APPENDIX F

WATER WELL INFORMATION

LOCATION: 17-11-4E

Well_PID: 25791
Owner: J TRAKALO
Driller: Ford Drilling Ltd.
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 644212.474
UTMY: 5531993.54
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z: UNKNOWN
Date Completed: 1975 Jul 01

WELL LOG

From (ft.)	To (ft.)	Log
0	2.0	TILL
2.0	39.0	SOFT CLAY
39.0	53.0	LAYERS OF STONES& SAND
53.0	77.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	55.0	casing	2.00				GALVANIZED
55.0	77.0	open hole					

Top of Casing: ft. below ground

PUMPING TEST

Date:
Pumping Rate: 6.0 Imp. gallons/minute
Water level before pumping: 30.0 ft. below ground
Pumping level at end of test: ?? ft. below ground
Test duration: 1 hours, minutes
Water temperature: ?? degrees F

REMARKS

W.SIDE DAY ST.

LOCATION: 17-11-4E

Well_PID: 56848
Owner: PRO AUTO
Driller: GUY'S WELL DRILLING
Well Name:
Well Use: PRODUCTION
Water Use: Industrial
UTMX: 642574.011
UTMY: 5531964.24
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1986 Sep 16

WELL LOG

From (ft.)	To (ft.)	Log
0	58.0	CLAY
58.0	60.0	TILL
60.0	61.0	LIMESTONE
61.0	66.0	GRAVEL
66.0	75.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	69.0	casing	4.00			INSERT	PVC
69.0	75.0	open hole	4.00				

Top of Casing: 2.0 ft. above ground

PUMPING TEST

Date: 1986 Sep 16
Pumping Rate: 72.0 Imp. gallons/minute
Water level before pumping: 41.0 ft. below ground
Pumping level at end of test: 42.0 ft. below ground
Test duration: 2 hours, minutes
Water temperature: ?? degrees F

REMARKS

2075 PLESIS RD.

LOCATION: 17-11-4E

Well_PID: 34885
Owner: BRUNSWICK ENTERPRISE
Driller: Friesen Drillers Ltd.
Well Name:
Well Use: PRODUCTION
Water Use: Industrial
UTMX: 642574.011
UTMY: 5531964.24
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1978 Jul 17

WELL LOG

From (ft.)	To (ft.)	Log
0	25.0	CLAY
25.0	51.0	TILL
51.0	79.9	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	53.0	casing	6.13			INSERT	BLACK IRON
53.0	79.9	open hole		5.50			

Top of Casing: ft. below ground

PUMPING TEST

Date:
Pumping Rate: 30.0 Imp. gallons/minute
Water level before pumping: 38.0 ft. below ground
Pumping level at end of test: 52.0 ft. below ground
Test duration: hours, minutes
Water temperature: ?? degrees F

LOCATION: 17-11-4E

Well_PID: 76933
Owner: LEO'S CONCRETE PUMPG
Driller: Paul Slusarchuk Well Drilling LTd.
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 642574.011
UTMY: 5531964.24
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1993 Sep 15

WELL LOG

From (ft.)	To (ft.)	Log
0	12.0	SILTY CLAY
12.0	40.0	CLAY
40.0	45.0	SILTY CLAY
45.0	50.0	SILTY TILL
50.0	51.0	FRACTURED LIMESTONE
51.0	142.9	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	53.9	casing	5.00				GALVANIZED
53.9	142.9	open hole	4.80				

Top of Casing: 2.0 ft. below ground

PUMPING TEST

Date: 1993 Sep 15
Pumping Rate: 40.0 Imp. gallons/minute
Water level before pumping: 38.0 ft. below ground
Pumping level at end of test: ?? ft. below ground
Test duration: hours, 30 minutes
Water temperature: ?? degrees F

REMARKS

LEOS CONCRETE PUMPING LTD, 259 GUNN RD, WHILE PUMPING WATER SEEMED TO HAVE A SLIGHT ROTTEN EGG SMELL, PUMPED WITH AIR

LOCATION: 17-11-4E

Well_PID: 20959
Owner: L VAN WALLEGHEN
Driller: AQUARIUS WELL DRILLING
Well Name:
Well Use: PRODUCTION
Water Use: Industrial
UTMX: 642574.011
UTMY: 5531964.24
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1974 Apr 09

WELL LOG

From (ft.)	To (ft.)	Log
0	4.0	DARK CLAY
4.0	50.0	YELLOW CLAY
50.0	84.9	WHITE LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	54.0	casing	2.00				GALVANIZED
54.0	84.9	open hole	2.00				

Top of Casing: ft. below ground

PUMPING TEST

Date:
Pumping Rate: 10.0 Imp. gallons/minute
Water level before pumping: 36.0 ft. below ground
Pumping level at end of test: ?? ft. below ground
Test duration: 1 hours, minutes
Water temperature: ?? degrees F

REMARKS

CORDITE + PLESSIS RD.

LOCATION: 17-11-4E

Well_PID: 18643
Owner: L PIDHIRNEY
Driller: Paul Slusarchuk Well Drilling LTd.
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 642574.011
UTMY: 5531964.24
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1973 Oct 20

WELL LOG

From (ft.)	To (ft.)	Log
0	42.0	CLAY
42.0	68.0	SILTY TILL
68.0	101.9	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	69.0	casing	4.00				GALVANIZED
69.0	101.9	open hole					

Top of Casing: ft. below ground

PUMPING TEST

Date:
Pumping Rate: 20.0 Imp. gallons/minute
Water level before pumping: 42.0 ft. below ground
Pumping level at end of test: ?? ft. below ground
Test duration: 1 hours, minutes
Water temperature: ?? degrees F

REMARKS

1999 PLESIS ROAD

LOCATION: 17-11-4E

Well_PID: 24139
Owner: S DOWHAN
Driller: Paul Slusarchuk Well Drilling LTd.
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 642574.011
UTMY: 5531964.24
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z: UNKNOWN
Date Completed: 1975 Jun 10

WELL LOG

From (ft.)	To (ft.)	Log
0	46.0	CLAY
46.0	61.0	SILTY TILL
61.0	62.0	FRACTURED LIMESTONE
62.0	124.9	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	64.0	casing	4.00			T & C	GALVANIZED
64.0	124.9	open hole					

Top of Casing: ft. below ground

PUMPING TEST

Date:
Pumping Rate: 8.0 Imp. gallons/minute
Water level before pumping: 32.0 ft. below ground
Pumping level at end of test: ?? ft. below ground
Test duration: 1 hours, minutes
Water temperature: ?? degrees F

REMARKS

1480 SPRINGFIELD RD

LOCATION: 17-11-4E

Well_PID: 7645
Owner: AUTOMATIC AUTO
Driller: SONIC DRILLING CO. LTD
Well Name:
Well Use: PRODUCTION
Water Use: Industrial
UTMX: 642574.011
UTMY: 5531964.24
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1965 Oct 18

WELL LOG

From (ft.)	To (ft.)	Log
0	33.0	DARK GREY CLAY
33.0	33.5	GRAVEL
33.5	54.0	BLUE CLAY
54.0	55.0	BOULDERS
55.0	57.0	DARK BLUE CLAY
57.0	90.9	LIMESTONE WITH WATER BEARING FISSURES

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	61.0	casing	5.00				
61.0	90.9	open hole					

Top of Casing: ft. below ground

PUMPING TEST

Date: 1965 Oct 18
Pumping Rate: 149.9 Imp. gallons/minute
Water level before pumping: ft. below ground
Pumping level at end of test: ?? ft. below ground
Test duration: 4 hours, minutes
Water temperature: 41.000 degrees F

REMARKS

AUTOMATIC AUTO + METAL PRESS

LOCATION: 17-11-4E

Well_PID: 73316
Owner: TEAM AUTO
Driller: Perimeter Drilling Ltd.
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 642574.011
UTMY: 5531964.24
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1991 Sep 06

WELL LOG

From (ft.)	To (ft.)	Log
0	51.0	CLAY
51.0	58.0	TILL
58.0	121.9	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	65.0	casing	5.00			INSERT	PVC
65.0	121.9	open hole	4.80				

Top of Casing: ft. below ground

PUMPING TEST

Date: 1991 Sep 06
Pumping Rate: 45.0 Imp. gallons/minute
Water level before pumping: 35.0 ft. below ground
Pumping level at end of test: ?? ft. below ground
Test duration: hours, minutes
Water temperature: ?? degrees F

REMARKS

2073 PLESSIS RD.

LOCATION: 17-11-4E

Well_PID: 74849
Owner: GRAINMASTER MFG LTD
Driller: Echo Drilling Ltd.
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 642574.011
UTMY: 5531964.24
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1992 Jan 06

WELL LOG

From (ft.)	To (ft.)	Log
0	43.0	CLAY
43.0	54.0	TILL
54.0	114.9	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	56.0	casing	5.00			INSERT	PVC
56.0	114.9	open hole	4.50				

Top of Casing: 1.5 ft. below ground

PUMPING TEST

Date: 1992 Jan 06
Pumping Rate: 25.0 Imp. gallons/minute
Water level before pumping: 30.0 ft. below ground
Pumping level at end of test: 40.0 ft. below ground
Test duration: 1 hours, minutes
Water temperature: ?? degrees F

REMARKS

LOT 118, SPRINGFIELD RD

LOCATION: NE17-11-4E

Well_PID: 138780
Owner: MAPLE LEAF DRILLING
Driller: Maple Leaf Enterprises LTd.
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 642969.195
UTMY: 5532381.52
Accuracy XY:
UTMZ:
Accuracy Z:
Date Completed: 2006 Sep 14

WELL LOG

From (ft.)	To (ft.)	Log
0	1.0	CLAY FILL
1.0	28.0	BROWN CLAY
28.0	43.0	GREY CLAY
43.0	47.0	GREY CLAY WITH STONES
47.0	49.0	BROWN TILL
49.0	50.0	LIMESTONE GRAVEL
50.0	52.0	SOFT LIMESTONE
52.0	100.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	52.0	CASING	5.00				PVC
52.0	100.0	OPEN HOLE	4.75				
8.0	45.0						CEMENT

Top of Casing: 2.0 ft. above ground

PUMPING TEST

Date: 2006 Sep 14
Pumping Rate: 50.0 Imp. gallons/minute
Water level before pumping: ?? ft. below ground
Pumping level at end of test: ?? ft. below ground
Test duration: hours, 30 minutes
Water temperature: ?? degrees F

REMARKS

LARGE FRACTURE AT ABOUT 66'. WELL IS NORTHWEST OF BUILDING. PUMPING AIR. LOST WATER AT 50'.

LOCATION: NE17-11-4E

Well_PID: 143872
Owner: CYR CONSTRUCTION
Driller: Stonewall Drilling
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 642168.109
UTMY: 5532369.83
Accuracy XY: 5 GENERAL [1KM-8KM] [WITHIN TOWNSHIP]
UTMZ:
Accuracy Z:
Date Completed: 2007 Jun 19

WELL LOG

From (ft.)	To (ft.)	Log
0	41.0	CLAY
41.0	53.0	FRACTURED LIMESTONE WITH GRAVEL
53.0	186.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	54.0	CASING	4.20	4.50		INSERT	GALVANIZED
10.0	54.0	CASING GROUT					BENTONITE
54.0	186.0	OPEN HOLE		4.00			

Top of Casing: 1.0 ft. above ground

PUMPING TEST

Date: 2007 Jun 19
Pumping Rate: 20.0 Imp. gallons/minute
Water level before pumping: 21.0 ft. below ground
Pumping level at end of test: ?? ft. below ground
Test duration: ??? hours, ?? minutes
Water temperature: ?? degrees F

REMARKS

1076 OXFORD STREET, SPRINGFIELD. WELL IS NORTH OF HOUSE, PUMPED BY AIR.

LOCATION: NE17-11-4E

Well_PID: 135302
Owner: Z WIECZORKIEWICZ
Driller: Maple Leaf Enterprises LTd.
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 642969.195
UTMY: 5532381.52
Accuracy XY:
UTMZ:
Accuracy Z:
Date Completed: 2005 Oct 11

WELL LOG

From (ft.)	To (ft.)	Log
0	4.0	CLAY TILL
4.0	32.0	BROWN CLAY
32.0	43.0	GREY CLAY
43.0	54.0	SOFT TILL
54.0	57.0	HARD TILL WITH LIMESTONE
57.0	100.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	58.0	CASING	5.00			INSERT	PVC
58.0	100.0	OPEN HOLE	4.00				
20.0	40.0	CASING GROUT					BENTONITE
40.0	58.0	CASING GROUT					CUTTINGS

Top of Casing: 1.0 ft. above ground

PUMPING TEST

Date: 2005 Oct 11
Pumping Rate: 40.0 Imp. gallons/minute
Water level before pumping: 36.0 ft. below ground
Pumping level at end of test: ?? ft. below ground
Test duration: 1 hours, minutes
Water temperature: ?? degrees F

REMARKS

LOT 2 SPRINGFIELD RD, CORNER OF OXFORD, N OF HOUSE, PUMPED BY AIR

LOCATION: NE17-11-4E

Well_PID: 134159
Owner: BESTWAY BUILDERS LTD
Driller: Stonewall Drilling
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 642969.195
UTMY: 5532381.52
Accuracy XY:
UTMZ:
Accuracy Z:
Date Completed: 2004 Nov 18

WELL LOG

From (ft.)	To (ft.)	Log
0	15.0	CLAY
15.0	62.0	TILL AND GRAVEL
62.0	225.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	62.0	CASING	4.20			INSERT	GALVANIZED
52.0	225.0	OPEN HOLE		4.00			
12.0	62.0	CASING GROUT					BENTONITE

Top of Casing: 1.5 ft. above ground

PUMPING TEST

Date: 2005 Nov 18
Pumping Rate: 1.0 Imp. gallons/minute
Water level before pumping: 38.0 ft. below ground
Pumping level at end of test: 55.0 ft. below ground
Test duration: hours, 40 minutes
Water temperature: ?? degrees F

REMARKS

SPRINGFIELD RD, W OF HOUSE

LOCATION: NW17-11-4E

Well_PID: 26670
Owner: DEN CHES ENTERPRISES
Driller: JOHN B. CASWELL DRILLING
Well Name:
Well Use: PRODUCTION
Water Use: Industrial
UTMX: 642168.109
UTMY: 5532369.83
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1976 May 01

WELL LOG

From (ft.)	To (ft.)	Log
0	30.0	CLAY
30.0	45.0	TILL
45.0	56.0	GRAVEL RUBBLE
56.0	59.5	FRACTURED LIMESTONE
59.5	102.9	HARD LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
9.0	59.5	casing		4.50			GALVANIZED
59.5	102.9	open hole	3.90				

Top of Casing: ft. below ground

PUMPING TEST

Date:
Pumping Rate: 12.0 Imp. gallons/minute
Water level before pumping: 36.0 ft. below ground
Pumping level at end of test: ?? ft. below ground
Test duration: hours, minutes
Water temperature: ?? degrees F

REMARKS

118 SPRINGFIELD RD

LOCATION: NW17-11-4E

Well_PID: 108563
Owner: J 3 HOLDINGS INC
Driller: Paul Slusarchuk Well Drilling LTd.
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 642168.109
UTMY: 5532369.83
Accuracy XY:
UTMZ:
Accuracy Z:
Date Completed: 1997 Oct 29

WELL LOG

From (ft.)	To (ft.)	Log
0	32.0	CLAY
32.0	41.0	TILL
41.0	42.2	RUBBLE LIMESTONE
42.2	53.0	LIMESTONE
53.0	61.0	LOOSE RUBBLE, SOME CLAY
61.0	144.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	44.8	CASING	5.20			INSERT	GALVANIZED
44.8	144.0	OPEN HOLE	4.90				

Top of Casing: 1.5 ft. above ground

PUMPING TEST

Date: 1997 Oct 29
Pumping Rate: 40.0 Imp. gallons/minute
Water level before pumping: 34.0 ft. below ground
Pumping level at end of test: 41.0 ft. below ground
Test duration: 2 hours, minutes
Water temperature: ?? degrees F

REMARKS

LOT 9 SPRINGFIELD RD, MOST WATER FROM LOOSE RUBBLE ZONE, ABOUT 10 IGPM FROM 61-144 FT, WELL WILL NOT STAY OPEN BELOW LOOSE RUBBLE ZONE

LOCATION: NW17-11-4E

Well_PID: 14298
Owner: C P R
Driller: Paul Slusarchuk Well Drilling LTd.
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 642168.109
UTMY: 5532369.83
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1970 Nov 10

WELL LOG

From (ft.)	To (ft.)	Log
0	7.0	SILT
7.0	41.0	GREY CLAY
41.0	55.0	GREY CLAY, PEBBLES, GRAVEL
55.0	57.0	GRAVEL
57.0	61.0	LIMESTONE, CLAY
61.0	165.9	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	61.0	casing	5.00				
61.0	165.9	open hole					

Top of Casing: ft. below ground

PUMPING TEST

Date: 1970 Nov 10
Pumping Rate: 7.5 Imp. gallons/minute
Water level before pumping: 36.0 ft. below ground
Pumping level at end of test: 75.0 ft. below ground
Test duration: 6 hours, minutes
Water temperature: ?? degrees F

REMARKS

N OF CPR TRACKS, GROUND LEVEL ELEV EST 763 FT

LOCATION: NW17-11-4E

Well_PID: 149541
Owner: BUCKS AUTO PARTS & GENERAL SCRAP
Driller: Paul Slusarchuk Well Drilling LTd.
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 642170
UTMY: 5532372
Accuracy XY: 3 ACCURATE [50-350M] [WITHIN 1/4-SECTION]
UTMZ: 232
Accuracy Z: 4 FAIR - Shuttle at Centroid
Date Completed: 1986 Apr 14

