication of statements, conclusions or extracts from or regarding our report is not permitted without our written approval. Any liability attached thereto is limited to the fee charged.

### How to read your report:

1. The **Analyte** column contains the names of the substances analyzed.
2. The **Result** column contains the values we obtained from analyzing your water. The symbol ">" means greater than. The symbol "<" means less than and
3. The **Detection Limit** column shows the lowest concentration we can detect with our instruments.
4. The **Units** column shows the reporting units for each analyte. The unit mg/L (milligrams per Liter) is the same as ppm (parts per million).
5. The **Guidelines / Recommendations Drinking Water** column shows the guideline value for each substance from the *1996 Guidelines for Canadian Drinking Water Quality*.
  - a) **Maximum Acceptable** - These concentrations have been established for certain substances that are known or suspected to cause adverse effects on health. All substances tested must be below the Maximum Acceptable level for the water to be designated Potable (Safe for Drinking Water).
  - b) **Interim Maximum Acceptable** - These concentrations have a larger safety factor built in to compensate for insufficient information on the toxic effects of the substance. The substances tested must also be below the guideline level for the water to be designated Potable.
  - c) **Aesthetic Objective** - These guideline levels are not considered to constitute a health hazard. If the concentration is well above the limit, there is a possibility of a health hazard. Two of the substances tested can be above the Aesthetic Objective and the water may still be designated Potable.



Work Order Number: 50901  
Date Issued:

## CERTIFICATION OF POTABILITY

Sample Id: WELL # 5 JAN 20/00

Norwest Soil Research Ltd. certifies that the above mentioned water sample number 50901-3 supplied by Corporation Of Delta meets the chemical and bacteriological requirements specified by the 1996 Guidelines for Canadian Drinking Water Quality for the constituents tested.

Approved by:

John Davidson, Dipl. T., C.P.H.I. ( C )  
Supervisor, Inorganics Lab

**Note:**

All reports are the confidential property of our clients. Publication of statements, conclusions or extracts from or regarding our report is not permitted without our written approval. Any liability attached thereto is limited to the fee charged.

**How to read your report:**

1. The **Analyte** column contains the names of the substances analyzed.
2. The **Result** column contains the values we obtained from analyzing your water. The symbol "<" means less than and the symbol ">" means greater than.
3. The **Detection Limit** column shows the lowest concentration we can detect with our instruments.
4. The **Units** column shows the reporting units for each analyte. The unit mg/L (milligrams per Liter) is the same as ppm (parts per million).
5. The **Guidelines / Recommendations Drinking Water** column shows the guideline value for each substance from the *1996 Guidelines for Canadian Drinking Water Quality*.
  - a) **Maximum Acceptable** - These concentrations have been established for certain substances that are known or suspected to cause adverse effects on health. All substances tested must be below the Maximum Acceptable level for the water to be designated Potable (Safe for Drinking Water).
  - b) **Interim Maximum Acceptable** - These concentrations have a larger safety factor built in to compensate for insufficient information on the toxic effects of the substance. The substances tested must also be below the guideline level for the water to be designated Potable.
  - c) **Aesthetic Objective** - These guideline levels are not considered to constitute a health hazard. If the concentration is well above the limit, there is a possibility of a health hazard. Two of the substances tested can be above the Aesthetic Objective and the water may still be designated Potable.



**NORWEST  
LABS**

Surrey	Ph (604) 514-3322	FAX (604) 514-3323
Edmonton	Ph (780) 438-5522	FAX (780) 438-0396
Calgary	Ph (403) 291-2022	FAX (403) 291-2021
Lethbridge	Ph (403) 329-9266	FAX (403) 327-8527
Winnipeg	Ph (204) 982-8630	FAX (204) 275-6019

Work Order Number: 50901


Date Issued:

## CERTIFICATION OF POTABILITY

Sample Id: STAND PIPE JAN 20/00

Norwest Soil Research Ltd. certifies that the above mentioned water sample number 50901-4 supplied by Corporation Of Delta meets the chemical and bacteriological requirements specified by the 1996 Guidelines for Canadian Drinking Water Quality for the constituents tested.

Approved by:

  
John Davidson, Dipl. T., C.P.H.I. ( C )  
Supervisor, Inorganics Lab

**Note:**  
All reports are the confidential property of our clients. Publication of statements, conclusions or extracts from or regarding our report is not permitted without our written approval. Any liability attached thereto is limited to the fee charged.

### How to read your report:

1. The **Analyte** column contains the names of the substances analyzed.
2. The **Result** column contains the values we obtained from analyzing your water. The symbol "<" means less than and the symbol ">" means greater than.
3. The **Detection Limit** column shows the lowest concentration we can detect with our instruments.
4. The **Units** column shows the reporting units for each analyte. The unit mg/L (milligrams per Liter) is the same as ppm (parts per million).
5. The **Guidelines / Recommendations Drinking Water** column shows the guideline value for each substance from the 1996 Guidelines for Canadian Drinking Water Quality.
  - a) **Maximum Acceptable** - These concentrations have been established for certain substances that are known or suspected to cause adverse effects on health. All substances tested must be below the Maximum Acceptable level for the water to be designated Potable (Safe for Drinking Water).
  - b) **Interim Maximum Acceptable** - These concentrations have a larger safety factor built in to compensate for insufficient information on the toxic effects of the substance. The substances tested must also be below the guideline level for the water to be designated Potable.
  - c) **Aesthetic Objective** - These guideline levels are not considered to constitute a health hazard. If the concentration is well above the limit, there is a possibility of a health hazard. Two of the substances tested can be above the Aesthetic Objective and the water may still be designated Potable.



# NORWEST LABS

Surrey Ph (604) 514-3322 FAX (604) 514-3323  
 Edmonton Ph (780) 438-5522 FAX (780) 438-0396  
 Calgary Ph (403) 291-2022 FAX (403) 291-2021  
 Lethbridge Ph (403) 329-9266 FAX (403) 327-8527  
 Winnipeg Ph (204) 982-8630 FAX (204) 275-6019

## Client

Name : CORPORATION OF DELTA  
 Address : 4500 CLARENCE TAYLOR CRES.  
 DELTA  
 BC  
 V4K-3E2  
 Att'n : Thomas Loo  
 Phone : 946-3361  
 Fax : 946-3240

WO (Surrey) : 50901  
 WO (Other) :  
 PO # : 800-2470  
 Project : Well # 1,3,5/Stand Pipe/7867 - 114A S  
 Date Sampled : 20-Jan-00  
 Date Received : 20-Jan-00  
 Date Reported : 31-Jan-00

50901-1 WELL # 1 JAN 20/00

### Petroleum Hydrocarbons

#### MTBE in water

<u>Analyte</u>	<u>Result</u>	<u>Detection</u>	
		<u>Limit</u>	<u>Units</u>
Methyl t-butyl ether	<1	1	µg/L
<u>Surrogates</u>			
Dibromofluoromethane	98		%
Toluene-d8	100		%
Bromofluorobenzene	95		%

Initials: *KL*



# NORWEST LABS

Surrey Ph (604) 514-3322 FAX (604) 514-3323  
 Edmonton Ph (780) 438-5522 FAX (780) 438-0396  
 Calgary Ph (403) 291-2022 FAX (403) 291-2021  
 Lethbridge Ph (403) 329-9266 FAX (403) 327-8527  
 Winnipeg Ph (204) 982-8630 FAX (204) 275-6019

## Client

Name : CORPORATION OF DELTA  
 Address : 4500 CLARENCE TAYLOR CRES.  
 DELTA  
 BC  
 V4K-3E2  
 Att'n : Thomas Loo  
 Phone : 946-3361  
 Fax : 946-3240

WO (Surrey) : 50901  
 WO (Other) :  
 PO # : 800-2470  
 Project : Well # 1,3,5/Stand Pipe/7867 - 114A S  
 Date Sampled : 20-Jan-00  
 Date Received : 20-Jan-00  
 Date Reported : 31-Jan-00

