

Part III Form 2
Section 11. ANNUAL REPORT.

Drinking-Water System Number:	220003467
Drinking-Water System Name:	Levack Well Supply
Drinking-Water System Owner:	Vale Inco
Drinking-Water System Category:	Large Municipal Residential
Period being reported:	January 1, 2008 to December 31, 2008

Complete if your Category is Large Municipal Residential or Small Municipal Residential

Does your Drinking-Water System serve more than 10,000 people? Yes [] No []

Is your annual report available to the public at no charge on a web site on the Internet? Yes [] No []

The report is provided to the city of Greater Sudbury (www.city.greatersudbury.on.ca/) / news release.

Location where Summary Report required under O. Reg. 170/03 Schedule 22 will be available for inspection.

The office of Wendy Wisniewski
Inco General Engineering Building
337 Power Street
Copper Cliff, Ontario
POM 1N0
(705) 682-8247

Complete for all other Categories.

Number of Designated Facilities served:

Did you provide a copy of your annual report to all Designated Facilities you serve?

Yes [] No [N/A]

Number of Interested Authorities you report to:

Did you provide a copy of your annual report to all Interested Authorities you report to for each Designated Facility?

Yes [] No [N/A]

List Drinking-Water Systems, which receive all of their drinking water from your system:

Town of Levack Ontario. (POM 2CO) Owned and Operated by the City of Greater Sudbury

Did you provide a copy of your annual report to all Drinking-Water System owners that are connected to you and to whom you provide all of its drinking water?

Yes [] No []

Indicate how you notified system users that your annual report is available, and is free of charge.

[] Public access/notice via the web

- Public access/notice via Government Office
- Public access/notice via a newspaper
- Public access/notice via Public Request
- Public access/notice via a Public Library
- Public access/notice via other method. **A copy of the report is provided to the owners who are connected to our water system. The owners make the report available to the public. (City of Greater Sudbury, Xstrata mine & mill).**

Describe your Drinking-Water System

The Levack Potable Water System gets its water from three wells situated in the Town of Levack on High Street. These wells draw water from an underground aquifer. The wells are situated in the aquifer composed of sand and gravel laid down in a bedrock trough approximately 1500 feet wide and a depth of 112 feet. The #1 and #2 wells were installed in 1952 and are 68 and 71 feet deep respectively. The #3 well was installed in 1957 and is 74 feet deep. Artificial recharging of the aquifer through the use of recharge pits began in 1969 and continues. Artificial recharging of the aquifer is a means of increasing the amount and rate of natural infiltration through the use of water filled recharge pits approximately seven feet deep. Water for these pits is drawn from the Onaping River. The raw water drawn from the wells is treated at the #3 Pumphouse. Treatment consists of adding sodium hexametaphosphate, which is used for iron and manganese sequestering. Sodium hypochlorite is added for chlorination. Sodium hydroxide is then added to raise the pH in order to meet the Ontario Drinking Water Standards. Our licensed operators ensure clean safe drinking water is then delivered to Vale Inco and Xstrata Mines and to the City of Greater Sudbury, which operates a distribution system that supplies the Town of Levack. These wells are able to supply 2.1 million US gallons of treated water per day to the Mines and Municipality. Once water has been treated it is routinely tested to ensure its quality and safety before it is pumped through miles of water mains to your faucets.

List all water treatment chemicals used over this reporting period

22935 liters of Sodium Hypochlorite
 1,736 liters of Sodium Hexametaphosphate
 34,676 Kilograms of Sodium Hydroxide 25%

Were any significant expenses incurred to?

- Install required equipment
- Repair required equipment
- Replace required equipment

Describe

No significant expense incurred.

Provide details on the notices submitted in accordance with subsection 18(1) of the Safe Drinking-Water Act or section 16-4 of Schedule 16 of O.Reg.170/03 and reported to Spills Action Centre

