

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

FORM 20-F

(Mark One)

- Registration Statement Pursuant To Section 12(b) or (g) of the Securities Exchange Act of 1934  
OR  
 Annual Report Pursuant To Section 13 or 15(d) of the Securities Exchange Act of 1934  
For the fiscal year ended December 31, 2008.  
OR  
 Transition Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934  
OR  
 Shell company Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Commission file number 000-24027

NXT Energy Solutions Inc.  
(Exact Name of Registrant as Specified in its Charter)

Alberta, Canada  
(Jurisdiction of incorporation or organization)

Suite 1400, 505 – 3<sup>rd</sup> Street SW  
Calgary AB, T2P 3E6 Canada  
(Address of principal executive offices)

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(Name, Telephone, E-mail and/or Facsimile number and address of Company Contact Person)

Securities registered or to be registered pursuant to Section 12(b) of the Act: None

Securities registered or to be registered pursuant to Section 12(g) of the Act:

Common Shares  
(Title of Class)

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act: NONE

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report:

30,676,796 common shares and 10,000,000 preferred shares outstanding as of December 31, 2008

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes  No

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Yes  No

Note-Checking the box above will not relieve any registrant required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 from their obligations under those Sections.

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes  No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

Yes  No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of "accelerated filer and large accelerated filer" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer  Accelerated filer  Non-accelerated filer

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing.

U.S. GAAP  International Financial Reporting Standards as issued by the International Accounting Standards Board  Other

If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow.

Item 17  Item 18

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act)

Yes  No

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## FORWARD-LOOKING STATEMENTS

Except for any historical information contained herein, the matters discussed in this Annual Report on Form 20-F contain certain “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995 with respect to our financial condition, results of operations and business. These statements relate to analyses and other information which are based on forecasts of future results and estimates of amounts not yet determinable. These statements also relate to our future prospects, developments and business strategies. These forward-looking statements are identified by their use of terms and phrases such as “anticipate”, “believe”, “could”, “estimate”, “expect”, “intend”, “may”, “plan”, “predict”, “will” and similar terms and phrases, including references to assumptions. These forward-looking statements involve risks and uncertainties, including current trend information, projections for deliveries, backlog and other trend projections, that may cause our actual future activities and results of operations to be materially different from those suggested or described in this Annual Report on Form 20-F.

These risks include:

- customer satisfaction and quality issues;
- competition;
- instability of the financial markets;
- technology risk;
- our ability to achieve and execute internal business plans; and
- other factors described herein under “Risk Factors”.

If one or more of these risks or uncertainties materialize, or if underlying assumptions prove incorrect, our actual results may vary materially from those expected, estimated or projected. Given these uncertainties, users of the information included in this Annual Report on Form 20-F, including investors and prospective investors, are cautioned not to place undue reliance on such forward-looking statements. We do not intend to update the forward-looking statements included in this Annual Report on Form 20-F.

In this Annual Report on Form 20-F, except as specified otherwise or unless the context requires otherwise, “we”, “our”, “us”, the “company”, and “NXT” refer to NXT Energy Solutions Inc. and its subsidiaries. All references to “fiscal” in connection with a year shall mean the year ended December 31.

All financial information contained herein is expressed in Canadian dollars unless otherwise stated.

## PART I

### ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS

Not applicable – The company is filing this Form 20-F as an annual report.

### ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE

Not applicable – The company is filing this Form 20-F as an annual report.

### ITEM 3. KEY INFORMATION

#### A. Selected financial data

The following historical financial information should be read in conjunction with the section entitled “Operating and Financial Review and Prospects” and our audited consolidated financial statements and related notes, which are in-

cluded elsewhere in this document. The consolidated statements of income data for each of the three years ended December 31, 2006, 2007 and 2008 and selected consolidated balance sheet data as of December 31, 2007 and 2008 are derived from, and qualified by reference to, our audited consolidated financial statements included elsewhere in this document. The consolidated statements of income data for each of the years ended December 31, 2004 and 2005 and selected consolidated balance sheet data as of December 31, 2004, 2005 and 2006, are derived from our United States dollar audited financial statements not included in this document that have been converted into Canadian dollars.

## INCOME (LOSS) & COMPREHENSIVE INCOME (LOSS)

Expressed in Canadian Dollars

	For the year ended December 31,				
	2008	2007	2006	2005	2004
Revenues					
Survey revenue	\$2,944,470	\$5,608,432	\$1,206,684	\$ -	\$ -
Oil and natural gas revenue	10,592	33,260	41,830	58,802	62,586
	<b>2,955,062</b>	<b>5,641,692</b>	<b>1,248,514</b>	<b>58,802</b>	<b>62,586</b>
Operating expenses					
Survey cost	211,237	814,343	164,095	34,331	933,578
Oil and natural gas expenses	3,959	3,753	5,390	5,705	7,464
Administrative	3,678,803	4,016,662	2,816,002	3,236,312	3,194,736
Depletion and impairment of oil and natural gas properties	4,372	87,291	1,153,576	703,769	232,011
Amortization and depreciation	171,613	128,179	95,844	67,764	75,390
Research & development	-	-	-	3,519,900	-
	<b>4,069,984</b>	<b>5,050,228</b>	<b>4,234,907</b>	<b>7,567,781</b>	<b>4,443,179</b>
	<b>(1,114,922)</b>	<b>591,464</b>	<b>(2,986,393)</b>	<b>(7,508,979)</b>	<b>(4,380,593)</b>
Other expense (income)					
Interest expense (income)	(234,007)	(109,374)	(4,411)	23,396	691
Interest on debentures	-	100,980	1,290,239	1,705,790	0
Loss (gain) on sale of properties	(20,325)	-	-	5,727	(39,424)
Loss (gain) on foreign exchange	(20,242)	249,427	1,882	67,335	0
Abandonment of oil and gas properties	210,943	-	-	-	-
Other	90,000	-	-	-	-
	<b>26,369</b>	<b>241,033</b>	<b>1,287,710</b>	<b>1,802,248</b>	<b>(38,733)</b>
Net income (loss) from continuing operations	<b>(1,141,291)</b>	<b>350,431</b>	<b>(4,274,103)</b>	<b>(9,311,227)</b>	<b>(4,341,860)</b>
Gain from discontinued operations	-	-	-	-	43,590
Net income (loss)	<b>(1,141,291)</b>	<b>350,431</b>	<b>(4,274,103)</b>	<b>(9,311,227)</b>	<b>(4,298,270)</b>
Other comprehensive income (loss):					
Foreign currency translation gain (loss)	-	-	9,907	(10,041)	-
Comprehensive income (loss) for the period	<b>(\$1,141,291)</b>	<b>\$350,431</b>	<b>(\$4,264,196)</b>	<b>(\$9,321,268)</b>	<b>(\$4,298,270)</b>
Basic and diluted net income (loss) per share from continuing operations	<b>(0.04)</b>	<b>0.01</b>	<b>(0.17)</b>	<b>(0.44)</b>	<b>(0.22)</b>
Basic and diluted income (loss) per share	<b>(\$0.04)</b>	<b>\$0.01</b>	<b>(\$0.17)</b>	<b>(\$0.44)</b>	<b>(\$0.21)</b>
Weighted average common shares outstanding	<b>30,369,586</b>	<b>27,838,893</b>	<b>25,038,200</b>	<b>21,276,899</b>	<b>20,132,989</b>

**Balance Sheet Data**  
**Expressed in Canadian Dollars**

	As at December 31,				
	2008	2007	2006	2005	2004
Working capital	<b>\$6,325,055</b>	\$5,336,353	\$1,264,252	\$(2,760,392)	\$827,130
Current assets	<b>6,971,898</b>	8,602,790	3,033,419	1,445,916	1,586,296
Oil and natural gas properties, net	<b>7,315</b>	35,585	151,921	1,265,628	1,396,232
Other property and equipment, net	<b>621,396</b>	504,160	247,688	148,347	212,334
Total assets	<b>7,600,609</b>	9,142,535	3,433,028	2,859,891	3,194,862
Current liabilities	<b>646,843</b>	3,266,437	1,769,167	4,206,308	759,166
Long-term liabilities	<b>53,808</b>	32,140	0	250,565	280,370
Total liabilities	<b>700,651</b>	3,298,577	1,769,167	4,456,873	1,039,536
Shareholders' equity	<b>\$6,899,958</b>	\$5,843,958	\$1,663,861	\$(1,596,982)	\$2,155,326

Throughout the history of the company there have been no dividends declared.

The following table sets forth certain exchange rates between our financial reporting currency, the Canadian dollar, and the United States dollar based on the noon rate of exchange of the U.S. dollar, expressed in Canadian dollars, as reported by the Bank of Canada:

**Period**

June 15, 2009		1.1341	
		<b>High</b>	<b>Low</b>
Month ended-	May 31, 2009	1.1872	1.0872
Month ended-	April 30, 2009	1.2643	1.1940
Month ended-	March 31, 2009	1.3000	1.2245
Month ended-	February 28, 2009	1.2890	1.2192
Month ended-	January 31, 2009	1.2741	1.1823
Month ended-	December 31, 2008	1.2969	1.1965
		<b>Average</b>	
Quarter ended-	March 31, 2009	1.2558	
Year ended-	December 31, 2008	1.0716	
Year ended-	December 31, 2007	1.0666	
Year ended-	December 31, 2006	1.1308	
Year ended-	December 31, 2005	1.2085	
Year ended-	December 31, 2004	1.2980	

**B. Capitalized and indebtedness**

Not applicable – The company is filing this Form 20-F as an annual report.

**C. Reasons for the offer and use of proceeds**

Not applicable – The company is filing this Form 20-F as an annual report.

#### **D. Risk factors**

Investing in our common shares involves a high degree of risk. In addition to the other information included in this document, you should carefully consider the risks described below before purchasing our common shares. If any of the following risks actually occur, our business, financial condition and results of operations could materially suffer. As a result, the trading price of our common shares could decline and you might lose all or part of your investment.

##### **Our ability to continue operating is not certain.**

We are in the early stages of commercializing our SFD® survey technology following a long history of generating losses. As at December 31, 2008 our deficit was \$52,703,170 consisting of net losses of \$47,638,207 incurred prior to fiscal 2006, net losses of \$4,274,103 and \$1,141,291 incurred respectively in fiscal 2006 and 2008 and net income of \$350,431 in fiscal 2007. The losses incurred prior to 2006 related to the development and industry validation of our SFD® technology. During this period we derived no direct revenue from our SFD® technology. In 2006 we commenced offering our SFD® survey services to third parties on a fee-for-service basis. In the three year period following the end of 2005 in aggregate we earned SFD® survey revenue of \$9,759,586 and generated cash from operating activities of \$913,150.

The company's ability to generate cash flow from operations will depend on its ability to service its existing clients and develop new clients for its services. Management recognizes that this early commercialization phase can last for several years. Consistent with this early stage of commercialization the company has a significant economic dependency on a few clients. While the company is in this early stage of commercialization, the company's financial position is materially impacted by the loss or gain of any one client. The company's ability to continue operations is dependent on attracting future clients through demonstrating the value that the company can bring to their exploration activities.

On April 13, 2009 the company executed a contract with a Colombian subsidiary of a Canadian oil and gas company to conduct a U.S. \$2,300,000 SFD® survey in Colombia. The survey commenced in the second quarter of 2009.

Until we can demonstrate our ability to service existing clients and develop new clients for our SFD® services over a longer period of time, we cannot be certain that we are in a position to continue operating indefinitely. The company's ability to continue as a going concern is discussed within Note 1 of the consolidated financial statements included within this Form 20-F.

##### **Our revenue and future business opportunities may be negatively impacted should our clients be unable to raise the required capital to conduct exploration activities.**

Our client's inability to raise capital can adversely affect our ability to earn revenue and generate cash from operating activities.

##### **The financial statements rely upon estimates and assumptions that could be incorrect.**

The preparation of financial statements requires our management to make estimates and assumptions. These estimates and assumptions affect the reported amounts of assets and liabilities including the disclosure of contingent assets and liabilities as well as revenues and expenses recorded in our financial statements. Estimates include allowances for doubtful accounts, valuation of the convertible debentures, estimated useful lives of assets, provisions for contingent liabilities, measurement of stock-based compensation, valuation of future tax assets, determination of proved reserves, valuation of undeveloped land, valuation of preferred shares including the likelihood that the conversion feature of the preferred shares will be achieved.

The estimates and assumptions are based upon the best information available to management, however, we cannot provide assurance that future events will not prove that these estimates and assumptions are inaccurate. Any revisions to our estimates and assumptions may have a material impact on our future reported net income or loss, assets or liabilities.

**We engage in transactions with related parties.**

We have related party transactions between NXT and its officers and directors. The most significant transaction was the Technical Transfer Agreement executed on December 31, 2006 between NXT and Mr. Liszicasz, our CEO, president and director, wherein NXT issued 10,000,000 preferred shares in exchange for the acquisition of the SFD® technology.

NXT manages this conflict of interest risk through maintenance of a strong independent board of directors. Five of the six directors are independent, as that term is defined in Canadian National Instrument 58-101. All transactions between NXT and its officers or directors are negotiated on behalf of NXT and voted upon by disinterested directors to protect the best interest of shareholders.

All related party transactions have the potential for conflicts of interest that may undermine the board's fiduciary responsibility to NXT shareholders.

**Our revenue and future business opportunities are impacted by oil and gas price fluctuations.**

We incur a risk of market changes in oil and natural gas prices. Prospective revenues from the sale of our services or properties will be impacted by oil and natural gas prices. The impact of price changes on any potential sale of our existing oil and natural gas properties or our ability to enter into SFD® survey contracts cannot be readily determined, however, in general if commodity prices decline our opportunity to sell properties or execute SFD® survey contracts will also decline.

**Our financial position is impacted by currency fluctuations.**

We currently hold our cash in Canadian as well as in U.S. dollars and we can earn revenues in U.S. dollars and other foreign currencies. Our reporting currency is in Canadian dollars. We do not engage in currency hedging activities. These cash positions and potential foreign currency revenue streams can expose us to exchange rate fluctuations between the Canadian and foreign currencies. See Item 11 of this Form 20-F.

**Our net income or loss is impacted by interest rate fluctuations.**

We currently maintain some of our available cash in short term investments that generate interest income that can be adversely affected by any material changes in interest rates. See Item 11 of this Form 20-F.

**We rely upon the availability of charter aircraft to conduct our survey operations.**

Since the sale of our aircraft in 2003, NXT has relied upon the availability of aircraft from charter operators. Charter operators provide the required aircraft for SFD® survey operations on an as-required basis for an hourly charter fee. NXT is not required to make a capital investment in a chartered aircraft. The only potential prepayment is the purchase of blocks of aircraft time, other advance payments and/or the cost paid by NXT for specific modifications to the chartered aircraft to meet our survey requirements.

On May 8, 2009 we entered into a charter agreement with Air Partners Corp., a Calgary Alberta based international aircraft charter operator, to supply aircraft services for our survey requirements for a minimum period of one year.

Although various charter operators have provided aircraft charter services since the disposal of our aircraft in 2003 there is a risk that a suitable aircraft may not be available for a charter operator at some future date. Should the company be unable to acquire an aircraft that is suitable from a charter operator, then NXT would be required to acquire an aircraft. A suitable used aircraft is expected to cost approximately U.S. \$4,000,000 and the company anticipates that 75% financing may be available to make the aircraft purchase. The time period to acquire an aircraft and then obtain required regulatory approval to conduct the first survey flight may take several months.

Should we be unable to receive aircraft services from a suitable charter operator in the future and we are unable to acquire an alternative suitable aircraft in a timely fashion we would be unable to conduct SFD® surveys for clients.

**We are a small business with limited personnel and therefore we have an inherent internal control weakness related to our inability to affect proper segregation of duties between administrative staff.**

Certain duties that are most appropriately segregated between different employees are, due to our limited staff, assigned to one individual. However, we believe our controls are reasonable given our limited staff resources.

Standard internal control methodology involves the separation of incompatible functions by assigning these functions to separate individuals, and in larger organizations, to separate departments. In the company often these incompatible functions cannot be allocated to separate individuals because of our small administrative staff.