WELL LOG

From (ft.)	To (ft.)	Log
0	49.0	CLAY
49.0	58.0	TILL
58.0	60.0	LIMESTONE RUBBLE
60.0	145.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	60.0	CASING	4.10			INSERT	GALVANIZED
60.0	145.0	OPEN HOLE	3.80				

Top of Casing: 1.7 ft. above ground

PUMPING TEST

Date: 1986 Apr 14
Pumping Rate: 15.0 Imp. gallons/minute
Water level before pumping: 34.0 ft. below ground
Pumping level at end of test: ?? ft. below ground
Test duration: hours, 45 minutes
Water temperature: ?? degrees F

REMARKS

1550 SPRINGFIELD RD, CAR SHREDDER

LOCATION: NW17-11-4E

Well_PID: 20600
Owner: S DOWHAN
Driller: Friesen Drillers Ltd.
Well Name:
Well Use: PRODUCTION
Water Use: Industrial
UTMX: 644212.474
UTMY: 5531993.54
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z: UNKNOWN
Date Completed: 1973 Apr 09

WELL LOG

From (ft.)	To (ft.)	Log
0	12.0	BROWN CLAY
12.0	38.0	BLUE CLAY
38.0	50.0	HARDPAN
50.0	70.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	56.0	casing	4.25			INSERT	BLACK IRON
56.0	70.0	open hole	4.00				

Top of Casing: ft. below ground

PUMPING TEST

Date:
Pumping Rate: 5.0 Imp. gallons/minute
Water level before pumping: 30.0 ft. below ground
Pumping level at end of test: 32.0 ft. below ground
Test duration: 4 hours, minutes
Water temperature: ?? degrees F

REMARKS

1480 SPRINGFIELD ROAD

LOCATION: NW17-11-4E

Well_PID: 76315
Owner: BRUNSWICK ENTERPRISE
Driller: Echo Drilling Ltd.
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 642168.109
UTMY: 5532369.83
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1993 Apr 05

WELL LOG

From (ft.)	To (ft.)	Log
0	6.0	BACKFILL, CONCRETE, REBAR, STEEL
6.0	35.0	CLAY
35.0	50.0	TILL
50.0	53.0	BROKEN ROCK
53.0	96.9	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	55.0	casing	5.00			INSERT	PVC
55.0	96.9	open hole	4.50				

Top of Casing: 2.0 ft. above ground

PUMPING TEST

Date: 1993 Apr 05
Pumping Rate: 30.0 Imp. gallons/minute
Water level before pumping: 40.0 ft. below ground
Pumping level at end of test: 45.0 ft. below ground
Test duration: 1 hours, minutes
Water temperature: ?? degrees F

REMARKS

125 BISMARCK ST

LOCATION: NW17-11-4E

Well_PID: 21234
Owner: GENERAL SCRAP
Driller: Paul Slusarchuk Well Drilling LTd.
Well Name: WELL # 2 (FIRE PROTECTION)
Well Use: PRODUCTION
Water Use: Industrial,Other
UTMX: 642168.109
UTMY: 5532369.83
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1974 Jul 05

WELL LOG

From (ft.)	To (ft.)	Log
0	37.0	CLAY
37.0	48.0	TILL
48.0	52.0	SILTY CLAY WITH STONES
52.0	56.0	FRACTURED LIMESTONE
56.0	124.9	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	56.0	casing	5.00			INSERT	BLACK IRON
56.0	124.9	open hole	5.00				

Top of Casing: ft. below ground

PUMPING TEST

Date:
Pumping Rate: 60.0 Imp. gallons/minute
Water level before pumping: 37.0 ft. below ground
Pumping level at end of test: ?? ft. below ground
Test duration: 1 hours, 15 minutes
Water temperature: ?? degrees F

REMARKS

CAR SHREDDER TLD

LOCATION: NW17-11-4E

Well_PID: 39742
Owner: GENERAL SCRAP
Driller: Paul Slusarchuk Well Drilling LTd.
Well Name: WELL# 3
Well Use: PRODUCTION
Water Use: Industrial
UTMX: 642168.109
UTMY: 5532369.83
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1980 Sep 23

WELL LOG

From (ft.)	To (ft.)	Log
0	4.0	RUBBLE FILL
4.0	30.0	CLAY
30.0	54.0	TILL
54.0	172.9	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	56.0	casing	6.50				BLACK IRON
56.0	172.9	open hole		6.50			

Top of Casing: 1.5 ft. above ground

PUMPING TEST

Date: 1980 Sep 23
Pumping Rate: 100.0 Imp. gallons/minute
Water level before pumping: 40.0 ft. below ground
Pumping level at end of test: 41.0 ft. below ground
Test duration: hours, 30 minutes
Water temperature: ?? degrees F

LOCATION: NW17-11-4E

Well_PID: 18642
Owner: GENERAL SCRAP
Driller: Paul Slusarchuk Well Drilling LTd.
Well Name: WELL#1 (SHOP)
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 642168.109
UTMY: 5532369.83
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1973 Oct 24

WELL LOG

From (ft.)	To (ft.)	Log
0	42.0	CLAY
42.0	53.0	TILL
53.0	57.0	FRACTURED STONE& CLAY
57.0	224.9	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	57.0	casing	4.00				GALVANIZED
57.0	224.9	open hole					

Top of Casing: ft. below ground

PUMPING TEST

Date:
Pumping Rate: 8.0 Imp. gallons/minute
Water level before pumping: 37.0 ft. below ground
Pumping level at end of test: ?? ft. below ground
Test duration: 1 hours, minutes
Water temperature: ?? degrees F

REMARKS

SCRAP AND CAR SHREDDER

LOCATION: SE17-11-4E

Well_PID: 60852
Owner: SOUTHWOOD CONST
Driller: Echo Drilling Ltd.
Well Name:
Well Use: PRODUCTION
Water Use: Industrial
UTMX: 642981.464
UTMY: 5531572.56
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1987 May 08

WELL LOG

From (ft.)	To (ft.)	Log
0	43.0	CLAY
43.0	52.0	TILL
52.0	56.0	LIMESTONE RUBBLE
56.0	94.9	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	57.0	casing	4.20			INSERT	BLACK IRON
57.0	94.9	open hole	4.00				

Top of Casing: 1.0 ft. above ground

PUMPING TEST

Date: 1987 May 08
Pumping Rate: 15.0 Imp. gallons/minute
Water level before pumping: 30.0 ft. below ground
Pumping level at end of test: 40.0 ft. below ground
Test duration: 1 hours, minutes
Water temperature: ?? degrees F

LOCATION: SE17-11-4E

Well_PID: 80875
Owner: F C WOODWORK
Driller: Echo Drilling Ltd.
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 642981.464
UTMY: 5531572.56
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1995 Jun 07

WELL LOG

From (ft.)	To (ft.)	Log
0	48.0	CLAY
48.0	58.0	TILL AND BROKEN ROCK
58.0	114.9	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	60.0	casing	5.00			INSERT	PVC
60.0	114.9	open hole	4.00				

Top of Casing: 3.0 ft. below ground

PUMPING TEST

Date: 1995 Jun 07
Pumping Rate: 50.0 Imp. gallons/minute
Water level before pumping: 30.0 ft. below ground
Pumping level at end of test: 50.0 ft. below ground
Test duration: 1 hours, minutes
Water temperature: ?? degrees F

REMARKS

11 GUNN RD

LOCATION: SE17-11-4E

Well_PID: 130906
Owner: SEVER'S MECHANICAL
Driller: Perimeter Drilling Ltd.
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 644212.474
UTMY: 5531993.54
Accuracy XY:
UTMZ:
Accuracy Z: UNKNOWN
Date Completed: 2003 Nov 14

WELL LOG

From (ft.)	To (ft.)	Log
0	54.0	CLAY
54.0	58.0	TILL
58.0	63.0	LIMESTONE
63.0	66.0	SINKHOLE
66.0	280.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	68.0	CASING	5.00			INSERT	PVC
68.0	280.0	OPEN HOLE	4.50				
		CASING GROUT					

Top of Casing: 2.0 ft. above ground

PUMPING TEST

Date: 2003 Nov 14
Pumping Rate: 8.0 Imp. gallons/minute
Water level before pumping: 38.0 ft. below ground
Pumping level at end of test: 238.0 ft. below ground
Test duration: ??? hours, ?? minutes
Water temperature: ?? degrees F

REMARKS

219 GUNN RD

LOCATION: SE17-11-4E

Well_PID: 134110
Owner: 4928777 MANITOBA LTD
Driller: Stonewall Drilling
Well Name:
Well Use: PRODUCTION
Water Use: Industrial
UTMX: 642981.464
UTMY: 5531572.56
Accuracy XY:
UTMZ:
Accuracy Z:
Date Completed: 2005 Nov 01

WELL LOG

From (ft.)	To (ft.)	Log
0	48.0	CLAY
48.0	53.0	FRACTURED LIMESTONE
53.0	186.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	53.6	CASING	4.20			INSERT	GALVANIZED
53.6	186.0	OPEN HOLE		4.00			
23.0	53.6	CASING GROUT					BENTONITE

Top of Casing: 1.5 ft. above ground

PUMPING TEST

Date: 2005 Nov 01
Pumping Rate: 10.0 Imp. gallons/minute
Water level before pumping: 28.0 ft. below ground
Pumping level at end of test: 41.0 ft. below ground
Test duration: hours, 40 minutes
Water temperature: ?? degrees F

REMARKS

355 GUNN RD, W OF BLDG, PUMPED WITH AIR

LOCATION: SE17-11-4E

Well_PID: 124702
Owner: KELVIN CARTAGE
Driller: Maple Leaf Enterprises LTd.
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 642981.464
UTMY: 5531572.56
Accuracy XY:
UTMZ:
Accuracy Z:
Date Completed: 2003 May 23

WELL LOG

From (ft.)	To (ft.)	Log
0	6.0	FILL
6.0	44.0	CLAY
44.0	58.0	TILL
58.0	64.0	BROKEN LIMESTONE AND GRAVEL

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	65.0	CASING	5.00				PVC
65.0	87.0	OPEN HOLE		4.50			
35.0		CASING GROUT					CEMENT

Top of Casing: 2.0 ft. above ground

PUMPING TEST

Date: 2003 May 23
Pumping Rate: 15.0 Imp. gallons/minute
Water level before pumping: 30.0 ft. below ground
Pumping level at end of test: 30.0 ft. below ground
Test duration: ??? hours, ?? minutes
Water temperature: ?? degrees F

REMARKS

AIR PUMPED 100GPM

LOCATION: SE17-11-4E

Well_PID: 76364
Owner: BRANCHES & ROOT CTRE
Driller: Echo Drilling Ltd.
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 642981.464
UTMY: 5531572.56
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1993 May 03

WELL LOG

From (ft.)	To (ft.)	Log
0	47.0	CLAY
47.0	58.0	TILL
58.0	124.9	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	61.0	casing	5.00			INSERT	PVC
61.0	124.9	open hole	4.75				

Top of Casing: 1.5 ft. below ground

PUMPING TEST

Date: 1993 May 03
Pumping Rate: 25.0 Imp. gallons/minute
Water level before pumping: 40.0 ft. below ground
Pumping level at end of test: 50.0 ft. below ground
Test duration: 1 hours, minutes
Water temperature: ?? degrees F

REMARKS

BRANCHES + ROOTS GARDEN CENTRE, 261 GUNN RD, 6 INCH SOCKET 59-61 FT

LOCATION: SE17-11-4E

Well_PID: 117601
Owner: CUSTOM CENTRE
Driller: Perimeter Drilling Ltd.
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 642981.464
UTMY: 5531572.56
Accuracy XY:
UTMZ:
Accuracy Z:
Date Completed: 1999 Jul 01

WELL LOG

From (ft.)	To (ft.)	Log
0	53.0	CLAY
53.0	56.0	TILL BROKEN LIMESTONE
56.0	62.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	58.0	CASING	5.00			INSERT	PVC
58.0	62.0	OPEN HOLE					

Top of Casing: 2.0 ft. above ground

PUMPING TEST

Date: 1999 Jul 01
Pumping Rate: 25.0 Imp. gallons/minute
Water level before pumping: 30.0 ft. below ground
Pumping level at end of test: 30.0 ft. below ground
Test duration: ??? hours, ?? minutes
Water temperature: ?? degrees F

REMARKS

207 GUNN RD.

LOCATION: SE17-11-4E

Well_PID: 113331
Owner: MASTERS PLUMBING
Driller: Maple Leaf Enterprises LTd.
Well Name: SHOP WELL
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 644212.474
UTMY: 5531993.54
Accuracy XY:
UTMZ:
Accuracy Z: UNKNOWN
Date Completed: 1999 Apr 19

WELL LOG

From (ft.)	To (ft.)	Log
0	4.0	CLAY
4.0	26.0	SILT, BROWN CLAY
26.0	44.0	GREY CLAY
44.0	54.0	SILTY SAND AND GRAVEL
54.0	115.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	56.0	CASING	5.00			INSERT	PVC
56.0	115.0	OPEN HOLE		4.80			
10.0	40.0	CASING GROUT					CEMENT

Top of Casing: 2.0 ft. above ground

PUMPING TEST

Date: 1999 Apr 19
Pumping Rate: 14.0 Imp. gallons/minute
Water level before pumping: 28.0 ft. below ground
Pumping level at end of test: 34.0 ft. below ground
Test duration: ??? hours, ?? minutes
Water temperature: ?? degrees F

REMARKS

201 GUNN RD

LOCATION: SW17-11-4E

Well_PID: 114512
Owner: M.P.I.C.
Driller: Friesen Drillers Ltd.
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 642177.767
UTMY: 5531554.86
Accuracy XY:
UTMZ:
Accuracy Z:
Date Completed: 2000 Mar 07

WELL LOG

From (ft.)	To (ft.)	Log
0	3.0	FILL
3.0	47.0	CLAY
47.0	60.0	TILL
60.0	257.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	62.0	CASING	5.00			INSERT	PVC
62.0	257.0	OPEN HOLE	4.00				
10.0	62.0	CASING GROUT					

BENTONITE

Top of Casing: 2.0 ft. above ground

PUMPING TEST

Date: 2000 Mar 07
Pumping Rate: 50.0 Imp. gallons/minute
Water level before pumping: 35.0 ft. below ground
Pumping level at end of test: 60.0 ft. below ground
Test duration: ??? hours, ?? minutes
Water temperature: ?? degrees F

REMARKS

1981 PLESSIS RD.

LOCATION: SW17-11-4E

Well_PID: 113631
Owner: MPIC
Driller: Echo Drilling Ltd.
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 642177.767
UTMY: 5531554.86
Accuracy XY:
UTMZ:
Accuracy Z:
Date Completed: 2000 Nov 24

WELL LOG

From (ft.)	To (ft.)	Log
0	45.0	CLAY
45.0	59.0	TILL
59.0	238.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	61.0	CASING	5.00			INSERT	PVC
61.0	238.0	OPEN HOLE	4.30				
10.0	61.0	CASING GROUT BENTONITE					

Top of Casing: 2.0 ft. above ground

PUMPING TEST

Date: 2000 Nov 24
Pumping Rate: 75.0 Imp. gallons/minute
Water level before pumping: 34.0 ft. below ground
Pumping level at end of test: 60.0 ft. below ground
Test duration: ??? hours, ?? minutes
Water temperature: ?? degrees F

REMARKS

1981 PLESSIS RD

LOCATION: SW17-11-4E

Well_PID: 78503
Owner: K MCDONALD
Driller: Maple Leaf Enterprises LTd.
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 642177.767
UTMY: 5531554.86
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1994 Nov 01

WELL LOG

From (ft.)	To (ft.)	Log
0	3.0	CLAY, BROWN
3.0	5.0	SILT, BROWN
5.0	30.0	BROWN CLAY
30.0	43.0	GREY CLAY
43.0	53.0	SILT TILL
53.0	99.9	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	56.0	casing	5.00			INSERT	PVC
56.0	99.9	open hole		4.75			

Top of Casing: 1.0 ft. below ground

PUMPING TEST

Date:
Pumping Rate: 20.0 Imp. gallons/minute
Water level before pumping: 39.0 ft. below ground
Pumping level at end of test: ?? ft. below ground
Test duration: hours, minutes
Water temperature: ?? degrees F

REMARKS

BATHROOMS FOR WAREHOUSE, LOT 2 GUNN RD

LOCATION: SW17-11-4E

Well_PID: 26967
Owner: M.P.I.C
Driller: Paul Slusarchuk Well Drilling LTd.
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 642177.767
UTMY: 5531554.86
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1976 Sep 30

WELL LOG

From (ft.)	To (ft.)	Log
0	2.0	GRAVEL FILL
2.0	46.0	CLAY
46.0	55.0	TILL
55.0	65.0	BROKEN LIMESTONE & CLAY
65.0	236.8	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	68.0	casing	5.00			T & C	GALVANIZED
62.0	236.8	open hole	4.75				

Top of Casing: ft. below ground

PUMPING TEST

Date:
Pumping Rate: 20.0 Imp. gallons/minute
Water level before pumping: 45.0 ft. below ground
Pumping level at end of test: ?? ft. below ground
Test duration: 1 hours, minutes
Water temperature: ?? degrees F

REMARKS

1981 PLESSIS RD

LOCATION: SW17-11-4E

Well_PID: 153184
Owner: MANITOBA PUBLIC INSURANCE
Driller: Friesen Drillers Ltd.
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 641946
UTMY: 5531269
Accuracy XY: 1 EXACT [<5M] [GPS]
UTMZ: 230
Accuracy Z: 4 FAIR - Shuttle at Centroid
Date Completed: 2009 May 29

WELL LOG

From (ft.)	To (ft.)	Log
0	48.0	TILL
48.0	54.0	BROKEN LIMESTONE
54.0	238.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	56.6	CASING	8.00	8.80		WELDED	BLACK IRON
56.6	238.0	OPEN HOLE	7.50				