8 incidents during the reported period of January 1, 2008 to December 31, 2008

<u>Date</u>	<u>Date Notified</u>	<u>Date Reported</u> <u>AWQI Notification #</u>	<u>Location</u>	<u>Adverse Indicator</u>	<u>Actions Taken</u>	<u>Comments</u>
April 22,08	April 22, 08 10:50 am	April 23, 2008 12:01 pm AWQI #79044	Vale Inco Levack well system	Turbidity levels > 1.0 NTU	Continuous monitoring conducted.	Vipond Fire Protection flushing lines at the Levack sewage plant hydrant location. Pressure and flow fluctuations created the Turbidity spikes to the analyzer located across the road from the hydrant.
May 3, 08	May 3, 08 5:10 am	May 3, 08 6:30 am AWQI #79220	Vale Inco Levack well system	Turbidity levels > 1.0 NTU	Continuous monitoring and flushing conducted.	Main water line break at # 3 pumphouse. Shut down and drained the system for repairs. Dirt movement in line when re-initiating the system along with flow and pressure changes caused the turbidity spikes.
July 21, 08	July 21, 08 9:08 am	July 21, 08 9:08 am AWQI #81324	Vale Inco Levack well system	Turbidity levels > 1.0 NTU	Continuous monitoring and flushing conducted.	The City of Greater Sudbury were conducting a flushing campaign near the turbidity analyzer location causing and back and forth flow in the main distribution line.
Aug.13, 08	Aug.13, 08 9:30 pm	Aug.13, 08 3:31 pm AWQI #82695	Vale Inco Levack well system	Turbidity levels > 1.0 NTU	Continuous monitoring and flushing conducted.	The City of Greater Sudbury fire dept. were conducting a fire drills and flushing the hydrant near the turbidity analyzer location causing and back and forth flow in the main distribution line
Sept. 30, 08	Sept. 30, 08 2:54 pm	Sept 30, 08 5:17 pm AWQI #84298	Vale Inco Levack well system	Turbidity levels > 1.0 NTU	Continuous monitoring and flushing conducted.	The City of Greater Sudbury were filling water trucks at the hydrant nearest the analyzer. They were using 2.5" hoses creating a back and forth flow in the distribution system.
Oct. 25,26 08	Oct. 25, 08 9:40am 4:25pm Oct. 27,08 10:35am	Oct. 25, 08 9:40am AWQI #84981 4:25pm AWQI #84984 Oct. 26, 08 3:16pm AWQI# 84998	Vale Inco Levack well system	Turbidity levels > 1.0 NTU	Continuous monitoring and flushing conducted.	FNX Mining had an airline cross connected to the water line creating a disturbance in the water system. The analyzer picked it up the air bubbles. The line was disconnected and capped.

Microbiological testing done under section 8-2 during this reporting period

	Number of Samples	Range of E.Coli Or Fecal Results (#-#)	Range of Total Coliform Results (#-#)	Number of HPC Samples Or Background Colony Counts	Range of HPC Results (#-#) Or Background Colony Counts
Raw	156	(ND) CFU/100mL	(ND to 24) CFU/100mL		
Treated	52	(ND) CFU100/mL	(ND) CFU/100mL	52	(ND to 10) CFU/100mL HPC
Distribution (Plumbing)	52	(ND) CFU100/mL	(ND) CFU/100mL	52	(ND to 10) CFU/100mL HPC

ND = Not Detected

Operational testing done under Schedule 7, 8 or 9 during the period covered by this Annual Report.

	Number of Grab Samples	Range of Results (#-#)
Turbidity	8760	(0.05 to 0.53) NTU
Chlorine	8760	(0.83 to 1.41) mg/L
Chlorine Residual Distribution System	8760	(0.83 to 1.41) mg/L
Fluoride (If the DWS provides fluoridation)		N/A

NOTE: For continuous monitors use 8760 as the number of samples.

NOTE: Record the unit of measure if it is not milligrams per litre.

Summary of additional testing and sampling carried out in accordance with the requirement of an approval or order.

Date of order or C of A	Parameter	Date Sampled	Result	Unit of Measure
Certificate of Approval No.7231-6MBKK3 Levack Water Treatment Plant Proposal to Condition 5.5 submitted to the ministry September 26, 2003	SEE APPENDIX A FOR DATE, LIST OF PARAMETERS AND RESULTS OF TESTING.			