The company has adopted alternative control methods designed to compensate for the reduced ability to separate incompatible functions. For example, as a compensating control, the accountant does not have signing authority on the bank accounts and the accountant's activities are actively supervised by our Chief Financial Officer. If these alternative controls fail then this lack of separation of duties exposes the company to misappropriation of funds, embezzlement and other forms of fraud and could have a material adverse effect on the company's business, financial condition and results of operations.

**Our rights to SFD® technology may be challenged and we may need to defend our rights to the technology in the courts.**

Our right to the SFD® technology depends on our CEO and director, Mr. Liszicasz, having a lawful right to sell to us the exclusive right to exploit the SFD® technology for the exploration of hydrocarbons as agreed to in the Technical Transfer Agreement ("TTA"). (For a full history of the technology transfer see Item 4.A Information on the Company - History and development of the company - History of Technology Agreements included within this Form 20-F.)

Our rights to use our SFD® technology initially arose from an agreement we entered into with Mr. Liszicasz on January 1, 1996. Mr. Liszicasz is the inventor of the technology. Mr. Liszicasz subsequently assigned his rights to this agreement to Momentum Resources Corporation ("Momentum"), a Corporation registered in Nassau, Bahamas on June 18, 1996 pursuant to a partnership agreement that Mr. Liszicasz had entered into with a third party partner on September 1, 1995 (the "Partnership Agreement"). Mr. Liszicasz owned 50% of Momentum and a 50% interest in the partnership (the "Partnership").

Pursuant to this Partnership Agreement, Mr. Liszicasz transferred to the Partnership the original SFD® sensor device as enhanced to the date of transfer and Mr. Liszicasz provided his know-how to locate hydrocarbons using the SFD® detector. On June 18, 1996 the Partnership transferred this interest in the SFD® technology to Momentum.

All subsequent SFD® development was undertaken and financed directly by NXT in conjunction with Mr. Liszicasz.

We retained a Canadian national law firm to evaluate the ownership of SFD® theories, equipment and know-how based upon documentary evidence including various agreements entered into by Mr. Liszicasz, the Partnership, Momentum and NXT. In a letter dated August 18, 2004, the law firm interpreted the agreements to have the following legal effect:

1. Momentum owns the original SFD® sensor that was transferred to Momentum pursuant to the Partnership Agreement on September 1, 1995.
2. The Partnership Agreement does not result in the transfer of "know-how" or the SFD® Theories from Mr. Liszicasz to the Partnership. "Know-how" is a personal skill and knowledge of Mr. Liszicasz that cannot be transferred.
3. Mr. Liszicasz retains intellectual rights associated with his SFD® Theories including any rights to his "know-how".
4. NXT owns any SFD® sensors developed by NXT.

On December 31, 2006 we executed the TTA with Mr. Liszicasz whereby Mr. Liszicasz transferred all his rights to the SFD® technology for the purpose of hydrocarbon exploration to the company.

A risk does exist that the former partner of Mr. Liszicasz in the Partnership or some other unknown party may claim some legal entitlement to Mr. Liszicasz' intellectual property, NXT's rights to commercialize this intellectual property or NXT's right to create SFD® devices and processes. However, we believe that such a claim would be without merit.

To mitigate the risk of an entitlement claim for our technology from a third party, the company entered into a settlement agreement with the former business partner of Mr. Liszicasz. On August 15, 2008 a settlement was reached between the company and the former partner wherein we paid \$90,000 and the former partner provided us with a complete release to any claim against NXT, its directors or officers, or any claim of an interest in the SFD® technology.

The SFD® technology is an essential component of our business plan. If a third party challenged our lawful entitlement to this technology we would vigorously defend our rights. The legal defense of our right to the technology may be expensive. A loss of our right to the SFD® technology, or a protracted legal process to assert our right to the technology, would have a material adverse effect on the company's business, financial condition and results of operations.

**We rely on a limited number of SFD® sensors and this limitation may affect our ability to conduct business.**

We have a limited number of SFD® sensors. We are manufacturing additional sensors and have been successful in manufacturing several new sensors in the last 12 months. We survey with an array of 14 sensors and we currently possess sufficient sensors to create at least 2 sensor arrays. The company would be at risk if these existing sensors are damaged, destroyed, wear out, are stolen or in any way made unavailable for operations prior to us creating and testing additional sensors. Should we lose these sensors our ability to conduct surveys will be delayed for several months as we build new sensors and in this period we may default on a contractual obligation. A default may jeopardize future revenue opportunities and may potentially result in a client drawing on a performance bond posted or otherwise making claims against the company for breach of contract.

**We rely on equipment for data acquisition and signal conditioning of the SFD® signal and should this equipment be damaged, destroyed or in any other way not be available for our operations then we will be unable to conduct surveys and meet contractual obligations.**

We have mitigated this risk in 2008 through the creation of a redundant set of equipment for data acquisition and signal conditioning of the SFD® signals. However, if equipment necessary to conduct surveys became unavailable, there is a risk that our ability to conduct surveys will be delayed for several months and we may become in default of a contractual obligation. A default may jeopardize future revenue opportunities and may potentially result in a client drawing on a performance bond posted or otherwise making claims against the company for breach of contract.

**We require ongoing technology development, otherwise we may not be able to respond to changes in customer requirements or new competitive technologies.**

We must continue to refine and develop our SFD® survey system to make it scalable for growth and to respond to potential future competitive pressures. These improvements require substantial time and resources. Furthermore, even if resources are available, there can be no assurance that the company will be commercially or technically successful in enhancing the technology. The company's inability to keep pace with new technologies and evolving industry standards and demands could have a material adverse effect on the company's business, financial condition and results of operations.

**We are dependent on key personnel; the loss of any of these key persons will impact our ability to conduct business.**

The company's future success depends to a significant extent on the continued service of its key technical and management personnel and on its ability to continue to attract and retain qualified employees. The loss of the services of the company's employees or the company's failure to attract, retain and motivate qualified personnel could have a

material adverse effect on the company's business, financial condition and results of operations. We do not have "key man" insurance on any of our personnel.

The company has employment agreements with all of its executive officers, including George Liszicasz, its president and Chief Executive Officer.

We have a strong dependence on Mr. Liszicasz to interpret the SFD® data and to enhance our technology. Mr. Liszicasz is currently training a team of interpreters in order for the company to become less reliant on him to perform these functions. Within the last year five persons have become trained to interpret SFD® signals, however currently none are trained to the skill level equivalent of Mr. Liszicasz. In addition, Mr. Liszicasz is working with senior individuals with doctorates in mathematics and physics, both in-house personnel and academics to further study and develop the technology. If Mr. Liszicasz is unable to reduce the company's dependence on him and he becomes incapable of performing these functions, this may adversely affect our ability to interpret the data from SFD® surveys or to enhance our technology.

Additionally, we could have demands for our services that can exceed our capacity with our current personnel. Although we have performed large scale SFD® surveys in the past to third parties, we may require additional skilled personnel to successfully fulfill multiple, concurrent fee-for-service contracts. Within the province of Alberta the skilled personnel that we require are in short supply. These key people may be difficult to recruit into our company. If we cannot hire these key personnel, or should lose current personnel, our ability to accept contracts or meet contract commitments may be adversely affected.

**A single major shareholder who is also a board member and an officer of the company retains the ability to influence or control the company and this influence or control may result in a conflict of interest.**

Mr. George Liszicasz, our principal executive officer and largest shareholder, beneficially owns, as of June 22, 2009, approximately 17% of the common shares outstanding and therefore has a substantial influence in all shareholder matters. Additionally, he owns 10,000,000 preferred shares, 2,000,000 of these preferred shares are convertible immediately on a one-to-one basis at the discretions of Mr. Liszicasz, and the balance are convertible into common shares subject largely to certain revenue performance conditions being met. If all the preferred shares were converted and there was no other change in our share structure he would own 43% of common shares. See Notes to the Consolidated Financial Statements or Item 4.B Information on the Company – Business overview – Key Contract on Which We Rely for additional information relating to the preferred shares.

This potential conflict of interest is mitigated by an independent board of directors that protects the interests of all shareholders. As well, Mr. Liszicasz is governed by a code of conduct and a fiduciary responsibility to ensure that the interests of all shareholders are protected.

If these conflict of interest controls are not effective there is an opportunity for decisions being made by the company that may advantage Mr. Liszicasz and negatively impact other shareholders.

**There is no certainty that an investor can trade our common shares on public markets at a stable market price.**

There is a limited public market for our common shares on the TSX Venture Exchange, Over the Counter Bulletin Board (the "OTCBB") and the Frankfurt and Berlin Exchanges and there is a risk that a broader or more active public trading market for our common shares will not develop or be sustained, or that current trading levels will not be sustained.

The market price for the common shares on the exchanges where our stock is listed has been, and we anticipate will continue to be, extremely volatile and subject to significant price and volume fluctuations in response to a variety of external and internal factors. This is especially true with respect to emerging companies such as ours. Examples of external factors, which can generally be described as factors that are unrelated to the operating performance or financial condition of any particular company, include changes in interest rates and worldwide economic and market conditions, as well as changes in industry conditions, such as changes in oil and natural gas prices, oil and natural gas inventory levels, regulatory and environment rules, and announcements of technology innovations or new prod-

ucts by other companies. Examples of internal factors, which can generally be described as factors that are directly related to our consolidated financial condition or results of operations, would include release of reports by securities analysts and announcements we may make from time to time relative to our operating performance, clients drilling results, financing, advances in technology or other business developments.

Because we have a limited operating history and only one profitable year to date, the market price for the common shares is more volatile than that of a seasoned issuer. Changes in the market price of the common shares, for example, may have no connection with our operating results or the quality of services provided to clients. No predictions or projections can be made as to what the prevailing market price for the common shares will be at any time, or as to what effect, if any, that the sale of shares or the availability of common shares for sale at any time will have on the prevailing market price.

Sales of substantial amounts of the common shares on the public market, or the perception that substantial sales could occur, could adversely affect the prevailing market prices for those shares. In addition, as of our last interim report on March 31, 2009, our employees, former employees, directors, consultants and shareholders hold 1,559,537 vested options, 150,000 of vested warrants and 2,000,000 preferred shares that are convertible to common shares entitling them to acquire 3,709,537 common shares. Subsequent to this interim report there has been no substantial change to the number of vested options or warrants.

**You will be subject to the penny stock rules to the extent our stock price on the OTCBB is less than \$5.00.**

Since the common shares are not listed on a national stock exchange within the United States, trading in the common shares on the OTCBB is subject, to the extent the market price for the common shares is less than \$5.00 per share, to a number of regulations known as the "penny stock rules". The penny stock rules, subject to certain exemptions, require a broker-dealer to deliver a standardized risk disclosure document prepared by the Securities and Exchange Commission (the "SEC"), to provide the customer with additional information including current bid and offer quotations for the penny stock, the compensation of the broker-dealer and its salesperson in the transaction, monthly account statements showing the market value of each penny stock held in the customer's account, and to make a special written determination that the penny stock is a suitable investment for the purchaser and receive the purchaser's written agreement to the transaction. To the extent these requirements may be applicable they will reduce the level of trading activity in the secondary market for the common shares and may severely and adversely affect the ability of broker-dealers to sell the common shares.

**You should not expect to receive dividends in the foreseeable future.**

We have never paid any cash dividends on our common stock and we do not anticipate that we will pay any dividends in the foreseeable future. Our current business plan is to retain any future earnings to finance the expansion of our business. Any future determination to pay cash dividends will be at the discretion of our board of directors, and will be dependent upon our consolidated financial condition, results of operations, capital requirements and other factors as our board of directors may deem relevant at that time.

**Our right to issue additional capital stock at any time could have an adverse effect on your proportionate ownership and voting rights.**

We are authorized under our Articles of Incorporation to issue an unlimited number of common shares and an unlimited number of preferred shares. Subject to compliance with applicable corporate and securities laws, we may issue these shares under such circumstances and in such manner and at such times, prices, amounts and purposes as our board of directors may, in their discretion, determine to be necessary and appropriate. Proportionate ownership and voting rights of common shareholders could be adversely affected by the issuance of additional common shares, that may result in dilution of net tangible book value per share.

**We may not be able to protect our trade secrets and intellectual property from competitors who would use this knowledge to eliminate or reduce our technological advantage.**

The company's success and future revenue growth will depend, in part, on its ability to protect its intellectual property.

We have no immediate intentions of obtaining a patent for the SFD® technology as we believe the risk and cost of seeking a patent exceed the benefits of a patent. The patent protection process would require disclosure of the SFD® technology to third parties and ultimately public disclosure. This disclosure could significantly increase the risk of unlawful use of our technology by third parties. Furthermore we have no assurance that, even if we seek patent protection, a patent could be registered to protect our intellectual property in all or any jurisdiction within North America or other countries throughout the world. If registered, there can be no assurance that it would be sufficiently broad to protect the company's technology or that any potential patent would not be challenged, invalidated or circumvented or that any right granted thereunder would provide meaningful protection or a competitive advantage to the company. Finally, protection afforded by patents is limited by the financial resources available to legally defend intellectual property rights. NXT currently does not possess the required financial resources to fund a lengthy defense of our rights if challenged by a much larger competitor or an oil and gas company.

We do enjoy common and contract law protection of our technology and trade secrets. Employees and contractors are governed by confidentiality agreements as well as a fiduciary responsibility to protect our technology, supporting documentation and other proprietary information.

Our strongest protection of the SFD® technology comes from restricting access to knowledge of the technology. Only a very limited number of NXT personnel have access to or knowledge of the underlying SFD® technology and no one employee and only one officer has access or knowledge of all aspects of the SFD® system. Currently no third party has any significant knowledge of the technology. As further protection, SFD® equipment does not leave the direct control of NXT employees, thereby preventing unauthorized replication of the equipment.

The company reassesses the appropriateness of its intellectual property protection strategy on an ongoing basis and seeks advice from intellectual property advisors. We may seek patent protection of our technology if conditions change in the future.

Despite these precautions, it may be possible for a third party to copy or otherwise obtain and use the company's technology without authorization, develop similar technology independently or design around the company's secrets. There can be no assurance that the steps taken by the company to prevent misappropriation or infringement of our intellectual property will be successful. An inability to protect our intellectual property would make it possible for competitors to offer similar products and services.

Any failure by the company to protect its intellectual property could have a material adverse effect on its business, financial condition and results of operations.

**We experience operational hazards in our flight operations that may subject us to potential claims in the event that an incident or accident occurs.**

The flight operations of SFD® surveys are subject to the hazards associated with general and low-level flight operations. An aircraft accident may cause personal injury and loss of life, as well as severe damage to and destruction of property, SFD® sensors and SFD® equipment.

Independent third parties provide all the services required to operate the aircraft; they bear the primary risks of flight operations. These services are provided by an organization accredited by Transport Canada to operate aircraft in accordance with Transport Canada approved and audited operating procedures. The aircraft operator employs the required pilots, aircraft maintenance engineers and support personnel and ensures that they operate within their Transport Canada operating certificate. Our employees do not perform any airworthiness or flight safety operations.

We obtain insurance coverage to provide us with additional risk protection. We require the flight contractor to maintain appropriate insurance coverage for the risks associated with aircraft operations. In addition, we maintain general business insurance coverage.

Despite our policy not to operate the aircraft directly we cannot avoid all risks of flight operations. In the event of an incident or accident we may be sued by injured parties and to the extent that our SFD® equipment is damaged we may be unable to conduct SFD® surveys for several months.

**We have operated in the oil and gas industry that may subject us to industry specific hazards that can result in unexpected costs to the company.**

Oil and natural gas exploration projects are subject to hazards related to the drilling of oil and natural gas wells, including the risk of fire, explosion, blow-out, pipe failure, casing collapse, abnormally pressured formations and environmental hazards such as oil spills, gas leaks, ruptures and discharges of toxic gases. These hazards can cause personal injuries or loss of life, severe damage to or destruction of property, natural resources and equipment, pollution or other environmental damage, clean-up responsibilities, regulatory investigation and penalties and suspension of operations.