Top of Casing: 2.0 ft. above ground

PUMPING TEST

Date: 2009 May 29
Pumping Rate: 350.0 Imp. gallons/minute
Water level before pumping: 27.7 ft. below ground
Pumping level at end of test: 32.6 ft. below ground
Test duration: ??? hours, ?? minutes
Water temperature: ?? degrees F

LOCATION: SW17-11-4E

Well_PID: 147538
Owner: ALVIN MERINUK
Driller: Echo Drilling Ltd.
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 642215
UTMY: 5531205
Accuracy XY: 1 EXACT [<5M] [GPS]
UTMZ: 230
Accuracy Z: 4 FAIR - Shuttle at Centroid
Date Completed: 2008 Jul 29

WELL LOG

From (ft.)	To (ft.)	Log
0	15.0	LIGHT BROWN TILL
15.0	50.0	CLAY
50.0	53.0	WHITE/BROWN TILL
53.0	137.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	55.0	CASING	5.00			INSERT	PVC
55.0	137.0	OPEN HOLE					
10.0	50.0	CASING GROUT					

BENTONITE

Top of Casing: 2.0 ft. above ground

PUMPING TEST

Date: 2008 Jul 29
Pumping Rate: 35.0 Imp. gallons/minute
Water level before pumping: 40.0 ft. below ground
Pumping level at end of test: 41.0 ft. below ground
Test duration: ??? hours, ?? minutes
Water temperature: ?? degrees F

REMARKS

BOX 26. GRP.337. WINNIPEG

LOCATION: SW17-11-4E

Well_PID: 53246
Owner: CALDON WELDING
Driller: Paul Slusarchuk Well Drilling LTd.
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 642177.767
UTMY: 5531554.86
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1985 Apr 10

WELL LOG

From (ft.)	To (ft.)	Log
0	43.0	CLAY
43.0	51.0	TILL
51.0	57.0	LIMESTONE CLAY LAYERS
57.0	134.9	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	58.0	casing	4.00			INSERT	GALVANIZED
58.0	134.9	open hole	3.50				

Top of Casing: 2.0 ft. below ground

PUMPING TEST

Date: 1985 May 10
Pumping Rate: 10.0 Imp. gallons/minute
Water level before pumping: 40.0 ft. below ground
Pumping level at end of test: ?? ft. below ground
Test duration: hours, 30 minutes
Water temperature: ?? degrees F

REMARKS

115 GUNN RD

LOCATION: SW17-11-4E

Well_PID: 56803
Owner: M P I C
Driller: Friesen Drillers Ltd.
Well Name:
Well Use: PRODUCTION
Water Use: Domestic,Irrigation
UTMX: 642177.767
UTMY: 5531554.86
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1986 Jul 11

WELL LOG

From (ft.)	To (ft.)	Log
0	44.0	CLAY
44.0	59.0	TILL
59.0	256.8	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	60.0	casing	4.25			INSERT	GALVANIZED
60.0	256.8	open hole	4.00				

Top of Casing: 2.5 ft. below ground

PUMPING TEST

Date: 1986 Jul 11
Pumping Rate: 15.0 Imp. gallons/minute
Water level before pumping: 41.0 ft. below ground
Pumping level at end of test: 42.0 ft. below ground
Test duration: hours, minutes
Water temperature: ?? degrees F

REMARKS

1981 PLESSIS RD., CHEMICAL ANALYSIS 1990, WATER RIGHTS PUMP TEST DATA FILE.

LOCATION: SW17-11-4E

Well_PID: 123895
Owner: PROTEC SCALE LTD.
Driller: Maple Leaf Enterprises LTd.
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 644212.474
UTMY: 5531993.54
Accuracy XY:
UTMZ:
Accuracy Z: UNKNOWN
Date Completed: 2002 Aug 01

WELL LOG

From (ft.)	To (ft.)	Log
0	3.0	FILL
3.0	45.0	CLAY
45.0	53.0	GREY TILL
53.0	115.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	56.0	CASING	5.00				PVC
56.0	115.0	OPEN HOLE		4.50			
15.0	45.0	CASING GROUT					

BENTONITE

Top of Casing: 1.5 ft. above ground

PUMPING TEST

Date: 2002 Aug 01
Pumping Rate: 15.0 Imp. gallons/minute
Water level before pumping: 40.0 ft. below ground
Pumping level at end of test: 45.0 ft. below ground
Test duration: ??? hours, ?? minutes
Water temperature: ?? degrees F

REMARKS

159 GUNN RD. 20-30 GPM

LOCATION: SW17-11-4E

Well_PID: 134164
Owner: GLEN KELLER
Driller: Stonewall Drilling
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 644212.474
UTMY: 5531993.54
Accuracy XY:
UTMZ:
Accuracy Z: UNKNOWN
Date Completed: 2004 Sep 10

WELL LOG

From (ft.)	To (ft.)	Log
0	40.0	CLAY
40.0	50.0	TILL AND SILT
50.0	54.0	FRACTURED LIMESTONE
54.0	110.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	54.0	CASING	4.20			INSERT	GALVANIZED
54.0	110.0	OPEN HOLE	4.00				
8.0	54.0	CASING GROUT					BENTONITE

Top of Casing: 1.5 ft. above ground

PUMPING TEST

Date: 2004 Sep 10
Pumping Rate: 25.0 Imp. gallons/minute
Water level before pumping: 36.0 ft. below ground
Pumping level at end of test: ?? ft. below ground
Test duration: ??? hours, ?? minutes
Water temperature: ?? degrees F

REMARKS

183 GUNN RD, E OF HOUSE, SUPRA BUILDERS, PUMPED WITH AIR

LOCATION: SW17-11-4E

Well_PID: 134106
Owner: BODDAN SZYSZKO
Driller: Stonewall Drilling
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 642177.767
UTMY: 5531554.86
Accuracy XY:
UTMZ:
Accuracy Z:
Date Completed: 2005 Sep 27

WELL LOG

From (ft.)	To (ft.)	Log
0	50.0	SOFT CLAY
50.0	56.0	TILL
56.0	58.0	FRACTURED LIMESTONE
58.0	145.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	58.6	CASING	4.20			INSERT	GALVANIZED
58.6	145.0	OPEN HOLE		4.00			
30.0	58.6	CASING GROUT					BENTONITE

Top of Casing: 1.6 ft. above ground

PUMPING TEST

Date: 2005 Sep 27
Pumping Rate: 30.0 Imp. gallons/minute
Water level before pumping: 35.0 ft. below ground
Pumping level at end of test: ?? ft. below ground
Test duration: ??? hours, ?? minutes
Water temperature: ?? degrees F

REMARKS

235 GUNN RD, E OF HOUSE, PUMPED WITH AIR

LOCATION: SW17-11-4E

Well_PID: 37216
Owner: KLEEN-TUBE SYSTEMS
Driller: CAPROCK DRILLING LTD.
Well Name:
Well Use: PRODUCTION
Water Use: Industrial
UTMX: 642177.767
UTMY: 5531554.86
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1979 Jun 21

WELL LOG

From (ft.)	To (ft.)	Log
0	48.0	CLAY
48.0	50.0	BROKEN LIMESTONE
50.0	70.0	TIGHT LIMESTONE
70.0	91.9	FRACTURED LIMESTONE
91.9	126.9	TIGHT LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	50.0	casing	6.00				GALVANIZED
50.0	126.9	open hole					

Top of Casing: 1.0 ft. below ground

PUMPING TEST

Date: 1979 Jun 21
Pumping Rate: 5.0 Imp. gallons/minute
Water level before pumping: 28.0 ft. below ground
Pumping level at end of test: ?? ft. below ground
Test duration: 2 hours, minutes
Water temperature: ?? degrees F

REMARKS

NE PLESSIS AND GUNN

LOCATION: SW17-11-4E

Well_PID: 80876
Owner: BRANKO DEMOLITION
Driller: Paul Slusarchuk Well Drilling LTd.
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 642177.767
UTMY: 5531554.86
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1995 Sep 13

WELL LOG

From (ft.)	To (ft.)	Log
0	4.0	FILL
4.0	20.0	SILTY CLAY
20.0	48.0	CLAY
48.0	56.0	TILL
56.0	60.0	WEATHERED LIMESTONE
60.0	183.9	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	60.7	casing	5.00			INSERT	GALVANIZED
60.7	183.9	open hole	4.90				
0	0	casing grout					CEMENT

Top of Casing: 2.0 ft. below ground

PUMPING TEST

Date: 1995 Sep 13
Pumping Rate: 17.0 Imp. gallons/minute
Water level before pumping: 44.0 ft. below ground
Pumping level at end of test: 47.0 ft. below ground
Test duration: hours, 30 minutes
Water temperature: ?? degrees F

REMARKS

LOTS 2 + 3 BLUECHER AVE

LOCATION: SW17-11-4E

Well_PID: 18349
Owner: ROBIN ELECTRIC CO
Driller: D. J. Coyle
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 642177.767
UTMY: 5531554.86
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1973 Jul 03

WELL LOG

From (ft.)	To (ft.)	Log
0	52.0	CLAY
52.0	70.0	LIMESTONE ROCK

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	53.0	casing	4.00			T & C	BLACK IRON
53.0	70.0	open hole					

Top of Casing: ft. below ground

No pump test data for this well.

REMARKS

2011 PLESSIS ROAD NEAR GRASSIE AND CPR MAIN LINE

LOCATION: SW17-11-4E

Well_PID: 73356
Owner: ROBIN ELECTRIC
Driller: HYGAARD'S WELL DRILLING
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 642177.767
UTMY: 5531554.86
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1991 Jun 14

WELL LOG

From (ft.)	To (ft.)	Log
0	46.0	GREY CLAY
46.0	53.0	TILL AND BOULDERS
53.0	62.0	LIMESTONE AND RED SHALE LAYERS
62.0	139.9	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	64.0	casing	4.00			INSERT	GALVANIZED
64.0	139.9	open hole	4.00				

Top of Casing: 1.0 ft. below ground

PUMPING TEST

Date: 1991 Jun 14
Pumping Rate: 12.0 Imp. gallons/minute
Water level before pumping: 39.0 ft. below ground
Pumping level at end of test: ?? ft. below ground
Test duration: hours, 30 minutes
Water temperature: ?? degrees F

LOCATION: SW17-11-4E

Well_PID: 139628
Owner: 4928777 MB LTD
Driller: Stonewall Drilling
Well Name:
Well Use: PRODUCTION
Water Use: Industrial
UTMX: 642177.767
UTMY: 5531554.86
Accuracy XY:
UTMZ:
Accuracy Z:
Date Completed: 2005 Nov 01

WELL LOG

From (ft.)	To (ft.)	Log
0	48.0	CLAY
48.0	53.0	FRACTURED LIMESTONE
53.0	186.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	53.6	CASING		4.20	4.500	INSERT	GALVANIZED
53.6	186.0	OPEN HOLE		4.00			
28.0	53.6	CASING GROUT					BENTONITE

Top of Casing: 1.5 ft. above ground

PUMPING TEST

Date: 2005 Nov 01
Pumping Rate: 10.0 Imp. gallons/minute
Water level before pumping: 28.0 ft. below ground
Pumping level at end of test: 35.0 ft. below ground
Test duration: hours, 15 minutes
Water temperature: ?? degrees F

REMARKS

355 GUNN ROAD, SPRINGFIELD. WELL IS AT THE NORTHWEST CORNER OF HOUSE. PUMPED WITH AIR.

LOCATION: SW17-11-4E

Well_PID: 71223
Owner: AUTOPAC MPIC
Driller: Paul Slusarchuk Well Drilling LTd.
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 642177.767
UTMY: 5531554.86
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1990 Aug 07

WELL LOG

From (ft.)	To (ft.)	Log
0	47.0	CLAY
47.0	53.0	TILL
53.0	54.0	LIMESTONE
54.0	55.0	CLAY
55.0	308.8	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	56.0	casing	6.00			T & C	BLACK IRON
56.0	308.8	open hole		5.80			
0	0	casing grout					

Top of Casing: 2.5 ft. below ground

PUMPING TEST

Date: 1990 Aug 07
Pumping Rate: 129.9 Imp. gallons/minute
Water level before pumping: 39.0 ft. below ground
Pumping level at end of test: ?? ft. below ground
Test duration: 1 hours, minutes
Water temperature: ?? degrees F

REMARKS

1981 PLESSIS RD, WELL CHLORINATED, PUMPED WITH AIR

LOCATION: 16-11-4E

Well_PID: 11575
Owner: W RAYNER
Driller: Paul Slusarchuk Well Drilling LTd.
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 644212.474
UTMY: 5531993.54
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1968 Oct 03

WELL LOG

From (ft.)	To (ft.)	Log
0	34.0	DARK CLAY
34.0	48.0	GREY CLAY, GRAVEL, FEW BOULDERS
48.0	60.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	48.0	casing	4.00				
48.0	60.0	open hole					

Top of Casing: ft. below ground

PUMPING TEST

Date: 1968 Oct 03
Pumping Rate: 20.0 Imp. gallons/minute
Water level before pumping: 28.0 ft. below ground
Pumping level at end of test: 29.0 ft. below ground
Test duration: 1 hours, minutes
Water temperature: ?? degrees F

REMARKS

LOT 36-40, 20 FT S OF DAY ST NORTH, GROUND LEVEL ELEV EST 775 FT

LOCATION: 16-11-4E

Well_PID: 140055
Owner: ALPINE CONCRETE
Driller: Maple Leaf Enterprises LTd.
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 644212.474
UTMY: 5531993.54
Accuracy XY:
UTMZ:
Accuracy Z:
Date Completed: 2006 Aug 31

WELL LOG

From (ft.)	To (ft.)	Log
0	1.0	FILL
1.0	26.0	BROWN CLAY
26.0	35.0	GREY CLAY
35.0	46.0	TILL
46.0	57.0	BOULDERS AND TILL
57.0	60.0	LIMESTONE AND BROKEN LIMESTONE LAYERS
60.0	130.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	60.5	CASING	5.00			INSERT	PVC
60.0	130.0	OPEN HOLE	4.25				
10.0	50.0	CASING GROUT					

BENTONITE

Top of Casing: 1.5 ft. above ground

PUMPING TEST

Date: 2006 Aug 31
Pumping Rate: 15.0 Imp. gallons/minute
Water level before pumping: ?? ft. below ground
Pumping level at end of test: ?? ft. below ground
Test duration: ??? hours, ?? minutes
Water temperature: ?? degrees F

REMARKS

LOT 27 REDONDA, WEST SIDE. NO ADDRESSES AVAILABLE YET. PUMPED WITH AIR.

LOCATION: 16-11-4E

Well_PID: 120205
Owner: SPERLING INDUSTRIES LTD.
Driller: Maple Leaf Enterprises LTd.
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 644212.474
UTMY: 5531993.54
Accuracy XY:
UTMZ:
Accuracy Z:
Date Completed: 2001 Aug 01

WELL LOG

From (ft.)	To (ft.)	Log
0	4.0	FILL
4.0	21.0	BROWN CLAY
21.0	44.0	GREY CLAY
44.0	54.0	TILL
54.0	115.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	56.0	CASING	5.00				PVC
56.0	115.0	OPEN HOLE		4.80			
15.0	40.0	CASING GROUT					

BENTONITE

Top of Casing: 2.0 ft. above ground

PUMPING TEST

Date: 2001 Aug 01
Rate: ?? Imp. gallons/minute
Water level before pumping: 40.0 ft. below ground
Pumping level at end of test: 42.0 ft. below ground
Test duration: ??? hours, ?? minutes
Water temperature: ?? degrees F

REMARKS

GUNN RD. DATE MAY NOT BE ACCURATE.

LOCATION: 16-11-4E

Well_PID: 119096
Owner: WRB
Driller: UNKNOWN
Well Name: EAST SIDE HOOP
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 644212.474
UTMY: 5531993.54
Accuracy XY:
UTMZ:
Accuracy Z:
Date Completed: 1978 Apr 15

No well log data for this well.

No construction data for this well.

Top of Casing: 0.0

No pump test data for this well.

REMARKS

NO WELL LOG. BIRDS HILL PARK CLUB.

LOCATION: NW16-11-4E

Well_PID: 11572
Owner: R BIRD
Driller: Paul Slusarchuk Well Drilling LTd.
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 643803.509
UTMY: 5532396.17
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1968 Mar 22

WELL LOG

From (ft.)	To (ft.)	Log
0	39.0	DARK CLAY
39.0	48.0	GREY CLAY, GRAVEL, BOULDERS
48.0	55.0	GRAVEL, PEBBLES, GREY SANDY CLAY
55.0	104.9	LIMESTONE, WATER AT 55 FEET

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	55.0	casing	5.00				
55.0	104.9	open hole					

Top of Casing: ft. below ground

PUMPING TEST

Date: 1968 Mar 22
Pumping Rate: 9.0 Imp. gallons/minute
Water level before pumping: 30.0 ft. below ground
Pumping level at end of test: 39.0 ft. below ground
Test duration: 3 hours, minutes
Water temperature: ?? degrees F

REMARKS

85 FT E OF DAY ROAD, S OF SPRINGFIELD RD, GROUND LEVEL ELEV EST 775 FT

LOCATION: NW16-11-4E

Well_PID: 63034
Owner: KOSS CABINETS
Driller: Stonewall Drilling
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 643803.509
UTMY: 5532396.17
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1988 Nov 01

WELL LOG

From (ft.)	To (ft.)	Log
0	38.0	CLAY
38.0	58.0	FRACTURED LIMESTONE, SANDY LAYERS
58.0	99.9	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	58.0	casing	4.20			INSERT	GALVANIZED
58.0	99.9	open hole	4.00				

Top of Casing: 2.5 ft. above ground

PUMPING TEST

Date: 1988 Nov 01
Pumping Rate: 8.0 Imp. gallons/minute
Water level before pumping: 29.0 ft. below ground
Pumping level at end of test: 50.0 ft. below ground
Test duration: hours, 35 minutes
Water temperature: ?? degrees F

REMARKS

DAY ST., WEST SIDE 2965 DAY ST

LOCATION: NW16-11-4E

Well_PID: 63035
Owner: RIVERSIDE PAINTING
Driller: Stonewall Drilling
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 643803.509
UTMY: 5532396.17
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1988 Nov 01

WELL LOG

From (ft.)	To (ft.)	Log
0	45.0	CLAY
45.0	61.0	CLAY AND LIMESTONE LAYERS
61.0	134.9	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	61.0	casing	4.20			INSERT	GALVANIZED
61.0	134.9	open hole	4.00				

Top of Casing: 1.5 ft. above ground

PUMPING TEST

Date: 1988 Nov 01
Pumping Rate: 10.0 Imp. gallons/minute
Water level before pumping: 34.0 ft. below ground
Pumping level at end of test: 50.0 ft. below ground
Test duration: 1 hours, 50 minutes
Water temperature: ?? degrees F

REMARKS

LOT 18 DAY ST., 350 FT. S. OF SPRINGFIELD RD.

