FORM 55-102F6 INSIDER REPORT

(See instructions on the back of this report)

Notice – Collection and Use of Personal Information: The personal information required under this form is collected on behalf of and used by the securities regulatory authorities set out below for purposes of the administration and enforcement of certain provisions of the securities legislation in British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Northwest Territories, Quebec, New Brunswick, Nova Scotia, Prince Edward Island, []Newfoundland and Yukon. Some of the required information will be made public pursuant to the securities legislation in each of the jurisdictions indicated above. Other required information will remain confidential and will not be disclosed to any person or company except to any of the securities regulatory authorities or their authorized representatives. If you have any questions about the collection and use of this information, you may contact the securities regulatory authority in any jurisdiction(s) in which the required information is filed, at the address(es) or telephone number(s) set out on the back of this

BOX 1. NAME OF TH	HE REPORTING	SISSUER (BLOCK L	ETTER	S)			B. NAME, ADDRESS A		NUMBER OF THE INS	IDER (E	3LOCK LETTERS	BOX 4. JURISDICTI	A REPORTING ISSUER
BOX 2. INSIDER DATA				GIVEN NO.	N NAMES STREET				APT	☐ ALBERTA	PRINCE EDWARD		
RELATIONSHIP(S) TO ISSUER CHANGE IN RELATIONSHIP FROM LAST REPORT	REPORTING	DATE OF LAST REPORT FILED OR IF INITIAL REPORT, DATE ON WHICH YOU BECAME AN INSIDER	DD DD			BUSIN				☐ MANITOBA ☐ NEW BRUNSWICK ☐ NEWFOUNDLAND ☐ NOVA SCOTIA	☐ NORTHWEST TERRITORIES ☐ ONTARIO ☐ QUÉBEC ☐ SASKATCHEWAN ☐ YUKON		
BOX 5. INSIDER HOL	DINGS AND C	HANGES (IF INITIAL I	REPOR	₹T, CON	<u>IPLETE</u>	SECTION	C		ISTRUCTIONS TO BOX	X 5)	D	Е	<u> </u>
DESIGNATION OF SECURIT		BALANCE OF CLASS OF SECURITIES ON LAST REPORT	DD	DATE MM	YY	NATURE	TRANSAC NUMBER/VALUE ACQUIRED	NUMBER/VALUE DISPOSED OF	UNIT PRICE / EXERCISE PRICE	\$ US	PRESENT BALANCE OF CLASS OF SECURITIES HEL	DIRECT / INDIRECT OWNDERSHIP /	IDENTIFY THE REGISTERED HOLDER WHERE OWNERSHIP IS INDIRECT OR WHERE CONTROL OR DIRECTION IS EXERCISED
						BOX 6.	. REMARKS						
ATTACHMENT This form is used as a unif requirements under all pro used is generic to accomm	ovincial securities A	Acts. The terminology											
CORRESPONDENCE	☐ ENGLISH	FRENCH				the time	ersigned certifies that the i and in the light of the circu . SIGNATURE	information given in this umstances in which it is	is report is true and complet s submitted, is misleading o	e in every r untrue.	respect. It is an offen	ce to submit information that	t, in a material respect and at
KEEP A COPY FOR YOUR FILE BCSC 55-102F6 Rev. 2008 / 6 / 13 VERSION FRANÇAISE DISPONIBLE SUR DEMANDE				NAME	NAME (BLOCK LETTERS) SIGNATUI			RE DD MM DATE OF THIS REPORT					

INSTRUCTIONS

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Insider Reports in English and French are available from Manitoba, Ontario, Québec and New Brunswick. If you are a corporate insider in the province of Québec, you will receive correspondence in French. Individuals in the province of Québec will receive, upon request, correspondence in English.

Where an insider of a reporting issuer does not own or have control or direction over securities of the reporting issuer, or where an insider's ownership or direction or control over securities of the reporting issuer remains unchanged from the last report filed, a report is not required. Insider reports are not required to be filed in, Nunavut.

If you have any questions about the form you should be using to file your report, see National Instrument 55-102 System for Electronic Disclosure by Insiders (SEDI).