## Water Analysis

### Potability

Analyte	Result	Detection		Units	Drinking Water Guidelines / Recommendations
		Limit			
pH	7.9	0.1		pH	Aesthetic Objective between 6.5 and 8.5
Electrical Conductivity	150	0.01		µS/cm	No guideline set - values above 1000 µS/cm indicate high salts
Total Dissolved Solids	82	1		mg/L	Aesthetic Objective 500 mg/L - higher values indicate high salts
Total Suspended Solids	2	1		mg/L	Values above 250 mg/L indicate excessive levels of sediment
Ammonium-N	<0.05	0.05		mg/L	No guideline concentration set - values normally below 0.5 mg/L
Potassium	1.6	0.2		mg/L	No guideline concentration set - values normally 0.5 to 10 mg/L
Calcium	17	0.05		mg/L	No guideline concentration set - causes hardness
Magnesium	6.9	0.05		mg/L	No guideline concentration set - causes hardness
Sodium	6.8	0.05		mg/L	Aesthetic Objective 200 mg/L -20 mg/L for low sodium diets
Iron	0.006	0.003		mg/L	Aesthetic Objective 0.3 mg/L - may cause staining if higher
Copper	0.004	0.001		mg/L	Aesthetic Objective 1.0 mg/L at point of consumption
Zinc	<0.0007	0.0007		mg/L	Aesthetic Objective 5.0 mg/L at point of consumption
Manganese	0.0033	0.0002		mg/L	Aesthetic Objective 0.05 mg/ - causes staining
Sulphate	5.3	0.1		mg/L	Aesthetic Objective 500 mg/L - higher can cause diarrhoea
Chloride	3.7	0.1		mg/L	Aesthetic Objective 250 mg/L
Fluoride	0.14	0.1		mg/L	Maximum Acceptable 1.5 mg/L - values up to 1.2 mg/L desirable
Boron	<0.002	0.002		mg/L	Interim Maximum Acceptable 5.0 mg/L
Carbonate	<6	6		mg/L	Presence indicates alkaline water
Bicarbonate	89	5		mg/L	High level indicates moderately alkaline water
Total Coliforms	<1	1		/100 mL	Maximum Acceptable <1 organism/100 mL. Conditional pass <10
Fecal Coliforms	<1	1		/100 mL	Maximum Acceptable less than 1 organism per 100 mL
Hardness (CaCO3 equiv)	63	1		mg/L	Soft waters are < 75 mg/L; hard waters are > 150 mg/L
Nitrate+Nitrite-N	0.33	0.05		mg/L	Maximum Acceptable 10 mg/L

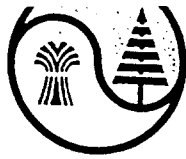
### WL36 metals

Analyte	Result	Detection		Units	Drinking Water Guidelines / Recommendations
		Limit			
Arsenic	<0.01	0.01		mg/L	Interim Maximum Acceptable 0.025 mg/L
Barium	0.0029	0.0005		mg/L	Maximum Acceptable 1 mg/L
Cadmium	<0.0006	0.0006		mg/L	Maximum Acceptable 0.005 mg/L
Chromium	0.0012	0.0009		mg/L	Maximum Acceptable 0.05 mg/L
Lead	<0.002	0.002		mg/L	Maximum Acceptable 0.01 mg/L at point of consumption
Mercury	<0.0001	0.0001		mg/L	Maximum Acceptable 0.001 mg/L
Selenium	<0.004	0.004		mg/L	Maximum Acceptable 0.01 mg/L

Approved By:

Ralph Hindle, B.Sc.  
 Supervisor, Organics Lab  
 Page 2 of 9

007507



# NORWEST LABS

Surrey Ph (604) 514-3322 FAX (604) 514-3323  
 Edmonton Ph (780) 438-5522 FAX (780) 438-0396  
 Calgary Ph (403) 291-2022 FAX (403) 291-2021  
 Lethbridge Ph (403) 329-9266 FAX (403) 327-8527  
 Winnipeg Ph (204) 982-8630 FAX (204) 275-6019

## Client

Name : CORPORATION OF DELTA  
 Address : 4500 CLARENCE TAYLOR CRES.  
 DELTA  
 BC  
 V4K-3E2  
 Att'n : Thomas Loo  
 Phone : 946-3361  
 Fax : 946-3240

WO (Surrey) : 50901  
 WO (Other) :  
 PO # : 800-2470  
 Project : Well # 1,3,5/Stand Pipe/7867 - 114A S  
 Date Sampled : 20-Jan-00  
 Date Received : 20-Jan-00  
 Date Reported : 31-Jan-00

50901-2 WELL # 3 JAN 20/00

### Petroleum Hydrocarbons

#### MTBE In water

<u>Analyte</u>	<u>Result</u>	<u>Detection Limit</u>	<u>Units</u>
Methyl t-butyl ether	<1	1	µg/L
<u>Surrogates</u>			
Dibromofluoromethane	98		%
Toluene-d8	98		%
Bromofluorobenzene	94		%

Initials: KW



# NORWEST LABS

Surrey Ph (604) 514-3322 FAX (604) 514-3323  
 Edmonton Ph (780) 438-5522 FAX (780) 438-0396  
 Calgary Ph (403) 291-2022 FAX (403) 291-2021  
 Lethbridge Ph (403) 329-9266 FAX (403) 327-8527  
 Winnipeg Ph (204) 982-8630 FAX (204) 275-6019

## Client

Name : CORPORATION OF DELTA  
 Address : 4500 CLARENCE TAYLOR CRES.  
 DELTA  
 BC  
 V4K-3E2  
 Att'n : Thomas Loo  
 Phone : 946-3361  
 Fax : 946-3240

WO (Surrey) : 50901  
 WO (Other) :  
 PO # : 800-2470  
 Project : Well # 1,3,5/Stand Pipe/7867 - 114A S  
 Date Sampled : 20-Jan-00  
 Date Received : 20-Jan-00  
 Date Reported : 31-Jan-00

## Water Analysis

### Potability

Analyte	Detection		
	Result	Limit	Units
pH	7.9	0.1	pH
Electrical Conductivity	160	0.01	µS/cm
Total Dissolved Solids	89	1	mg/L
Total Suspended Solids	1	1	mg/L
Ammonium-N	<0.05	0.05	mg/L
Potassium	1.5	0.2	mg/L
Calcium	18	0.05	mg/L
Magnesium	7.2	0.05	mg/L
Sodium	6.3	0.05	mg/L
Iron	0.023	0.003	mg/L
Copper	0.002	0.001	mg/L
Zinc	<0.0007	0.0007	mg/L
Manganese	<0.0002	0.0002	mg/L
Sulphate	7.5	0.1	mg/L
Chloride	4.6	0.1	mg/L
Fluoride	0.12	0.1	mg/L
Boron	<0.002	0.002	mg/L
Carbonate	<6	6	mg/L
Bicarbonate	90	5	mg/L
Total Coliforms	<1	1	/100 mL
Fecal Coliforms	<1	1	/100 mL
Hardness (CaCO3 equiv)	73	1	mg/L
Nitrate+Nitrite-N	0.43	0.05	mg/L

### Drinking Water Guidelines / Recommendations

Aesthetic Objective between 6.5 and 8.5  
 No guideline set - values above 1000 µS/cm indicate high salts  
 Aesthetic Objective 500 mg/L - higher values indicate high salts  
 Values above 250 mg/L indicate excessive levels of sediment  
 No guideline concentration set - values normally below 0.5 mg/L  
 No guideline concentration set - values normally 0.5 to 10 mg/L  
 No guideline concentration set - causes hardness  
 No guideline concentration set - causes hardness  
 Aesthetic Objective 200 mg/L - 20 mg/L for low sodium diets  
 Aesthetic Objective 0.3 mg/L - may cause staining if higher  
 Aesthetic Objective 1.0 mg/L at point of consumption  
 Aesthetic Objective 5.0 mg/L at point of consumption  
 Aesthetic Objective 0.05 mg/L - causes staining  
 Aesthetic Objective 500 mg/L - higher can cause diarrhoea  
 Aesthetic Objective 250 mg/L  
 Maximum Acceptable 1.5 mg/L - values up to 1.2 mg/L desirable  
 Interim Maximum Acceptable 5.0 mg/L  
 Presence indicates alkaline water  
 High level indicates moderately alkaline water  
 Maximum Acceptable <1 organism/100 mL. Conditional pass <10  
 Maximum Acceptable less than 1 organism per 100 mL  
 Soft waters are < 75 mg/L; hard waters are > 150 mg/L  
 Maximum Acceptable 10 mg/L