LOCATION: NW16-11-4E

Well_PID: 103468
Owner: MOUNTAIN VIEW AUTO PARTS LTD
Driller: Paul Slusarchuk Well Drilling LTd.
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 643803.509
UTMY: 5532396.17
Accuracy XY:
UTMZ:
Accuracy Z:
Date Completed: 1996 Aug 26

WELL LOG

From (ft.)	To (ft.)	Log
0	40.0	CLAY
40.0	50.0	SILTY TILL
50.0	52.5	RUBBLE LIMESTONE AND CLAY
52.5	143.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	54.0	CASING					
54.0	143.0	OPEN HOLE					
10.0	40.0	CASING GROUT					

BENTONITE

Top of Casing: 1.5 ft. above ground

PUMPING TEST

Date: 1996 Aug 26
Pumping Rate: 7.0 Imp. gallons/minute
Water level before pumping: 35.0 ft. below ground
Pumping level at end of test: ?? ft. below ground
Test duration: 1 hours, minutes
Water temperature: ?? degrees F

REMARKS

SPRINGFIELD RD, E OF HWY #59

LOCATION: NW16-11-4E

Well_PID: 75660
Owner: GLENWOOD PLASTICS
Driller: Friesen Drillers Ltd.
Well Name:
Well Use: RECHARGE
Water Use: Industrial
UTMX: 643803.509
UTMY: 5532396.17
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1992 Jul 10

WELL LOG

From (ft.)	To (ft.)	Log
0	40.0	CLAY
40.0	45.0	TILL
45.0	52.0	BROKEN ROCK
52.0	179.9	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	46.0	casing	5.00			INSERT	PVC
46.0	53.0	perforations	5.00		0.020	SAW CUT	PVC
40.0	53.0	gravel pack				PEA SIZE	GRAVEL
8.0	40.0	casing grout					CEMENT

Top of Casing: 1.5 ft. above ground

PUMPING TEST

Date: 1992 Jul 13
Pumping Rate: 100.0 Imp. gallons/minute
Water level before pumping: 24.0 ft. below ground
Pumping level at end of test: 10.0 ft. below ground
Test duration: 1 hours, minutes
Water temperature: ?? degrees F

REMARKS

2954 DAY ST, PUMP TEST IS RECOVERY, FORMERLY THOMPSON PLASTICS.

LOCATION: NW16-11-4E

Well_PID: 56307
Owner: B MAJETIC
Driller: Paul Slusarchuk Well Drilling LTd.
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 643803.509
UTMY: 5532396.17
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1986 Oct 30

WELL LOG

From (ft.)	To (ft.)	Log
0	4.0	FILL
4.0	42.0	CLAY
42.0	55.0	TILL
55.0	58.0	FRACTURED LIMESTONE AND CLAY
58.0	134.9	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	59.0	casing	4.10			INSERT	GALVANIZED
59.0	134.9	open hole	3.80				

Top of Casing: 1.6 ft. above ground

PUMPING TEST

Date: 1986 Oct 30
Pumping Rate: 20.0 Imp. gallons/minute
Water level before pumping: 30.0 ft. below ground
Pumping level at end of test: ?? ft. below ground
Test duration: 1 hours, minutes
Water temperature: ?? degrees F

REMARKS

OXFORD ST, OFF SPRINGFIELD RD

LOCATION: NW16-11-4E

Well_PID: 71575
Owner: GLENWOOD PLASTICS
Driller: Watkins & Argue Construction Co.
Well Name:
Well Use: TEST WELL
Water Use:
UTMX: 643803.509
UTMY: 5532396.17
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1991 Jun 14

WELL LOG

From (ft.)	To (ft.)	Log
0	6.0	TOPSOIL
6.0	12.0	YELLOW CLAY
12.0	38.0	GREY CLAY
38.0	42.0	WHITE CLAY AND GRAVEL
42.0	43.0	GRAVEL
43.0	48.0	WHITE CLAY AND GRAVEL
48.0	54.0	LIMESTONE RUBBLE
54.0	70.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	50.0	casing	6.00			INSERT	PVC
50.0	60.0	casing	5.00		0.040	WIRE WOUND	S. S.
45.0	63.0	gravel pack				1.2 MM	QUARTZ

S.

Top of Casing: 1.0 ft. above ground

PUMPING TEST

Date: 1991 Jun 14
Pumping Rate: 78.0 Imp. gallons/minute
Water level before pumping: 31.0 ft. below ground
Pumping level at end of test: 48.0 ft. below ground
Test duration: 2 hours, minutes
Water temperature: ?? degrees F

REMARKS

55 FT. E. OF BLDG. PULLED THIS WELL OUT

LOCATION: NW16-11-4E

Well_PID: 65976
Owner: SOUTHWOOD CONST
Driller: Echo Drilling Ltd.
Well Name:
Well Use: PRODUCTION
Water Use: Industrial
UTMX: 643803.509
UTMY: 5532396.17
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1989 Jul 31

WELL LOG

From (ft.)	To (ft.)	Log
0	40.0	CLAY
40.0	46.0	TILL
46.0	48.0	BROKEN LIMESTONE
48.0	159.9	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	49.0	casing	4.20			INSERT	BLACK IRON
49.0	159.9	open hole	4.00				

Top of Casing: 2.0 ft. above ground

PUMPING TEST

Date: 1989 Jul 31
Pumping Rate: 12.0 Imp. gallons/minute
Water level before pumping: 32.0 ft. below ground
Pumping level at end of test: 38.0 ft. below ground
Test duration: 1 hours, minutes
Water temperature: ?? degrees F

REMARKS

LOT 4 OXFORD ST. WEST

LOCATION: NW16-11-4E

Well_PID: 30706
Owner: GLENWOOD PLASTICS
Driller: Paul Slusarchuk Well Drilling LTd.
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 643803.509
UTMY: 5532396.17
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1977 Sep 15

WELL LOG

From (ft.)	To (ft.)	Log
0	45.0	CLAY
45.0	52.0	BROKEN RUBBLE LIMESTONE
52.0	124.9	LIMESTONE SOME FRACTURED ZONES

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	52.0	casing	4.00			T & C	GALVANIZED
52.0	124.9	open hole	3.75				

Top of Casing: ft. below ground

PUMPING TEST

Date:
Pumping Rate: 15.0 Imp. gallons/minute
Water level before pumping: 32.0 ft. below ground
Pumping level at end of test: ?? ft. below ground
Test duration: hours, 30 minutes
Water temperature: ?? degrees F

REMARKS

PREVIOUS OWNER SPRINGHILL LUMBER 2954 DAY ST

LOCATION: NW16-11-4E

Well_PID: 106904
Owner: NORTECH AUTO PARTS/CHRIS SZEINTAG
Driller: Stonewall Drilling
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 643803.509
UTMY: 5532396.17
Accuracy XY:
UTMZ:
Accuracy Z:
Date Completed: 1998 Oct 14

WELL LOG

From (ft.)	To (ft.)	Log
0	38.0	CLAY
38.0	42.0	TILL
42.0	48.0	LIMESTONE
48.0	55.0	TILL
55.0	81.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	55.0	CASING	4.20			INSERT	GALVANIZED
55.0	81.0	OPEN HOLE	4.00				
20.0	55.0	CASING GROUT					CEMENT

Top of Casing: 1.5 ft. above ground

PUMPING TEST

Date: 1998 Oct 14
Pumping Rate: 20.0 Imp. gallons/minute
Water level before pumping: 31.0 ft. below ground
Pumping level at end of test: ?? ft. below ground
Test duration: hours, 20 minutes
Water temperature: ?? degrees F

REMARKS

W ST OF DAY ST, S OF AUCTION AUTO, KOSS N OF KOSS CABINETS, PUMPED WITH AIR

LOCATION: NW16-11-4E

Well_PID: 125180
Owner: AKRIM AUTO AND TRUCK PARTS
Driller: Selkirk Drillers
Well Name:
Well Use: PRODUCTION
Water Use:
UTMX: 644212.474
UTMY: 5531993.54
Accuracy XY:
UTMZ:
Accuracy Z: UNKNOWN
Date Completed: 2000 Jul 08

WELL LOG

From (ft.)	To (ft.)	Log
0	4.0	BACKFILL PACK
4.0	42.0	GREY CLAY
42.0	55.0	TILL
55.0	65.0	BROKEN LIMESTONE
65.0	84.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	67.0	CASING	5.00				PVC
67.0	84.0	OPEN HOLE	4.50				

Top of Casing: 1.0 ft. above ground

PUMPING TEST

Date: 2000 Jul 08
Pumping Rate: 40.0 Imp. gallons/minute
Water level before pumping: 28.0 ft. below ground
Pumping level at end of test: ?? ft. below ground
Test duration: ??? hours, ?? minutes
Water temperature: ?? degrees F

REMARKS

2691 DAY ST.

LOCATION: NW16-11-4E

Well_PID: 103188
Owner: ED BOYECHKO
Driller: Paul Slusarchuk Well Drilling LTd.
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 643803.509
UTMY: 5532396.17
Accuracy XY:
UTMZ:
Accuracy Z:
Date Completed: 1996 Jun 10

WELL LOG

From (ft.)	To (ft.)	Log
0	40.0	CLAY, SILTY
40.0	46.0	SILTY TILL
46.0	52.0	LAYERS OF LIMESTONE AND CLAY, SOME RUBBLE LIMESTONE
52.0	143.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	53.0	CASING		4.50			
53.0	143.0	OPEN HOLE		4.90			
8.0	40.0	CASING GROUT					

BENTONITE

Top of Casing: 2.0 ft. above ground

PUMPING TEST

Date: 1996 Jun 10
Pumping Rate: 20.0 Imp. gallons/minute
Water level before pumping: 28.0 ft. below ground
Pumping level at end of test: ?? ft. below ground
Test duration: hours, 45 minutes
Water temperature: ?? degrees F

REMARKS

2975 DAY ST, S OF SPRINGFIELD RD

LOCATION: NW16-11-4E

Well_PID: 124727
Owner: RED RIVER GALVANIZING INC.
Driller: Maple Leaf Enterprises LTd.
Well Name:
Well Use: PRODUCTION
Water Use: Industrial
UTMX: 643803.509
UTMY: 5532396.17
Accuracy XY:
UTMZ:
Accuracy Z:
Date Completed: 2003 Aug 01

WELL LOG

From (ft.)	To (ft.)	Log
0	4.0	FILL
4.0	43.0	CLAY
43.0	45.0	TILL
45.0	46.0	LIMESTONE
46.0	49.0	TILL
49.0	130.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	51.5	CASING	5.00				PVC
51.5	130.0	OPEN HOLE		4.50			
10.0	45.0	CASING GROUT					

BENTONITE

Top of Casing: 0.0

PUMPING TEST

Date: 2003 Aug 01
Pumping Rate: 15.0 Imp. gallons/minute
Water level before pumping: 39.0 ft. below ground
Pumping level at end of test: 40.0 ft. below ground
Test duration: ??? hours, ?? minutes
Water temperature: ?? degrees F

REMARKS

LOT 3 OXFORD ST.

LOCATION: NW16-11-4E

Well_PID: 123941
Owner: POUNDER EMULSIONS
Driller: Maple Leaf Enterprises LTd.
Well Name:
Well Use: PRODUCTION
Water Use: Industrial
UTMX: 643803.509
UTMY: 5532396.17
Accuracy XY:
UTMZ:
Accuracy Z:
Date Completed: 2002 Jun 01

WELL LOG

From (ft.)	To (ft.)	Log
0	28.0	BROWN CLAY
28.0	41.0	GREY CLAY
41.0	50.0	SILTY GREY CLAY
50.0	63.0	SOFT BROKEN LIMESTONE
63.0	130.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	65.0	CASING	5.00				PVC
65.0	130.0	OPEN HOLE		4.50			

Top of Casing: 2.0 ft. above ground

PUMPING TEST

Date: 2002 Jun 01
Pumping Rate: ?? Imp. gallons/minute
Water level before pumping: 28.0 ft. below ground
Pumping level at end of test: ?? ft. below ground
Test duration: ??? hours, ?? minutes
Water temperature: ?? degrees F

REMARKS

1800 DAY

LOCATION: NW16-11-4E

Well_PID: 33786
Owner: DAY AUTO PARTS
Driller: Paul Slusarchuk Well Drilling LTd.
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 644212.474
UTMY: 5531993.54
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z: UNKNOWN
Date Completed: 1978 Aug 14

WELL LOG

From (ft.)	To (ft.)	Log
0	49.0	CLAY
49.0	53.0	SILTY CLAY& STONE
53.0	61.0	WEATHERED ROCK
61.0	124.9	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	61.0	casing	4.00			T & C	GALVANIZED
61.0	124.9	open hole	3.50				

Top of Casing: ft. below ground

PUMPING TEST

Date:
Pumping Rate: 10.0 Imp. gallons/minute
Water level before pumping: 30.0 ft. below ground
Pumping level at end of test: ?? ft. below ground
Test duration: hours, minutes
Water temperature: ?? degrees F

LOCATION: NW16-11-4E

Well_PID: 70728
Owner: ACTION RECYCLED
Driller: Perimeter Drilling Ltd.
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 643803.509
UTMY: 5532396.17
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1990 Sep 10

WELL LOG

From (ft.)	To (ft.)	Log
0	2.0	FILL
2.0	55.0	CLAY
55.0	60.0	BROKEN LIMESTONE
60.0	186.9	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	62.0	casing	5.00			INSERT	PVC
62.0	186.9	open hole	4.80				

Top of Casing: 1.0 ft. above ground

PUMPING TEST

Date: 1990 Sep 10
Pumping Rate: 30.0 Imp. gallons/minute
Water level before pumping: 30.0 ft. below ground
Pumping level at end of test: 30.0 ft. below ground
Test duration: 1 hours, minutes
Water temperature: 41.000 degrees F

REMARKS

W. SIDE DAY STREET 2955 DAY ST

LOCATION: NW16-11-4E

Well_PID: 71577
Owner: SPARTECK PROFILES/WRB
Driller: Watkins & Argue Construction Co.
Well Name: G05OJ139 GM262 THOMPSON
Well Use: PRODUCTION
Water Use: Industrial
UTMX: 644022
UTMY: 5532320
Accuracy XY: 1 EXACT [<5M] [GPS]
UTMZ:
Accuracy Z: UNKNOWN
Date Completed: 1991 Jul 10

WELL LOG

From (ft.)	To (ft.)	Log
0	7.0	YELLOW CLAY
7.0	38.0	GREY CLAY
38.0	46.0	WHITE CLAY AND GRAVEL
46.0	57.0	GRAVEL AND CLAY
57.0	103.9	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	57.4	casing	8.00			INSERT	PVC
57.4	103.9	open hole	6.00				

Top of Casing: ft. below ground

PUMPING TEST

Date: 1991 Jul 10
Pumping Rate: 199.9 Imp. gallons/minute
Water level before pumping: 31.0 ft. below ground
Pumping level at end of test: 35.0 ft. below ground
Test duration: 2 hours, minutes
Water temperature: ?? degrees F

REMARKS

WINNIPEG REGION - PREVIOUSLY USED AS A WRB MONITORING STATION FOR WATER QUALITY (1992-2005) & WATER TEMPERATURE (1992-2005). 2954 DAY ST., E SUPPLY WELL #3, 280 FT. E. OF BLDG. EC=400, HARD=20

LOCATION: NW16-11-4E

Well_PID: 71578
Owner: SPARTECK PROFILES/WRB
Driller: Watkins & Argue Construction Co.
Well Name: G05OJ140 GM263 WELL #2 RETURN
Well Use: RECHARGE
Water Use:
UTMX: 643915
UTMY: 5532372
Accuracy XY: 1 EXACT [<5M] [GPS]
UTMZ:
Accuracy Z: UNKNOWN
Date Completed: 1991 Jun 21

WELL LOG

From (ft.)	To (ft.)	Log
0	4.0	TOPSOIL
4.0	11.0	YELLOW CLAY
11.0	40.0	GREY CLAY
40.0	42.0	GRAVEL, WATER LOSS
42.0	46.0	LIMESTONE, WATER LOSS, HIGH FISSURE
46.0	101.9	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	42.0	casing	8.00			INSERT	PVC
42.0	101.9	open hole	6.00				
39.0	42.0	casing grout					CEMENT
35.0	40.0	casing grout					

Top of Casing: ft. below ground

PUMPING TEST

Date: 1991 Jun 21
Pumping Rate: 173.9 Imp. gallons/minute
Water level before pumping: 31.0 ft. below ground
Pumping level at end of test: 44.0 ft. below ground
Test duration: 2 hours, minutes
Water temperature: ?? degrees F

REMARKS

WINNIPEG REGION - PREVIOUSLY USED AS A WRB MONITORING STATION FOR WATER TEMPERATURE (1992-2005). 2954 DAY ST., THOMPSON PLASTICS, 8 FT. N. OF BLDG. EC=420, FE=0, HARD=22