Summary of Inorganic parameters tested during this reporting period or most recent

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Antimony	January 31, 07	< 0.0002	mg/L	No
Arsenic	January 31, 07	0.0003	mg/L	No
Barium	January 31, 07	0.012	mg/L	No
Boron	January 31, 07	0.0067	mg/L	No
Cadmium	January 29, 08	< 0.000003	mg/L	No
Chromium	January 29, 08	0.0006	mg/L	No
Lead	January 29, 08	0.00003	mg/L	No
Mercury	January 29, 08	< 0.00002	mg/L	No
Selenium	January 29, 08	< 0.001	mg/L	No
Sodium	January 29, 08	10.7	mg/L	No
Uranium	January 29, 08	0.000059	mg/L	No
Fluoride	January 29, 08	<0.00006	mg/L	No
Nitrite	January 29, 08	< 0.005	mg/L	No
Nitrate	January 29, 08	0.359	mg/L	No

Summary of Organic parameters sampled during this reporting period or most recent

Parameter	Sample Date	Result Value	Unit of Measure	Exceedance
Alachlor	Jan.29, 08	< 0.00015	mg/L	No
Aldicarb	Jan.29, 08	< 0.0003	mg/L	No
Aldrin + Dieldrin	Jan.29, 08	< 0.000067	mg/L	No
Atrazine + N-dealkylated metabolites	Jan.29, 08	< 0.00012	mg/L	No
Azinphos-methyl	Jan.29, 08	< 0.00021	mg/L	No
Bendiocarb	Jan.29, 08	< 0.00013	mg/L	No
Benzene	Jan.29, 08	< 0.00037	mg/L	No
Benzo(a)pyrene	Jan.29, 08	< 0.000004	mg/L	No
Bromoxynil	Jan.29, 08	< 0.00033	mg/L	No
Carbaryl	Jan.29, 08	< 0.00016	mg/L	No
Carbofuran	Jan.29, 08	< 0.00037	mg/L	No
Carbon Tetrachloride	Jan.29, 08	< 0.00041	mg/L	No
Chlordane (Total)	Jan.29, 08	< 0.00011	mg/L	No
Chlorpyrifos	Jan.29, 08	< 0.00018	mg/L	No
Cyanazine	Jan.29, 08	< 0.00018	mg/L	No
Diazinon	Jan.29, 08	< 0.000081	mg/L	No
Dicamba	Jan.29, 08	< 0.0002	mg/L	No
1,2-Dichlorobenzene	Jan.29, 08	< 0.0005	mg/L	No
1,4-Dichlorobenzene	Jan.29, 08	< 0.00021	mg/L	No
Dichlorodiphenyltrichloroethane (DDT) + metabolites	Jan.29, 08	< 0.00014	mg/L	No
1,2-Dichloroethane	Jan.29, 08	< 0.00043	mg/L	No
1,1-Dichloroethylene (vinylidene chloride)	Jan.29, 08	< 0.00041	mg/L	No
Dichloromethane	Jan.29, 08	< 0.00034	mg/L	No
2-4 Dichlorophenol	Jan.29, 08	< 0.00015	mg/L	No
2,4-Dichlorophenoxy acetic acid (2,4-D)	Jan.29, 08	< 0.00019	mg/L	No
Diclofop-methyl	Jan.29, 08	< 0.0004	mg/L	No
Dimethoate	Jan.29, 08	< 0.00012	mg/L	No
Dinoseb	Jan.29, 08	< 0.00036	mg/L	No
Diquat	Jan.29, 08	< 0.001	mg/L	No

Diuron	Jan.29, 08	< 0.000087	mg/L	No
Glyphosate	Jan.29, 08	< 0.006	mg/L	No
Heptachlor + Heptachlor Epoxide	Jan.29, 08	< 0.00011	mg/L	No
Linadane (Total)	Jan.29, 08	< 0.000056	mg/L	No
Malathion	Jan.29, 08	< 0.000091	mg/L	No
Methoxychlor	Jan.29, 08	< 0.00014	mg/L	No
Metolachlor	Jan.29, 08	< 0.000092	mg/L	No
Metribuzin	Jan.29, 08	< 0.00012	mg/L	No
Monochlorobenzene	Jan.29, 08	< 0.00058	mg/L	No
Paraquat	Jan.29, 08	< 0.001	mg/L	No
Parathion	Jan.29, 08	< 0.00018	mg/L	No
Pentachlorophenol	Jan.29, 08	< 0.00015	mg/L	No
Phorate	Jan.29, 08	< 0.00011	mg/L	No
Picloram	Jan.29, 08	< 0.00025	mg/L	No
Polychlorinated Biphenyls(PCB)	Jan.29, 08	< 0.00004	mg/L	No
Prometryne	Jan.29, 08	< 0.00023	mg/L	No
Simazine	Jan.29, 08	< 0.00015	mg/L	No
THM (NOTE: show latest annual average)	Jan.29, 08	0.0408	mg/L	No
Temephos	Jan.29, 08	< 0.00031	mg/L	No
Terbufos	Jan.29, 08	< 0.00012	mg/L	No
Tetrachloroethylene	Jan.29, 08	< 0.00045	mg/L	No
2,3,4,6-Tetrachlorophenol	Jan.29, 08	< 0.00014	mg/L	No
Triallate	Jan.29, 08	< 0.0001	mg/L	No
Trichloroethylene	Jan.29, 08	< 0.00038	mg/L	No
2,4,6-Trichlorophenol	Jan.29, 08	< 0.00025	mg/L	No
2,4,5-Trichlorophenoxy acetic acid (2,4,5-T)	Jan.29, 08	< 0.00022	mg/L	No
Trifluralin	Jan.29, 08	< 0.00012	mg/L	No
Vinyl Chloride	Jan.29, 08	< 0.00017	mg/L	No