### WL36 metals

Analyte	Detection		
	Result	Limit	Units
Arsenic	<0.01	0.01	mg/L
Barium	0.0058	0.0005	mg/L
Cadmium	<0.0006	0.0006	mg/L
Chromium	0.0013	0.0009	mg/L
Lead	<0.002	0.002	mg/L
Mercury	<0.0001	0.0001	mg/L
Selenium	<0.004	0.004	mg/L

### Drinking Water Guidelines / Recommendations

Interim Maximum Acceptable 0.025 mg/L  
 Maximum Acceptable 1 mg/L  
 Maximum Acceptable 0.005 mg/L  
 Maximum Acceptable 0.05 mg/L  
 Maximum Acceptable 0.01 mg/L at point of consumption  
 Maximum Acceptable 0.001 mg/L  
 Maximum Acceptable 0.01 mg/L

Approved By:

Ralph Hindle, B.Sc.  
 Supervisor, Organics Lab

007509



**Client**

Name : CORPORATION OF DELTA  
Address : 4500 CLARENCE TAYLOR CRES.  
DELTA  
BC  
V4K-3E2  
Att'n : Thomas Loo  
Phone : 946-3361  
Fax : 946-3240

WO (Surrey) : 50901  
WO (Other) :  
PO # : 800-2470  
Project : Well # 1,3,5/Stand Pipe/7867 - 114A S  
Date Sampled : 20-Jan-00  
Date Received : 20-Jan-00  
Date Reported : 31-Jan-00

50901-3 WELL # 5 JAN 20/00

Petroleum Hydrocarbons

MTBE in water

<u>Analyte</u>	<u>Result</u>	<u>Detection</u>		<u>Units</u>
		<u>Limit</u>		
Methyl t-butyl ether	<1	1		µg/L
<u>Surrogates</u>				
Dibromofluoromethane	98			%
Toluene-d8	100			%
Bromofluorobenzene	94			%

Initials: *RH*



# NORWEST LABS

Surrey Ph (604) 514-3322 FAX (604) 514-3323  
 Edmonton Ph (780) 438-5522 FAX (780) 438-0396  
 Calgary Ph (403) 291-2022 FAX (403) 291-2021  
 Lethbridge Ph (403) 329-9266 FAX (403) 327-8527  
 Winnipeg Ph (204) 982-8630 FAX (204) 275-6019

## Client

Name : CORPORATION OF DELTA  
 Address : 4500 CLARENCE TAYLOR CRES.  
 DELTA  
 BC  
 V4K-3E2  
 Att'n : Thomas Loo  
 Phone : 946-3361  
 Fax : 946-3240

WO (Surrey) : 50901  
 WO (Other) :  
 PO # : 800-2470  
 Project : Well # 1,3,5/Stand Pipe/7867 - 114A S  
 Date Sampled : 20-Jan-00  
 Date Received : 20-Jan-00  
 Date Reported : 31-Jan-00

## Water Analysis

### Potability

Analyte	Result	Detection	
		Limit	Units
pH	7.7	0.1	pH
Electrical Conductivity	160	0.01	µS/cm
Total Dissolved Solids	88	1	mg/L
Total Suspended Solids	3	1	mg/L
Ammonium-N	<0.05	0.05	mg/L
Potassium	1.6	0.2	mg/L
Calcium	17	0.05	mg/L
Magnesium	7	0.05	mg/L
Sodium	6.5	0.05	mg/L
Iron	<0.003	0.003	mg/L
Copper	<0.001	0.001	mg/L
Zinc	<0.0007	0.0007	mg/L
Manganese	0.003	0.0002	mg/L
Sulphate	6.7	0.1	mg/L
Chloride	5.5	0.1	mg/L
Fluoride	0.11	0.1	mg/L
Boron	<0.002	0.002	mg/L
Carbonate	<6	6	mg/L
Bicarbonate	88	5	mg/L
Total Coliforms	<1	1	/100 mL
Fecal Coliforms	<1	1	/100 mL
Hardness (CaCO3 equiv)	71	1	mg/L
Nitrate+Nitrite-N	0.3	0.05	mg/L

### Drinking Water Guidelines / Recommendations

Aesthetic Objective between 6.5 and 8.5  
 No guideline set - values above 1000 µS/cm indicate high salts  
 Aesthetic Objective 500 mg/L - higher values indicate high salts  
 Values above 250 mg/L indicate excessive levels of sediment  
 No guideline concentration set - values normally below 0.5 mg/L  
 No guideline concentration set - values normally 0.5 to 10 mg/L  
 No guideline concentration set - causes hardness  
 No guideline concentration set - causes hardness  
 Aesthetic Objective 200 mg/L -20 mg/L for low sodium diets  
 Aesthetic Objective 0.3 mg/L - may cause staining if higher  
 Aesthetic Objective 1.0 mg/L at point of consumption  
 Aesthetic Objective 5.0 mg/L at point of consumption  
 Aesthetic Objective 0.05 mg/ - causes staining  
 Aesthetic Objective 500 mg/L - higher can cause diarrhoea  
 Aesthetic Objective 250 mg/L  
 Maximum Acceptable 1.5 mg/L - values up to 1.2 mg/L desirable  
 Interim Maximum Acceptable 5.0 mg/L  
 Presence indicates alkaline water  
 High level indicates moderately alkaline water  
 Maximum Acceptable <1organism/100 mL. Conditional pass <10  
 Maximum Acceptable less than 1organism per 100 mL  
 Soft waters are < 75 mg/L; hard waters are > 150 mg/L  
 Maximum Acceptable 10 mg/L

### WL36 metals

Analyte	Result	Detection	
		Limit	Units
Arsenic	<0.01	0.01	mg/L
Barium	0.0058	0.0005	mg/L
Cadmium	<0.0006	0.0006	mg/L
Chromium	<0.0009	0.0009	mg/L
Lead	<0.002	0.002	mg/L
Mercury	<0.0001	0.0001	mg/L
Selenium	<0.004	0.004	mg/L

### Drinking Water Guidelines / Recommendations

Interim Maximum Acceptable 0.025 mg/L  
 Maximum Acceptable 1 mg/L  
 Maximum Acceptable 0.005 mg/L  
 Maximum Acceptable 0.05 mg/L  
 Maximum Acceptable 0.01 mg/L at point of consumption  
 Maximum Acceptable 0.001 mg/L  
 Maximum Acceptable 0.01 mg/L

Approved By:

Ralph Hindle, B.Sc.  
 Supervisor, Organics Lab  
 Page 6 of 9

007511

50 P



# NORWEST LABS

Surrey Ph (604) 514-3322 FAX (604) 514-3323  
 Edmonton Ph (780) 438-5522 FAX (780) 438-0396  
 Calgary Ph (403) 291-2022 FAX (403) 291-2021  
 Lethbridge Ph (403) 329-9266 FAX (403) 327-8527  
 Winnipeg Ph (204) 982-8630 FAX (204) 275-6019

## Client

Name : CORPORATION OF DELTA  
 Address : 4500 CLARENCE TAYLOR CRES.  
 DELTA  
 BC  
 V4K-3E2  
 Att'n : Thomas Loo  
 Phone : 946-3361  
 Fax : 946-3240

WO (Surrey) : 50901  
 WO (Other) :  
 PO # : 800-2470  
 Project : Well # 1,3,5/Stand Pipe/7867 - 114A S  
 Date Sampled : 20-Jan-00  
 Date Received : 20-Jan-00  
 Date Reported : 31-Jan-00

50901-4 STAND PIPE JAN 20/00

### Petroleum Hydrocarbons

#### MTBE in water

<u>Analyte</u>	<u>Result</u>	<u>Detection</u>	
		<u>Limit</u>	<u>Units</u>
Methyl t-butyl ether	<1	1	µg/L
<u>Surrogates</u>			
Dibromofluoromethane	98		%
Toluene-d8	99		%
Bromofluorobenzene	95		%

Initials: *Ha*



# NORWEST LABS

Surrey Ph (604) 514-3322 FAX (604) 514-3323  
 Edmonton Ph (780) 438-5522 FAX (780) 438-0396  
 Calgary Ph (403) 291-2022 FAX (403) 291-2021  
 Lethbridge Ph (403) 329-9266 FAX (403) 327-8527  
 Winnipeg Ph (204) 982-8630 FAX (204) 275-6019