LOCATION: NW16-11-4E

Well_PID: 71576
Owner: GLENWOOD PLASTICS
Driller: Watkins & Argue Construction Co.
Well Name: WELL #1
Well Use: PRODUCTION
Water Use: Industrial
UTMX: 643803.509
UTMY: 5532396.17
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1991 Jun 12

WELL LOG

From (ft.)	To (ft.)	Log
0	6.0	TOPSOIL
6.0	13.0	YELLOW CLAY
13.0	43.0	GREY CLAY
43.0	56.0	WHITE CLAY AND GRAVEL
56.0	249.8	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	60.0	casing	8.00			INSERT	PVC
60.0	249.8	open hole	6.00				
35.0	57.0	casing grout					CEMENT

Top of Casing: 1.0 ft. above ground

PUMPING TEST

Date: 1991 Jul 10
Pumping Rate: 149.9 Imp. gallons/minute
Water level before pumping: 29.0 ft. below ground
Pumping level at end of test: 62.0 ft. below ground
Test duration: 1 hours, 15 minutes
Water temperature: ?? degrees F

REMARKS

95 FT. E. OF BLDG. EC=460, FE=0, HARD=23

LOCATION: NW16-11-4E

Well_PID: 154793
Owner: NORCRAFT CANADA CORP.
Driller: Maple Leaf Enterprises LTd.
Well Name: WOOD WORKING
Well Use: PRODUCTION
Water Use: Industrial
UTMX: 643806
UTMY: 5532396
Accuracy XY: 3 ACCURATE [50-350M] [WITHIN 1/4-SECTION]
UTMZ: 234
Accuracy Z: 4 FAIR - Shuttle at Centroid
Date Completed: 2003 Sep 01

WELL LOG

From (ft.)	To (ft.)	Log
0	47.0	CLAY
47.0	49.0	SILTY SAND
49.0	130.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	51.0	CASING	5.00			INSERT	PVC
51.0	130.0	OPEN HOLE	4.25				
0	48.0	CASING GROUT					

BENTONITE

Top of Casing: 0.0

PUMPING TEST

Date: 2003 Sep 01
Pumping Rate: 15.0 Imp. gallons/minute
Water level before pumping: 37.0 ft. below ground
Pumping level at end of test: 41.0 ft. below ground
Test duration: ??? hours, ?? minutes
Water temperature: ?? degrees F

REMARKS

1980 SPRINGFIELD RD. DRILL DATE IS ESTIMATED. GROUTED WITH A CEMENT/BENTONITE MIX

LOCATION: SW16-11-4E

Well_PID: 111335
Owner: WINN-MAN TRANSPORT LTD
Driller: Paul Slusarchuk Well Drilling LTd.
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 643815.778
UTMY: 5531587.21
Accuracy XY:
UTMZ:
Accuracy Z:
Date Completed: 1998 Mar 02

WELL LOG

From (ft.)	To (ft.)	Log
0	46.0	CLAY
46.0	54.0	SILTY TILL
54.0	60.0	RUBBLE LIMESTONE
60.0	144.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	62.5	CASING		5.50		INSERT	GALVANIZED
62.5	144.0	OPEN HOLE		4.90			

Top of Casing: 1.5 ft. above ground

PUMPING TEST

Date: 1998 Mar 02
Pumping Rate: 50.0 Imp. gallons/minute
Water level before pumping: 31.5 ft. below ground
Pumping level at end of test: ?? ft. below ground
Test duration: hours, 30 minutes
Water temperature: ?? degrees F

REMARKS

135 SAUNDERS

LOCATION: SW16-11-4E

Well_PID: 80874
Owner: NEIGHBOUR'S LANDSCAP
Driller: Perimeter Drilling Ltd.
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 643815.778
UTMY: 5531587.21
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1995 Jun 15

WELL LOG

From (ft.)	To (ft.)	Log
0	2.0	TOPSOIL
2.0	45.0	CLAY
45.0	53.0	BROKEN LIMESTONE
53.0	119.9	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	55.0	casing	5.00			INSERT	PVC
55.0	119.9	open hole	4.75				

Top of Casing: 2.0 ft. above ground

PUMPING TEST

Date: 1995 Jun 15
Pumping Rate: 50.0 Imp. gallons/minute
Water level before pumping: 35.0 ft. below ground
Pumping level at end of test: ?? ft. below ground
Test duration: hours, 30 minutes
Water temperature: 41.000 degrees F

REMARKS

2735 DAY ST, E OF BLDG

LOCATION: SW16-11-4E

Well_PID: 24165
Owner: SWIDERSKI
Driller: Paul Slusarchuk Well Drilling LTd.
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 643815.778
UTMY: 5531587.21
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1975 Jul 23

WELL LOG

From (ft.)	To (ft.)	Log
0	40.0	CLAY
40.0	47.0	TILL
47.0	54.0	FRACTURED LIMESTONE
54.0	144.9	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	54.6	casing	4.00			T & C	GALVANIZED
54.6	144.9	open hole					

Top of Casing: ft. below ground

PUMPING TEST

Date:
Flowing Rate: 10.0 Imp. gallons/minute
Water level before pumping: ft. below ground
Pumping level at end of test: 30.0 ft. below ground
Test duration: hours, 45 minutes
Water temperature: ?? degrees F

LOCATION: SW16-11-4E

Well_PID: 81576
Owner: FRANK MOTORS
Driller: Stonewall Drilling
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 644212.474
UTMY: 5531993.54
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z: UNKNOWN
Date Completed: 1995 Jun 01

WELL LOG

From (ft.)	To (ft.)	Log
0	41.0	CLAY AND SILT
41.0	60.0	FRACTURED LIMESTONE
60.0	135.9	LIMESTONE, FRACTURED LAYERS

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	60.0	casing	4.20			INSERT	GALVANIZED
60.0	135.9	open hole	4.00				
20.0	60.0	casing grout					CEMENT

Top of Casing: 1.5 ft. above ground

PUMPING TEST

Date: 1995 Jun 01
Pumping Rate: 20.0 Imp. gallons/minute
Water level before pumping: 29.0 ft. below ground
Pumping level at end of test: 39.0 ft. below ground
Test duration: hours, 25 minutes
Water temperature: ?? degrees F

REMARKS

3001 DAY ST, NORTH PERIMITER CONSTRUCTION LTD

LOCATION: SW16-11-4E

Well_PID: 11573
Owner: J HOLLAND
Driller: Paul Slusarchuk Well Drilling LTd.
Well Name:
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 643815.778
UTMY: 5531587.21
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1968 Oct 05

WELL LOG

From (ft.)	To (ft.)	Log
0	36.0	DARK CLAY
36.0	43.0	GREY CLAY, GRAVEL, BOULDERS
43.0	68.0	GRAVEL, GREY SANDY CLAY
68.0	81.9	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	68.0	casing	4.00				
68.0	81.9	open hole					

Top of Casing: ft. below ground

PUMPING TEST

Date: 1968 Oct 05
Pumping Rate: 20.0 Imp. gallons/minute
Water level before pumping: 28.0 ft. below ground
Pumping level at end of test: 28.0 ft. below ground
Test duration: 1 hours, 30 minutes
Water temperature: ?? degrees F

REMARKS

LOT 52-61, 60 FT E OF DAY STREET, GROUND LEVEL ELEV EST 775 FT

LOCATION: SW16-11-4E

Well_PID: 124692
Owner: CANDO CONSTRUCTION LOCOMOTIVE
Driller: Maple Leaf Enterprises LTd.
Well Name:
Well Use: PRODUCTION
Water Use: Industrial
UTMX: 643815.778
UTMY: 5531587.21
Accuracy XY:
UTMZ:
Accuracy Z:
Date Completed: 2002 Nov 18

WELL LOG

From (ft.)	To (ft.)	Log
0	2.0	SILT SAND
2.0	12.0	SOFT CLAY AND SILT
12.0	46.0	CLAY
46.0	53.0	TILL
53.0	58.0	RUBBLE
58.0	87.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	60.5	CASING	5.00				PVC
60.5	87.0	OPEN HOLE		4.00			
12.0	45.0	CASING GROUT					

BENTONITE

Top of Casing: 2.0 ft. above ground

PUMPING TEST

Date: 2002 Nov 18
Pumping Rate: 15.0 Imp. gallons/minute
Water level before pumping: 32.0 ft. below ground
Pumping level at end of test: 33.0 ft. below ground
Test duration: ??? hours, ?? minutes
Water temperature: ?? degrees F

REMARKS

DAY ST., AIR PUMPED AT 56', 40 GPM

LOCATION: SW16-11-4E

Well_PID: 123952
Owner: AL THOMPSON BROOM
Driller: Maple Leaf Enterprises LTd.
Well Name:
Well Use: PRODUCTION
Water Use:
UTMX: 644212.474
UTMY: 5531993.54
Accuracy XY:
UTMZ:
Accuracy Z: UNKNOWN
Date Completed: 2002 Feb 08

WELL LOG

From (ft.)	To (ft.)	Log
0	3.0	FILL
3.0	28.0	BROWN CLAY
28.0	43.0	GREY CLAY
43.0	57.0	TILL
57.0	85.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	59.0	CASING	5.00				PVC
59.0	85.0	OPEN HOLE		4.50			
10.0	35.0	CASING GROUT					

BENTONITE

Top of Casing: 0.0

PUMPING TEST

Date: 2002 Feb 08
Pumping Rate: 15.0 Imp. gallons/minute
Water level before pumping: 30.0 ft. below ground
Pumping level at end of test: 31.0 ft. below ground
Test duration: ??? hours, ?? minutes
Water temperature: ?? degrees F

REMARKS

592 GUNN RD.

LOCATION: SW16-11-4E

Well_PID: 104710
Owner: BORDER CHEMICALS/WRB
Driller: UNKNOWN
Well Name: GM123
Well Use: OBSERVATION
Water Use:
UTMX: 643815.778
UTMY: 5531587.21
Accuracy XY: 4 FAIR [350M-1KM] [WITHIN SECTION]
UTMZ:
Accuracy Z: UNKNOWN
Date Completed: 1965 Aug 17

No well log data for this well.

No construction data for this well.

Top of Casing: 0.0

No pump test data for this well.

REMARKS

WINNIPEG REGION - PREVIOUSLY USED AS A WRB MONITORING STATION FOR WATER QUALITY (1965-1993). SW DAY ST & GUNN RD, NO WELL LOG AVAILABLE.

LOCATION: SW16-11-4E

Well_PID: 11574
Owner: BORDER CHEMICAL
Driller: Paul Slusarchuk Well Drilling LTd.
Well Name: OFFICE
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 643815.778
UTMY: 5531587.21
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1968 Jul 09

WELL LOG

From (ft.)	To (ft.)	Log
0	36.0	DARK CLAY
36.0	52.0	GREY CLAY, GRAVEL, BOULDERS
52.0	84.9	GRAVEL, GREY SANDY CLAY
84.9	112.9	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	84.9	casing	4.00				
84.9	112.9	open hole					

Top of Casing: ft. below ground

PUMPING TEST

Date: 1968 Jul 09
Pumping Rate: 10.0 Imp. gallons/minute
Water level before pumping: 31.0 ft. below ground
Pumping level at end of test: 31.0 ft. below ground
Test duration: 4 hours, minutes
Water temperature: ?? degrees F

REMARKS

GROUND LEVEL ELEV EST 775 FT

LOCATION: SW16-11-4E

Well_PID: 65609
Owner: BORDER CHEMICAL
Driller: Paul Slusarchuk Well Drilling LTd.
Well Name: PLANT WELL NO. 2
Well Use: PRODUCTION
Water Use: Industrial
UTMX: 643815.778
UTMY: 5531587.21
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1989 Aug 30

WELL LOG

From (ft.)	To (ft.)	Log
0	4.0	FILL
4.0	45.0	CLAY
45.0	56.0	TILL
56.0	75.8	LAYER OF LIMESTONE TILL AND GRAVEL
75.8	199.9	LIMESTONE
199.9	244.8	LAYERS OF LIMESTONE, SHALE AND CLAY SOME SAND
244.8	249.8	SHALE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	77.0	casing	8.00			T & C	BLACK IRON
77.0	249.8	open hole	7.80				
10.0	45.0	casing grout					CEMENT

Top of Casing: 2.0 ft. above ground

PUMPING TEST

Date: 1989 Aug 30
Pumping Rate: 299.9 Imp. gallons/minute
Water level before pumping: 34.0 ft. below ground
Pumping level at end of test: ?? ft. below ground
Test duration: 1 hours, 30 minutes
Water temperature: ?? degrees F

REMARKS

AT 100 FT. WELL PRODUCED 10 GPM MAJOR FRACTURES - 110-115 FT. - 200-245 FT.

LOCATION: SW16-11-4E

Well_PID: 8878
Owner: BORDER CHEMICAL
Driller: SONIC DRILLING CO. LTD
Well Name: PLANT WELL NO.1
Well Use: PRODUCTION
Water Use: Industrial
UTMX: 643815.778
UTMY: 5531587.21
Accuracy XY: UNKNOWN
UTMZ:
Accuracy Z:
Date Completed: 1966 Jun 29

WELL LOG

From (ft.)	To (ft.)	Log
0	8.0	BROWN SANDY CLAY
8.0	41.0	BLUE CLAY
41.0	46.0	FINE SAND AND GRAVEL
46.0	70.0	LIMESTONE GRAVEL
70.0	100.9	HARD LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	74.0	casing	8.00				
74.0	83.9	perforations				SL. PIPE	

Top of Casing: ft. below ground

PUMPING TEST

Date: 1966 Jun 29
Pumping Rate: 149.9 Imp. gallons/minute
Water level before pumping: 26.0 ft. below ground
Pumping level at end of test: 32.0 ft. below ground
Test duration: 8 hours, minutes
Water temperature: ?? degrees F

REMARKS

GUNN AND DAY ST, SPRINGFILED, GROUND LEVEL ELEV EST 775 FT

LOCATION: SW16-11-4E

Well_PID: 126011
Owner: BORDER CHEMICAL
Driller: Friesen Drillers Ltd.
Well Name: PLANT WELL NO.3
Well Use: PRODUCTION
Water Use: Industrial
UTMX: 643815.778
UTMY: 5531587.21
Accuracy XY:
UTMZ:
Accuracy Z:
Date Completed: 2003 Sep 02

WELL LOG

From (ft.)	To (ft.)	Log
0	52.0	CLAY
52.0	60.0	TILL
60.0	140.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	72.0	CASING	12.00			WELDED	BLACK IRON
75.0	140.0	OPEN HOLE	10.60				
10.0	75.0	CASING GROUT					BENTONITE

Top of Casing: 2.0 ft. above ground

PUMPING TEST

Date: 2003 Jul 17
Pumping Rate: 83.0 Imp. gallons/minute
Water level before pumping: 34.1 ft. below ground
Pumping level at end of test: 36.7 ft. below ground
Test duration: ??? hours, ?? minutes
Water temperature: ?? degrees F

REMARKS

PRODUCTION WELL INSTALLED AT 5" TEST WELL SITE, PUMP TEST NO.1 WAS FOR 5" TEST HOLE, NO.2 IS FOR 12" WELL

LOCATION: SW16-11-4E

Well_PID: 103484
Owner: BORDER CHEMICALS
Driller: Paul Slusarchuk Well Drilling LTd.
Well Name: POTASH TRANSFER FACILITY
Well Use: PRODUCTION
Water Use: Domestic
UTMX: 643815.778
UTMY: 5531587.21
Accuracy XY:
UTMZ:
Accuracy Z:
Date Completed: 1996 Oct 02

WELL LOG

From (ft.)	To (ft.)	Log
0	40.0	SILTY CLAY
40.0	55.0	TILL
55.0	63.0	RUBBLE LIMESTONE AND TILL
63.0	164.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	65.5	CASING		5.50		INSERT	GALVANIZED
65.5	164.0	OPEN HOLE		4.80			
10.0	40.0	CASING GROUT					CEMENT

Top of Casing: 1.5 ft. above ground

PUMPING TEST

Date: 1996 Oct 02
Pumping Rate: 10.0 Imp. gallons/minute
Water level before pumping: 30.0 ft. below ground
Pumping level at end of test: ?? ft. below ground
Test duration: 1 hours, minutes
Water temperature: ?? degrees F

REMARKS

2641 DAY ST, JUST S OF CP MAINLINE

LOCATION: SW16-11-4E

Well_PID: 126012
Owner: BORDER CHEMICAL
Driller: Friesen Drillers Ltd.
Well Name: TEST WELL #1 & OBSERVATION
Well Use: OBSERVATION
Water Use:
UTMX: 643815.778
UTMY: 5531587.21
Accuracy XY:
UTMZ:
Accuracy Z:
Date Completed: 2003 Jul 17

WELL LOG

From (ft.)	To (ft.)	Log
0	35.0	CLAY
35.0	60.0	TILL
60.0	80.0	LIMESTONE

WELL CONSTRUCTION

From (ft.)	To (ft.)	Casing Type	Inside Dia.(in)	Outside Dia.(in)	Slot Size(in)	Type	Material
0	65.0	CASING	5.00	5.50		INSERT	PVC
65.0	80.0	OPEN HOLE	4.75				
10.0	65.0	CASING GROUT BENTONITE					

Top of Casing: 2.0 ft. above ground

PUMPING TEST

Date: 2003 Jul 17
Pumping Rate: 100.0 Imp. gallons/minute
Water level before pumping: 32.0 ft. below ground
Pumping level at end of test: 34.0 ft. below ground
Test duration: ??? hours, ?? minutes
Water temperature: ?? degrees F

REMARKS

595 GUNN RD., TRANSCONA

APPENDIX G

AUGUST 2002 AIR QUALITY TESTING

425 Stanley Avenue
Selkirk, Manitoba
R1A 0R7

Plasti-Fab Ltd.
2485 Day Street
Winnipeg, Manitoba
Attention: Rodney

Dear Rod:

This report concerns recent monitoring of styrene and LEL's (lower explosive limits) conducted in your plant at the request of management and the workplace safety and health committee.