While we would have no direct liability in cases where our participation is limited to an overriding royalty interest, the failure or inability of the project operator to procure insurance at an acceptable cost or the occurrence of a significant adverse event not fully insured or indemnified against could have an indirect, adverse effect on our business, financial condition and results of operations to the extent it adversely affects the operator's ability to complete projects where we have a beneficial interest.

**We conduct business in foreign currencies thereby exposing us to currency exchange losses.**

Our financial position will be affected by exchange rate fluctuations. We hold cash in both Canadian and United States dollars. We may earn revenue and incur expenses denominated in foreign currencies, yet report our financial results in Canadian dollars. Furthermore we intend to enter into contracts to provide services in foreign countries and may conduct business in other currencies such as the Euro. Changes in currency exchange rates could have an adverse effect on the company's business, financial condition and results of operations.

**We are a Canadian company and our nationality may impair the enforceability of judgment for any person resident outside Canada.**

Since we are a Canadian company and most of our assets and key personnel are located in Canada, you may not be able to enforce a U.S. judgment for claims you may bring against us, our assets, our key personnel or many of the experts named in this document. This may prevent you from receiving compensation to which you may otherwise have a claim.

We are organized under the laws of Alberta, Canada and substantially all of our assets are normally located in Canada. In addition, our board of directors and our officers are residents of Canada. As a result, it may be impossible for you to affect service of process upon us or these individuals within the U.S. or to enforce any judgments in civil and commercial matters, including judgments under U.S. federal securities laws. In addition, a Canadian court may not permit you to bring an original action in Canada or to enforce in Canada a judgment of a U.S. court based upon civil liability provisions of the U.S. federal securities laws.

**We caution that the factors referred to above and those referred to as part of particular forward-looking statements may not be exhaustive and that new risk factors emerge from time to time in our rapidly changing business environment.**

#### **ITEM 4. INFORMATION ON THE COMPANY**

##### **A. History and development of the company**

###### **Summary**

NXT was incorporated under the laws of the State of Nevada on September 27, 1994 and continued from the State of Nevada to the Province of Alberta, Canada on October 24, 2003. The company commenced business operation in 1996 for the purpose of developing and commercializing our proprietary SFD® survey system.

Our registered office is located at 1400, 505 - 3rd Street SW, Calgary, Alberta, Canada and our telephone number is (403) 264-7020. In the United States our authorized agent is Parasec at: 318 North Carson Street, Suite 208, Carson City, NV and their telephone number is (888) 972-7273.

We are a reporting issuer in Alberta under the Alberta Securities Commission. We are a reporting company in the United States under the Securities Exchange Act of 1934, as amended (the “Exchange Act”), and our common shares trade publicly in Canada on the TSX Venture Exchange under the symbol "SFD.V", over-the-counter within the United States on the OTC Bulletin Board under the symbol "NSFDF.OB" and in Europe on the Berlin and Frankfurt Exchanges under the symbol “EFW”.

We are a technology company focused on providing a service to oil and natural gas exploration clients using our SFD® survey system. The SFD® system is a remote sensing airborne technology comprised of SFD® sensors, integrated electronic data acquisition, processing and interpretation subsystems. SFD® is the registered trade mark of NXT Energy Solutions Inc.

The underlying technology employed by our SFD® survey system was invented by George Liszicasz, our CEO, president and largest shareholder. The technology was licensed to the company by Mr. Liszicasz until December 31, 2006 through a series of consecutive license agreements. On December 31, 2006 the company acquired the technology through a Technology Transfer Agreement from Mr. Liszicasz and terminated the license agreement.

Our airborne SFD® survey system is offered to clients on a fee-for-service basis. Under contract we survey large tracts of land, then identify and prioritize oil and gas prospect areas (“Prospect Areas”) for our clients. A Prospect Area is defined as an area having subsurface structural trapping mechanisms with oil and gas reservoir potential. Prospect Areas are generally further evaluated by clients using conventional exploration techniques, such as conducting a follow-up seismic survey prior to the client selecting a drilling location. Our SFD® survey system is less expensive, quicker and less environmentally intrusive than other existing wide-area reconnaissance survey systems capable of assessing reservoir potential. These advantages can reduce for our clients the risk, finding costs and time required to identify oil and gas prospects.

The SFD® survey system is a proven technology that has successfully been field tested for clients and joint venture partners. Several independent reports confirm the efficacy of the technology and five clients have conducted surveys for which they have paid the company \$9,759,586.

#### Risk Factors

We are subject to a number of risks that you should be aware of before you decide to buy our common stock. These risks are discussed in the “RISK FACTORS” section of this Form 20-F.

#### Corporate History

NXT is a technology company focused on using its proprietary SFD® technology for oil and gas exploration. We were initially incorporated in the State of Nevada on September 27, 1994 under the name Auric Mining Corporation. In January 1996 we acquired all of the common stock of NXT Energy USA (then known as Pinnacle Oil Inc.) from its stockholders in exchange for our common stock. As a consequence of this acquisition, NXT Energy USA became our wholly owned subsidiary and its stockholders acquired a 92% controlling interest in our common stock.

Prior to this transaction, we were a corporate shell conducting no active business, and NXT Energy USA was a development stage research and development enterprise holding world-wide rights to use the SFD® technology for hydrocarbon exploration purposes through an agreement with our CEO, president and board member George Liszicasz. Mr. Liszicasz was the inventor of the technology.

Immediately after this transaction we changed our name to Pinnacle Oil International, Inc. and subsequently, on June 13, 2000 we changed our name to Energy Exploration Technologies.

Throughout the period from fiscal year 2000 through to 2005, NXT made capital investments for the purpose of developing oil and gas properties. In this period NXT invested U.S. \$10.1 million; U.S. \$5.0 million of which was invested in Canada and U.S. \$5.1 million which was invested in the United States (the United States investments were solely in the period 2000 through 2002). There was no significant capital expenditure on oil and gas properties in the fiscal years ended 2006, 2007 and 2008. In the fiscal years ended 2006, 2007 and 2008 the company made expenditures of \$39,869, \$5,954 and \$3,177 respectively on oil and gas properties primarily to maintain lease commitments on undeveloped lands.

Expenditures on oil and gas properties prior to 2006 were high risk in nature with U.S. \$1.4 million invested into the acquisition of land and U.S. \$8.6 million expended on exploration programs with the balance on development. These expenditures were partially targeted towards land identified by SFD® surveys.

We incurred these pre-2006 expenditures generally to provide evidence of the efficacy of the SFD® survey system through direct exploitation of SFD®-identified Prospect Areas. This tactic, although partially effective, suffered because NXT lacked the capital base to exploit the technology independently. To counter these capital deficiencies NXT entered into joint venture agreements with third parties to jointly exploit properties. These joint venture obligations included non-SFD® identified properties, thereby diverting capital resources away from the prime SFD® prospects.

In January 2003 we adopted a formal plan to divest our U.S. oil and gas properties. On May 9, 2003 we closed a sale transaction with our U.S. joint venture partner to sell the properties for \$1.5 million consisting of \$720,000 in cash with the balance paid through the return to treasury of all outstanding preferred shares.

Effective on April 1, 2008 the company sold its sole Canadian producing oil well for a net proceed of \$47,400. Currently the company's interests in oil and gas properties consist of undeveloped land in Canada and royalty interest.

On October 24, 2003 at a special shareholders' meeting, a majority of our shareholders approved the continuance of the company from the State of Nevada to the Province of Alberta, Canada. At that time we continued or were re-incorporated in the Province of Alberta, Canada under the *Business Corporations Act (Alberta)* and we modified our name to Energy Exploration Technologies Inc. Throughout 2004 and to the present we have conducted our business activities primarily through the company's Canadian parent and subsidiaries. Our wholly-owned subsidiaries located in the United States are currently inactive. Our business is based in Calgary, Alberta, Canada.

On December 21, 2007 both NXT Aero Canada Inc. and NXT Energy Canada Inc., two wholly owned subsidiaries of NXT, initiated procedures for dissolution. Upon completion of the dissolution in 2008 all the assets and liabilities of these corporations were transferred to the parent, NXT.

On September 22, 2008 the company's name was changed from Energy Exploration Technologies Inc. to NXT Energy Solutions Inc. by way of Articles of Amendment filed pursuant to the *Business Corporations Act (Alberta)*.

#### History of Technology Agreements

On January 1, 1996 our initial entitlement to use SFD® technology was obtained through an agreement executed with Mr. George Liszicasz who is our CEO, president and director. Pursuant to the terms of this agreement Mr. Liszicasz agreed to provide oil and gas prospects located by utilizing the SFD® sensors ("SFD® Device") on an exclusive basis to NXT. The agreement had a five year term that expired on December 31, 2000. The agreement contemplated that NXT would conduct seismic surveys and acquire land "if commercially reasonable to make such acquisitions" over prospect areas and Mr. Liszicasz would be entitled to an overriding royalty interest on these lands. NXT did not acquire any interest in the SFD® Device.

On August 1, 1996 we entered into an agreement with Momentum, Mr. Liszicasz and Mr. Dirk Stinson (the "Restated Technology Agreement"). Momentum was a Bahamas corporation directly owned and controlled by Messrs. George Liszicasz and R. Dirk Stinson. Mr. Stinson is a past director and officer of NXT. The Restated Technology Agreement was deemed effective January 1, 1996 with a ten year term that ended on December 31, 2005 and superseded the prior agreement dated January 1, 1996.

The following summary outlines the major terms of the Restated Technology Agreement complete with a retrospective account of relevant subsequent events related to these terms.

- Mr. Liszicasz was identified in the recitals as the inventor, developer and owner of the SFD® technology. The recitals further discussed a contemplated transfer of the ownership of the SFD® technology to a corporation to be formed and owned jointly by Mr. Liszicasz and Mr. Stinson.

We are not aware of any subsequent documentation or representation by Mr. Stinson, Mr. Liszicasz or any other party that suggests that this transfer ever took place.

- We hold the exclusive worldwide right to use SFD® data for the identification and exploration of hydrocarbon.
- Momentum is obligated to conduct SFD® surveys and to provide to us the SFD® data. Momentum further agreed to provide no less than 500 hours per year of trained manpower to generate the SFD® data with respect to the selected areas.

Momentum did not fulfill any of these obligations and these responsibilities were performed by NXT. As evidenced by the actions of Mr. Liszicasz and Mr. Stinson, in their respective capacities as officers of NXT as well as owners of Momentum, all parties accepted a transfer of these duties to NXT from Momentum.

- NXT was to pay Momentum contingent payments based upon profits generated by SFD® data provided by Momentum.

There were no payments required or paid under these agreement terms as neither data was provided by Momentum to NXT nor were the profit thresholds reached.

- NXT was to grant Momentum performance options based upon the achievement of specified gross production from SFD® prospects.

There were no performance options exercised as the gross production thresholds were not reached.

On April 3, 1998 we executed an amendment to the Restated Technology Agreement, which amended certain provisions relating to the “Payment of Fee to Momentum for Provision of SFD® Data” in section 5(a) therein. No fees became due and payable throughout the term of the Restated Technology Agreement, as amended.

On November 4, 2004 we executed two agreements with Mr. Liszicasz regarding the ownership of, use of and access to the SFD® technology. These are the “Interim Operating Agreement” and the “Technical Services Agreement”. The Interim Operating Agreement was effective as of August 25, 2004 and the Technical Services Agreement was effective as of January 1, 2006.

The Interim Operating Agreement states that NXT has an undivided and unencumbered title to the four SFD® sensor devices engineered and constructed by Mr. Liszicasz subsequent to June 1, 1999 plus all subsequently manufactured sensors. This agreement obliged Mr. Liszicasz to provide NXT with his know-how and technical expertise for the manufacture, redesign and advancement of the sensors utilizing his new proprietary quantum theories as they apply to NXT’s use of the technology; plus to provide interpretation and analysis of data produced by surveys using SFD® sensors. The Interim Operating Agreement expired on December 31, 2005.

The Technical Services Agreement was amended prior to its effective date by the Amended and Restated Technical Services Agreement.

On December 31, 2005 NXT’s board of directors approved the “Amended and Restated Technical Services Agreement” with Mr. Liszicasz that superseded the Interim Operating Agreement and the Technical Services Agreement. The Amended and Restated Technical Services Agreement became effective December 31, 2005 and expires ten years thereafter. In accordance with the Amended and Restated Technical Services Agreement, Mr. Liszicasz received 10,000,000 preferred shares.

In accordance with the Amended and Restated Technical Services Agreement, Mr. Liszicasz granted to NXT an exclusive, world-wide license to the SFD® technology. This license entitled NXT to the rights to use, develop, copy and modify the existing sensors to the extent necessary and also the theories of quantum physics which are utilized in the operation of the sensors for use in the exploration of hydrocarbon reserves. The SFD® technology remained the property of Mr. Liszicasz.

On December 31, 2006 we executed the Technical Transfer Agreement (“TTA”) that superseded the Amended and Restated Technical Services Agreement. Upon execution of the TTA, Mr. Liszicasz transferred all his rights and entitlements to SFD® technology to NXT and accordingly the previous license as defined in the Amended and Restated Technical Services Agreement was terminated. SFD® technology for the purposes of the TTA is defined as the theories of quantum physics and engineering which are utilized in the operation of stress field detectors used by NXT for the reception, collection and recording of subsurface geological stresses for hydrocarbon exploration. The number of preferred shares issued to Mr. Liszicasz in accordance with the Amended and Restated Technical Services Agreement remained unchanged at 10,000,000 although certain attributes of these preferred shares were changed. See Item 4.B “Key Contract on Which We Rely” within this Form 20-F for more information on these contracts.

On August 15, 2008 a settlement was reached between the company and Mr. Stinson wherein we paid \$90,000 and Mr. Stinson provided us with a complete release to any claim against NXT, its directors or officers, or any claim of an interest in the SFD® technology.

#### Patent

We have not patented our SFD® technology, however, we understand we can obtain a worldwide patent in the future (see “Risk Factors” in this Form 20-F). Our right to patent the SFD® technology in the future is not compromised by our commercial use of the technology as it has never been disclosed to third parties (except under very limited confidential terms) or released in any manner into the public domain. See Item 3.D Key Information – Risk factors within this Form 20-F.

#### Business Development History

The business operations of the company can be divided into two discreet phases:

Phase I (the Technology development stage) until the end of 2005 wherein NXT was engaged in oil and gas exploration;

Phase II (the commercialization stage) for the period after 2005 NXT initiated commercial operations as a service provider to the oil and gas industry.

Phase I from 1996 until the end of 2005 was characterized by the development of the SFD® detectors and the testing of the detectors in various environments in North America and the Middle East and obtaining independent verification that corroborated management’s assertions on the efficacy of the SFD® system. During this phase NXT participated in exploration programs and incurred capital expenditures to develop properties that may or may not have been identified by the SFD® survey system. This phase was completed in December 2005.

The company in this phase worked to develop the technology, gain sufficient field tests to prove the efficacy and to gain industry acceptance of the technology. Throughout this period the company entered into several joint venture agreements with third party oil and gas exploration companies wherein NXT participated in oil and gas exploration activities. The objectives of the company in participating as a joint venture partner were to:

- obtain third party support to share cost for SFD® survey programs;
- maximize the kilometers surveyed by the SFD® survey system;
- gain industry acceptance of the SFD® survey system through a demonstrated track record of successfully locating oil and gas reserves; and
- to directly benefit from successful oil and gas exploration of SFD® located prospects.

In the period 2004 through 2005 NXT focused resources on obtaining third party support for the SFD® technology. Expert third parties were engaged to evaluate the effectiveness of the SFD® survey system. During this period a body of empirical evidence supporting the efficacy of SFD® survey system was prepared to support company assertions on SFD® survey system capabilities.

Phase II began in 2006 wherein the company began the process of providing services to clients on a fee-for-service basis. NXT began seeking commercial agreements with oil and gas companies, governments of petroleum producing countries and other entities interested in assessing land for the potential of finding oil and natural gas reserves. NXT's standard service agreement includes a fixed fee from the client in consideration for NXT providing a survey followed by a report that identifies any Prospects within the survey area. In addition NXT may negotiate a Gross Overriding Royalty or some other incentive fee, where applicable, on Prospects identified by the SFD® survey.