## Client

Name : CORPORATION OF DELTA  
 Address : 4500 CLARENCE TAYLOR CRES.  
 DELTA  
 BC  
 V4K-3E2  
 Att'n : Thomas Loo  
 Phone : 946-3361  
 Fax : 946-3240

WO (Surrey) : 50901  
 WO (Other) :  
 PO # : 800-2470  
 Project : Well # 1,3,5/Stand Pipe/7867 - 114A S  
 Date Sampled : 20-Jan-00  
 Date Received : 20-Jan-00  
 Date Reported : 31-Jan-00

## Water Analysis

### Potability

Analyte	Result	Detection		Units
		Limit		
pH	7.7	0.1		pH
Electrical Conductivity	170	0.01		µS/cm
Total Dissolved Solids	94	1		mg/L
Total Suspended Solids	<1	1		mg/L
Ammonium-N	<0.05	0.05		mg/L
Potassium	1.6	0.2		mg/L
Calcium	18	0.05		mg/L
Magnesium	7	0.05		mg/L
Sodium	6.4	0.05		mg/L
Iron	<0.003	0.003		mg/L
Copper	<0.001	0.001		mg/L
Zinc	<0.0007	0.0007		mg/L
Manganese	0.0081	0.0002		mg/L
Sulphate	8.5	0.1		mg/L
Chloride	9.6	0.1		mg/L
Fluoride	0.11	0.1		mg/L
Boron	<0.002	0.002		mg/L
Carbonate	<6	6		mg/L
Bicarbonate	88	5		mg/L
Total Coliforms	<1	1		/100 mL
Fecal Coliforms	<1	1		/100 mL
Hardness (CaCO3 equiv)	72	1		mg/L
Nitrate+Nitrite-N	0.32	0.05		mg/L

### Drinking Water Guidelines / Recommendations

Aesthetic Objective between 6.5 and 8.5  
 No guideline set - values above 1000 µS/cm indicate high salts  
 Aesthetic Objective 500 mg/L - higher values indicate high salts  
 Values above 250 mg/L indicate excessive levels of sediment  
 No guideline concentration set - values normally below 0.5 mg/L  
 No guideline concentration set - values normally 0.5 to 10 mg/L  
 No guideline concentration set - causes hardness  
 No guideline concentration set - causes hardness  
 Aesthetic Objective 200 mg/L - 20 mg/L for low sodium diets  
 Aesthetic Objective 0.3 mg/L - may cause staining if higher  
 Aesthetic Objective 1.0 mg/L at point of consumption  
 Aesthetic Objective 5.0 mg/L at point of consumption  
 Aesthetic Objective 0.05 mg/L - causes staining  
 Aesthetic Objective 500 mg/L - higher can cause diarrhoea  
 Aesthetic Objective 250 mg/L  
 Maximum Acceptable 1.5 mg/L - values up to 1.2 mg/L desirable  
 Interim Maximum Acceptable 5.0 mg/L  
 Presence indicates alkaline water  
 High level indicates moderately alkaline water  
 Maximum Acceptable <1 organism/100 mL. Conditional pass <10  
 Maximum Acceptable less than 1 organism per 100 mL  
 Soft waters are < 75 mg/L; hard waters are > 150 mg/L  
 Maximum Acceptable 10 mg/L

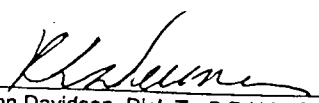
### WL36 metals

Analyte	Result	Detection		Units
		Limit		
Arsenic	<0.01	0.01		mg/L
Barium	0.005	0.0005		mg/L
Cadmium	<0.0006	0.0006		mg/L
Chromium	<0.0009	0.0009		mg/L
Lead	<0.002	0.002		mg/L
Mercury	<0.0001	0.0001		mg/L
Selenium	<0.004	0.004		mg/L

### Drinking Water Guidelines / Recommendations

Interim Maximum Acceptable 0.025 mg/L  
 Maximum Acceptable 1 mg/L  
 Maximum Acceptable 0.005 mg/L  
 Maximum Acceptable 0.05 mg/L  
 Maximum Acceptable 0.01 mg/L at point of consumption  
 Maximum Acceptable 0.001 mg/L  
 Maximum Acceptable 0.01 mg/L

Approved By:

  
 John Davidson, Dipl. T., C.P.H.I. (C)

Supervisor, Inorganics Lab

Page 8 of 9

007513



**NORWEST  
LABS**

Surrey  
Edmonton  
Calgary  
Lethbridge  
Winnipeg

Ph (604) 514-3322  
Ph (780) 438-5522  
Ph (403) 291-2022  
Ph (403) 329-9266  
Ph (204) 982-8630

FAX (604) 514-3323  
FAX (780) 438-0396  
FAX (403) 291-2021  
FAX (403) 327-8527  
FAX (204) 275-6019

Work Order Number: 53364

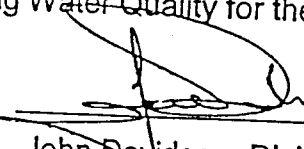
Date Issued: 16-May-00

## CERTIFICATION OF POTABILITY

Sample Id: Well #1

Norwest Soil Research Ltd. certifies that the above mentioned water sample number 53364-1 supplied by Corporation of Delta meets the chemical and bacteriological requirements specified by the 1996 Guidelines for Canadian Drinking Water Quality for the constituents tested.

Approved by:

  
John Davidson, Dipl. T., C.P.H.I. (C)  
Supervisor, Inorganics Lab

**Note:**

All reports are the confidential property of our clients. Publication of statements, conclusions or extracts from or regarding our report is not permitted without our written approval. Any liability attached thereto is limited to the fee charged.

### How to read your report:

1. The Analyte column contains the names of the substances analyzed.
2. The Result column contains the values we obtained from analyzing your water. The symbol ">" means greater than.
3. The Detection Limit column shows the lowest concentration we can detect with our instruments.
4. The Units column shows the reporting units for each analyte. The unit mg/L (milligrams per Liter) is the same as ppm (parts per million).
5. The Guidelines / Recommendations Drinking Water column shows the guideline value for each substance from the 1996 Guidelines for Canadian Drinking Water Quality.
  - a) **Maximum Acceptable** - These concentrations have been established for certain substances that are known or suspected to cause adverse effects on health. All substances tested must be below the Maximum Acceptable level for the water to be designated Potable (Safe for Drinking Water).
  - b) **Interim Maximum Acceptable** - These concentrations have a larger safety factor built in to compensate for insufficient information on the toxic effects of the substance. The substances tested must also be below the guideline level for the water to be designated Potable.
  - c) **Aesthetic Objective** - These guideline levels are not considered to constitute a health hazard. If the concentration is well above the limit, there is a possibility of a health hazard. Two of the substances tested can be above the Aesthetic Objective and the water may still be designated Potable.



**NORWEST  
LABS**

Surrey  
Edmonton  
Calgary  
Lethbridge  
Winnipeg

Ph (604) 514-3322  
Ph (780) 438-5522  
Ph (403) 291-2022  
Ph (403) 329-9266  
Ph (204) 982-8630

FAX (604) 514-3322  
FAX (780) 438-0398  
FAX (403) 291-2021  
FAX (403) 327-8527  
FAX (204) 275-6018

Work Order Number: 53364  
Date Issued: 16-May-00

## CERTIFICATION OF POTABILITY

Sample Id: Well #3

Norwest Soil Research Ltd. certifies that the above mentioned water sample number 53364-2 supplied by Corporation of Delta meets the chemical and bacteriological requirements specified by the 1996 Guidelines for Canadian Drinking Water Quality for the constituents tested.

Approved by:

John Davidson; Dipl. T., C.P.H.I. (C)  
Supervisor, Inorganics Lab

**Note:**

All reports are the confidential property of our clients. Publication of statements, conclusions or extracts from or regarding our report is not permitted without our written approval. Any liability attached thereto is limited to the fee charged.