List any Inorganic or Organic parameter(s) that exceeded half the standard prescribed in Schedule 2 of Ontario Drinking Water Quality Standards.

No half of standards exceeded.

Parameter	Result Value	Unit of Measure	Date of Sample

(Only if DWS category is large municipal residential, small municipal residential, large municipal non-residential, non municipal year round residential, large non municipal non residential)

Drinking-Water Systems Regulation O. Reg. 170/03

APPENDIX A

**# 1 DEEPWELL DAILY GROUND WATER TESTS.
RECHARGE PIT LINER CHANGE 2007**

PARAMETERS	Aluminum	Arsenic	Barium	Boron	Cadmium	Calcium	Chromium	Cobalt	Colour	Copper	Hardness	Iron	Lead	Magnesium
UNITS	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	mg/L	ug/L	TCU	mg/L	mg/L	mg/L	mg/L	ug/L
MAC			1		0.005	n/a	0.05	n/a					0.01	n/a
IMAC		0.025		5		n/a		n/a						n/a
OG	0.1					n/a		n/a			80-100			n/a
AO						n/a		n/a	5	1		0.3		n/a
MDL	0.001	0.001	0.001	0.002	0.0001	50	0.001	0.1	4	0.001	0.1	0.02	0.001	4
July 10,08	0.0083	<0.001	0.0110	0.0043	<0.0001	5,400	<0.001	<0.1	6.7	0.0038	16.6	<0.02	<0.001	762
July 11,08	0.0099	<0.001	0.0137	0.0047	<0.0001	8,240	<0.001	0.13	7.6	0.0042	25.2	<0.02	<0.001	1,130
July 12,08	0.0065	<0.001	0.0180	0.0050	<0.0001	8,920	<0.001	<0.1	6.9	0.003	28.1	<0.02	<0.001	1,410
July 13,08	0.0072	<0.001	0.0190	0.0067	<0.0001	11,200	<0.001	<0.1	4.3	0.0037	35.6	<0.02	<0.001	1,860
July 14,08	0.0067	<0.001	0.0173	0.0057	<0.0001	9,440	<0.001	<0.1	6	0.0027	30	<0.02	<0.001	1,570
July 15,08	0.00147	<0.001	0.0184	0.0088	<0.0001	13,400	<0.001	<0.1	5.5	0.0055	50.5	<0.02	<0.001	4,110
July 16,08	0.0129	<0.001	0.0188	0.0098	<0.0001	16,200	0.0016	0.12	6.4	0.0049	59	<0.02	<0.001	4,490
July 17,08	0.0195	<0.001	0.0196	0.0100	<0.0001	19,900	<0.001	0.13	<4	0.0042	69	<0.02	<0.001	4,720
July 18,08	0.0174	<0.001	0.0187	0.0099	<0.0001	18,900	<0.001	0.11	<4	0.0041	66.1	<0.02	<0.001	4,570
July 19,08	0.0197	<0.001	0.0188	0.0170	<0.0001	15,700	<0.001	0.14	<4	0.0074	56.8	<0.02	<0.001	4,260
July 20,08	0.0188	<0.001	0.0143	0.0120	<0.0001	11,700	<0.001	0.13	<4	0.0057	42	<0.02	<0.001	3,100
July 21,08	0.0172	<0.001	0.0161	0.0120	<0.0001	14,000	<0.001	0.1	<4	0.0066	50.1	<0.02	<0.001	3,700
July 22,08	0.024	<0.001	0.0158	0.0091	<0.0001	14,700	<0.001	<0.1	6.2	0.0072	51.8	<0.02	<0.001	3,660
July 23,08	0.0232	<0.001	0.0134	0.0086	<0.0001	11,700	<0.001	<0.1	4.4	0.0073	40.9	<0.02	<0.001	2,950
July 24,08	0.0181	<0.001	0.0147	0.0088	<0.0001	13,200	<0.001	<0.1	6	0.0071	46.6	<0.02	<0.001	3,300
July 25,08	0.0191	<0.001	0.0153	0.0088	<0.0001	14,300	<0.001	<0.1	7	0.0076	50.4	<0.02	<0.001	3,590
July 26,08	0.0279	<0.001	0.0108	0.0058	<0.0001	8,660	<0.001	<0.1	7.1	0.0074	30.3	<0.02	<0.001	2,100