BOX 1 Name of reporting issuer

Provide the full legal name of the reporting issuer. Use a separate report for each reporting

BOX 2 Insider data

Indicate all of your relationship(s) to the reporting issuer using the following codes: Reporting issuer that has acquired securities issued by itself 2 Subsidiary of the reporting issuer Security holder who beneficially owns or who exercises control or direction over more than 10% of the securities of the reporting issuer (Québec Securities Act-10% of a class of shares) to which are attached voting rights or an unlimited right to a share of the profits and to its assets in case of winding up 3 4 Director of a reporting issuer Senior officer of a reporting issuer 5 Director or senior officer of a security holder referred to in 3 6 Director or senior officer of an insider or subsidiary of the reporting issuer, other than in 4, 5 and 6

If you have filed a report before, indicate whether your relationship to the reporting issuer

Specify the date of the last report you filed, and if it is an initial report, the date on which you became an insider.

BOX 3 Name, address and telephone number of the insider

Deemed insider - 6 months before becoming an insider

Provide your name, address and business telephone number.

BOX 4 Jurisdiction

Indicate each jurisdiction where the issuer is a reporting issuer or the equivalent.

BOX 5 Insider holdings and changes

Show direct and indirect holdings separately, both in the initial report and where a transaction is reported. Indicate only one transaction per line

For an initial report complete only:

designation of class of securities held

present balance of class of securities held

nature of ownership (see List of Codes)

identification of the registered holder where ownership is not direct

you acquired or disposed of securities while an insider, complete sections A to F:

A Indicate a designation of the securities traded that is sufficient to identify the class, including yield, series, maturity.

Indicate the number of securities, or for debt securities, the aggregate nominal value, of the class held, directly and indirectly, before the transaction that is being reported.

Indicate for each transaction:

- the date of the transaction (not the settlement date)
- the nature of the transaction (see List of Codes)
- the number of securities acquired or disposed of, or for debt securities, the aggregate nominal value
- the unit price paid or received on the day of the transaction, excluding the commission
- if the report is in American dollars, check the space under "\$ US"

List of Codes

BOX 5 C Nature of transaction

Compensation for property

Compensation for services

General	
Acquisition or disposition in the public market	10
Acquisition or disposition carried out privately	11
Acquisition or disposition under a prospectus	15
Acquisition or disposition under a prospectus exemption	16
Acquisition or disposition pursuant to a take-over bid, merger or acquisition	22
Acquisition or disposition under a purchase/ownership plan	30
Stock dividend	35
Conversion or exchange	36
Stock split or consolidation	37
Redemption/retraction/cancellation/repurchase	38
Short sale	40

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Acquisition or disposition by gift	47
Acquisition by inheritance or disposition by bequest	48
Issuer Derivatives	
Grant of options	50
Exercise of options	51
Expiration of options	52
Grant of warrants	53
Exercise of warrants	54
Expiration of warrants	55
Grant of rights	56
Exercise of rights	57

Third Party Derivatives

Expiration of rights

Acquisition or disposition (writing) of third party derivative	70
Exercise of third party derivative	71
Other settlement of third party derivative	72
Expiration of third party derivative	73
Miscellaneous	
Change in pature of ownership	90

MISCEIIANEOUS	
Change in nature of ownership	90
Other	97
Correction of information	99

D Indicate the number of securities, or for debt securities, the aggregate nominal value, of the class held, directly and indirectly, after the transaction that is being reported.

Indicate the nature of ownership, control or direction of the class of securities held using the following codes:

Direct ownership Indirect ownership (identify the registered holder) 2 Control or direction (identify the registered holder) 3

For securities that are indirectly held, or over which control or direction is exercised, identify

BOX 6 Remarks

Add any explanation necessary to make the report clearly understandable.

If space provided for any item is insufficient, additional sheets may be used. Additional sheets must refer to the appropriate Box and must be properly identified and signed.

Office staff are not permitted to alter a report.

BOX 7 Signature and filing

Sign and date the report.

File one copy of each of the report in each jurisdiction in which the issuer is reporting within the time limits prescribed by the applicable laws of that jurisdiction.

Manually sign the report.