### How to read your report:

1. The Analyte column contains the names of the substances analyzed.
2. The Result column contains the values we obtained from analyzing your water. The symbol "<" means less than and the symbol ">" means greater than.
3. The Detection Limit column shows the lowest concentration we can detect with our instruments.
4. The Units column shows the reporting units for each analyte. The unit mg/L (milligrams per Liter) is the same as ppm (parts per million).
5. The Guidelines / Recommendations Drinking Water column shows the guideline value for each substance from the 1996 Guidelines for Canadian Drinking Water Quality.
  - a) Maximum Acceptable - These concentrations have been established for certain substances that are known or suspected to cause adverse effects on health. All substances tested must be below the Maximum Acceptable level for the water to be designated Potable (Safe for Drinking Water).
  - b) Interim Maximum Acceptable - These concentrations have a larger safety factor built in to compensate for insufficient information on the toxic effects of the substance. The substances tested must also be below the guideline level for the water to be designated Potable.
  - c) Aesthetic Objective - These guideline levels are not considered to constitute a health hazard. If the concentration is well above the limit, there is a possibility of a health hazard. Two of the substances tested can be above the Aesthetic Objective and the water may still be designated Potable.



Surrey Ph (604) 514-3322 FAX (604) 514-3322  
Edmonton Ph (780) 438-5522 FAX (780) 438-5522  
Calgary Ph (403) 291-2022 FAX (403) 291-2022  
Lethbridge Ph (403) 329-9266 FAX (403) 327-8266  
Winnipeg Ph (204) 982-8630 FAX (204) 275-6266


Work Order Number: 53364  
Date Issued: 16-May-00

## CERTIFICATION OF POTABILITY

Sample Id: Well #5

Norwest Soil Research Ltd. certifies that the above mentioned water sample number 53364-3 supplied by Corporation of Delta meets the chemical and bacteriological requirements specified by the 1996 Guidelines for Canadian Drinking Water Quality for the constituents tested.

Approved by:

  
John Davidson, Dipl. T., C.P.H.I. (C)  
Supervisor, Inorganics Lab

### Note:

All reports are the confidential property of our clients. Publication of statements, conclusions or extracts from or regarding our report is not permitted without our written approval. Any liability attached thereto is limited to the fee charged.

### How to read your report:

1. The Analyte column contains the names of the substances analyzed.
2. The Result column contains the values we obtained from analyzing your water. The symbol "<" means less than and the symbol ">" means greater than.
3. The Detection Limit column shows the lowest concentration we can detect with our instruments.
4. The Units column shows the reporting units for each analyte. The unit mg/L (milligrams per Liter) is the same as ppm (parts per million).
5. The Guidelines / Recommendations Drinking Water column shows the guideline value for each substance from the 1996 Guidelines for Canadian Drinking Water Quality.
  - a) Maximum Acceptable - These concentrations have been established for certain substances that are known or suspected to cause adverse effects on health. All substances tested must be below the Maximum Acceptable level for the water to be designated Potable (Safe for Drinking Water).
  - b) Interim Maximum Acceptable - These concentrations have a larger safety factor built in to compensate for insufficient information on the toxic effects of the substance. The substances tested must also be below the guideline level for the water to be designated Potable.
  - c) Aesthetic Objective - These guideline levels are not considered to constitute a health hazard. If the concentration is well above the limit, there is a possibility of a health hazard. Two of the substances tested can be above the Aesthetic Objective and the water may still be designated Potable.



**NORWEST  
LABS**

Surrey  
Edmonton  
Calgary  
Lethbridge  
Winnipeg

Ph (604) 514-3322  
Ph (780) 438-5522  
Ph (403) 291-2022  
Ph (403) 329-9266  
Ph (204) 982-8630

FAX (604) 514-3323  
FAX (780) 438-0396  
FAX (403) 291-2021  
FAX (403) 327-8527  
FAX (204) 275-6019

Work Order Number: 53364  
Date Issued: 16-May-00

## CERTIFICATION OF POTABILITY

Sample Id: WS #1

Norwest Soil Research Ltd. certifies that the above mentioned water sample number 53364-4 supplied by Corporation of Delta meets the chemical and bacteriological requirements specified by the 1996 Guidelines for Canadian Drinking Water Quality for the constituents tested.

Approved by:

  
\_\_\_\_\_  
John Davidson, Dipl. T., C.P.H.I. (C)  
Supervisor, Inorganics Lab

### Note:

All reports are the confidential property of our clients. Publication of statements, conclusions or extracts from or regarding our report is not permitted without our written approval. Any liability attached thereto is limited to the fee charged.

### How to read your report:

1. The Analyte column contains the names of the substances analyzed.
2. The Result column contains the values we obtained from analyzing your water. The symbol "<" means less than and the symbol ">" means greater than.
3. The Detection Limit column shows the lowest concentration we can detect with our instruments.
4. The Units column shows the reporting units for each analyte. The unit mg/L (milligrams per Liter) is the same as ppm (parts per million).
5. The Guidelines / Recommendations Drinking Water column shows the guideline value for each substance from the 1996 Guidelines for Canadian Drinking Water Quality.
  - a) Maximum Acceptable - These concentrations have been established for certain substances that are known or suspected to cause adverse effects on health. All substances tested must be below the Maximum Acceptable level for the water to be designated Potable (Safe for Drinking Water).
  - b) Interim Maximum Acceptable - These concentrations have a larger safety factor built in to compensate for insufficient information on the toxic effects of the substance. The substances tested must also be below the guideline level for the water to be designated Potable.
  - c) Aesthetic Objective - These guideline levels are not considered to constitute a health hazard. If the concentration is well above the limit, there is a possibility of a health hazard. Two of the substances tested can be above the Aesthetic Objective and the water may still be designated Potable.



Client Code: CORDEL

Name: CORPORATION OF DELTA  
 Address: 4500 CLARENCE TAYLOR CRES.

DELTA  
 BC V4K-3E2  
 Attn: Thomas Loo  
 Phone: (604) 946-3361  
 Fax: (604) 946-3240

Workorder: 53364  
 WO (Other): 58631  
 PO Num: 800-2470  
 Project:  
 Date Sampled:  
 Date Received: Apr 28, 2000  
 Date Reported: May 16, 2000

## Pesticides

Detection Limit	Units	53364-1	53364-2	53364-3	53364-4	
		Well #1	Well #3	Well #5	WS #1	
<i>Multiresidue Pesticide Screen</i>						
Acephate	0.04	ppm	<0.04	<0.04	<0.04	<0.04
Alachlor	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Aldicarb	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Aldicarb sulfone	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Aldicarb sulfoxide	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Aldrin	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Allethrin	0.02	ppm	<0.02	<0.02	<0.02	<0.02
Ametryn	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Aspon	0.02	ppm	<0.02	<0.02	<0.02	<0.02
Atrazine	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Atrazine-de-ethyl	0.06	ppm	<0.06	<0.06	<0.06	<0.06
Azinphos-ethyl	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Azinphos-methyl	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Benfluralin	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Benzoylprop-ethyl	0.02	ppm	<0.02	<0.02	<0.02	<0.02
BHC-alpha	0.01	ppm	<0.01	<0.01	<0.01	<0.01
BHC-beta	0.04	ppm	<0.04	<0.04	<0.04	<0.04
BHC-delta	0.04	ppm	<0.04	<0.04	<0.04	<0.04
BifenoX	0.01	ppm	<0.01	<0.01	<0.01	<0.01
BPMC	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Bromacil	0.02	ppm	<0.02	<0.02	<0.02	<0.02
Bromophos	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Bromophos-ethyl	0.04	ppm	<0.04	<0.04	<0.04	<0.04
Bromopropylate	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Butralin	0.04	ppm	<0.04	<0.04	<0.04	<0.04
Butylate	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Captafol	0.02	ppm	<0.02	<0.02	<0.02	<0.02
Captan	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Carbaryl	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Carbofuran	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Carbophenothion	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Carboxin	0.02	ppm	<0.02	<0.02	<0.02	<0.02
Chlorbenside	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Chlorbenzilate	0.05	ppm	<0.05	<0.05	<0.05	<0.05
Chlorbromuron	0.03	ppm	<0.03	<0.03	<0.03	<0.03
Chlordane-cis	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Chlordane-trans	0.04	ppm	<0.04	<0.04	<0.04	<0.04
Chlordimeform	0.04	ppm	<0.04	<0.04	<0.04	<0.04
Chlorfenson	0.02	ppm	<0.02	<0.02	<0.02	<0.02
Chlorfenvinphos	0.04	ppm	<0.04	<0.04	<0.04	<0.04



# NORWEST LABS

Surrey Ph (604) 514-5522 FAX (403) 438-0398  
 Edmonton Ph (403) 438-5522 FAX (403) 291-2021  
 Calgary Ph (403) 291-2022 FAX (403) 327-8527  
 Lethbridge Ph (403) 329-9266 FAX (204) 275-6019  
 Winnipeg Ph (204) 982-8630

Client Code: CORDEL

Name: CORPORATION OF DELTA  
 Address: 4500 CLARENCE TAYLOR CRES.