Styrene levels were monitored using a gas tech detector and detector tubes specifically designed to detect the amount of styrene present in the air. Several tubes were pulled at each of the following locations and the highest readings obtained are as follows:

1. At the primary work station of the down cutter - the cutting harp had fourteen wires installed in the machine when the following results were recorded:
   A) with the exhaust fan off and sample drawn from the breathing zone.....2ppm
   B) with the exhaust fan off and the sample drawn from the plume which is far away from the worker's breathing zone.....5ppm

2. At the specialty line cutting harp .....(no sample was drawn as there was not enough of a plume generated to warrant taking a sample)

3. At the big whally machine under the best possible conditions (doors open in summer time) 2ppm

As the TLV for Styrene is 50ppm there would not appear to be a problem at this time. In addition to the above monitoring for styrene there were numerous attempts made to monitor the lower explosive limit when bead boxes were being dumped into the hopper at the tilting station. Having reviewed correspondence from Huntsman which was given to me and taking into consideration my findings I think it would be prudent to install a fan which would dilute or extract the potentially explosive mixture away from the hopper where the plastic bag liner is removed from the box after dumping the contents into the hopper. The reason for my recommendation is as per the next paragraph.

Although I could not get the instrument to alarm when a box was being dumped during actual operating conditions the instrument did alarm on several occasions when boxes of bead were opened and the bead was agitated (essentially the same thing as dumping in that the pentane is liberated). This means that some boxes or types of bead do have the

potential to produce potentially explosive mixtures that could be ignited by something as seemingly innocuous and unpredictable as a static spark.

Also, there needs to be a written safe work practice or procedure for operators to follow when they are performing the job of dumping boxes of bead. This is a requirement of the latest regulatory requirements and it is consistent with the best practices for safety and health programs. The written work practice or procedure should be specific as to when the bag is to be removed and when the fan is to be used and for how long prior to and after dumping a box of bead. In addition, the operators must be instructed to make regularly scheduled (daily) checks of the grounding etc. I am including a copy of the Safer Workplaces Act for your information as you may decide that you need some assistance in complying with some of the new provisions.

Yours truly,

Rick Wyspinski

APPENDIX H

JUNE 2010 NOISE LEVEL HAZARD ASSESSMENT

PROTEC
HEARING INC.

June 9, 2010

Plasti-Fab Manitoba
2485 Day St..
Winnipeg, MB
R2C 5G2

Business Type: EPS Product Solutions

ATTENTION: Rodney Bagley - Plant Manager – Plasti-Fab Manitoba

RE: NOISE LEVEL HAZARD ASSESSMENT - May 18, 2010

Protec Hearing is pleased to submit our findings of the recent noise level hazard assessment of the Plasti-Fab Manitoba at 2485 Day St.in Winnipeg, MB. The purpose of the assessment is to establish baseline sound level readings for areas selected by Rodney Bagley - Plant Manager.

All measurements were obtained using the slow response setting of the hand held sound level meter. Dosimetry was carried out using an integrating sound level meter. The integrating sound level meter averages the sound levels over a given length of time. In this manner, short bursts of impulsive sound may be integrated or averaged into the results producing a more workable number. For employee's whose job location and/or responsibilities change throughout the day, a noise dosimeter records fluctuations in noise levels throughout the work day directly from the level of the subjects ear. Length of dosimetry is felt to be representative of the sound levels associated with the jobs sampled by this method.

Measurements were all short samples, approx 60 seconds or under.
3 measurements were obtained. Sound levels ranged from 92 to 95 dBA.

All findings appear on the attached sheets entitled; *Plasti-Fab Manitoba - Noise Hazard Assessment, May 18, 2010, carried out by: Protec Hearing Inc.*

I. Equipment:

Quest Sound Pro SE/DL sound level meter	Serial # BGG100014
Quest QC-10/QC-20 Calibrator	Serial # QIG090045
Quest NoisePro Dosimeter	Serial # NLH020012
Quest NoisePro Dosimeter	Serial # NLD120047
Metrosonics db-4000ez	Serial # NZD010028

II. Method:

Battery condition and calibration were checked prior to and immediately after measurements were carried out. All measures were taken at the proximity of the worker's ear at locations to be described with each measurement. All measurements are expressed in dBA.

III. Findings:

Area	Equipment	Measurement Location	dBA	Comments
Milling Area	Milling Machine	Feed End	91.6	Normal Operation 3 pieces of block mold material are run through the machine. *Max = 86.6 dBA* *25 Seconds*
		Receiving End	93.2	Normal Operation 3 pieces of block mold material run through the machine and are received and stacked. *Max = 86.6 dBA* *25 Seconds*
	Mulcher	Operator Position	95.4	1 piece of block mold material is mulched. *Max = 86.6 dBA* *25 Seconds*

IV. Summary of Personal Dosimetry Results

Sample Date	Tuesday, May 18, 2010
Area:	**BW Area & Warehouse**
Job:	Contour Cutting Operator on the "Big Wally" machine
Employee:	Gordon Cube
Leq (8hrs):	**79.6 dBA**
TWA (duration):	**78.6 dBA**
Duration:	6 hrs. 29 min.
Max:	104.7 dBA @ 9:50 am
Calibration Level:	114.0 dBA
Dosimeter:	Metrosonics db-4000ez NDZ010028

Comments:

Microphone placed on right shoulder.

Gordon Cube was instructed to carry on his normal work activities, asked to keep an activity log of his activities and note if any tampering occurred.

Gordon indicates this sample is not contaminated and describes the day as a typical workday. Nothing out of the ordinary occurred.

Gordon describes his job as:
Contour Cutting Operator on the "Big Wally" machine (A 2 dimensional cutting machine).

Note: The activity log below is based on the employee's time accounting card.

Activities Log – Tuesday, May 18, 2010 - Gordon Cube – Contour Cutting Operator

Time	Activity
8:16 am	Dosimeter attached and turned on
2 hr. 30 min. *Approx.* 7:00 – 9:30 am	Working around Big Wally – gathering & using materials from around the Big Wally Machine. (Plant # = 41, Act. Code = 35, STN # = 51)
15 min. *Approx.*9:30 – 9:45 am	Get a new block from the warehouse. (Act. Code = 30, STN # = 41)
2 hr. 30 min. *Approx.* 9:45 – 12:15 pm	Working around Big Wally – gathering & using materials from around the Big Wally Machine. (Act. Code = 35)
30 min.	Lunch – eat at work station while machine runs. (Act. Code = 99)
45 min *Approx.*12:30 – 1:15 pm	Recycling: Place materials into the mulcher machine and then go & get more material to add. Usually there is very little standing at the mulcher. (Act. Code = 68)
1 hr. 30 min. *Approx.* 1:15 – 2:45 pm	Working around Big Wally – gathering & using materials from around the Big Wally Machine. (Act. Code = 35)
2:45 pm	Dosimeter turned off and removed

IV. Summary of Personal Dosimetry Results continued…

Sample Date	Tuesday, May 18, 2010
Area:	**Primary Area & Warehouse**
Job:	Primary Cutting Operator / Lead Hand
Employee:	Miles Bileski
Leq (8hrs):	**78.6 dBA**
TWA (duration):	**77.8 dBA**
Duration:	6 hrs 37 min.
Max:	109.4 dBA @ 10:27 am
Calibration Level:	114.0 dBA
Dosimeter:	Quest Noise Pro NLH020012

Comments:

Microphone placed on right shoulder.

Miles Bileski was instructed to carry on his normal work activities, asked to keep an activity log of his activities and note if any tampering occurred.

Miles indicates this sample is not contaminated and describes the day as a typical workday. Nothing out of the ordinary occurred.

Miles describes his job as:
Primary Cutting Operator / Lead Hand

Note: The activity log below is based on the employee's time accounting card.

Activities Log – Tuesday, May 18, 2010 - Miles Bileski – Primary Cutting Operator / Lead Hand

Time	Activity
8:06 am	Dosimeter attached and turned on
15 min. *Approx.* 7:00 – 7:15 am	In & around direct zone/ primary work station (Act. Code = 35)
3 hr 15 min. *Approx.* 7:15 – 10:30 am	Out of direct zone & in warehouse area. (Act. Code = 30)
15 min. *Approx.* 10:30 – 10:45 am	In & around direct zone/ primary work station (Act. Code = 35)
2 hr 15 min. *Approx.* 10:45 – 1:00 pm	Out of direct zone & in warehouse area. (Act. Code = 30)
30 min.	Lunch in lunch room (Act. Code = 990)
15 min. *Approx.* 1:30 – 1:45 pm	In & around direct zone/ primary work station (Act. Code = 35)
30 min. *Approx.* 1:45 – 2:15 pm	Out of direct zone & in warehouse area. (Act. Code = 30)
2:43 pm	Dosimeter turned off and removed

IV. Summary of Personal Dosimetry Results continued…

Sample Date	Tuesday, May 18, 2010
Area:	**Mold Area**
Job:	4th Class Power Engineer Expander Machine & Block Molder Machine Operator
Employee:	John Dalebozik
Leq (8hrs):	**82.1 dBA**
TWA (duration):	**81.2 dBA**
Duration:	6 hrs. 32 min.
Max:	117.8 dBA @ 1:52 pm
Calibration Level:	114.0 dBA
Dosimeter:	Quest Noise Pro NLD120047

Comments:

Microphone placed on right shoulder.

John Dalebozik was instructed to carry on his normal work activities, asked to keep an activity log of his activities and note if any tampering occurred.

John indicates this sample is not contaminated and describes the day as a "slow workday." Nothing out of the ordinary occurred.

John describes his job as:
4th Class Power Engineer
Expander Machine & Block Molder Machine Operator

Note: The activity log below is based on the employee's time accounting card.

Activities Log

Tuesday, May 18, 2010 - John Dalebozik - Machine Operator & 4th Class Power Engineer

Note: John typically runs both the Expanding Machine and the Block Molding Machine simultaneously all day long. Work is done in task cycles of approx. 10 – 12 min. intervals. The first 7 min. (approx.) are spent operating the machines followed by 3 min. (approx.) of moving the block mould into the warehouse.

A typical day would be equal amounts of Expanding and Molding machine operation.

John starts work at 7 am and works an 8 hr. day. Total hours combine to greater than 8 hrs due to some activities occurring simultaneously.

Time	Activity
8:05 am	Dosimeter attached and turned on
5.5 hrs	Block Molding (Plant # = 42, Act. Code = 20, STN # = 16)
3 hrs	Expanding Process (Plant # = 42, Act. Code = 15, STN # = 21)
.5 hr 11:00 pm – 11:30 am *(approx.)*	Lunch (Plant # = 42, Act. Code = 99)
.5 hr	Boiler Check – "MT – Horn & Side Silo" (Plant # = 42, Act. Code = 86)
1 hr	Warehouse work – "make room on boards for fresh G-S block." (Plant # = 42, Act. Code = 62)
2:38 pm	Dosimeter turned off and removed

V. Recommendations:

Manitoba Provincial Regulation 217/2006 – Part 12 – Respecting Hearing Conservation And Noise Control

*(NOTICE: **This summary is for convenience of reference only. The original Act should be consulted for all purposes of interpreting and applying the law.**)*

>80 dBA Periodic exposure measurements **MUST** be taken and workers informed of the results.

All workers **MUST** receive training in hearing conservation and noise control.

80-85 dBA **Use Of Hearing Protection Is Optional:**
If requested - workers must be provided with hearing protection and information regarding its selection, use and care.

>85 dBA Employers **MUST** study the workplace to determine the practicality of taking sound control measures to reduce exposure levels to </= 85 dBA.

If engineering controls can be shown to be impractical, work practice controls **MUST** be considered.

Use Of Hearing Protection Is Mandatory:
Workers **MUST** be provided with hearing protection and information regarding its selection, use and care.

Warning signs **MUST** be posted advising that hazardous noise levels exist.

All exposed workers **MUST** have their hearing tested no later than 70 days from initial exposure (a baseline test) and at least once a year thereafter.

Periodic reassessment of the practicality of engineering and work practice controls is required.

Hearing Protection Effectiveness: Traditional vs. NIOSH Recommendations

When selecting suitable hearing protection devices, both the limitations and the noise reduction rating (NRR) of the particular device should be understood.

The goal is to reduce the level of noise to levels below 85dB. Therefore if a device has a NRR of 30dB, it would be expected that this protector would be effective in noise up to 115dB (85dB +30dB = 115dB). This is not the case. This figure is derived under ideal laboratory conditions, with the device being a proper fit.

Because of individual differences, e.g.: ear canal size and shape, structure of cheek bones, effectiveness of the seal etc., the NRR of the hearing protection device should be devalued to reflect these "real world" differences. An effective level to devalue by is approximately 10-12dB.

Therefore, in the above example, the NRR of 30dB would traditionally be devalued by approximately 12dB and have a real world attenuation of 18dB. Studies have shown that this method of de-valuing a hearing protector's effectiveness may indeed prove too conservative. A best practice recommendation may be to consider adopting the following NIOSH protocol for estimating effectiveness of hearing protectors.

National Institute for Occupational Safety and Health in the USA (NIOSH) compared NRR's derived from real-world noise attenuation data with the Manufacturers' or Laboratory NRR's. The Laboratory NRR's consistently over-estimated the real-world NRR's by 140% to 2000% [Berger etal. 1996].

NIOSH recommends that if subject fit data are not available, then labeled NRRs be derated as follows:

Earmuffs	***Subtract 25% from the manufacturer's labeled NRR***
Formable Earplugs	***Subtract 50% from the manufacturer's labeled NRR***
All other Earplugs	***Subtract 70% from the manufacturers labeled NRR***

When the noise exposure level in dBA is known, the effective A-weighted noise level (ENL) is:

$$ENL = dBA - (derated\ NRR - 7)$$

To summarize, the best hearing protection for any worker is the removal of hazardous noise from the workplace. Until that happens, the best hearing protector for a worker is the one he or she will wear willingly and consistently.

The following factors are extremely important determinants of worker acceptance to hearing protectors and the likelihood that workers will wear them consistently.

- ***Convenience and availability***
- ***Belief that the device can be worn correctly***
- ***Belief that the device will prevent hearing loss***
- ***Belief that the device will not impair a workers ability to hear important sounds***
- ***Comfort***
- ***Adequate noise reduction***
- ***Ease of fit***
- ***Compatibility with other personal protective equipment***

(Source: NIOSH web site: www.cdc.gov/niosh/98-126f.html)

Traditional Forms of Hearing Protection (NRR's Must be De-Rated)

A variety of hearing protection should be made available to employees as one type of protection may not be suitable for all employees or jobs.

It is advised that when employees work in noise levels which exceed 102 dBA, doubling-up of hearing protection through the use of both plugs and a muff is recommended.

Ear Muffs - are generally the most reliable in terms of employees using them correctly as they are fairly easy to put on. They are however often rejected as being hot, heavy and uncomfortable. Watch for employees bending the head band, thereby losing the effectiveness of the ear cushion seal. Ear muffs will require (as a minimum) an annual maintenance to replace the cushions as they will lose their resiliency. The use of perspiration pads will improve the comfort of the muff in warm environments. **De-rate NRR by 25%**

Foam Plugs - are an excellent form of hearing protection when properly worn. The problem is most people do not wear them correctly and they become of little help. Employees must be taught and supervised on the correct use of this product. Most employees find them cool and comfortable to wear although some find them to hurt. Foam plugs are meant for all day use and are not to be constantly taken off and on all day. They should not be used in extremely dirty atmosphere or where employees' hands get quite dirty. **De-rate NRR by 50**

Standard / Rubber Plugs - are a bit easier to put in than a foam plug but not as effective as a hearing protector. The plugs come in a variety of sizes and the employee must be given the correct size for them to be effective. Employees find them cool and fairly comfortable. Cost is quite minimal and a set of plugs may last up to 6 months. **De-rate NRR by 70%**

Canal Caps - are cool and comfortable to wear, are quite cosmetically appealing, and are fairly easy to remove and put on and are very light. They are however, the least effective noise attenuator and should not be used in noise levels in excess of 95 dBA. They are quite visible and are good for supervisors who are in and out of noise. We recommend the brand name E.A.R. Carboflex. **De-rate NRR by 70%**

New Technology Hearing Protection

Unlike traditional hearing protection – No more de-rating or guessing the amount of protection afforded to the worker. This form of protection is objectively computer-measured to avoid either under or over-protection thereby facilitating uninterrupted use in toxic noise while still allowing optimal communication ability and sound balancing.
Custom E-A-R calibrated plugs are a cost effective method of providing hearing protection, allowing employees to maintain their communication need; made on-the-spot in minutes.

Aearo/Sonomax CustomE-A-R
The Ultimate in Personal Fit, Protection and Comfort

A Canadian technology that consists of hearing protection that can now be custom molded on the spot, calibrated to the specific time-weighted average noise exposure level of the worker, and objectively fit and tested through the use of computer measurement software. Each device is then equipped with sonic filters to ensure optimum communication ability without sacrificing safety. Finally, for the first time ever, a certificate of effectiveness for each employee fit is issued to Occupational Safety and Health / Risk Management for objective, individual quantification of the Hearing Protection Device portion of the Hearing Conservation Program. Please call and we would be pleased to discuss the use of this product with your company.

For more information visit: www.customE-A-R.com

VI. Definitions

A - weighted sound pressure level: means a sound pressure level as determined by a measurement system which includes an A-weighting filter that meets the requirements set out in the International Electrotechnical Commission Standard 651 (1979), Sound Level Meters, as amended from time to time: (niveau de pression acoustique ponderee A)

dBA: means decibel A-weighted and is a unit of A-weighted sound pressure level: (dBA).