NXT began marketing of its SFD® survey system in 2006 through direct presentation of the technology to prospective clients and by attending trade shows and other industry events. The targeted potential customers include exploration and production companies, energy trusts, governments and other exploration and production service providers.

Since the initiation of this Phase II the company has realized commercial success reporting a net income for the first time in 2007. In 2006 the company conducted its first SFD® surveys for a fee for two independent clients and earned \$1,206,684 of revenue and generated a net loss of \$4,274,103. In 2007 the company conducted five surveys for three different clients and earned revenue of \$5,608,432, generating a net income of \$350,431. In 2008 the company conducted multiple surveys for two different clients and earned \$2,944,470, generating a net loss of \$1,141,291.

These surveys, conducted for clients since 2006, have provided invaluable case studies, client endorsements and industry recognition that are required to broaden the adoption of our services into both domestic and international markets.

## **B. Business overview**

NXT utilizes its proprietary SFD® technology to provide a fast and cost effective method for evaluating large survey areas for the oil and gas clients.

SFD® is an airborne exploration tool that uses SFD® sensors to measure stress regime distributions to locate geological features such as structure, faults, fractures, reef and reservoir potential for the purpose of oil and gas exploration. Survey areas often exceed 5,000 square kilometers. The SFD® system can identify subsurface structures that have a high likelihood of bearing hydrocarbons and is effective over a wide range of geological environments and depths; thereby focusing and reducing the time and expense associated with conventional exploration.

NXT will conduct SFD® surveys for clients for a fee plus potentially a gross overriding royalty or other performance-based fee on any future production on SFD® prospect areas.

NXT will deliver at the end of each survey a detailed report of the survey area with a ranking of the prospect areas in accordance with their assessed ranking of prospectivity.

The company for the period 2006 through 2008 has provided our SFD® airborne geophysical survey service to clients in the western sedimentary basin located in Western Canada. Our revenues were earned solely in this market and consisted of \$1,206,684 in fiscal 2006, \$5,608,432 in fiscal 2007 and \$2,944,470 in fiscal 2008.

### **Corporate Mission**

Our mission is to become an industry leading service provider to the oil and natural gas industry. We intend to continue utilizing our proprietary SFD® survey system to become the service provider of choice for clients desiring a technological advantage in the identification of prospective oil and gas properties in frontier regions throughout the world.

### **Business Strategy**

We shall provide SFD® survey services to clients on a fee-for-service basis. NXT does not intend to participate either directly or as a joint venture partner in any future exploration or development wells.

Under our business strategy we will earn revenues from the following sources:

- Conducting client specific flight surveys for a fee;

- Earning gross overriding royalty (“GORR”) income or other incentive fees upon clients successfully generating production on SFD® Prospects;

We shall provide Prospect Areas to clients through customized surveys. Clients may retain exclusive rights to SFD® reports obtained from customized flights for a specific period of time as defined in the service contract; thereafter the SFD® reports become available on a fee basis to any clients. We may conduct flights over areas of interest to increase our data on lands for the purpose of identifying Prospect Areas for sale to clients or to showcase our SFD® capabilities for sales and marketing purposes.

#### Business Objectives

We believe that we can generate an annual net income from successfully executing this Business Strategy. We anticipate the cash flow that we generate will provide the necessary operating capital to sustain our future growth and enhance the SFD® technology in accordance with our base assumptions. We believe that our SFD® survey system, given its superior effectiveness and competitive price, will become an industry leader in locating Prospect Areas for the oil and gas industry in frontier regions.

Our general business objectives are to:

- generate cash flow from operating activities by entering into service contracts with oil and gas clients;
- continue to build credibility and industry acceptance of the SFD® technology;
- enhance the SFD® technology to ensure NXT maintains its position as the most effective oil and gas airborne survey company; and
- develop our capability to meet the anticipated growth in client demands for our service.

NXT has generated interest in its services from a number of prospective clients. Our ability to generate revenue is not seasonal. Contacts will be made directly by NXT personnel or in certain international markets through independent agents or large service providers. The potential end clients include:

- international, intermediate and junior oil and gas companies;
- energy investment pools contemplating a business strategy utilizing the SFD® survey system;
- foreign governments in countries looking for a means to better exploit their natural resources; and
- other service providers as general contractor to above potential clients.

Our 2009 objective is to focus on revenue growth through the implementation of new marketing, sales and technical strategies that showcase our past achievements. A key advantage of our position today as compared to just three years ago is that we can build upon commercial and technical successes from our 2006 through 2008 Canadian surveys. These surveys provide invaluable case studies, client endorsements and industry recognition that are required to broaden the adoption of our services internationally. To meet this objective we are expanding our geological and geophysical technical team and establishing a strong sales and marketing organization. NXT is determined to develop a market brand to evolve from the technology company of the past to become a respected service provider with strong geological and geophysical expertise and an industry leading reputation.

We recently announced the appointment of Mr. Murray Christie as our Chief Operating Officer. Mr. Christie’s career includes over 15 years of geological modeling and geophysical survey experience providing leading edge technology solutions to international and domestic oil and gas clients. He offers a track record of impressive revenue growth derived from launching technologies for the oil and gas sector. Mr. Christie’s previous roles include COO of Geomodeling Technology Corporation and Canadian President of Paradigm, a major international geosciences software and service provider. In addition, we have engaged the services of a senior consulting geologist and geophysicist, Mr. Azer Mustaqeem of Petro-Explorer Consulting, who offers over ten years of advanced geophysical modeling and software experience gained throughout North America. Mr. Mustaqeem holds both a Master of Science in Ex-

ploration and Development Geophysics from Stanford University and Master of Science in Applied Geology from Azad Jammu & Kashmir University in Pakistan.

These recent management additions, both with strong geosciences backgrounds, shall continue to be complemented by our Geosciences Advisory Board as announced on June 26, 2008. The board's mandate is to expand the industry acceptance and application of SFD® survey system as well as to advance the understanding of the underlying science. The advisory board has provided invaluable contributions within this mandate. We are indeed fortunate for the services of our advisory board consisting of Dr. George Iusco, Prof. Arief Budiman and Mr. Leslie Kende.

Furthermore in 2008, to develop a market focus for our business plan, we began assessing various international market opportunities for our services. These initiatives include attending industry conferences, conducting in-house evaluations of potential international markets, consulting with international agents and drawing upon the vast experience of our Board of Directors and Geosciences Advisory Board.

Particularly, our recent attendance at industry conferences has significantly advanced our business plan development. They provided market intelligence, access to key decision makers and advisors and provided excellent forums to introduce and stimulate dialogue on our SFD® technology. Since September 2008 we have attended the OIL & MONEY and the APPEX conferences in London, the VENEZUELAN GEOPHYSICAL CONGRESS in Caracas, the SEG (Society of Exploration Geophysicists) conference in Las Vegas, and the NAPE (formerly "North American Prospect Expo") conference in Houston. NXT was represented at these conferences by key members of management, of the Board of Directors and of the Geosciences Advisory Board.

Throughout this process we have formulated clear criterion to evaluate the market potential for any international region or country. This criterion includes an assessment of budgeted expenditures for frontier exploration, fiscal and geo-political stability, general receptiveness of participating companies to new technologies and the relative competitive advantages of SFD® within the region. By applying this criterion we have now completed extensive reviews of potential markets consisting of over 12 regions of the world. Through this process we have ranked regions for their potential.

As well, we have developed a better understanding of the requirements to overcome industry resistance and enable the adoption of SFD® by the oil and gas industry at large. Industry requires detailed comparisons between SFD® and other geological and geophysical data. We have initiated a major program to conduct these detailed comparative studies. This program is still in its early stage, however, it has provided valuable presentation material to support our sales initiatives.

Core to our international strategy is discipline and focus. The world market is vast and our resources limited. Spreading resources too thin by attempting to pursue multiple markets throughout the world concurrently only invites failure. Success in any market depends upon dedicating enough time and resources to gain detailed knowledge of the marketplace, the industry players and their unique problems and challenges. This knowledge is then used to develop a complete product solution tailored for a market's needs.

A complete market solution is not met with simply a superior technology. A market solution requires a full suite of services to assist a client to understand, accept and then apply the technology appropriately to achieve a tangible operational advantage.

- Client understanding requires technical reports and compelling geosciences explanations.
- Client acceptance also depends upon the credibility of NXT and its professional staff plus the credibility of the references received from other users of the service.
- A successful application of the technology requires a problem that the technology can solve plus strong effective collaboration between NXT personnel and the client.

To create these complete market solutions and gain broad acceptance in a market requires a focused effort.

Our evaluation of potential markets to focus our international activities identified Colombia as an area that offered several advantages as an initial target market for our SFD® services. Colombia has evolved quickly to become one of the more attractive oil and gas exploration opportunities in the world. The Colombia government has undertaken effective measures to implement fair and predictable fiscal terms and energy policies to attract foreign investment. These measures, coupled with greatly improved security and an abundance of underexplored yet prospective basins, has resulted in a large increase in 2008 exploration activities over prior years; this trend is projected to continue throughout 2009. In 2010 ANH, the Colombian national hydrocarbon agency proposes to release in excess of 300,000 square kilometers for open round bidding. Our SFD® survey system is well suited to meet the technical, logistical and financial challenges associated with surveying these large under-explored basins of Colombia.

Our interest in Colombia was verified with NXT being awarded a contract to provide U.S. \$2.3 million of SFD® survey services in Colombia for a Canadian-based international oil and gas company. In May of 2009 we commenced operation in Colombia and anticipate delivering the initial survey results to the client prior to the end of the second quarter of 2009.

#### Sources of Raw Material

We do not foresee any constraints upon materials or equipment that will impede our ability to execute this plan or affect the company's ability to conduct and/or expand its business. In order to conduct our survey we require the following:

- Survey aircraft: - Historically NXT has both owned its own aircraft and chartered aircraft from independent charter aircraft companies.

In early 2009, in preparation for serving an international client base, we entered into a one year charter agreement with Air Partners Corporation, a Calgary based air-charter operator, to provide aircraft, crew and maintenance services for our survey operations worldwide. This charter agreement can be extended for multiple years upon mutual agreement of the parties. Air Partners is a subsidiary of Morgan Air Services which has been providing aviation services worldwide since 1983. This agreement gives us priority access, on an as-needed basis, to multiple Citation 560 series jet aircraft that have been modified to meet our survey requirements. These jets are well suited for international operations as they will provide the additional flying range required as compared to the Piaggio aircraft previously used in our Canadian operations.

- SFD® sensors: - All the sensors are manufactured in-house. Certain machining is required by third party machine shops, with final assembly performed by our technical staff. The sensors, once assembled, require flight testing prior to being considered acceptable for operational use. Not all sensors meet the performance criteria for operational use. However, NXT has demonstrated its ability to manufacture new functional SFD® sensors.
- SFD® assembly: - The units in which the sensors are incorporated are custom designed, fabricated and assembled in-house or through subcontracted vendors. We utilize the services of Transport Canada approved Design Approval Representatives to prepare subsequent type certificates (STC) for the installation of our SFD® units in each aircraft we utilize for surveys. The time to obtain an STC approval for the installation of our SFD® units into any proposed aircraft type may require several months.
- Computer hardware and software: - The customized software used in our data acquisition system is written and modified by outside consulting programmers with whom we have long-standing relationships. The hardware we use in our SFD® survey systems (other than the SFD® unit), and the balance of the computer software we use, are all readily available from retail or wholesale sources.

We are not dependent upon any other third party contract manufacturers or suppliers to satisfy our technology requirements.

## Key Contract on Which We Rely

### Technical Transfer Agreement

Upon execution of the TTA on December 31, 2006 Mr. Liszicasz transferred all his rights and entitlements to SFD® technology to the company and accordingly the Amended and Restated Technical Services Agreement executed on December 31, 2005 that previously licensed to us the SFD® technology was terminated.

As consideration for Mr. Liszicasz selling the SFD® technology to NXT we modified the conversion terms for the 10,000,000 preferred shares originally issued pursuant to the Amended and Restated Technical Services Agreement executed on December 31, 2005. The following table summarizes these modifications:

<b>Amended and Restated Technical Services Agreement Executed December 31, 2005</b>	<b>Technical Transfer Agreement Executed December 31, 2006</b>
2,000,000 preferred shares are immediately convertible to common shares	No change
2,000,000 preferred shares are convertible into common shares upon the company achieving gross revenue in any year of US \$50 million	2,000,000 preferred shares are convertible into common shares upon the company achieving cumulative aggregate gross revenue of US \$50 million
A further 2,000,000 preferred shares are convertible into common shares upon the company achieving gross revenue in any year of US \$100 million	A further 2,000,000 preferred shares are convertible into common shares upon the company achieving cumulative aggregate gross revenue of US \$100 million
A further 2,000,000 preferred shares are convertible into common shares upon the company achieving gross revenue in any year of US \$250 million	A further 2,000,000 preferred shares are convertible into common shares upon the company achieving cumulative aggregate gross revenue of US \$250 million
A further 2,000,000 preferred shares are convertible into common shares upon the company achieving gross revenue in any year of US \$500 million	A further 2,000,000 preferred shares are convertible into common shares upon the company achieving cumulative aggregate gross revenue of US \$500 million
At December 31, 2015, upon expiration of the license term, the SFD® technology will revert to Mr. Liszicasz	At December 31, 2015 the SFD® technology can be retained by the company by either:  (i) if the company earned cumulative aggregate gross revenue of US \$500 million or more in the 9-year period ended December 31, 2015 then the company can retain the SFD® technology by issuing Mr. Liszicasz an additional 1,000,000 common shares; or (ii) if the company did not earn cumulative aggregate gross revenue of US \$500 million or more in the 9-year period ended December 31, 2015 then the company can retain the SFD® technology by immediately making any remaining preferred shares convertible; or (iii) if NXT chooses not to retain the SFD® technology it can be acquired by Mr. Liszicasz for \$10.00.

For a further discussion of the history of the SFD® technology see Item 4.A in this Form 20-F.

A Second Amended and Restated Technical Services Agreement (the “Second Amended Services Agreement”) was executed on December 31, 2006 outlining the terms of Mr. Liszicasz’ employment agreement with the company. The Second Amended Services Agreement has a term ending December 31, 2015 or until the Second Amended Services Agreement is terminated by the company or Mr. Liszicasz, and establishes Mr. Liszicasz’ entitlement to normal employee remuneration such as salary, benefits, bonus and options and identifies grounds for termination of this agreement.

The following schedule provides a summary of the ownership of the preferred shares as of June 22, 2009:

<b>Owner of Preferred Share</b>	<b>Preferred Shares Owned</b>	<b>Percent of Class of Share</b>
George Liszicasz CEO & Director	10,000,000	100.0%

The preferred shares carry no voting rights. 2,000,000 of these preferred shares are convertible on a one-to-one basis at the discretion of the holder and the remaining 8,000,000 preferred shares are potentially convertible upon certain into common shares on a one-to-one basis.

The Second Amended Services Agreement is included by reference as Exhibit 4.36 in this Form 20-F.

#### **Air Partners Aircraft Charter Agreement**

On May 8, 2009, the company executed an aircraft charter agreement with Air Partners Corp. to provide aircraft, crew and maintenance services for SFD® survey operations utilizing their fleet of Cessna Citation 560 series jet aircraft. NXT's minimum aircraft charter commitment under this agreement is approximately Cdn. \$400,000 from the date of the agreement.

Under the terms of this agreement Air Partners shall provide aircraft charter services to meet NXT's aircraft survey requirements both in Canada and many international locations, including our current survey in Colombia. Specifically Air partners shall provide on a non-exclusive but preferential basis two Cessna Citation 560 aircraft, specifically modified to meet SFD® survey mission requirements, including all aircraft personnel (including pilots, aircraft maintenance engineers and administration), insurance plus aircraft maintenance, servicing and grooming all in accordance with Transport Canada and other regulatory standards.

NXT's minimum commitment is based upon a minimum to charter the aircraft for at least 125 hours at a rate of \$3,170 per flight hour for operations in Canada and the U.S. and \$3,351 per flight hour for operations outside of Canada and the U.S. Flight hours in excess of this 125 hour minimum shall be made available to NXT for survey operations on an as required bases subject to availability. As of June 22, 2009 NXT has paid \$50,000 to Air Partners pursuant to this agreement.