Workorder: 53364  
 WO (Other): 58631  
 PO Num: 800-2470  
 Project:  
 Date Sampled:  
 Date Received: Apr 28, 2000  
 Date Reported: May 16, 2000

DELTA  
 BC V4K-3E2  
 Attn: Thomas Loo  
 Phone: (604) 946-3361  
 Fax: (604) 946-3240

Chlorflurenol-methyl	0.02	ppm	<0.02	<0.02	<0.02	<0.02
Chlormephos	0.03	ppm	<0.03	<0.03	<0.03	<0.03
Chlorothalonil	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Chlorpropham	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Chlorpyrifos	0.04	ppm	<0.04	<0.04	<0.04	<0.04
Chlorpyrifos-methyl	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Chlorthal-dimethyl	0.06	ppm	<0.06	<0.06	<0.06	<0.06
Chlorthiophos	0.02	ppm	<0.02	<0.02	<0.02	<0.02
Chlozolinat	0.02	ppm	<0.02	<0.02	<0.02	<0.02
Clomazone	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Coumaphos	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Crotoxyphos	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Crufomate	0.03	ppm	<0.03	<0.03	<0.03	<0.03
Cyanazine	0.09	ppm	<0.09	<0.09	<0.09	<0.09
Cyanophos	0.03	ppm	<0.03	<0.03	<0.03	<0.03
Cyhalothrin lambda	0.02	ppm	<0.02	<0.02	<0.02	<0.02
Cypermethrin	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Cyprazine	0.01	ppm	<0.01	<0.01	<0.01	<0.01
DDD-p,p'	0.04	ppm	<0.04	<0.04	<0.04	<0.04
DDE-p,p'	0.01	ppm	<0.01	<0.01	<0.01	<0.01
DDT-o,p'	0.04	ppm	<0.04	<0.04	<0.04	<0.04
DDT-p,p'	0.03	ppm	<0.03	<0.03	<0.03	<0.03
Deltamethrin	0.1	ppm	<0.1	<0.1	<0.1	<0.1
Demeton	0.1	ppm	<0.1	<0.1	<0.1	<0.1
Demeton-S-methyl	0.06	ppm	<0.06	<0.06	<0.06	<0.06
Desmetryn	0.02	ppm	<0.02	<0.02	<0.02	<0.02
Dialifos	0.02	ppm	<0.02	<0.02	<0.02	<0.02
Diallate	0.07	ppm	<0.07	<0.07	<0.07	<0.07
Diazinon	0.05	ppm	<0.05	<0.05	<0.05	<0.05
Dibrom/Naled	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Dichlobenil	0.04	ppm	<0.04	<0.04	<0.04	<0.04
Dichlofenthion	0.09	ppm	<0.09	<0.09	<0.09	<0.09
Dichlofluanid	0.02	ppm	<0.02	<0.02	<0.02	<0.02
Dichlorvos	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Dicloran	0.02	ppm	<0.02	<0.02	<0.02	<0.02
Dicofol	0.04	ppm	<0.04	<0.04	<0.04	<0.04
Dicrotophos	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Dieldrin	0.04	ppm	<0.04	<0.04	<0.04	<0.04
Dimethachlor	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Dimethoate	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Dinitramine	0.02	ppm	<0.02	<0.02	<0.02	<0.02
Dioxathion	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Diphenamld	0.09	ppm	<0.09	<0.09	<0.09	<0.09
Diphenylamine	0.02	ppm	<0.02	<0.02	<0.02	<0.02

007519



# NORWEST LABS

Calgary Ph (403) 291-2022 FAX (403) 438-0396  
 Lethbridge Ph (403) 329-9266 FAX (403) 291-2021  
 Winnipeg Ph (204) 982-8630 FAX (403) 327-8527  
 FAX (204) 275-6019

Client Code: BORDEL

Name: CORPORATION OF DELTA  
 Address: 4500 CLARENCE TAYLOR CRES.

DELTA  
 BC V4K-3E2  
 Attn: Thomas Loo  
 Phone: (604) 946-3361  
 Fax: (604) 946-3240

Workorder: 53364  
 WO (Other): 58631  
 PO Num: 800-2470  
 Project:  
 Date Sampled:  
 Date Received: Apr 28, 2000  
 Date Reported: May 16, 2000

Disulfoton	0.06	ppm	<0.06	<0.06	<0.06	<0.06
Diuron	0.06	ppm	<0.06	<0.06	<0.06	<0.06
Endosulfan I	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Endosulfan II	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Endosulfan sulfate	0.02	ppm	<0.02	<0.02	<0.02	<0.02
Endrin	0.01	ppm	<0.01	<0.01	<0.01	<0.01
EPN	0.04	ppm	<0.04	<0.04	<0.04	<0.04
Eptam	0.02	ppm	<0.02	<0.02	<0.02	<0.02
Ethalfuralin	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Ethion	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Ethoprophos	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Etridiazol	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Etrimfos	0.09	ppm	<0.09	<0.09	<0.09	<0.09
Fenarimol	0.02	ppm	<0.02	<0.02	<0.02	<0.02
Fenchlorphos	0.03	ppm	<0.03	<0.03	<0.03	<0.03
Fenitrothion	0.08	ppm	<0.08	<0.08	<0.08	<0.08
Fenson	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Fensulfothion	0.04	ppm	<0.04	<0.04	<0.04	<0.04
Fenthion	0.02	ppm	<0.02	<0.02	<0.02	<0.02
Fenvalerate	0.02	ppm	<0.02	<0.02	<0.02	<0.02
Flamprop-methyl	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Fluchloralin	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Folpet	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Fonofos	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Heptachlor	0.04	ppm	<0.04	<0.04	<0.04	<0.04
Heptachlor epoxide	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Heptenofos	0.09	ppm	<0.09	<0.09	<0.09	<0.09
Hexachlorobenzene	0.04	ppm	<0.04	<0.04	<0.04	<0.04
Hexazinone	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Imidacloprid	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Iodofenphos	0.04	ppm	<0.04	<0.04	<0.04	<0.04
Iprodione	0.05	ppm	<0.05	<0.05	<0.05	<0.05
Isofenphos	0.02	ppm	<0.02	<0.02	<0.02	<0.02
Leptophos	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Lindane	0.04	ppm	<0.04	<0.04	<0.04	<0.04
Linuron	0.02	ppm	<0.02	<0.02	<0.02	<0.02
Malaoxon	0.1	ppm	<0.1	<0.1	<0.1	<0.1
Malathion	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Metalaxyl	0.04	ppm	<0.04	<0.04	<0.04	<0.04
Metazachlor	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Methamidophos	0.03	ppm	<0.03	<0.03	<0.03	<0.03
Methidathion	0.02	ppm	<0.02	<0.02	<0.02	<0.02
Methiocarb	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Methomyl	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Methoprene	0.01	ppm	<0.01	<0.01	<0.01	<0.01



# NORWEST LABS

Edmonton Ph (403) 438-5522 FAX (403) 438-0398  
 Calgary Ph (403) 291-2022 FAX (403) 291-2021  
 Lethbridge Ph (403) 329-9266 FAX (403) 327-8527  
 Winnipeg Ph (204) 982-8630 FAX (204) 275-6019

Client Code: BORDEL

Name: CORPORATION OF DELTA  
 Address: 4500 CLARENCE TAYLOR CRES.