Legibly print or type the name of each individual signing the report.

If the report is filed on behalf of a company, partnership, trust or other entity, legibly print or type the name of that entity after the signature.

If the report is signed on behalf of an individual by an agent, there shall be filed with each

jurisdiction in which the report is filed a duly completed power of attorney.

If the report is filled by facsimile in accordance with National instrument 55-102 System for Electronic Disclosure by Insiders (SEDI), the report should be sent to the applicable securities regulatory authority at the fax number set out below.

Alberta Securities Commission Suite 600, 250 – 5" Street SWCalgary, AB, T2P 0R4 Attention: Information Officer * Telephone: (403) 297-6454 Facsimile: (403) 297-6156

British Columbia Securities Commission PO Box 10142, Pacific Centre 701 West Georgia Street Vancouver, BC, V7Y 1L2 Attention: Supervisor, Insider Reporting * Telephone: (604) 899-6500 or (800) 373-6393 (in BC) Facsimile: (604) 899-6550

The Manitoba Securities Commission 500 - 400 St. Mary Avenue Winnipeg, MB, R3C 4K5
Attention: Continuous Disclosure *
Telephone: (204) 945-2548
Facsmile (204) 945-4508

Securities Commission of Newfoundland P.O. Box 8700, 2nd Floor West Block Confederation Building St. John's, NFLD, A1B 4J6 Attention: Director of Securities
Telephone: (709) 729-4189
Facsimile: (709) 729-6187

Superintendent of Securities Superintendent of Securities
Department of Justice
Government of the Northwest Territories
1st Floor, Stuart M. Hodgson Building
5009-49th Street
P.O. Box 1320

Yellowknife, Northwest Territories, X1A 2L9 Attention: Deputy Superintendent of Securities Tel; (867) 920-3318

Facsimile: (867) 873-0243

Nova Scotia Securities Commission 2nd Floor, Joseph Howe Building 1690 Hollis Street, P.O. Box 458 Halifax, INS, B3J 3J9 Attention: FOI Officer* Telephone: (900) 424-7768 Facsimile: (902) 424-4625

Government of Nunavut
Legal Registries Division
P.O. Box 100, Station 570
1st Floor, Brown Building
Iqualuit, Nunavut, XOA 0H0
Contact person: Superintendent of Securities
Tel: (867) 975-6590
Fax: (867) 975-6595
Email: legal.registries@gov.nu.ca

Ontario Securities Commission Suite 1903, Box 55, 20 Queen Street West Toronto, ON, MSH 3S8 Attention: FOI Coordinator * Telephone: (416) 593-8314

Yukon Securities Office Yukon Government Law Centre, 3rd Floor 2130 Second Avenue 2130 Second Avenue (PO Box 2703) Whitehorse, YT Y1A 5H6 Attn: Superintendent of Securities Tel: (867) 667-5466 Fax: (867) 393-6251

Facsimile: (416) 593-3666

Autorite des marches financiers* Stock Exchange Tower P.O. Box 246, 22nd Floor

F.O. BOX 240, 2210 FIOOT 800 Victoria Square Montreal, PQ, H4Z 1G3 Attention: Responsable de l'accès à l'information Telephone: (514) 940-2150 or

(800) 361-5072 (in Québec) Facsimile: (514) 873-3120

Saskatchewan Financial Services Commission Securities Division 6th Floor, 1919 Saskatchewan Drive Regina, SK, S4P 3V7 Attention: Director * Telephone: (306) 787-5645 Facsimile: (306) 787-5899

New Brunswick Securities Commission New Brunswick Securities Commission 85 Charlotte Street, Suite 300 Saint John, NB, E2L 2J2 Attention: Corporate Finance Officer Telephone: (506) 658-3060 or (866) 933-2222 (in New Brunswick)

Superintendent of Securities Government of Prince Edward Island 4th Floor, Shaw Building 95 Rochford Street P.O. Box 2000

Charlottetown PE C1A 7N8 Tel: (902) 368-4550

* For questions about the collection and use of personal information

** in Québec questions about the collection and use of personal information may also be addressed to the Commission d'accès à l'information du Québec (1-888-528-7741)