Air Partners Corp., in conjunction with its parent Morgan Air Services, has provided aviation related services worldwide since 1983. The Air Partner team consists of respected aviation experts and industry leaders including, most notably, their President & CEO, Mr. Tim Morgan. In 1995, Mr. Morgan became one of four founding shareholders of WestJet Airlines Ltd. and served as Executive Vice-President of Operations until 2005. Today Westjet is the second largest air carrier in Canada.

#### **SFD® Survey Contract in Colombia**

On April 13, 2009, NXT executed a contract to conduct a U.S. \$2.3 million SFD® survey in Colombia (the "\$2.3 million Colombian contract") with Pacific Stratus Energy Colombia Corp (the "Client"). The survey area consisted of a land assigned to the Client for evaluation by the Colombian regulatory authority for technical evaluation for hydrocarbon. Pursuant to the terms of the contract NXT is responsible for the following principal obligations:

- Carry out flights over the exploratory block and additional control flights over fields discovered in the vicinity of the block.
- Identify anomalies of the stress field which could be associated with accumulations of hydrocarbons.
- Recommend prospective areas within the block.
- Mobilize the acquisition equipment—airplane and remote sensors of forces—to the area on May 15, 2009.
- Present a preliminary report on June 30, 2009.
- Present a final report on July 21, 2009.

On June 23, 2009 NXT announced completion of flight operations and progress invoicing of \$1.9 million with a stated expectation that the preliminary report will be submitted to the client by June 30, 2009.

### Competitive Position

Our SFD® airborne survey service is based upon a proprietary technology. It is capable of remotely, from a survey aircraft, identifying subsurface structural anomalies associated with potential hydrocarbon traps with a resolution that we believe is technically superior to other airborne survey systems. To our knowledge there is no other company employing technology similar or comparable to our SFD® survey system for oil and natural gas exploration.

Seismic is the standard technology used by the industry to image subsurface structures. It is our view that the SFD® survey system is a complementary technique to seismic. Our system is intended to focus seismic and other resources upon those areas that have the highest potential for oil and gas. Our system may reduce the need for seismic in wide-area reconnaissance but will not replace the role of seismic in verifying structure, closure and selecting drilling locations. The seismic industry is very competitive with many international and regional service providers.

The SFD® system is often used as a focusing tool for seismic. With a SFD® survey a large tract (i.e. over 5,000 square kilometers) of land can be evaluated quickly to determine the location of any hydrocarbon prospective areas within the survey area. Seismic surveys, although also effective in identifying these prospective areas, are much more expensive and require significantly more time than SFD® surveys. Clients can first utilize an SFD® survey to quickly evaluate a large area and then focus a much smaller seismic survey on the prospective areas identified by SFD®. This approach maximizes the effectiveness of the seismic program and substantially reduces the overall cost and time to locate and qualify a prospect.

The industry uses other technologies for wide-area oil and natural gas reconnaissance exploration such as aeromagnetic and gravity surveys. These systems may provide regional geological information such as basement depth, sedimentary thickness and faulting; however, neither technique is capable of identifying potential hydrocarbon systems and prospect areas nor can they provide information that is comparable to SFD® generated information.

### Governmental & Environmental Regulation

#### i) SFD® Survey Flight Operations

The operation of our business, namely conducting aerial SFD® surveys and interpreting SFD® data, is not subject to material Canadian governmental or environmental regulation with the exception of flight rules issued by Transport Canada governing the use of private aircraft, including rules relating to low altitude flights. The requirements in other countries vary greatly and may require permits and/or provide other restrictions to conducting flight operations in the country that may restrict our ability to perform SFD® surveys as freely as in Canada.

#### ii) Oil and Gas Exploration and Development Projects

The oil and natural gas industry in general is subject to extensive controls and regulations imposed by various levels of the federal and provincial governments in Canada. In particular, oil and natural gas exploration and production is subject to laws and regulations governing environmental quality and pollution control, limits on allowable rates of production by well or proration unit, and other similar regulations. Laws and regulations are generally intended to prevent the waste of oil and natural gas, to protect rights to produce oil and natural gas between owners in a common reservoir, to control the amount of oil and natural gas produced by assigning allowable rates of production, and to reduce contamination of the environment. Environmental regulations can affect our operations. Drilling in certain areas has been opposed by environmental groups and, in certain areas, has been restricted. We believe that the trend to stricter environmental legislation and regulations will continue.

We do not expect that any of these government controls or regulations will prevent projects in which we participate.

### C. Organizational structure

The following table provides a list of all subsidiaries and other companies controlled by the company:

<u>Subsidiaries</u>	<u>Date and Manner of Incorporation</u>	<u>Authorized Share Capital</u>	<u>Issued and Outstanding Shares</u>	<u>Nature of the Business</u>	<u>% of each Class of Shares owned by NXT</u>
NXT Energy USA, Inc.	October 20, 1995 by Articles of Incorporation – State of Nevada	20,000,000 common	5,000,000 common	Inactive	100%
NXT Aero USA, Inc.	August 28, 2000 by Articles of Incorporation – State of Nevada	1,000 common 4,000 preferred	100 common	Inactive	100%

### D. Property, plants and equipment

#### Oil and Gas Properties

The company owns limited acres of undeveloped land in the Canadian western sedimentary basin. These assets are not a material asset of the company and carry a book value in our financial records of \$7,315. Additionally the company is entitled to royalty interest on production on certain lands surveyed by clients. The value of these royalty interests are not determinable.

#### Facilities

We operate from a 7,087 square foot leased office, research and development facility located at Suite 1400, 505-3rd Street SW, Calgary, Alberta T2P 3E6. This leased facility includes a 2,100 square feet addition that commenced on June 1, 2008 that was added to the original lease on a co-terminus basis. The original six year lease was entered into on November 1, 2006 and expires on October 31, 2012.

The minimum sublease payments commencing June 1, 2008 through to November 1, 2009 is \$29,483 per month and \$30,729 per month for the remaining three years of the lease.

#### Equipment

Our SFD® technology is comprised of the following components, which we collectively refer to as our SFD® survey system, used for the following functions:

- ***Stress Field Detector***—the stress field detector, or SFD®, is a unit which houses the SFD® sensor, the principal component of our technology. The SFD® sensor is a passive transducer that interacts with energy fields created by subsurface stresses as the aircraft flies and registers that interaction in the form of digital electronic signals. When NXT conducts SFD® surveys, we use an SFD® sensor array incorporating fourteen or more SFD® sensors, which allows us to collect multiple SFD® signals over areas where we fly.
- ***Data Acquisition System***—used in conjunction with the SFD® sensor array on surveys, our data acquisition system is a compact, portable computer system which concurrently acquires the electronic digital signals from the SFD® sensor array and other pertinent client data, including the GPS location information of the data.
- ***SFD® Signal Conditioning Unit***—this self-contained unit contains electronic circuits for stabilizing and conditioning electronic signals. All sensor output is directly connected to this unit and after signal conditioning is completed, all output is forwarded to the computer system.
- ***Interpretation Theatre***—once returned to our home base, the SFD® data collected is processed and converted into a format that can be used by our interpretive staff using systems consisting of generally off-the-shelf computer equipment, high definition monitors, projectors and screens.

## ITEM 4A. UNRESOLVED STAFF COMMENTS

None.

## ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS

*The following discussion of our financial condition and results of operations should be read in conjunction with the "Selected Financial Data" and the accompanying Consolidated Financial Statements and the notes to those statements appearing elsewhere in this Form 20-F. The following discussion contains forward-looking statements that reflect our plans, estimates and beliefs. Our actual results could differ materially from those discussed in these forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those discussed below and elsewhere in this annual report, particularly under the caption "Risk Factors".*

### A. Operating results

#### Description of Business

NXT is a Calgary based technology-driven company providing wide-area airborne exploration survey services for the oil and gas industry. The company utilizes its proprietary SFD® survey system to offer its clients a unique survey service that rapidly identifies areas with oil and gas potential. As an airborne survey system, SFD® is environmentally non-invasive and unaffected by ground security issues or difficult terrain. Additionally, surveys can generally be conducted year round, both onshore and offshore. NXT offers its services world-wide providing its clients an efficient, accurate and reliable method to explore for hydrocarbons.

On September 22, 2008 the company changed its name from Energy Exploration Technologies Inc. to NXT Energy Solutions Inc. This change was approved by shareholders during the company's November 29, 2007 Annual General Meeting. The name change was implemented to better reflect our principal activities and now aligns with the NXT trademark. The trading symbol for the TSX Venture Exchange (SFD.V) remained unchanged as does our trading symbol (EFW) for the Frankfurt exchange. In accordance with regulations, our NASDAQ OTCBB symbol was changed to NSFDF.OB (from the old symbol ENXTF.OB).

#### Overall Operational Performance

### Selected Annual Information

	For the year ended December 31,		
	2008	2007	2006
SFD® survey revenue	\$ 2,944,470	\$ 5,608,432	\$ 1,206,684
Oil and natural gas revenue	10,592	33,260	41,830
Net comprehensive income (loss)	(1,141,291)	350,431	(4,264,196)
Net income (loss) per share unit; basic	(0.04)	0.01	(0.17)
Net income (loss) per share unit; diluted	(0.04)	0.01	(0.17)
Net cash generated (used) in operating activities	(1,812,796)	3,854,084	(1,128,138)
Cash and short term investments	6,984,170	7,640,962	2,308,015
Total assets	7,600,609	9,142,535	3,433,028
Long term liabilities	\$ 53,808	\$ 32,140	\$ -

#### Financial Highlights for 2008

- We completed SFD® surveys for two clients earning \$2,944,470 of revenue in the year and incurred a net loss of \$1,141,291.
- We used \$1,812,796 in cash for operating activities in the year.

- \$1,499,853 of cash was received as a result of 276,667 options being exercised at an average exercise price of \$0.45 and 677,543 warrants being exercised at \$2.03 per share.
- Our cash and investments held on account as at the end of the year are \$6,894,170; a decrease of \$746,792 from the beginning of the year. Working capital ended the year at \$6,325,055 as compared with \$5,336,353 at the end of last year.

#### Financial Highlights for 2007

- We completed SFD® surveys for three clients earning \$5,608,432 of revenue in the year and generating a net income of \$350,431.
- We generated cash from operating activities in the year of \$3,854,084. Q4 of 2007 represented the fifth consecutive quarter, beginning in Q4 of 2006, where we had generated cash from operating activities.
- \$2,319,433 of cash was received as a result of options and warrants being exercised.
- Our cash and short term investments held on account as at the end of the year were \$7,640,962; an increase of \$5,332,947 from the beginning of the year.
- The company discharged in full its convertible debenture obligation including debenture principle, interest and registration penalty. In 2007, 192,401 common shares were issued through the conversion of convertible debentures to discharge \$134,082 of principal and \$3,123 of interest. In addition the company paid \$522,364 to discharge the registration penalty obligation pursuant to the debentures. To discharge the \$522,364 incurred for the registration penalty pursuant to the debentures, the company paid \$343,824 as at December 31, 2007 with the balance of \$178,540 paid in the first quarter of 2008.
- In 2007 the company repaid the principal and accrued interest on a Canadian dollar denominated loan outstanding due to our president, CEO and director in the amount of \$239,618.
- On December 3, 2007 the company became listed on the TSX Venture Exchange. Listing costs were \$633,793 which included \$492,000 in fair market value for common share warrants issued in accordance with our sponsorship agreement.

#### Financial Highlights for 2006

- The company completed a \$1,200,000 SFD® survey in the fourth quarter that was recognized as revenue in the statement of loss. We executed an additional \$3,000,000 SFD® contract in December 2006 to be completed in 2007. Pursuant to these two contracts in 2006 we received cash of \$900,000 in the form of progress payments and billed an additional \$600,000.
- In April and May of 2006 the company completed a private placement wherein 2,276,560 units were issued for \$2,354,032 net of cash. Each unit consisted of one common share and a U.S. \$2.00 two year warrant.
- In 2006, 2,627,288 common shares were issued through the conversion of U.S. \$1,821,871 of convertible debentures and U.S. \$130,434 of accrued interest.

#### Operating Loss from Continuing Operations before Taxes

	<b>For the year ended December 31,</b>		
	<b>2008</b>	2007	2006
Revenue	<b>\$ 2,955,062</b>	\$ 5,641,692	\$ 1,248,514
Operating expenses	<b>4,069,984</b>	5,050,228	4,234,907
Income (loss) from continuing operations before other expenses and taxes	<b>(1,114,922)</b>	591,464	(2,986,393)
Other expense	<b>26,369</b>	241,033	1,287,710
Net income (loss) from continuing operations before income tax	<b>\$ (1,141,291)</b>	\$ 350,431	<b>\$ (4,274,103)</b>

We had an operating loss of \$1,114,922 in 2008 (2007 – income of \$591,464 and 2006 - loss of \$2,986,393) representing an overall decrease in operations of \$1,706,386 in the year.

#### Revenue

	<b>For the year ended December 31,</b>		
	<b>2008</b>	2007	2006
SFD® survey revenue	<b>\$ 2,944,470</b>	\$ 5,608,432	\$ 1,206,684
Oil & gas revenue	<b>10,592</b>	33,260	41,830
<b>Total revenue</b>	<b>\$ 2,955,062</b>	\$ 5,641,692	\$ 1,248,514

#### SFD® Survey Revenue – 2008 compared with prior years

The SFD® survey revenue for the year ended December 31, 2008 is \$2,944,470 and is related to two SFD® survey contracts that were completed for existing NXT clients. This compares to 2007 survey revenue of \$5,608,432 for five surveys completed for three clients (2006 - \$1,206,684 for one contract). NXT believes that the decline in 2008 is a result of downward market conditions that have caused a delay or cancellation of surveys planned by two junior oil and gas clients as they attempted to secure financing or re-evaluated their capital programs.

#### Oil and Natural Gas Revenue – 2008 compared with prior years

Effective April 1, 2008, the company sold its 22.5% working interest in a well at Entice, Alberta for a net proceeds of \$47,400. Following the effective date, the company ceased to hold working interests in any producing wells. The company's interests in oil and gas properties consist of undeveloped land and gross overriding royalty ("Royalty") interests.

Currently, the company holds Royalty interests in two producing wells in Alberta and an entitlement to Royalties on future production on much of the land where we have conducted surveys for clients. We are optimistic on generating additional Royalty income from these surveyed areas as one of our clients is actively pursuing exploration programs on these surveyed areas. There is no certainty Royalties will be earned from these entitlements.

	<b>For the year ended December 31,</b>		
	<b>2008</b>	2007	2006
Gross overriding royalty	<b>\$ 1,168</b>	\$ 4,542	\$ 1,266
Oil and natural gas revenue; net of royalty expense	<b>9,424</b>	28,718	40,564
<b>Revenues; net of royalty expense</b>	<b>\$ 10,592</b>	\$ 33,260	\$ 41,830

#### Expenses

	<b>For the year ended December 31,</b>		
	<b>2008</b>	2007	2006
SFD® survey cost	<b>\$ 211,237</b>	\$ 814,343	\$ 164,095
Oil and natural gas operating expenses	<b>3,959</b>	3,753	5,390
Administrative	<b>3,678,803</b>	4,016,662	2,816,002
Depletion and impairment of oil and natural gas properties	<b>4,372</b>	87,291	1,153,576
Amortization and depreciation	<b>171,613</b>	128,179	95,844
<b>Total</b>	<b>\$ 4,069,984</b>	\$ 5,050,228	\$ 4,234,907

#### Expenses for the years ended December 31, 2008, 2007 and 2006

- The 2008 survey costs of \$211,237 (\$814,343 - 2007 and \$164,095 - 2006) were for two surveys completed in 2008 (2007 - five surveys and 2006 - one survey). These expenses include nil commissions on sales in 2008

(2007 - \$339,545 and 2006 - nil). The commission on sales in 2007 was for a finder's fee obligation that affected a one-year period only and was fulfilled with the issuance of company shares.