Workorder: 53364  
 WO (Other): 58631  
 PO Num: 800-2470  
 Project:

DELTA  
 BC V4K-3E2  
 Attn: Thomas Loo  
 Phone: (604) 946-3361  
 Fax: (604) 946-3240

Date Sampled:  
 Date Received: Apr 28, 2000  
 Date Reported: May 16, 2000

Methoprotryn	0.09	ppm	<0.09	<0.09	<0.09	<0.09
Methoxychlor	0.04	ppm	<0.04	<0.04	<0.04	<0.04
Metobromuron	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Metolachlor	0.02	ppm	<0.02	<0.02	<0.02	<0.02
Metribuzin	0.04	ppm	<0.04	<0.04	<0.04	<0.04
Mevinphos	0.03	ppm	<0.03	<0.03	<0.03	<0.03
Mirex	0.03	ppm	<0.03	<0.03	<0.03	<0.03
Monocrotophos	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Monolinuron	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Myclobutanil	0.02	ppm	<0.02	<0.02	<0.02	<0.02
Nitralin	0.02	ppm	<0.02	<0.02	<0.02	<0.02
Nitrapyrin	0.03	ppm	<0.03	<0.03	<0.03	<0.03
Nitrofen	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Norflurazon	0.02	ppm	<0.02	<0.02	<0.02	<0.02
Omethoate	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Oxadiazon	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Oxamyl	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Oxychlorane	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Paraoxon	0.02	ppm	<0.02	<0.02	<0.02	<0.02
Parathion	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Parathion-methyl	0.02	ppm	<0.02	<0.02	<0.02	<0.02
Pebulate	0.02	ppm	<0.02	<0.02	<0.02	<0.02
Pendimethalin	0.04	ppm	<0.04	<0.04	<0.04	<0.04
Permethrin-cis	0.05	ppm	<0.05	<0.05	<0.05	<0.05
Permethrin-trans	0.02	ppm	<0.02	<0.02	<0.02	<0.02
Phorate	0.03	ppm	<0.03	<0.03	<0.03	<0.03
Phosalone	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Phosmet	0.07	ppm	<0.07	<0.07	<0.07	<0.07
Phosphamidon	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Pirimicarb	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Pirimiphos-ethyl	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Pirimiphos-methyl	0.02	ppm	<0.02	<0.02	<0.02	<0.02
Procymidone	0.02	ppm	<0.02	<0.02	<0.02	<0.02
Profenofos	0.02	ppm	<0.02	<0.02	<0.02	<0.02
Profluralin	0.03	ppm	<0.03	<0.03	<0.03	<0.03
Prometon	0.04	ppm	<0.04	<0.04	<0.04	<0.04
Prometryn	0.04	ppm	<0.04	<0.04	<0.04	<0.04
Pronamide	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Propanil	0.04	ppm	<0.04	<0.04	<0.04	<0.04
Propazine	0.02	ppm	<0.02	<0.02	<0.02	<0.02
Propetamphos	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Propiconazole	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Propoxur	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Prothiofos	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Pyrazophos	0.04	ppm	<0.04	<0.04	<0.04	<0.04
Pyridaben	0.05	ppm	<0.05	<0.05	<0.05	<0.05

Quina  
 Quinc  
 Quint  
 Schra  
 Sima  
 Sulfo  
 Tebu  
 Tecr  
 Terb  
 Tert  
 Tert  
 Tetr  
 Tetr  
 Toly  
 Trie  
 Tri  
 Tri  
 Tri  
 Tri  
 Ve  
 Vir

007521



# NORWEST LABS

Calgary Ph (403) 291-2022 FAX (403) 291-0396  
 Lethbridge Ph (403) 329-9266 FAX (403) 291-2021  
 Winnipeg Ph (204) 982-8630 FAX (403) 327-8527  
 FAX (204) 275-6019

Client Code: CORDEL

Name: CORPORATION OF DELTA  
 Address: 4500 CLARENCE TAYLOR CRES.

DELTA  
 BC V4K-3E2  
 Attn: Thomas Loo  
 Phone: (604) 946-3361  
 Fax: (604) 946-3240

Workorder: 53364  
 WO (Other): 58631  
 PO Num: 800-2470  
 Project:  
 Date Sampled:  
 Date Received: Apr 28, 2000  
 Date Reported: May 16, 2000

Quinalphos	0.04	ppm	<0.04	<0.04	<0.04	<0.04
Quinomethionate	0.08	ppm	<0.08	<0.08	<0.08	<0.08
Quintozene	0.03	ppm	<0.03	<0.03	<0.03	<0.03
Schradan	0.02	ppm	<0.02	<0.02	<0.02	<0.02
Simazine	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Sulfotep	0.02	ppm	<0.02	<0.02	<0.02	<0.02
Tebufenozide	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Tecnazene	0.04	ppm	<0.04	<0.04	<0.04	<0.04
Terbacil	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Terbufos	0.04	ppm	<0.04	<0.04	<0.04	<0.04
Terbuthylazine	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Terbutryn	0.03	ppm	<0.03	<0.03	<0.03	<0.03
Tetrachlorvinphos	0.02	ppm	<0.02	<0.02	<0.02	<0.02
Tetradifon	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Tetramethrin	0.04	ppm	<0.04	<0.04	<0.04	<0.04
Tolyfluanid	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Triadimefon	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Triadimenol	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Triallate	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Triazophos	0.02	ppm	<0.02	<0.02	<0.02	<0.02
Trichlorfon	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Trifluralin	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Vernolate	0.01	ppm	<0.01	<0.01	<0.01	<0.01
Vinclozolin	0.03	ppm	<0.03	<0.03	<0.03	<0.03

Approved By:

Randy Neumann, B.Sc.  
 Lab Manager



# NORWEST LABS


Surrey Ph (604) 514-3322 FAX (604) 514-3323  
 Edmonton Ph (403) 438-5522 FAX (403) 438-0386  
 Calgary Ph (403) 291-2022 FAX (403) 291-2021  
 Lethbridge Ph (403) 329-9266 FAX (403) 327-8527  
 Winnipeg Ph (204) 982-8630 FAX (204) 275-6010

Client Code: QURDEL

Name: CORPORATION OF DELTA Address: 4500 CLARENCE TAYLOR CRES.  DELTA BC V4K-3E2 Attn: Thomas Loo Phone: (604) 946-3361 Fax: (604) 946-3240	Workorder: 53364 WO.(Other): 58631 PO Num: 800-2470 Project: Date Sampled: Date Received: Apr 28, 2000 Date Reported: May 16, 2000
--	--

## Petroleum Hydrocarbons

	Detection Limit	Units	53364-1 Well #1	53364-2 Well #3	53364-3 Well #5	53364-4 WS #1
<b>BTEX In Water</b>						
Benzene	0.001	mg/L	<0.001	<0.001	<0.001	<0.001
Toluene	0.001	mg/L	<0.001	<0.001	<0.001	<0.001
Ethylbenzene	0.001	mg/L	<0.001	<0.001	<0.001	<0.001
Total Xylenes (o,m, & p)	0.001	mg/L	<0.001	<0.001	<0.001	<0.001
<b>MTBE In water</b>						
Methyl t-butyl ether	1	µg/L	<1	<1	<1	<1
<b>Surrogates</b>						
Dibromofluoromethane		%	101	100	100	101
Toluene-d8		%	101	99	101	100
Bromofluorobenzene		%	97	97	98	96

Approved By:   
 Randy Neumann, B.Sc.  
 Lab Manager



Client Code: **CORDL**

Name: **CORPORATION OF DELTA**  
 Address: **4500 CLARENCE TAYLOR CRES.**


**DELTA**  
**BC V4K-3E2**  
 Attn: **Thomas Loo**  
 Phone: **(604) 946-3361**  
 Fax: **(604) 946-3240**

Workorder: **53364**  
 WO (Other): **58631**  
 PO Num: **800-2470**  
 Project:  
 Date Sampled:  
 Date Received: **Apr 28, 2000**  
 Date Reported: **May 16, 2000**