Sound level meter: means a device for measuring sound pressure level that meets the performance requirements for a Type 2 instrument as specified in the International Electrotechnical Commission Standard 651 (1979), Sound Level Meters, as amended from time to time.

It was a pleasure contributing to the hearing conservation program at Plasti-Fab Manitoba. If there are any questions regarding this noise survey report please do not hesitate to call at any time.

Sincerely,

Karen Turner, L.I.A.T
Hearing Conservationist

Bob Turner, M.S. Aud. (C)
Audiologist

Mary-Anne Tymm, BA
Hearing Conservationist

APPENDIX I

MATERIAL SAFETY DATA SHEETS

Water Treatment. Steam Boiler

MATERIAL SAFETY DATA SHEET

Nor-Chem Water Treatment LTD.
255 Thurso Street
Winnipeg,Manitoba,R3M 3C7

Phone: (204)478-9994
In Case of Emergency Only:
Phone CANUTEC: (613) 996-6666

Date completed: Nov.1 ,2011

PRODUCT NAME: PBT-20 POLYMER BOILER TREATMENT **CODE: S772**
OTHER NAME:
DISTRIBUTED BY:

WHMIS CLASSIFICATION: D2B
TDG CLASSIFICATION: Not Regulated

HAZARDOUS INGREDIENTS	%WT/WT	CAS NO.	TOXICITY DATA (LD_{50} & LC_{50})
Polyacrylic Sodium Salt	40-60	Mixture	Not Available

PHYSICAL DATA FOR PRODUCT

Physical State: Liquid Sp. Gravity: 1.0898 pH: 4-5
Boiling Point: 100°C Vapour Pressure: N/A
Vapour Density: N/A Evaporation Rate: N/A
Freezing Point: N/A
Solubility in Water: 100%
Appearance & Odour: Light brown with slight odour.

FIRE AND EXPLOSION DATA FOR PRODUCT

Flash Point (Test Method): >93.3°C (C.C.)
Flammable Limits in Air, % by vol. Non-flammable Lower: N/A Upper: N/A
Fire Extinguishing Substances: (X) Water Fog (X) Foam (X) CO_2
(X) Dry Chem ( ) Other:
Hazardous Combustion Products: Carbon oxides.
Special Firefighting Procedures: As for surrounding fire.

REACTIVITY DATA FOR PRODUCT

Incompatibility: ( ) Water (X) Oxidizing Material ( ) Acid ( ) Base
( ) Other:
Hazardous Decomposition Products: Carbon oxides. Acrid smoke and fumes emitted when heat to decomposition.

Chemical Stability: Stable under normal conditions.

*N/A - Not applicable.

Product Name: **PBT-20 POLYMER BOILER TREATMENT**

HEALTH HAZARD INFORMATION FOR PRODUCT

EMERGENCY and FIRST AID PROCEDURES

Inhalation: Remove to fresh air. If not breathing, give artificial respiration, if breathing is difficult, give oxygen. Call physician.

Ingestion: Induce vomiting. Drink 2 glasses of water to dilute chemical. Call physician immediately.

Eyes: Flush eyes immediately with water for at least 15 minutes and call a physician.

Skin: Wash exposed area with soap and water. If irritation or abnormalities persist, call a physician.

EFFECTS OF OVEREXPOSURE (Acute and Chronic)

Inhalation: If misted may cause sneezing, slight irritation of nose and throat.

Ingestion: May cause nausea and vomiting.

Eyes: May cause watering of the eyes and inflammation of conjuctiva.

Skin: May cause irritation after prolonged contact.

PREVENTIVE MEASURES

Steps to be taken upon release or spillage (including neutralizing):

For small spills, dilute and wash area with water. For larger spills, contain and pick up.

Waste disposal method:

Dispose in accordance with federal, provincial and local regulations in designated landfill site.

Handling and Storage Requirements:

Store in cool, well ventilated, area away from strong oxidizers. Keep container closed when not in use.

Ventilation Requirements (Local or General):

General ventilation is normally sufficient.

Respiratory Protection:

An approved NIOSH chemical cartridge respirator should be worn. Avoid breathing mist or vapour.

Eye Protection:

Safety glasses or chemical workers goggles should be worn.

Other Protection:

Rubber gloves and coveralls should be used to minimize contact with skin and clothing.

Prepared by: Technical Services Department,

Water Treatment Steam Boiler

MATERIAL SAFETY DATA SHEET

Nor-Chem Water Treatment LTD.
255 Thurso Street
Winnipeg,Manitoba,R3M 3C7

Phone: (204)478-9994
In Case of Emergency Only:
Phone CANUTEC: (613) 996-6666

Date completed: Nov. 1 ,2011

PRODUCT NAME: **SP-50 POWDERED BOILER COMPOUND** **CODE: S763**
OTHER NAME:
DISTRIBUTED BY:

WHMIS CLASSIFICATION: D2A
TDG CLASSIFICATION: Not Regulated

HAZARDOUS INGREDIENTS	%WT/WT	CAS NO.	TOXICITY DATA (LD_{50} & LC_{50})
Sodium Sulphite	40-70	7757-83-7	LD_{50} Oral (rabbit) 2825 mg/kg ACGIH TLV - 10 mg/m^3
Sodium Carbonate	10-30	497-19-8	LD_{50} Oral (rat) 2800 mg/kg
Nitrilotriacetic Acid, Trisodium Salt	3-7	5064-31-3	LD_{50} Oral (rat) 3715 mg/kg
Benzotriazole	1-5	95-14-7	LD_{50} Oral (rat) 560 mg/kg

PHYSICAL DATA FOR PRODUCT

Physical State: Solid
Boiling Point: Not Avail.
Vapour Density: Non-volatile
Freezing Point: Not Avail.
Solubility in Water: 5-10%
Sp. Gravity: Not Avail.
Vapour Pressure: N/A
Evaporation Rate: N/A
pH: 1% sol. 10.7
Appearance & Odour: Free flowing powder.

FIRE AND EXPLOSION DATA FOR PRODUCT

Flash Point (Test Method): N/A
Flammable Limits in Air, % by vol. Non-flammable Lower: N/A Upper: N/A
Fire Extinguishing Substances: (X) Water Fog (X) Foam (X) CO_2
(X) Dry Chem ( ) Other:
Hazardous Combustion Products: May liberate carbon monoxide, carbon dioxide, oxides of sodium and sulphur dioxide.

Special Firefighting Procedures: Use self-contained breathing apparatus and protective clothing.

REACTIVITY DATA FOR PRODUCT

Incompatibility: ( ) Water (X) Oxidizing Material (X) Acid ( ) Base
( ) Other:
Hazardous Decomposition Products: Sulphur dioxide decomposes at 900°C

Chemical Stability: Stable under normal conditions.

*N/A - Not applicable.

Product Name: **SP-50 POWDERED BOILER COMPOUND**

HEALTH HAZARD INFORMATION FOR PRODUCT

EMERGENCY and FIRST AID PROCEDURES

Inhalation: Move to fresh air.

Ingestion: Do not induce vomiting. If swallowed, drink milk, egg whites or large quantities of water. Get medical attention.

Eyes: Flush with plenty of water for 15 minutes. Get medical attention.

Skin: Flush with plenty of water.

EFFECTS OF OVEREXPOSURE (Acute and Chronic)

Inhalation: May cause irritation of upper respiratory tract and central nervous system depression.

Ingestion: Harmful, do not take internally. May cause central nervous system depression, low blood pressure and circulating collapse. May cause irritation of the mouth and throat, nausea, abdominal pain and diarrhea.

Eyes: Keep away from eyes, causes irritation.

Skin: Prolonged skin contact will cause irritation, defatting and drying and cracking of the skin.

PREVENTIVE MEASURES

Steps to be taken upon release or spillage (including neutralizing):

Flush with water and mop up. For large spills, dyke for later recovery of neutralized product, sludge and contaminated soil.

Waste disposal method:

Dispose in accordance with federal, provincial and local regulations. Wastes should not be disposed into local sewer or with normal refuse. Dispose in approved incinerator or waste treatment disposal facility.

Handling and Storage Requirements:

Keep container closed and away from direct sunlight.

Ventilation Requirements (Local or General):

Local ventilation is sufficient.

Respiratory Protection:

Dust mask should be worn where dust occurs.

Eye Protection:

Safety glasses with sideshield.

Other Protection: Gloves should be worn.

Prepared by: Technical Services Department,

BASF

The Chemical Company

Safety Data Sheet
Luconyl® Green 8730

1. Product and Company Identification

Use: Colorants for the Paints, lacquers and varnishes industry

Company
BASF Canada Inc.
100 Milverton Drive
Mississauga, ON L5R 4H1, CANADA

24 Hour Emergency Response Information
CANUTEC (reverse charges): (613) 996-6666
BASF HOTLINE: (800) 454-COPE (2673)

Chemical family: pigments, non-ionic surfactants, preparation, in water/solvent

2. Hazards Identification

Emergency overview

NO PARTICULAR HAZARDS KNOWN.

State of matter: liquid
Colour: green
Odour: product specific

Potential health effects

Acute toxicity:
Virtually nontoxic after a single ingestion. The product has not been tested. The statement has been derived from the properties of the individual components.

Irritation / corrosion:
Not irritating to the skin. Not irritating to the eyes. The product has not been tested. The statement has been derived from the properties of the individual components.

Signs and symptoms of overexposure:
No significant reaction of the human body to the product known.

3. Composition / Information on Ingredients

Not WHMIS controlled.

4. First-Aid Measures

General advice:
Remove contaminated clothing.

If inhaled:
If difficulties occur after vapour/aerosol has been inhaled, remove to fresh air and seek medical attention.

If on skin:
Wash thoroughly with soap and water.

If in eyes:
Wash affected eyes for at least 15 minutes under running water with eyelids held open.

If swallowed:
Rinse mouth and then drink plenty of water.

Note to physician

Treatment:	Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Flash point:	> 100 °C	(DIN 51758)
Autoignition:	> 200 °C	(DIN 51794)
Flammability:	does not ignite	

Suitable extinguishing media:
water spray, dry powder, foam

Hazards during fire-fighting:
harmful vapours
Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire.

Further information:
Contaminated extinguishing water must be disposed of in accordance with official regulations.

6. Accidental release measures

Personal precautions:
Use personal protective clothing.

Environmental precautions:
Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

Cleanup:
For large amounts: Pump off product.
For residues: Pick up with suitable absorbent material. Dispose of absorbed material in accordance with regulations.

7. Handling and Storage

Handling

General advice:
No special measures necessary provided product is used correctly. Protect against heat.

Protection against fire and explosion:
No special precautions necessary.

Storage

General advice:
Keep container tightly closed and in a cool place. Store protected against freezing.

Temperature tolerance
Protect from temperatures below: 0 °C
Protect from temperatures above: 50 °C

8. Exposure Controls and Personal Protection

Advice on system design:
Provide local exhaust ventilation to control vapours/mists.

Personal protective equipment

Respiratory protection:
Wear respiratory protection if ventilation is inadequate. Respiratory protection in case of vapour/aerosol release.

Hand protection:
Chemical resistant protective gloves

Eye protection:
Safety glasses with side-shields.

General safety and hygiene measures:
Handle in accordance with good industrial hygiene and safety practice. Due to the colouring properties of the product closed work clothes should be used, to avoid stains during manipulation. Wash soiled clothing immediately.

9. Physical and Chemical Properties

Form:	liquid	
Odour:	product specific	
Odour threshold:	No data available.	
Colour:	green	
pH value:	7 - 9	(20 °C) (measured with the undiluted substance)
solidification temperature:	-30 °C	(1,013 hPa)
boiling temperature:	approx. 100 °C	
Vapour pressure:		not determined
Density:	approx. 1.4 g/cm3	(approx. 20 °C)
Relative density:		No data available.
Vapour density:		not determined
Particle size:		
		The substance / product is marketed or used in a non solid or granular form.
Solubility in water:		miscible

10. Stability and Reactivity

Conditions to avoid:
Avoid extreme heat.

Substances to avoid:
No substances known that should be avoided.

Hazardous reactions:
No hazardous reactions when stored and handled according to instructions.

Decomposition products:
Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

Thermal decomposition:
not determined

Corrosion to metals:
No corrosive effect on metal.

11. Toxicological information

Acute toxicity

Oral:
Type of value: LD50
Species: rat
Value: > 2,000 mg/kg

Inhalation:

not determined

Dermal:

not determined

Irritation / corrosion

Skin:
Species: rabbit
Result: non-irritant
Method: OECD Guideline 404

Eye:
Species: rabbit
Result: non-irritant
Method: OECD Guideline 405

Aspiration Hazard:

No aspiration hazard expected.

Other Information:

The product has not been tested. The statements on toxicology have been derived from the properties of the individual components.

12. Ecological Information

Fish

Acute:
Leuciscus idus/LC50 (96 h): > 100 mg/l

The product has not been tested. The statement has been derived from the properties of the individual components.

Chronic:

No data available.

Aquatic invertebrates

Acute:

No data available concerning toxicity for daphnia.

Chronic:
No data available.

Aquatic plants

Toxicity to aquatic plants:

No data available concerning toxicity for algae.

Microorganisms

Toxicity to microorganisms:

Inhibition of degradation activity in activated sludge is not to be anticipated during correct introduction of low concentrations.

Degradability / Persistence
Biological / Abiological Degradation

Test method:	Static test
Degree of elimination:	25 - 50 %
Evaluation:	Moderately/partially eliminated from water. The product is not very soluble in water and can thus be removed from water mechanically in suitable effluent treatment plants. The solvents are biodegradable.

Other adverse effects:

Inhibition of degradation activity in activated sludge is not to be anticipated during correct introduction of low concentrations. Do not release untreated into natural waters.

The product contains: 3 (W/W) % copper
The heavy metals mentioned are present in complex bound form as substantial constituent of the colourant.

13. Disposal considerations

Waste disposal of substance:
Must be disposed of or incinerated in accordance with local regulations.

Container disposal:
Uncontaminated packaging can be re-used. Packs that cannot be cleaned should be disposed of in the same manner as the contents.

14. Transport Information

Land transport
TDG

Not classified as a dangerous good under transport regulations

Sea transport
IMDG

Not classified as a dangerous good under transport regulations

Air transport
IATA/ICAO

Not classified as a dangerous good under transport regulations

15. Regulatory Information

Federal Regulations

Registration status:

Chemical	DSL, CA	released / listed

Not WHMIS controlled.
THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CPR AND THE MSDS CONTAINS ALL THE INFORMATION REQUIRED BY THE CPR.

16. Other Information

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

MSDS Prepared by:
BASF NA Product Regulations
msds@basf.com
MSDS Prepared on: 2010/12/13

END OF DATA SHEET

BASF

The Chemical Company

Safety Data Sheet
Luconyl® Brown 2915

1. Product and Company Identification

Company
BASF Canada Inc.
100 Milverton Drive
Mississauga, ON L5R 4H1, CANADA

24 Hour Emergency Response Information
CANUTEC (reverse charges): (613) 996-6666
BASF HOTLINE: (800) 454-COPE (2673)

Chemical family:	iron oxide, in water/solvent
Synonyms:	Water/DPG dispersion of pigment red 101; C.I. 77491

2. Hazards Identification

Emergency overview

CAUTION:
May cause sensitization by skin contact.
Prolonged or repeated exposure may cause pneumoconiosis.
The statements are based on the properties of the individual components.
Avoid inhalation of mists/vapours.
Use with local exhaust ventilation.
Wear protective clothing.
Wear full face shield if splashing hazard exists.

State of matter: liquid
Colour: brown
Odour: product specific

Potential health effects

Primary routes of entry:
Eyes
Skin
Inhalation.
Ingestion.

Acute toxicity:
Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact. The product has not been tested. The statement has been derived from the properties of the individual components.

Irritation / corrosion:
Not irritating to the skin. Not irritating to the eyes. The product has not been tested. The statement has been derived from the properties of the individual components.

Sensitization:

sensitizing effect in animal tests The product has not been tested. The statement has been derived from the properties of the individual components.

Chronic toxicity:

Repeated dose toxicity: The substance may cause increase in lung mass and lung tissue changes after repeated inhalation. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. Chronic exposures have been known to produce pneumoconiosis (chronic inflammatory and fibrotic lung disease).

3. Composition / Information on Ingredients

CAS Number	Content (W/W)	Hazardous ingredients
1309-37-1	40.0 - 50.0 %	Iron oxide
26316-40-5	5.0 - 10.0 %	Ethylenediamine, ethoxylated and propoxylated

4. First-Aid Measures

General advice:
Remove contaminated clothing.

If inhaled:
If difficulties occur after vapour/aerosol has been inhaled, remove to fresh air and seek medical attention.

If on skin:
Remove contaminated clothing. Wash thoroughly with soap and water. If irritation develops, seek medical attention.

If in eyes:
Wash affected eyes for at least 15 minutes under running water with eyelids held open.

If swallowed:
Rinse mouth and then drink plenty of water.

Note to physician
Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Flash point:	> 100 °C	(DIN 51758)
Autoignition:	> 200 °C	(DIN 51794)
Lower explosion limit:	2.9 %(V)	Information applies to the solvent.
Upper explosion limit:	12.6 %(V)	Information applies to the solvent.
Flammability:	not determined	
Self-ignition temperature:		not self-igniting

Suitable extinguishing media:
water spray, dry powder, foam

Hazards during fire-fighting:
harmful vapours
Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire.

Protective equipment for fire-fighting:
Wear a self-contained breathing apparatus in confined areas or when exposed to combustion products.

6. Accidental release measures

Personal precautions:
Use personal protective clothing.

Environmental precautions:
Do not discharge into drains/surface waters/groundwater.

Cleanup:
Spills should be contained, solidified, and placed in suitable containers for disposal.
For small amounts: Pick up with absorbent material (e.g. sand, sawdust, general-purpose binder). Dispose of absorbed material in accordance with regulations.
For large amounts: Pump off product.

