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 report.

BOX 1. NAME OF TH	IE REPORTING	ISSUER (BLOCK L	ETTER	S)					NUMBER OF THE INS	SIDER (BLOCK LETTERS)	ISSUER IS	ION(S) WHERE THE A REPORTING ISSUER
						FAMIL	LY NAME OR CORPORA	ATE NAME				OR THE EC	QUIVALENT
BOX 2. INSIDER DATA				GIVEI	N NAMES STREET				APT	ALBERTA	PRINCE EDWARD		
						CITY						☐ BRITISH COLUMBI. ☐ MANITOBA	A NORTHWEST TERRITORIES
RELATIONSHIP(S) TO	REPORTING					PROV	,			POS	TAL CODE	☐ NEW BRUNSWICK	ONTARIO
ISSUER I	I		DD I	MM I	I YY							☐ NEWFOUNDLAND	QUÉBEC
		DATE OF LAST REPORT FILED OR					NESS TELEPHONE NUM	IBER EXT	CHANGE IN NAME,			□ NOVA SCOTIA	SASKATCHEWAN
FROWLAST —	YES NO	IF INITIAL REPORT, DATE ON WHICH YOU BECAME AN	DD	MM I	YY I	BUSIN	NESS FAX NUMBER		ADDRESS OR TELEPHONE NUMBER FROM LAST REPORT	□ Y	ES NO		YUKON
REPORT		INSIDER	1	<u> </u>	<u> </u>	_]							
BOX 5. INSIDER HOL A	DINGS AND CF	IANGES (IF INITIAL I B	REPOR	RT, CON	IPLETE	SECTION	IS A D E AND C TRANSAC		STRUCTIONS TO BO	X 5)	D	E	Ε
DESIGNATION OF SECURITII		BALANCE OF CLASS OF SECURITIES ON LAST REPORT	DD	DATE MM	YY	NATURE	NUMBER/VALUE ACQUIRED	NUMBER/VALUE DISPOSED OF	UNIT PRICE / EXERCISE PRICE	\$US	PRESENT BALANCE OF CLASS OF SECURITIES HELD	OWNDERSHIP /	IDENTIFY THE REGISTERED HOLDER WHERE OWNERSHIP IS INDIRECT OR WHERE CONTROL OR DIRECTION IS EXERCISED
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						вох 6.	REMARKS						
ATTACHMENT	YES	□NO											
This form is used as a unif requirements under all pro used is generic to accomm	vincial securities A	cts. The terminology											
CORRESPONDENCE ENGLISH FRENCH				the time	The undersigned certifies that the information given in this report is true and complete in every respect. It is an offent the time and in the light of the circumstances in which it is submitted, is misleading or untrue. BOX 7. SIGNATURE				e to submit information tha	at, in a material respect and at			
KEEP A COPY FOR YOUR FILE					NAME	(BLOCK LETTERS)		SIGNATURE				DD MM YY	
ASC 55-102F6 Rev. 2011/	05/01 VERSIO	N FRANCAISE DISPONI	BLE SU	R DEMAI	NDE							DATE OF THIS	KEPUKI

INSTRUCTIONS

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 issuer.

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 Director of a reporting issuer Senior officer of a reporting issuer 5 Director or senior officer of a security holder referred to in 3 Director or senior officer of an insider or subsidiary of the reporting issuer, other than in 4, 5 and 6 Deemed insider - 6 months before becoming an insider 8

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

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

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:

A designation of class of securities held

present balance of class of securities held

nature of ownership (see List of Codes)

dentification of the registered holder where ownership is not direct

If 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"

BOX 5 C Nature of transaction

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
Compensation for property	45
Compensation for services	46
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
Expiration of rights	58
Exercise for cash	59
Third Party Derivatives	
Acquisition or disposition (writing) of third party derivative	70
Exercise of third party derivative	71

List of Codes

7 1
72
73
90
97
99

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 1
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 the registered holder.

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 repor

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 – 5th Street SW Calgary, 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 The Manitoba Securities Commissions 500 – 400 St. Mary Avenue Winnipeg, MB, R3C 4K5 Attention: Continuous Disclosure Telephone: (204) 945-2548 Facsmile (204) 945-0330

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 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 Suite 400, 5251 Duke Street Halifax, Nova Scotia B3J 1P3 Attention: FOI Officer * Telephone: (902) 424-7768 Facsimile: (902) 424-4625

Government of Nunavut Government of Nunavut
Office of Superintendent of Securities
P.O. Box 100, Station 570
1st Floor, Brown Building
Igaluit, Nunavut X0A 0H0
Contact person: Superintendent of Securities

Tel: (867) 975-6590 Fax: (867) 975-6595 Email: securities@gov.nu.ca

Ontario Securities Commission Suite 1903, Box 55, 20 Queen Street West

Toronto, ON, M5H 3S8
Attention: FOI Coordinator '
Telephone: (416) 593-8314
Facsimile: (416) 593-3666

Office of the Yukon Superintendent of Securities Government of Yukon
Department of Community Services
307 Black Street, 1st Floor PO Box 2703 (C-6) Whitehorse, Yukon Y1A 2C6 Telephone: (867)667-5466 Facsimile: (867)393-6251

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

F.O. BOX 246, 2210 FIDO 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

Financial and Consumer Services Commission Financial and Consumer Services 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)

ASC 55-102F6 Rev. 2011/05/01

Note: [01 May 2011] – The above is a consolidation of 55-102F6. It incorporates the amendments to this document that came into effect on May 6, 2003, June 13, 2008, May 1, 2011, local amendments in Nova Scotia and Yukon as described in CSA Notice 11-320, local amendments made by Yukon Rule 11-802 and 11-803, PEI Rule 55-802, Nunavut Rule 11-801, NWT Rule 11-801 and Nova Scotia Rule 11-506 and local amendments in Nunavut and New Brunswick as described in CSA Staff Notice 11-335. This consolidation is provided for your convenience and should not be relied on as authoritative.