MDL = Method Detection Limit or Minimum Reporting Limit

APPENDIX A (continued)

1 DEEPWELL DAILY GROUND WATER TESTS. RECHARGE PIT LINER CHANGE 2008

PARAMETERS	Manganese	Mercury	Nickel	Organic Nitrogen	pH	Silicon	Sodium	Turbidity	Zinc	Moose Creek Hardness	Moose Creek Turbidity	Moose Creek pH	Work Order #
UNITS	mg/L	mg/L	ug/L	mg/L	pH	mg/L	mg/L	NTU	mg/L	mg/L	NTU	pH	
MAC		0.001	n/a			n/a		1					
IMAC			n/a			n/a							
OG			n/a	0.15	6.5 - 8.5	n/a				80-100	1 ntu	6.5 - 8.5	
AO	0.05		n/a			n/a	200		5		5 ntu		
MDL	0.001	0.0001	1	0.05	n/a	0.1	0.05	0.2	0.001			n/a	
							20						
July 10,08	0.0355	<0.0001	3.1	0.38	6.36	5.54	6.49	0.24	0.0038	32	0.24	6.9	59763
July 11,08	0.0420	<0.0001	4.1	0.37	6.44	6.82	6.63	0.16	0.0011	32	0.25	6.9	59764
July 12,08	0.0370	<0.0001	3.8	0.73	6.32	7.06	8.06	<0.1	<0.001	34	0.25	6.9	59826
July 13,08	0.0396	<0.0001	4.1	0.57	6.32	8.14	8.85	<0.1	0.0025	38	0.26	6.9	59829
July 14,08	0.0414	<0.0001	4	0.44	6.34	7.69	8.36	<0.1	0.0043	40	0.26	6.9	59827
July 15,08	0.0432	<0.0001	7.3	<0.05	6.56	5.06	9.82	<0.1	0.0012	46	0.22	6.8	60139
July 16,08	0.0455	<0.0001	6.1	0.39	6.52	5.53	10.30	<0.1	0.0070	47	0.21	6.8	60138
July 17,08	0.0528	<0.0001	6.5	0.18	6.46	4.84	9.47	0.19	0.0049	50	0.19	6.8	60345
July 18,08	0.0529	<0.0001	6.5	0.60	7.01	4.80	9.50	0.18	0.0057	49	0.20	6.9	60346
July 19,08	0.0526	<0.0001	6.4	0.67	6.73	5.20	10.90	<0.1	0.0120	42	0.21	6.9	60423
July 20,08	0.0560	<0.0001	6.2	0.65	6.57	4.65	8.53	<0.1	0.0185	42	0.23	6.9	60424
July 21,08	0.0550	<0.0001	6.2	0.25	6.57	4.86	9.31	<0.1	0.0101	42	0.25	6.9	60425
July 22,08	0.0575	<0.0001	7.1	0.21	6.79	3.24	7.93	<0.1	0.0087	38	0.26	6.9	60707
July 23,08	0.0621	<0.0001	6.5	0.21	6.78	2.98	6.54	<0.1	0.0122	40	0.24	6.9	60706
July 24,08	0.0577	<0.0001	6.7	0.73	6.75	4.27	7.83	0.14	0.0094	36	0.25	7.0	60882
July 25,08	0.0618	<0.0001	7.1	0.55	6.53	4.88	8.71	0.11	0.0083	36	0.25	7.0	60881
July 26,08	0.0624	<0.0001	6.6	0.38	6.56	3.54	5.04	0.19	0.0093	32	0.27	7.0	60958