- The administrative cost decrease of \$337,859 for 2008 to 2007 related mainly to employee bonuses and TSX Venture Exchange sponsorship and listing costs being incurred in 2007 (nil - 2008). These were offset somewhat by increased consultant expenses in 2008 that included fees for electronic design and development, investor relations, an executive compensation study, geoscience advisory services and sales and marketing strategy development.
- The 2007 administrative increase of \$1,200,660 over 2006 related to the hiring of additional staff, salary reassessments and employee bonuses; upgrades to computer hardware and software; TSX Venture Exchange sponsorship and listing costs; and the change in auditors necessitating audit costs for outgoing and incoming auditors.
- Effective April 1, 2008 the company sold its working interest in a well at Entice, Alberta and therefore will no longer have depletion of oil and natural gas properties.
- In 2008, the company expanded its office space in its existing building incurring costs to update and furnish the facilities. We also invested in additional equipment required to develop sensors. This has resulted in an increase in amortization and depreciation costs.

#### Other Expense (Income)

	<b>For the year ended December 31,</b>		
	<b>2008</b>	2007	2006
Convertible debenture interest:			
Accretion of convertible debenture	\$ -	\$ -	\$ 1,144,280
Change in fair market value of conversion feature	-	-	(456,263)
Interest on convertible debenture including registration penalty	-	100,980	602,222
Interest on convertible debentures	-	100,980	1,290,239
Gain on sale of properties	<b>(20,325)</b>	-	-
Interest income	<b>(234,007)</b>	(109,374)	(4,411)
Loss (gain) on foreign exchange	<b>(20,242)</b>	249,427	1,882
Other	<b>90,000</b>	-	-
Abandonment	<b>210,943</b>	-	-
Other expense	<b>\$ 26,369</b>	\$ 241,033	\$ 1,287,710

The registration penalty obligation was incurred through a registration rights agreement provided to all investors in the 2005 convertible debenture. Pursuant to this rights agreement the company was obliged to pay a 2% per month registration penalty for month four and beyond following the close of the convertible debenture private placement. The penalty continued to accrue until the shares became free trading concurrent with the company's TSX Venture Exchange listing on December 3, 2007. For the year ended December 31, 2007, penalties of \$343,824 were paid out and the remaining \$178,540 in penalty payments were released in the first quarter of 2008.

Interest income was offset by interest expense resulting in \$234,007 net income in 2008 as compared to \$109,374 net income in 2007 and \$4,411 net income in 2006. The year-over-year increase in income is due to increased short term investments generating interest income.

In the third quarter of 2008 the company paid out \$90,000 to settle a Statement of Claim that was outstanding since 2002. The plaintive was a past president and director of NXT.

Management conducted a review in 2008 of all wells for which NXT had a historical participation and determined that 8 gross (1.1 net) wells drilled from 2000 through 2004 still require abandonment. Management determined the asset retirement obligation based upon estimates of the costs to remediate, reclaim and abandon the wells and the

estimated timing of the costs to be incurred. At December 31, 2008 the abandonment expense is estimated to be \$28,997 (December 31, 2007 and 2006 - nil). These obligations are estimated to be settled in five years. In addition, the company recorded an obligation of \$160,148 in respect to a well drilled in 2000 and abandoned in 2008 for which no previous significant abandonment obligation had been anticipated.

#### Loss (Gain) on Foreign Exchange

Loss or gain on foreign exchange is caused by changes in the relative exchange values of the U.S. and Canadian dollars. For example, when the Canadian dollar trades higher relative to the U.S. dollar, cash held in U.S. dollars will decline in value and this decline will be reflected as a foreign exchange loss in the period. In 2007 the company held United States dollars in cash and short term investments as well as convertible debenture obligations. In 2008 nearly all cash and investments were converted to Canadian dollars to reduce the impact caused by market volatility.

The equivalent Canadian dollars for a U.S. dollar changed from \$0.9928 on January 1, 2008 to \$1.218 as at December 31, 2008 resulting in a gain of \$20,242 in 2008; the change was from \$1.1636 as at January 1, 2007 to \$0.9913 as at December 31, 2007 resulting in a 2007 loss of \$249,427; the change was from \$1.1556 as at January 1, 2006 to \$1.1654 as at December 31, 2006 resulting in a loss of \$1,882 for 2006.

In 2008 the company substantially reduced the value of net investments denominated in foreign currencies and thereby has reduced its exposure to material future foreign exchange gains or losses.

#### Summary of Quarterly Results (Unaudited)

	<b>Dec 31, 2008</b>	Sep 30, 2008	Jun 30, 2008	Mar 31, 2008
Revenue	<b>\$ 6,153</b>	\$ 1,193,250	\$ 1,749,076	\$ 9,583
Net income (loss) from continuing operations	<b>(945,394)</b>	(290,639)	806,619	(711,877)
Basic earnings (loss) per share	<b>(0.04)</b>	(0.01)	0.03	(0.02)
Diluted earnings (loss) per share	<b>\$ (0.04)</b>	\$ (0.01)	\$ 0.02	\$ (0.02)

  

	Dec 31, 2007	Sep 30, 2007	Jun 30, 2007	Mar 31, 2007
Revenue	\$ 2,350,497	\$ 507,183	\$ 2,772,806	\$ 11,206
Net income (loss) from continuing operations	208,308	(642,076)	1,665,080	(880,881)
Basic earnings (loss) per share	0.01	(0.02)	0.06	(0.03)
Diluted earnings (loss) per share	\$ 0.01	\$ (0.02)	\$ 0.05	\$ (0.03)

In the fourth quarter 2008, the company recognized \$207,457 in stock-based compensation expense.

The company is in the early stage of commercializing its SFD® technology. Its ability to generate cash flow from operations will depend on its ability to service its existing clients and develop new clients for its SFD® services. Management recognizes that this early commercialization phase can last for several years. Consistent with this early stage of commercialization, the company has a significant economic dependency on a few clients. In 2006, we had two clients who accounted equally for 100% of our survey revenue. In 2007, the company's largest client accounted for 81% of its survey revenue and three clients accounted for 100% of survey revenue. For the year ended December 31, 2008 we had survey revenue of \$2,944,470 from two existing clients. While the company is in this early stage of commercialization, the company's financial position is materially impacted by the loss or gain of any one client. The company's ability to continue operations is dependent on attracting future customers through demonstrating the value that the company can bring to their exploration activities.

In comparing Q4 2008 to Q3 2008; the company recognized nil in survey revenue in Q4 (\$1,200,000 in Q3 from one completed survey contract) and recognized \$207,457 in stock-based compensation expense (\$144,843 - Q3).

In comparing Q3 2008 to Q2 2008; the company recognized \$1,200,000 in SFD® survey revenue for one completed survey contract in the third quarter (\$1,744,470 in Q2) resulting in net income. We settled a Statement of Claim from 2002 for \$90,000 wherein the plaintiff was a past president and director. Management conducted a review in 2008 of all wells for which NXT had a historical participation and determined a net 1.1 (8 actual) wells drilled from 2000 through 2004 that still require abandonment. The asset retirement obligation is based upon estimates of the

costs to remediate, reclaim and abandon the wells and the estimated timing of the costs to be incurred. The abandonment expense recorded in Q3 2008 was \$28,338. In addition, the company recorded an obligation of \$160,148 in respect to a well drilled in 2000 and abandoned in 2008 for which no previous abandonment obligation had been anticipated.

In comparing Q2 2008 to Q1 2008; the company recognized \$1,744,470 in SFD® survey revenue for one completed survey contract in the second quarter (nil in Q1) resulting in net income. We sold our producing well for net proceeds of \$47,400 which generated a gain on disposal of \$20,325.

In comparing Q1 2008 to Q4 2007; there was no survey revenue recognized in the first quarter of 2008 (Q4 2007 - \$2,344,812 for two surveys). \$1,220,940 of invoiced services was recorded as unearned revenue at March 31, 2008 and was recognized as revenue in Q2 2008 in addition to the final invoice of \$523,530 that was billed in Q2 2008.

In comparing Q4 2007 to Q3 2007; revenue of \$2,344,812 for the completion of two SFD® survey contracts was recognized in the fourth quarter of 2007 (Q3 - \$500,000 from one contract) resulting in a net income. Survey costs were correspondingly higher in the fourth quarter (\$439,282) than in the third quarter (\$27,317). In addition \$174,500 in bonuses were paid out in Q4 (Q3 - nil).

In comparing Q3 2007 to Q2 2007; revenue of \$500,000 for the completion of one SFD® survey contract was recognized in the third quarter of 2007 while Q2 had survey revenue of \$2,763,620 from two contracts. The administrative cost increases in the third quarter over the second quarter of \$160,600 were due to increases in stock based compensation plus increased accruals in interim audit and review fees. As well, other expenses increased by U.S. \$193,234 on unrealized exchange losses on U.S. denominated cash and short term investments that was partially offset by exchange gains related on the accrued U.S. dollar convertible debentures registration penalty.

In comparing Q2 2007 to Q1 2007; revenue for the completion of two 2007 SFD® survey contracts was recognized in the second quarter resulting in a positive cash flow; for the first quarter the survey contracts had been flown, but not completed, so the progress payments were on the balance sheet as unearned revenue. The only revenue recognized for the first quarter was for oil and natural gas and one GORR.

## **B. Liquidity and capital resources**

The company's cash position at December 31, 2008 continues to be healthy. Our cash and equivalents and short term investments held on account as of June 22, 2009 is \$5,026,297.

The board has authorized management of the company to purchase short term liquid investment instruments. Per this directive, the company uses Guaranteed Investment Certificates ("GIC") for investment purposes. These instruments are fully cashable after the first 30 days and have a one-year term. As at December 31, 2008 all short term investments and cash equivalents were held in Canadian funds with interest rates ranging from 2.85% to 3.15%. Cash was held mainly in Canadian funds with a minimal amount in U.S. dollars (\$13,120). The company does not participate in hedging activities.

With cash and short term investments we forecast having the required cash to operate for up to two years without any additional sources of cash. However, our ability to continue as a going concern will ultimately be dependent upon our ability to sustain positive cash flow from operations and/or obtain additional financing. The outcome of these matters cannot be predicted with certainty at this time.

The following table summarizes the change in cash flow for the year ended December 31, 2008, 2007 and 2006:

	<b>For the year ended December 31,</b>		
	<b>2008</b>	2007	2006
Cash generated (used) in operating activities	<b>\$ (1,812,796)</b>	\$ 3,854,084	\$ (1,128,138)
Cash generated by financing activities	<b>1,310,630</b>	1,729,759	2,430,664
Cash used in investing activities	<b>(1,340,065)</b>	(4,588,163)	(1,498,118)
Effect of foreign exchange translation	-	-	(74,556)
	<b>\$ (1,842,231)</b>	\$ 995,680	\$ (270,148)

#### **Operating Activities**

- 2008 - the \$1,812,796 of cash used in operating activities reflects our net loss of \$1,141,291 adjusted for \$1,022,999 of non-cash additions and a \$1,694,504 net decrease in non-cash working capital.
- 2007 - the \$3,854,084 cash generated in operating activities reflects our net income of \$350,431 adjusted for \$1,519,599 of non-cash additions and a \$1,984,054 net increase in non-cash working capital.
- 2006 - the \$1,128,138 of cash used in operating activities reflects our net loss of \$4,274,103 adjusted for \$3,392,989 of non-cash additions and a \$247,024 net decrease in non-cash working capital.

#### **Financing Activities**

- 2008 - we raised \$1,499,853 through the exercise of options and warrants and reduced our capital lease by \$10,683. We also paid out the final amount of \$178,540 in registration penalty against a convertible debenture from 2005.
- 2007 - we raised \$2,319,433 through the exercise of options and warrants and paid off the note payable of \$239,618. We also paid out \$343,824 in registration penalty against a convertible debenture from 2005.
- 2006 - we raised \$2,354,032 net through private placements, \$102,310 was provided through the exercise of options and \$25,678 was used to reduce the note payable due to our president and CEO.

#### **Investing Activities**

- 2008 - \$1,095,439 was invested in short-term investments, \$288,849 in capital assets and \$47,400 was generated through the sale of oil and gas properties in the Entice area of Alberta.
- 2007 - \$4,279,380 was invested in short-term investments, \$337,829 in capital assets and \$35,000 was generated through the sale of oil and gas properties in the Ladyfern/Drake area of British Columbia.
- 2006 - there was no sale of land in 2006; the primary use of cash was for other property and equipment (\$195,185) and oil and natural gas properties (\$39,869). \$1,263,064 was used for short term investments.

#### **Projected and Actual Cash Receipts Subsequent to December 31, 2008**

Pursuant to the terms of the \$2.3 million Colombian contract executed, we anticipate receiving U.S. \$1 million dollars prior to the end of June 2009 with the balance of U.S. \$1.3 million expected to be received in the third quarter of 2009.

#### **C. Research and development, patents and licenses, etc.**

There was no research and development expense reported in 2008, 2007 and 2006. In these three years expenditures related to research and development were not significant and was included within administrative expense.

#### **D. Trend information**

We saw a decline in both the revenue earned and the number of surveys conducted in 2008 as compared with 2007. In 2008 we completed two surveys for two separate clients to earn \$2,944,470 survey revenue as compared with completing five surveys for three clients to earn \$5,608,432 of survey revenue in 2007. Since the mid-point of 2008, NXT has been adversely affected by economic conditions caused by the rapid decline in the financial markets, downturn in commodity prices, as well as uncertainty related to proposed increases in the Province of Alberta's royalty rates. These factors collectively have created a business environment that diminished the demand for our services within the western Canadian sedimentary basin; the basin wherein all of NXT's revenue had been derived since 2006. In the last half of 2008, several clients and potential clients cancelled SFD® survey programs, as contemplated in their business plans, due to these economic conditions. As a consequence, NXT had no revenue in the fourth quarter of 2008 and no SFD® survey revenue for the first quarter of 2009. In the second quarter of 2009 the company executed a contract to conduct a U.S. \$2,300,000 SFD® survey in Colombia and this survey commenced in May of 2009.

Although the weakness in our domestic marketplace beginning in the last half of 2008 is unfortunate, we are confident in our ability to enter into contracts in the future both with domestic and international clients. Prior client successes from using our technology has provided strong evidence supporting the long term value of our survey system to the oil and gas industry.

The company is in the early stage of commercializing its SFD® technology. Its ability to generate cash flow from operations will depend on its ability to service its existing clients and develop new clients for its SFD® services. Management recognizes that this early commercialization phase can last for several years. Consistent with this early stage of commercialization, the company has a few customers and its revenue may vary considerably from year to year.

#### **E. Off-balance sheet arrangements**

We do not have any off-balance sheet arrangements.

#### **F. Tabular disclosure of contractual obligations**

The following table sets forth our contractual obligations as of December 31, 2008:

	Total (\$)	Payments Due by Period			
		Less Than 1 Year	1-3 Years	3-5 Years	Over 5 years
Copier/scanner lease-to-own agreement	\$ 35,495	\$ 7,977	\$ 27,518	\$ -	\$ -
Rent or operating lease	1,423,650	362,170	1,061,480	-	-

### **ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES**

#### **A. Directors and senior management**

NXT's articles of incorporation provide for a minimum of one director and a maximum of 15 directors comprising our board of directors. At present, our board of directors consists of six members.

Our directors are appointed by our common stock shareholders at our annual meeting of shareholders and hold the position either until the next annual shareholders' meeting or until a successor is appointed.

The following table sets forth information, as of June 22, 2009, regarding our directors, executive officers and key employees:

**MICKEY ABOUGOUSH**  
Age 62  
Director since November 2007

Mr. Abougoush is a professional engineer with over 37 years of experience in the petroleum industry, largely in technical and executive positions. Mr. Abougoush is the chairman of SQFive Intelligent Oilfield Solutions Ltd., an international consulting

and software development company.

Mr. Abougoush is a member of the board of Wellpoint Systems, Inc. which trades on the TSX and a private software development company based in Ottawa, Ontario.

Mr. Abougoush is a member of the Audit and Governance Committees.

**BRIAN KOHLHAMMER**

*Age 46*

*Director since December 2004*

Mr. Kohlhammer is a Chartered Accountant with over twenty years experience in financial management reporting including four years public accounting and eighteen years financial forecasting, analysis and reporting.