## Water Analysis

	Detection Limit	Units	53364-1 Well #1	53364-2 Well #3	53364-3 Well #5	53364-4 WS #1
<b>Potability</b>						
pH	0.1	pH	7.7	7.9	7.7	7.6
Electrical Conductivity	0.01	µS/cm	175	170	170	155
Total Dissolved Solids	1	mg/L	136	134	120	121
Total Suspended Solids	5	mg/L	<5	<5	<5	<5
Ammonium-N	0.001	mg/L	<0.001	<0.001	<0.001	<0.001
Potassium	0.2	mg/L	1.6	1.8	1.8	1.7
Calcium	0.05	mg/L	19.3	20.5	18.8	17.6
Magnesium	0.05	mg/L	7.12	7.68	7.49	6.72
Sodium	0.05	mg/L	7.13	7.28	7.32	7.23
Iron	0.003	mg/L	0.01	0.031	0.004	0.028
Copper	0.002	mg/L	0.007	0.007	0.009	0.006
Zinc	0.001	mg/L	0.004	0.003	0.003	0.003
Manganese	0.0006	mg/L	0.0081	0.0009	0.004	0.0038
Phosphate-P	0.005	mg/L	0.056	0.059	0.062	0.08
Sulphate	0.1	mg/L	8.8	7.8	7	5.4
Chloride	0.1	mg/L	9.11	5	5.5	3.7
Fluoride	0.1	mg/L	<0.1	0.1	<0.1	<0.1
Boron	0.01	mg/L	<0.01	<0.01	<0.01	<0.01
Carbonate	5	mg/L	<5	<5	<5	<5
Bicarbonate	5	mg/L	65	71	71	65
Total Coliforms	1	/100 mL	<1	<1	<1	<1
Fecal Coliforms	1	/100 mL	<1	<1	<1	<1
Hardness (CaCO3 equiv)	1	mg/L	78	83	78	44
Nitrate+Nitrite-N	0.05	mg/L	0.28	0.43	0.3	0.31
<b>WL36 metals</b>						
Arsenic	0.02	mg/L	<0.02	<0.02	<0.02	<0.02
Barium	0.0005	mg/L	0.0053	0.0062	0.006	0.0031
Cadmium	0.0005	mg/L	<0.0005	<0.0005	<0.0005	<0.0005
Chromium	0.001	mg/L	<0.001	0.003	0.002	0.002
Lead	0.005	mg/L	<0.005	<0.005	<0.005	<0.005
Mercury	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001
Selenium	0.002	mg/L	<0.002	<0.002	<0.002	<0.002
Uranium	0.06	mg/L	<0.06	<0.06	<0.06	<0.06

Approved By: \_\_\_\_\_

  
 John Davidson, Dipl. T., C.P.H.I. (C)  
 Supervisor, Inorganics Lab

na = not available



# NORWEST LABS

Surrey Ph (604) 514-3322 FAX (604) 514-3323  
Edmonton Ph (403) 438-5522 FAX (403) 438-0396  
Calgary Ph (403) 291-2022 FAX (403) 291-2021  
Lethbridge Ph (403) 329-9266 FAX (403) 327-8527  
Winnipeg Ph (204) 982-8630 FAX (204) 275-6019

Name : CORPORATION OF DELTA  
Address : 4500 CLARENCE TAYLOR CRES.  
DELTA  
BC  
V4K-3E2  
Attention: Thomas Loo  
Phone : 604 946-3361  
Fax : 604 946-3240

WO (Surrey) : 56446  
Quote No. :  
WO (Other) : 79500  
PO Num : 800-2470  
Project :  
Date Sampled : Aug 28, 2000  
Date Received : Aug 28, 2000  
Date Reported : Sep 11, 2000

## Method References

### BTEX in Water

US EPA Method 8020 which involves purge and trap extraction of the volatile components followed by analysis with capillary gas chromatography using a photo-ionization detector. Equivalent to BC Environmental Laboratory Manual method , March 3, 1997.



# NORWEST LABS

Calgary Ph (403) 291-2022 FAX (403) 291-2021  
 Lethbridge Ph (403) 329-9266 FAX (403) 327-8527  
 Winnipeg Ph (204) 982-8630 FAX (204) 275-6019

Client Code: CORDEL

Name: CORPORATION OF DELTA  
 Address: 4500 CLARENCE TAYLOR CRES.

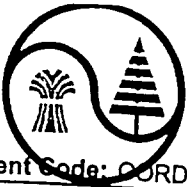
DELTA  
 BC V4K-3E2  
 Attn: Thomas Loo  
 Phone: (604) 946-3361  
 Fax: (604) 946-3240

Workorder: 56446  
 WO (Other): 79500  
 PO Num: 800-2470  
 Project:  
 Date Sampled: Aug 28, 2000  
 Date Received: Aug 28, 2000  
 Date Reported: Sep 11, 2000

## Water Analysis

	Detection Limit	Units	56446-1 Well #1	56446-2 Well #3	56446-3 Well #5	56446-4 WS #1
<b>Potability</b>						
pH	0.1	pH	7.72	7.81	7.64	7.59
Electrical Conductivity	0.01	µS/cm	160	180	170	180
Total Dissolved Solids	1	mg/L	109	120	110	124
Total Suspended Solids	5	mg/L	<5	<5	<5	<5
Ammonium-N	0.05	mg/L	<0.05	<0.05	<0.05	<0.05
Potassium	0.2	mg/L	1.4	1.8	1.7	8.7
Calcium	0.05	mg/L	17.1	19.8	18.5	45.2
Magnesium	0.05	mg/L	6.41	7.28	7.18	7.48
Sodium	0.05	mg/L	7.06	7.04	7.33	40.2
Iron	0.003	mg/L	0.019	<0.003	0.022	2.07
Copper	0.002	mg/L	0.007	0.004	0.01	0.008
Zinc	0.001	mg/L	0.002	0.002	0.003	0.121
Manganese	0.0006	mg/L	<0.0006	<0.0006	0.001	0.236
Phosphate-P	0.005	mg/L	0.18	0.18	0.19	0.18
Sulphate	0.1	mg/L	5.2	7.9	6.5	9
Chloride	0.1	mg/L	4.2	5	5.8	9.2
Fluoride	0.1	mg/L	<0.1	<0.1	<0.1	<0.1
Boron	0.01	mg/L	<0.01	<0.01	<0.01	0.02
Carbonate	5	mg/L	<5	<5	<5	<5
Bicarbonate	5	mg/L	68	77	73	64
Total Coliforms	1	/100 mL	<1	<1	<1	<1
Fecal Coliforms	1	/100 mL	<1	<1	<1	<1
Hardness (CaCO3 equiv)	1	mg/L	69.2	79.5	75.9	144
Nitrate+Nitrite-N	0.05	mg/L	0.35	0.45	0.34	0.38
<b>WL36 metals</b>						
Arsenic	0.02	mg/L	<0.02	<0.02	<0.02	<0.02
Barium	0.0005	mg/L	0.0032	0.0055	0.0057	0.0294
Cadmium	0.0005	mg/L	<0.0005	<0.0005	<0.0005	<0.0005
Chromium	0.001	mg/L	0.002	0.002	0.002	<0.001
Lead	0.005	mg/L	<0.005	<0.005	<0.005	<0.005
Mercury	0.0001	mg/L	<0.0001	<0.0001	<0.0001	<0.0001
Selenium	0.002	mg/L	<0.002	<0.002	<0.002	<0.002
Uranium	0.06	mg/L	<0.06	<0.06	<0.06	<0.06

Approved By: John Davidson  
 John Davidson, Dipl. T., C.P.H.I. (C)  
 Supervisor, Inorganics Lab



# NORWEST LABS

Surrey Ph (604) 514-3322 FAX (604) 514-3323  
 Edmonton Ph (403) 438-5522 FAX (403) 438-0398  
 Calgary Ph (403) 291-2022 FAX (403) 291-2021  
 Lethbridge Ph (403) 329-9266 FAX (403) 327-8527  
 Winnipeg Ph (204) 982-8630 FAX (204) 275-6019

Client Code: **CDRDEL**

Name: CORPORATION OF DELTA  
 Address: 4500 CLARENCE TAYLOR CRES.

DELTA  
 BC V4K-3E2  
 Attn: Thomas Loo  
 Phone: (604) 946-3361  
 Fax: (604) 946-3240

Workorder: **56446**  
 WO (Other): 79500  
 PO Num: 800-2470  
 Project:  
 Date Sampled: Aug 28, 2000  
 Date Received: Aug 28, 2000  
 Date Reported: Sep 11, 2000

## Petroleum Hydrocarbons

	Detection Limit	Units	56446-1	56446-2	56446-3	56446-4
			Well #1	Well #3	Well #5	WS #1
<b>BTEX in Water</b>						
Benzene	0.001	mg/L	<0.001	<0.001	<0.001	<0.001
Toluene	0.001	mg/L	<0.001	<0.001	<0.001	<0.001
Ethylbenzene	0.001	mg/L	<0.001	<0.001	<0.001	<0.001
Total Xylenes (o,m, & p)	0.001	mg/L	<0.001	<0.001	<0.001	<0.001
<b>MTBE in water</b>						
Methyl t-butyl ether	1	µg/L	<1	<1	<1	<1

Approved By: *Randy Neumann*  
 Randy Neumann, B.Sc.  
 Lab Manager