7. Handling and Storage

Handling

General advice:
Ensure thorough ventilation of stores and work areas.

Storage

General advice:
Keep container tightly closed and in a cool place.

Storage stability:
Storage temperature: <= 60 °C

Temperature tolerance
Protect from temperatures above: 60 °C

8. Exposure Controls and Personal Protection

Components with workplace control parameters

Iron oxide	OSHA	PEL 10 mg/m3 fumes/smoke ;
	ACGIH	TWA value 5 mg/m3 Respirable fraction ;

Personal protective equipment

Respiratory protection:
Wear respiratory protection if ventilation is inadequate. Respiratory protection in case of vapour/aerosol release.

Hand protection:
Chemical resistant protective gloves

Eye protection:
Safety glasses with side-shields.

General safety and hygiene measures:
Handle in accordance with good industrial hygiene and safety practice. Due to the colouring properties of the product closed work clothes should be used, to avoid stains during manipulation. Eye wash fountains and safety showers must be easily accessible.

9. Physical and Chemical Properties

Form:	liquid

Odour:	product specific	
Odour threshold:	No data available.	
Colour:	brown	
pH value:	8 - 9	(20 °C) (measured with the undiluted substance)
solidification temperature:	-17 °C	
boiling temperature:	approx. 100 °C	
Vapour pressure:		not determined
Density:	approx. 1.5 g/cm3	(20 °C)
Relative density:		Study does not need to be conducted.
Vapour density:		not determined
Partitioning coefficient n-octanol/water (log Pow):		not applicable
Viscosity, dynamic:		not determined
Particle size:		The substance / product is marketed or used in a non solid or granular form.
Solubility in water:		miscible

10. Stability and Reactivity

Conditions to avoid:
No special precautions other than good housekeeping of chemicals.

Substances to avoid:
No substances known that should be avoided.

Hazardous reactions:
No hazardous reactions when stored and handled according to instructions.
The product is chemically stable.

Decomposition products:
Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

Oxidizing properties:
not fire-propagating

11. Toxicological information

Acute toxicity

Information on: Iron oxide
Assessment of acute toxicity:
Virtually nontoxic after a single ingestion.

Information on: dipropylene glycol
Assessment of acute toxicity:
Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact.

Oral:
Type of value: LD50
Species: rat
Value: > 5,000 mg/kg
The product has not been tested. The statement has been derived from the properties of the individual components.

Inhalation:

Species: rat
Value: (IRT)
Exposure time: 8 h
No mortality within the stated exposition time as shown in animal studies. The product has not been tested. The statement has been derived from the properties of the individual components.

Dermal:

not determined

Irritation / corrosion

Information on: Iron oxide
Assessment of irritating effects:
Not irritating to the eyes. Not irritating to the skin.

Information on: dipropylene glycol
Assessment of irritating effects:
Not irritating to the skin. Not irritating to the eyes.

Skin:

Information on: Iron oxide
Species: rabbit
Result: non-irritant
Method: OECD Guideline 404

Information on: dipropylene glycol
Species: rabbit
Result: non-irritant

Eye:

Information on: Iron oxide
Species: rabbit
Result: non-irritant
Method: OECD Guideline 405

Information on: dipropylene glycol
Species: rabbit
Result: non-irritant

Sensitization

Information on: Iron oxide
Assessment of sensitization:
Skin sensitizing effects were not observed in animal studies.

Information on: dipropylene glycol
Assessment of sensitization:
Skin sensitizing effects were not observed in animal studies.

Information on: Ethylenediamine, ethoxylated and propoxylated
Assessment of sensitization:
sensitizing effect in animal tests

Information on: Iron oxide
Maurer optimisation test
Species: guinea pig

Result: Non-sensitizing.

Information on: dipropylene glycol
Buehler test
Species: guinea pig
Result: Non-sensitizing.

Information on: Ethylenediamine, ethoxylated and propoxylated
Mouse Local Lymph Node Assay (LLNA)
Species: mouse
Result: sensitizing
Method: OECD Guideline 429
Guinea pig maximization test
Species: guinea pig
Result: Non-sensitizing.

Repeated dose toxicity

Information on: Iron oxide
Assessment of repeated dose toxicity:
The substance may cause increase in lung mass and lung tissue changes after repeated inhalation. The product has not been fully tested. The statements have been derived in parts from products of a similar structure or composition.
Chronic exposures have been known to produce pneumoconiosis (chronic inflammatory and fibrotic lung disease).

Information on: dipropylene glycol
Assessment of repeated dose toxicity:
No adverse effects were observed after repeated exposure in animal studies.

Genetic toxicity

Information on: Iron oxide
No mutagenic effect was found in various tests with bacteria and mammalian cell culture. The substance was not mutagenic in a test with mammals. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Information on: dipropylene glycol
The substance was not mutagenic in bacteria. The substance was not mutagenic in mammalian cell culture. The substance was not mutagenic in a test with mammals.

Carcinogenicity

Information on: Iron oxide
The whole of the information assessable provides no indication of a carcinogenic effect. IARC Group 3 (not classifiable as to human carcinogenicity).
Information on: dipropylene glycol
In long-term studies in rats and mice in which the substance was given by drinking-water, a carcinogenic effect was not observed.

Reproductive toxicity

Information on: Iron oxide
Study scientifically not justified.
Information on: dipropylene glycol
No data available concerning reproduction toxicity. The chemical structure does not suggest a specific alert for such an effect.

Development:

Information on: Iron oxide
Study scientifically not justified.
Information on: dipropylene glycol
No indications of a developmental toxic / teratogenic effect were seen in animal studies.

Aspiration Hazard:

No aspiration hazard expected.

12. Ecological Information

Fish

Acute:
Leuciscus idus/LC50 (96 h): > 1,000 mg/l
The product has not been tested. The statement has been derived from the properties of the individual components.

Microorganisms

Toxicity to microorganisms:
C test activated sludge/EC50: > 1,000 mg/l
Inhibition of degradation activity in activated sludge is not to be anticipated during correct introduction of low concentrations. The product has not been tested. The statement has been derived from the properties of the individual components.

Degradability / Persistence
Biological / Abiological Degradation

Test method:	Static test
Method of analysis:	colour reduction
Degree of elimination:	> 90 %

Test method:	OECD Guideline 302 B
Method of analysis:	DOC reduction
Degree of elimination:	> 70 %
Evaluation:	Easily eliminated from water. Easily eliminated from water. The product is virtually insoluble in water and can thus be separated from water mechanically in suitable effluent treatment plants.

Other adverse effects:

Do not release untreated into natural waters.

13. Disposal considerations

Waste disposal of substance:
Dispose of in accordance with national, state and local regulations. It is the waste generator's responsibility to determine if a particular waste is hazardous under RCRA.

Container disposal:
Dispose of in a licensed facility. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

14. Transport Information

Land transport
TDG

Not classified as a dangerous good under transport regulations

Sea transport
IMDG

Not classified as a dangerous good under transport regulations

Air transport
IATA/ICAO

Not classified as a dangerous good under transport regulations

15. Regulatory Information

Federal Regulations

Registration status:
Chemical DSL, CA released / listed

WHMIS classification: D2B: Materials Causing Other Toxic Effects - Toxic material

THIS PRODUCT HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CPR AND THE MSDS CONTAINS ALL THE INFORMATION REQUIRED BY THE CPR.

16. Other Information

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

MSDS Prepared by:
BASF NA Product Regulations
msds@basf.com
BASF HOTLINE (800) 454 – COPE (2673)
MSDS Prepared on: 2012/09/14

END OF DATA SHEET

PLASTI-FAB LTD. EPR RESIN

MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION:

TRADE NAME:	EPR
CHEMICAL NAME:	EXPANDABLE POLYSTYRENE RESIN
MANUFACTURER:	Plasti-Fab Ltd. Polymer Plant, Box 88, 802 McCool Street, Crossfield, Alberta, Canada, T0M 0S0

2. HAZARDS IDENTIFICATION:

EMERGENCY OVERVIEW:	Pentane vapours are primary concern. Be aware that pentane vapours are extremely flammable and heavier than air.
POTENTIAL HEALTH EFFECTS:	See section 11
ROUTES OF ENTRY:	Skin Contact, Eye Contact, Inhalation, Ingestion
CARCINOGEN/TERATOGEN/ MUTAGEN:	No
WHMIS Classification:	Indicated as being Class B (Flammable) due to pentane vapours

3. COMPOSITION, INFORMATION ON INGREDIENTS:

CAS Number	Content (W/W)	Chemical Name
9003-53-6	>90%	Polystyrene
109-66-0	<7.0%	n-Pentane
78-78-4	<1.0%	Isopentane
3194-55-6	<1.0%	1,2,5,6,9,10-Hexabromocyclododecane

4. FIRST-AID MEASURES:

Eyes:	Flush with flowing water for several minutes. If irritation persists, obtain medical assistance
Skin:	Wash with soap & water
Ingestion:	Consult a physician if more than a mouthful is ingested
Inhalation:	If excessive pentane vapours are inhaled, remove victim to fresh air. Assist breathing and obtain medical assistance.

EMERGENCY PHONE NUMBERS

403-946-5031 (24 Hours)
403-946-4576 (Office Hours)

5. FIRE-FIGHTING MEASURES:

Conditions of Flammability:	Vapours can be ignited by heat, sparks, flames or other sources of ignition
Means of Extinction:	• Water Fog • Foam • Dry Chemical • ABC type Extinguisher
Protective Equipment	• Self-contained breathing apparatus
Flash Point:	< -40 °C / -40 °F (pentane)
Upper Explosive Limit:	8.3 (% by Volume)
Lower Explosive Limit:	1.4 (% by Volume)
Autoignition Temperature:	284 °C / 544 °F (pentane)
Hazardous Combustion Products:	CO, HBr
Explosion Data:	Not available

6. ACCIDENTAL RELEASE MEASURES:

Ventilate area of leak or spill to avoid accumulation of vapours. Remove all sources of ignition. Wear appropriate personal protective equipment. Sweep up, using non-sparking equipment. Avoid static build up and discharge.

7. HANDLING AND STORAGE:

Do not smoke in areas where product is being stored or used. Store away from all sources of ignition. Ventilate storage areas well. Handle carefully using spark-proof tools; electrostatic discharge can be generated during handling.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION:

Airborne Exposure Limits (for pentane):

-OSHA Permissible Exposure Limit (PEL):	1000 ppm (TWA)
-ACGIH Threshold Limit Value (TLV):	600 ppm (TWA)

RESPIRATORY PROTECTION: Cartridge or self-contained respirator, if TLV is exceeded

SKIN PROTECTION: Hand protection not normally required.

EYE PROTECTION: Safety glasses with side protection.

General Hygiene: Wash thoroughly after handling. Do not eat, drink or smoke in work area.

EMERGENCY PHONE NUMBERS

403-946-5031 (24 Hours)
403-946-4576 (Office Hours)

APPENDIX J

GENERAL TERMS AND CONDITIONS

AMEC Environment and Infrastructure, A Division of AMEC Americas Limited
STATEMENT OF GENERAL CONDITIONS - ENVIRONMENTAL SERVICES

1. STANDARD OF CARE - In the performance of professional services, AMEC uses that degree of care and skill ordinarily exercised under similar circumstances by reputable members of its profession practicing in the same or similar localities. No warranty, either express or implied, is made or intended by this Agreement or by furnishing oral or written reports of the findings. AMEC is to be liable only for damage proximately caused by the negligence of AMEC. The CLIENT recognizes that subsurface conditions may vary from those encountered at the location where borings, surveys or explorations are made by AMEC and that the data, interpretations and recommendation of AMEC are based solely on the information available to him. AMEC will not be responsible for the interpretation by others of the information developed.

2. SITE INFORMATION - The CLIENT has agreed to make available to AMEC all relevant information and documents under his control regarding past, present and proposed conditions of the site. The information shall include, but not be limited to, plot plans, topographic surveys, hydrologic data and previous soil and geologic data including borings, field or laboratory tests and written reports. The CLIENT shall immediately transmit to AMEC any new information that becomes available or any change in plans. The CLIENT also ensured uninterrupted site access for AMEC throughout performance of this Agreement.

AMEC agrees to include a review of all historical information obtained by the CLIENT or provided by the Client to assist in the investigation of the Site unless and except to the extent that such a review is limited or excluded from the scope of work to be performed by AMEC.

3. FULL DISCLOSURE - The CLIENT acknowledges that in order for AMEC to properly advise and assist the CLIENT in respect of the investigation of the Site, AMEC has relied upon full disclosure by the CLIENT of all matters pertinent to an investigation of the Site.

4. DELAYS AND INTERRUPTIONS - Should AMEC have been delayed or interrupted by others in the performance of its services or be required to perform additional services as a result of any delay or interruption caused by others, AMEC shall be equitably compensated by the CLIENT for all costs, charges and expenses which it may incur as a result of such delay or interruption and any such additional services to be performed and any and all consequences resulting from such delay or interruption.

5. USE OF WORK PRODUCT - AMEC agrees to provide to the CLIENT interim reports outlining the progress of the investigation of the Site on a periodic basis and a final comprehensive report upon the completion of the investigation of the Site.

6. COMPLETE REPORT - This document being a part of the Report is of a summary nature and is not intended to stand alone without reference to the instructions given to AMEC by the CLIENT, communications between AMEC and the CLIENT, and to any other reports, writings or documents prepared by AMEC for the CLIENT relative to the specific Site described herein, all of which constitute the Report. Wherever the word “Report” is used herein, it shall refer to any and all of the documents referred to herein.

In order to properly understand the suggestions, recommendations and opinions expressed herein, reference must be made to the whole of the Report. AMEC cannot be responsible for use by any part of portions of the report without reference to the whole report.

7. LIMITATIONS ON SCOPE OF INVESTIGATION AND WARRANTY DISCLAIMER
There is no warranty, expressed or implied, by AMEC that:
a) The investigation shall uncover all potential contaminants, including asbestos, on the Site; or
b) The Site will be entirely free of all Targeted Contaminants or other contaminants as a result of any cleanup work undertaken on the Site, since it is not possible, even with exhaustive sampling, testing and analysis, to document all potential contaminants on the Site.

Classification and identification of soils, rocks, geological units, contaminated materials and contaminant quantities have been based on commonly accepted practices in environmental consulting practice in this area.

The CLIENT acknowledges that:

a) The investigation findings are based solely on the information generated as a result of the specific scope of the investigation authorized by the CLIENT;
b) any assessment regarding the presence of contamination of the Site is based on the interpretation of conditions determined at specific sampling locations and depths and that conditions may vary between sampling locations;
c) there can be no assurance that isolated pockets of contaminants are not located on the Site;
d) any assessment is also dependent on and limited by the accuracy of the analytical data generated by the sample analyses;
e) any assessment is also limited by the scientific possibility of determining the presence of contaminants for which scientific analyses have been conducted; and
f) the analytical parameters selected are limited to those outlined in the CLIENT's authorized scope of investigation (in the absence of any evidence of potential contamination sources on the Site, which may warrant expanding the analytical parameters).

8. REMEDIATION COST ESTIMATES - Estimates of remediation costs can only be based on the specific information generated and the technical limitations of the investigation authorized by the CLIENT. Accordingly, estimated costs for remediation only represent the cost to clean up known contaminants that have been identified during the course of the investigation. As remediation of a Site is often an iterative exercise, estimated costs for remediation should only be interpreted to cover the first stage of any Site remediation until such time as verification samples indicate that the Site has been fully remediated and AMEC shall therefore not be liable for the accuracy of any estimates of remediation costs provided.

9. CONTROL OF WORK AND JOBSITE SAFETY - AMEC is only responsible for the activities of its employees on the jobsite. The presence of AMEC personnel on the Site shall not be construed in any way to relieve the CLIENT or any contractors on Site from their responsibilities for Site safety. The CLIENT undertakes to inform AMEC of all hazardous conditions, or possible hazardous conditions which are known to him. The CLIENT also recognizes that the activities of AMEC may uncover previously unknown hazardous materials and that such a discovery may result in the necessity to undertake emergency procedures to protect AMEC employees as well as the public at large and the environment in general. The CLIENT also acknowledges that in some cases the discovery of hazardous conditions and materials will require that certain regulatory bodies be informed and the CLIENT agrees that notification to such bodies by AMEC will not be a cause of action or dispute.

10. LIMITATION OF RESPONSIBILITY

Limitation of Liability - The CLIENT has agrees that, notwithstanding any other provision negotiated as part of AMEC's contract, the total liability of AMEC, its officers, directors and employees for liabilities, claims, judgments, demands and causes of action arising under or related to this Agreement, whether based in contract or tort, shall be limited to the total compensation actually paid to AMEC for the services hereunder or $50,000, whichever is less. All claims by the CLIENT shall be deemed relinquished unless filed within one (1) year after substantial completion of the services hereunder.

No Special or Consequential Damages - CLIENT and AMEC agree that to the fullest extent permitted by law that AMEC shall not be responsible for any consequential, incidental or indirect damages.

Indemnification - Because CLIENT owns and/or operates the site where work is being performed, CLIENT has and shall retain all responsibility and liability associated with the environmental conditions at the site. Unless specifically identified elsewhere, CLIENT'S responsibility and liability includes the handling and disposal of any samples or hazardous materials generated on the site as a result of AMEC's performance hereunder. To the fullest extent permitted by law, the CLIENT agrees to defend, indemnify and hold AMEC, its agents, subcontractors, and employees harmless from and against any and all claims, defense costs, including attorney's fees, damages, and other liabilities arising out of or in any way related to CONSULTANT's reports or recommendations concerning this Agreement, AMEC's presence on the project property, or the presence, release, or threatened release of asbestos, hazardous substances, or pollutants on or from the project property; provided that the CLIENT shall not indemnify AMEC against liability for damages to the extent caused by the negligence or intentional misconduct of AMEC, its agents, subcontractors, or employees.