Since December 2004, Mr. Kohlhammer has been serving as Vice President of Finance and Chief Financial Officer for Delphi Energy Corp., a public junior oil and gas company in Canada traded on the Toronto Stock Exchange and based in Calgary, Alberta. From 2001 to 2004, Mr. Kohlhammer served as Vice President of Finance and Chief Financial Officer for Virtus Energy Ltd., a public junior oil and gas exploration and production company traded on the TSX Venture Exchange and based in Calgary, Alberta. From 2000 to 2001, Mr. Kohlhammer served as Vice President of Finance and Chief Financial Officer for Patchgear.com Inc., an internet based B2B e-commerce public company in the safety equipment sector that was located in Calgary, Alberta.

Mr. Kohlhammer is the financial expert and Chair of the Audit Committee and a member of the Governance Committee.

**GEORGE LISZICASZ**

*Age 55*

*Director, Chairman and Chief Executive Officer since January 1996; President since July 2002*

Mr. Liszicasz is the inventor of the SFD® technology and has been our Chairman and Chief Executive Officer since the company's inception. Mr. Liszicasz was appointed our president in July 2002. Mr. Liszicasz' primary responsibilities, as the Chief Executive Officer and president, are to ensure the smooth running of the day-to-day operations and to further develop our SFD® technology. Prior to founding NXT, Mr. Liszicasz was Vice President of Susa Petroleum Inc. from 1993 to 1994. From 1987 to 1995, Mr. Liszicasz was President of Owl Industries Ltd., a developer of electronic controlling devices, where he had both engineering and business responsibilities. Mr. Liszicasz serves as a board member of each of our two subsidiaries, NXT Energy USA, Inc. and NXT Aero USA, Inc.

Mr. Liszicasz studied electronics and general sciences at the University of British Columbia and obtained a High Voltage Controls and Station Operations degree in Electronics from the Landler Jenő Technikum in Hungary in 1973.

**DOUGLAS ROWE**

*Age 67*

*Director since May 2002*

Mr. Rowe is the President of Black Eagle Enterprises Inc. and Trinity Metals Corporation Ltd. He was the Chief Executive Officer of Birch Mountain Resources Ltd., a Canadian junior mineral exploration company, from 1994 to 2008. Prior to that he was Chairman and President of Brougham Geoquest, Ltd., a company engaged in mineral exploration, from 1986 to 1993, and Brougham Energy Corporation, a company engaged in oil and gas exploration and development, from 1984 to 1986.

Mr. Rowe is a professional engineer with a Bachelor of Science degree in Electrical Engineering from Queen's University which he obtained in 1967 and has over 40 years of industry experience.

Mr. Rowe is Chair of the Compensation Committee.

**CHARLES SELBY**

*Age 52*

*Director since January 2006*

Mr. Selby is both a Lawyer and Professional Engineer, holding B.Sc. (Hons) and LLB degrees. He operates an independent corporate finance consulting firm and continues an associated legal practice which specializes in securities, oil and gas and international financial transactions. Mr. Selby was employed as a petroleum engineer in the energy sector in Canada, the United States of America, and Saudi Arabia prior to practicing law.

Mr. Selby is currently an officer of Pengrowth Corporation and Pengrowth Management Limited, which administer and manage Pengrowth Energy Trust, a large North

American energy royalty trust. He is also a founder and Chairman of the board of AltaCanada Energy Corp., a junior public oil and natural gas company with interests in Canada and the United States. Mr. Selby is a director of the Qwest Energy Corp. group of companies, Transco Resources Corp. and is on the board of Wellpoint Systems, Inc.

Mr. Selby is a member of the Audit, Compensation and Disclosure Committees.

**THOMAS E. VALENTINE**

*Age 47*

*Director since November 2007*

Mr. Valentine is a Partner with Macleod Dixon LLP, where he has practiced law, both as a Barrister and a Solicitor, since his call to the Bar in 1987. He is a member of the firm's Global Resources Practice Group and is involved in energy and energy related matters throughout the Middle East, North Africa, the CIS, Asia and South America. In 2003 and 2004 Mr. Valentine was Senior Counsel (Projects) to Qatar Petroleum, the national oil and gas company of the State of Qatar. Mr. Valentine holds a BA from the University of British Columbia, a LLB from Dalhousie University, and a LLM from the London School of Economics.

Mr. Valentine is the Chair of the Governance Committee and a member of the Compensation Committee.

**MURRAY CHRISTIE**

*AGE 43*

*SENIOR VICE PRESIDENT AND  
COO*

Mr. Christie joined NXT in January 2009 as Senior Vice President and COO. Mr. Christie's career includes over 15 years of geological modeling and geophysical survey experience providing leading edge technology solutions to international and domestic oil and gas clients. From 2003 to 2008 Mr. Christie's served as COO of Geomodeling Technology Corporation and from 1996 to 2003 he served as the Canadian President and VP North America of Paradigm Geophysical both major international geosciences software and service provider. Mr. Christie holds a B.A. degree in economics.

Mr. Christie is a member of the Disclosure Committee.

**KEN ROGERS**

*AGE 56*

*CFO, VP FINANCE SINCE*

*JANUARY 2006; INTERIM*

*CORPORATE SECRETARY SINCE*

*DECEMBER 2007*

Mr. Rogers joined NXT in January 2006 as Vice President of Finance and was appointed CFO in May 2006. In December 2007 Mr. Rogers was appointed Interim Corporate Secretary. Mr. Rogers is a Chartered Accountant with over 25 years of financial and operational management experience.

In 2005 Mr. Rogers provided contracted financial and regulatory reporting services to Enterra Energy Trust. From September 2003 to the end of 2004, Mr. Rogers was VP of Finance for Superior Propane. Superior Propane is the only national propane distributor in Canada with cash flows exceeding \$100 million annually and 1,800 employees. Superior is the largest division of Superior Plus, an income trust that trades on the TSX. Responsibilities at Superior included supply and transportation plus all finance functions for the division. From 2000 to 2003 he served as President and VP Finance for Foremost Industries. Foremost is a manufacturer of off-road vehicles and drilling rigs. During this period Foremost converted to a TSX trading mutual fund trust. From 1991 through 1999 he provided financial and business consulting services to government and private clients. From 1979 through 1991 he worked for Canadian Helicopters in various financial and operational capacities including VP & General Manager of their overhaul division.

Mr. Rogers is the Chair of the Disclosure Committee.

**ANDREW STEEDMAN**

*Age 48*

*VP Operations since December  
2005*

Mr. Steedman joined NXT in December 2005 as Vice President of Operations. Mr. Steedman holds a B.Sc. in Electrical Engineering and an MBA, both from the University of Calgary.

Prior to joining NXT, Mr. Steedman was the president of his own management consulting firm. From 2001 to 2003 he was President and CEO of Wireless Networks and was responsible for the overall strategic direction of the company. From 1999 to 2001, he was Senior Manager of Business Development with Nortel Networks. In this role he was responsible for developing Nortel's unlicensed wireless strategy,

identifying strategic partners, developing relationships with key customers and negotiating OEM agreements with key partners. From 1994 to 1999, Mr. Steedman held various positions within Nortel including product management, project management, international business development and marketing. From 1991 to 1994, Mr. Steedman consulted in Bangkok to the Telephone Organization of Thailand (TOT). He was responsible for the construction of a network management center that would monitor the TOT's national network.

None of our executive officers or directors have been involved in any bankruptcy proceedings within the last five years, been convicted of or has pending any criminal proceeding, been subject to any order, judgment or decree enjoining, barring, suspending or otherwise limiting involvement in any type of business, securities or banking activity or been found to have violated any federal, state or provincial securities or commodities laws.

Messrs. Rowe, Kohlhammer, Abougoush, Valentine and Selby are considered "independent" within the meaning of Canadian National Instrument 58-101.

## B. Compensation

### Executive Compensation

The following table sets out certain information regarding the annual and long-term compensation of the Chief Executive Officer, the Chief Financial Officer and the other four most highly compensated executive officers serving as executive officers at December 31, 2008, as well as any additional individuals for whom disclosure would have been provided pursuant to the above criteria except that the individual was not serving as an officer of the company at the end of 2008, (collectively, the "Named Executive Officers") for the fiscal years ending December 31, 2006, 2007 and 2008. Our executive officers located in Canada are paid in Canadian funds.

Summary compensation table

<u>Name &amp; Principal Position</u>	<u>Year</u>	<u>Salary</u>	<u>Bonus</u> <sup>(2)</sup>	<u>Other</u> <sup>(1)</sup>
George Liszicasz, Chief Executive Officer	2008	\$ 206,307	\$ -	\$ 7,937
Ken Rogers, VP Finance & Chief Financial Officer	2008	166,600	-	2,074
Andrew Steedman, VP Operations	2008	140,000	-	8,134

(1) Taxable benefits; consisting of life insurance, Alberta Health Care premiums, wellness, parking.

(2) NXT has a commitment to pay a bonus to officers upon the company becoming profitable as defined by the Compensation Committee.

Our COO, Mr. Murray Christie, joined the company in January of 2009 with an annual salary of \$160,000 plus benefits (see Item 6.E "Share Ownership" for details regarding stock options granted to officers).

No amount is set aside or accrued by the company or its subsidiaries to provide pension, retirement or similar benefits. We do not provide termination benefits for directors.

### Director Compensation

We do not currently pay any cash compensation to directors for serving on our board, but we do reimburse directors for out-of-pocket expenses for attending board and committee meetings. Our independent directors receive stock options to purchase our common shares as compensation for their service as directors. The terms of stock option grants made to independent directors are determined by the board of directors. We do not provide additional compensation for committee participation or special assignments of the board of directors. (See Item 6.E "Share ownership" for details regarding stock options granted to directors).

Charles Selby, a director of the company, received 400,000 shares in January of 2006. These shares relate to a contract entered and completed with the company prior to Mr. Selby joining the board.

## **C. Board practices**

### Expiration Dates

No director or member of our administrative, supervisory or management bodies has an expiration date of the current term of office.

### Service Contracts

No directors have service contracts with the company or any of its subsidiaries that provide benefits upon termination of employment.

### Board of Directors Mandate

The principal role of the Board of Directors of NXT (the “Board”) is stewardship of the company through the creation of shareholder value, including the protection and enhancement of the value of its assets, as the fundamental objective. The stewardship responsibility means that the Board oversees the conduct of the business and management, which is responsible for the day-to-day conduct of the business. The Board must assess and ensure systems are in place to manage the risks of the company’s business with the objective of preserving the company’s assets. The Board, through the Chief Executive Officer, sets the attitude and disposition of the company towards compliance with applicable laws, environmental, safety and health policies, financial practices and reporting. In addition to its primary accountability to shareholders, the Board is also accountable to employees, government authorities, other stakeholders and the public.

### Board Committees

#### Audit Committee

The Audit Committee's duties, as outlined in its charter, are to deal with financial reporting and control systems. These responsibilities include recommending to our Board the engagement of our independent registered chartered accountants, reviewing and discussing the financial statements with management, reviewing the results of the independent registered chartered accountants examination of our periodic financial statements, and determining the independence of those accountants. Messrs. Kohlhammer, Selby and Abougoush are members of the Audit Committee. Mr. Kohlhammer is the financial expert and Chair of the Audit Committee.

#### Compensation Committee

The Compensation Committee's duties, as outlined in its charter, are to deal with the assessment of management and succession to key positions and compensation within the company. The committee shall assist the Board in discharging the Board’s oversight responsibilities relating to the compensation and retention of key senior management employees, and in particular the Chief Executive Officer, with the skills and expertise needed to enable the company to achieve its goals and strategies at fair and competitive compensation and appropriate performance incentives. In discharging its responsibilities, the committee will report and, where appropriate, make recommendations to the Board in respect of the matters identified in this charter. In addition, the committee is responsible for producing an annual report on executive compensation for inclusion in the company's annual proxy circular in accordance with applicable securities laws. Messrs. Rowe, Valentine and Selby are members of the Compensation Committee. Mr. Rowe is the Chair of the Compensation Committee.

#### Governance Committee

The Governance Committee’s duties, as outlined in its charter, are to deal with the company’s approach to corporate governance and the promotion of compliance with industry and regulatory standards. The committee is responsible for overseeing and assessing the functioning of the Board and the committees of the Board and for the development, recommendation to the Board, implementation and assessment of effective corporate governance principles and guidelines. The committee’s responsibilities also include identifying candidates for director and recommending that the Board select qualified director candidates for election at the next annual meeting of shareholders. Messrs. Valentine, Abougoush and Kohlhammer are members of the Governance Committee. Mr. Valentine is the Chair of the the Governance Committee.

#### Disclosure Committee

The Disclosure Committee duties are to ensure the company provides timely, accurate and balanced disclosure of all material information about the company and to provide fair and equal access to such information. All news releases, including but not limited to releases of material information, are managed by the Disclosure Committee. If the in-

formation has been determined by the Disclosure Committee to be material, news releases will be prepared, reviewed and then disseminated through a news-wire service that provides simultaneous service to widespread news services and financial media. Additionally, the committee is responsible for ensuring public disclosure through filing these news releases on SEDAR, EDGAR as well as the company's webpage. The Disclosure Committee consists of Messrs Selby, Christie and Rogers, and Ms. Suzanne Loov, the company's recording secretary. Ken Rogers is the chair of the Disclosure Committee.

#### **D. Employees**

As of December 31, 2008 we had 12 employees and 1 full time contractor. All persons work in either management, technical or administrative positions.

The following summarizes the approximate number of employees and independent contractors by function:

<u>Function</u>	<u>Employees</u>	<u>Contractors</u>	<u>Total</u>
Senior Management Team	3	-	3
Finance and Administration	3	-	3
Technical Development	1	1	2
Survey Support	5	-	5
Total	<u>12</u>	<u>1</u>	<u>13</u>

Employees by year are all based in Calgary, Alberta.

#### **Fiscal year ended 2008**

As at December 31, 2008 we had a staff of 13 consisting of 12 full-time employees and one consultant which includes 3 members of the senior management team, 2 financial staff, 5 operations staff, an electronics engineer, a research scientist holding a Ph.D. and one administrative staff. We may engage other technical and administrative contract personnel on a project-by-project basis as required.

#### **Fiscal year ended 2007**

As of December 31, 2007 we had a staff of 12, consisting of 9 full-time employees, 2 part-time employees and 1 consultant which includes 3 members of the senior management team, 1 financial staff, 5 operations staff, an electronics engineer, a research scientist holding a Ph.D. and 1 administrative staff.

#### **Fiscal year ended 2006**

As of December 31, 2006 we had a staff of 10, consisting of 9 full-time employees and 1 consultant which includes 3 members of the senior management team, 1 financial staff, 3 operations staff, an electronics engineer, a research scientist holding a Ph.D. and 1 administrative staff.

#### **E. Share ownership**

Information on the ownership of our common shares is given under Item 7, Major Shareholders and Related Party Transactions.

#### **Summary of Stock Options and Stock Appreciation Rights Granted To Executive Officers and Directors**

All stock options have been granted pursuant to the 2006 Option Plan (the "Plan") or predecessor plans with substantially the same terms. The Plan has been incorporated by reference into this Form 20-F as Exhibit No. 2.14. Pursuant to this Plan all option grants must be approved by the board of directors of the company. Stock options may be granted to the directors, officers and employees of NXT and to consultants retained by the company. The aggregate number of common shares reserved for issuance under this Plan, or any other plan of the Corporation, shall not, at the time of the stock option grant, exceed ten percent of the total number of issued and outstanding shares (calculated on a non-diluted basis) unless the company receives the permission of the stock exchange or exchanges on which the shares are then listed to exceed such threshold. No option shall be exercisable for a period exceeding five (5) years from the date the option is granted unless the company receives the permission of the stock exchange or exchanges on which the shares are then listed and as specifically provided by the board and as permit-

ted under the rules of any stock exchange or exchanges on which the shares are then listed, and in any event, no option shall be exercisable for a period exceeding ten (10) years from the date the option is granted. Options are generally issued with a three year vesting period wherein one third of the options granted vest at the end of each of the first three years following the grant date. The exercise price for an option grant is set at the last trade price on the day of grant or some higher price at the discretion of the board.

The following options were granted to our executive officers in 2006, 2007 and 2008.

2006 200,000 options were issued at exercise prices ranging from \$1.05 to \$1.39.  
 2007 885,000 options were issued at exercise prices ranging from \$1.45 to \$4.90.  
 2008 Nil options were issued.

Subsequent to the end of 2008, 100,000 options in aggregate were issued to two directors at an exercise price of U.S. \$0.80 and 150,000 options were issued to the company's Senior Vice President and COO upon being hired in January 2009 at a strike price of U.S. \$0.80.

The following table sets forth information regarding outstanding stock options granted to our directors and officers as of June 22, 2009. All options are issued at an exercise price set at the last trade price on the day of grant. Each option entitles the option holder to acquire one common share.

Name	US \$ Exercise Price	Grant Date	Expiry Date	Options Issued	% Issued & Outstanding Common Shares
Mickey Abougoush Director	\$ 4.90 0.80	Dec 12/07 Apr 14/09	Dec 12/12 Apr 14/14	150,000 50,000	
ABOUGOUSH TOTAL				200,000	8%
MURRAY CHRISTIE - COO	0.40	Jan 14/09	Jan14/14	150,000	6%
Brian Kohlhammer Director	1.47 0.65 1.45	Dec 23/04 Jul 19/05 Feb 13/07	Dec 23/09 Jul 19/10 Feb 13/12	40,000 30,000 90,000	
KOHLHAMMER TOTAL				160,000	6%
George Liszicasz CEO & Director	2.15 0.65 0.65 1.45	Aug 12/04 Jun 28/05 Jul 19/05 Feb 13/07	Aug 12/09 Jun 28/10 Jul 19/10 Feb 13/12	40,000 30,000 30,000 55,000	
LISZICASZ TOTAL				155,000	6%
Ken Rogers CFO & VP Finance	1.05 1.39 1.45	Mar 20/06 May 4/06 Feb 13/07	Mar 20/11 May 4/11 Feb 13/12	150,000 50,000 75,000	
ROGERS TOTAL				275,000	11%
Douglas Rowe Director	2.15 0.65 1.45	Aug 12/04 Jul 19/05 Feb 13/07	Aug 12/09 Jul 19/10 Feb 13/12	40,000 30,000 100,000	
ROWE TOTAL				170,000	7%
CHARLES SELBY – Director	1.45	Feb 13/07	Feb 13/12	150,000	6%
Andrew Steedman VP Operations	1.48 1.45	Dec 21/05 Feb 13/07	Dec 21/10 Feb 13/12	150,000 75,000	
STEEDMAN TOTAL				225,000	9%

Thomas E Valentine	4.90	Dec 12/07	Dec 12/12	150,000	
Director	0.80	Apr 14/09	Apr 14/12	50,000	
VALENTINE TOTAL				200,000	8%
Total Director & Officer Options				1,685,000	67%

## ITEM 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS

### A. Major shareholders

The following table sets forth information concerning the beneficial ownership of our common shares as of June 22, 2009 by persons who beneficially own 5% or more of the outstanding common shares of our company, each person who is a director of our company, each executive officer named in this Form 20-F and all directors and executive officers as a group. For the purposes of this Form 20-F, a person is considered to be a “beneficial owner” of common shares in the company if that person has, or shares with another person, the power to direct the vote or disposition of the common shares or to receive the economic benefit of ownership of the common shares. A person is also deemed to be a beneficial owner of a common share if that person has the right to acquire the share within 60 days by option or other agreement (whether or not, in the case of a stock option, the current market price of the underlying common share is below the stock option exercise price). Therefore, the table also reflects, for each such beneficial owner, the number of options, warrants and preferred shares either exercisable or convertible into common shares within 60 days of June 22, 2009 that are owned by each beneficial owner, but, in determining the percentage ownership and general voting power of such person, does not assume the exercise of options or the conversion of securities owned by any other person. We believe the beneficial owners of common shares listed below, based on information they furnished, have sole voting and investment power over the number of shares listed opposite their names. Percentage of beneficial ownership is based on 30,676,796 common shares outstanding. This total excludes any share’s underlying options and warrants exercisable within 60 days that are deemed to be owned for purposes of calculating the beneficial ownership of securities by the holder of such options and/or warrants.

Beneficial Owner	Beneficially Owned at June 22, 2009	Percent of Class of Share
George Liszicasz <sup>1 &amp; 2</sup>	9,333,157	30%
Charles Selby <sup>1</sup>	553,718	2%
Douglas J. Rowe <sup>1</sup>	241,667	* <sup>3</sup>
Brian Kohlhammer <sup>1</sup>	165,000	* <sup>3</sup>
M. S. Abougoush <sup>1</sup>	50,000	* <sup>3</sup>
Thomas E. Valentine <sup>1</sup>	50,000	* <sup>3</sup>
Andrew Steedman <sup>2</sup>	315,534	* <sup>3</sup>
Murray Christie <sup>2</sup>	-	-
Ken Rogers <sup>2</sup>	280,000	* <sup>3</sup>
Total Common Shares	10,989,076	36%
<sup>1</sup> Director of NXT		
<sup>2</sup> Officer of NXT		
<sup>3</sup> Beneficially owns less than one percent of common shares		
Common Shares		
Goodman & Company, Investment Counsel Ltd.	1,559,387	5.1%

Major changes in percentage ownership of persons who beneficially own 5% or more of the outstanding common shares of NXT in the last 3 years:

- In March 31, 2007 Goodman & Company, Investment Counsel Ltd. converted convertible debenture and interest into 562,958 common shares.

The following information is taken from the records of Olympia Trust Company located in Calgary, Alberta, Canada, the company's transfer agent for its common stock. As of June 1, 2009 there were 179 holders of record of the company's common stock including 82 in the United States who collectively held 16,933,644 common shares, representing 55% of the total issued and outstanding shares of 30,676,796 common shares.

The company's major shareholders in common shares have the same voting rights as other holders of common shares. The company is not directly or indirectly owned or controlled by another corporation, a foreign government or any other natural or legal persons severally or jointly. There are no arrangements known to the company which may result in a change of control of the company.

**B. Related party transactions**

Summarized below are certain transactions and business relationships between NXT and persons who are related parties, as described in Item 7.B of Form 20-F, since January 1, 2008:

	<b>In the year ended December 31, 2008</b>
Collective wages, fees and benefits paid to executive officers of the company who were also directors of the company	<b>\$ 231,244</b>

Mr. Selby, a director of NXT, is also a Vice President for Pengrowth Corporation, one of our SFD® survey clients. We recorded revenue from this client for the year ended December 31, 2008 of \$1,200,000. At December 31, 2008 there was no amount due from this client.

110,000 shares were issued to officers and directors pursuant to the exercise of options at a strike price of U.S. \$0.14 - \$0.43 in the year ended December 31, 2008.

In the year ended December 31, 2008 5,000 shares were issued to the spouse of an officer of the company pursuant to the exercise of warrants at a strike price of U.S. \$2.00.

On January 14, 2009, 150,000 options were issued to an officer of the company at a strike price of U.S. \$0.40 and on April 14, 2009 an additional 100,000 options were issued in aggregate to two directors of the company at a strike price of U.S. \$0.80.

On June 15, 2009 25,000 shares were issued to the spouse of an officer of the company pursuant to a private placement at a price of \$2.01 per common shares for net proceeds of \$50,240.

**ITEM 8. FINANCIAL INFORMATION**

**Consolidated statements and other financial information**

**Index to Consolidated Financial Statements  
December 31, 2008**

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## REPORT OF INDEPENDENT REGISTERED CHARTERED ACCOUNTANTS

To the Directors of NXT Energy Solutions Inc.

We have audited the consolidated balance sheets of NXT Energy Solutions Inc. as at December 31, 2008 and 2007 and the consolidated statements of income (loss) and comprehensive income (loss), cash flows and shareholders' equity for each of the years in the three-year period ended December 31, 2008. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as at December 31, 2008 and 2007 and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2008 in accordance with accounting principles generally accepted in the United States of America.

/s/ KPMG LLP

Chartered Accountants

Calgary, Canada

April 23, 2009, except as to note 16

which is as of June 25, 2009

## **COMMENTS FOR UNITED STATES READERS ON DIFFERENCES BETWEEN CANADIAN AND UNITED STATES REPORTING STANDARDS**

In the United States, reporting standards for auditors require the addition of an explanatory paragraph (following the opinion paragraph) when the financial statements are affected by conditions and events that cast substantial doubt on the Company's ability to continue as a going concern, such as those described in Note 1 to the consolidated financial statements. Our report to the directors dated April 23, 2009, except as to note 16 which is as of June 25, 2009, is expressed in accordance with Canadian reporting standards, which do not permit a reference to such events and conditions in the auditors' report when these are adequately disclosed in the financial statements.

/s/ KPMG LLP

Chartered Accountants

Calgary, Canada

April 23, 2009

**NXT ENERGY SOLUTIONS INC**  
**(Formerly Energy Exploration Technologies Inc)**  
**Consolidated Balance Sheets**  
**(Expressed in Canadian dollars except share data)**

	December 31, 2008	December 31, 2007
<b>Assets</b>		
Current assets:		
Cash and cash equivalents	\$ 146,065	\$ 1,988,296
Short term investments	6,748,105	5,652,666
Accounts receivable	20,569	839,537
Prepaid expenses and other	57,159	122,291
	6,971,898	8,602,790
Oil and natural gas properties [note 3]	7,315	35,585
Property and equipment, net of accumulated depreciation and amortization [note 4]	621,396	504,160
	\$ 7,600,609	\$ 9,142,535
<b>Liabilities and Shareholders' Equity</b>		
Current liabilities:		
Trade payables	\$ 359,535	\$ 516,232
Other accrued liabilities [note 5]	256,624	328,511
Unearned revenue	-	2,232,470
Convertible debentures [note 9]	-	178,540
Current portion of capital lease obligation	10,684	10,684
Asset retirement obligation [note 6]	20,000	-
	646,843	3,266,437
Long term liabilities:		
Capital lease obligation	24,811	32,140
Asset retirement obligation [note 6]	28,997	-
	700,651	3,298,577
Commitments and contingencies [note 14]		
Future operations [note 1]		
Subsequent event [note 16]		
Shareholders' equity:		
Preferred shares:- authorized unlimited		
Issued: 10,000,000 [note 8]	3,489,000	3,489,000
Common shares: - authorized unlimited		
Issued: 30,676,796 shares as of December 31, 2008 (2007 - 29,713,381) [note 7]	51,884,121	49,789,695
Contributed capital	3,519,072	3,416,207
Deficit	(52,703,170)	(51,561,879)
Accumulated other comprehensive income	710,935	710,935
	6,899,958	5,843,958
	\$ 7,600,609	\$ 9,142,535

Signed "George Liszicasz"  
Director

Signed "Brian Kohlhammer"  
Director

The accompanying notes to these consolidated financial statements are  
an integral part of these consolidated balance sheets.

**NXT ENERGY SOLUTIONS INC**  
**(Formerly Energy Exploration Technologies Inc)**  
**Consolidated Statements of Income (Loss) and Comprehensive Income (Loss)**  
**(Expressed in Canadian dollars except share data)**

	For the year ended December 31,		
	2008	2007	2006
Revenue			
Survey revenue	\$ 2,944,470	\$ 5,608,432	\$ 1,206,684
Oil and natural gas revenue	10,592	33,260	41,830
	<u>2,955,062</u>	<u>5,641,692</u>	<u>1,248,514</u>
Expense			
Survey cost	211,237	814,343	164,095
Oil and natural gas operating expenses	3,959	3,753	5,390
Administrative	3,678,803	4,016,662	2,816,002
Depletion of oil and natural gas properties [note 3]	4,372	87,291	1,153,576
Amortization and depreciation [note 4]	171,613	128,179	95,844
	<u>4,069,984</u>	<u>5,050,228</u>	<u>4,234,907</u>
	<u>(1,114,922)</u>	<u>591,464</u>	<u>(2,986,393)</u>
Other expense			
Gain on sale of oil and natural gas properties [note 3]	(20,325)	-	-
Interest income	(234,007)	(109,374)	(4,411)
Interest on convertible debentures [note 9]	-	100,980	1,290,239
Loss (gain) on foreign exchange	(20,242)	249,427	1,882
Other [note 14]	90,000	-	-
Abandonment of oil and natural gas properties [note 6]	210,943	-	-
	<u>26,369</u>	<u>241,033</u>	<u>1,287,710</u>
Net income (loss)	<u>(1,141,291)</u>	<u>350,431</u>	<u>(4,274,103)</u>
Foreign currency translation gain	-	-	9,907
Net comprehensive income (loss)	<u>\$ (1,141,291)</u>	<u>\$ 350,431</u>	<u>\$ (4,264,196)</u>
Net income (loss) per share unit [note 7]			
Basic	\$ (0.04)	\$ 0.01	\$ (0.17)
Diluted	\$ (0.04)	\$ 0.01	\$ (0.17)

The accompanying notes to these consolidated financial statements are  
an integral part of these consolidated statements of income (loss) and comprehensive income (loss).

**NXT ENERGY SOLUTIONS INC**  
**(Formerly Energy Exploration Technologies Inc)**  
**Consolidated Statements of Cash Flow**  
**(Expressed in Canadian dollars)**

	For the year ended December 31,		
	2008	2007	2006
<b>Operating activities</b>			
Net income (loss)	\$ (1,141,291)	\$ 350,431	\$ (4,274,103)
Amortization and depreciation	171,613	128,179	95,844
Depletion of oil and natural gas properties	4,372	87,291	1,153,576
Non-cash asset retirement obligation	210,943	-	-
Costs settled by issuance of common stock	-	274,977	-
Stock-based compensation expense	653,042	988,664	818,874
Non-cash interest expense convertible debenture	-	24,883	1,290,239
Non-cash interest expense	3,354	2,234	-
Non-cash expense note payable	-	13,371	34,456
Gain on sale of oil and natural gas properties	(20,325)	-	-
Changes in non-cash working capital			
Accounts receivable	818,968	(236,407)	(600,237)
Prepaid expenses	65,132	(57,904)	5,650
Unearned revenue	(2,232,470)	1,949,452	283,019
Trade payables	(156,697)	275,047	(141,352)
Other accrued liabilities	(27,491)	53,866	205,896
Asset retirement obligations paid	(161,946)	-	-
Net cash generated (used) in operating activities	<u>(1,812,796)</u>	<u>3,854,084</u>	<u>(1,128,138)</u>
<b>Financing activities</b>			
Repayment of note payable	-	(239,618)	(25,678)
Repayment of capital lease	(10,683)	(6,232)	-
Repayment of registration penalty	(178,540)	(343,824)	-
Issue of common shares, net of issuance costs	-	-	2,354,032
Exercise of options and warrants	1,499,853	2,319,433	102,310
Net cash generated in financing activities	<u>1,310,630</u>	<u>1,729,759</u>	<u>2,430,664</u>
<b>Investing activities</b>			
Invested in other property and equipment	(288,849)	(337,829)	(195,185)
Invested in oil and natural gas properties	(3,177)	(5,954)	(39,869)
Proceeds on the sale of oil and gas properties	47,400	35,000	-
Increase in short term investments	(1,095,439)	(4,279,380)	(1,263,064)
Net cash used in investing activities	<u>(1,340,065)</u>	<u>(4,588,163)</u>	<u>(1,498,118)</u>
Effect of foreign exchange translation	-	-	(74,556)
Net cash inflow (outflow)	<u>(1,842,231)</u>	<u>995,680</u>	<u>(270,148)</u>
Cash and cash equivalents, beginning of year	<u>1,988,296</u>	<u>992,616</u>	<u>1,262,764</u>
Cash and cash equivalents, end of year	<u>\$ 146,065</u>	<u>\$ 1,988,296</u>	<u>\$ 992,616</u>
<b>Supplemental cash flow information</b>			
Cash interest paid	\$ 3,354	\$ 15,606	\$ 16,647

The accompanying notes to these consolidated financial statements are an integral part of these consolidated statements of cash flow.

**NXT ENERGY SOLUTIONS INC**  
**(Formerly Energy Exploration Technologies Inc)**  
**Consolidated Statements of Shareholders' Equity**  
**(Expressed in Canadian dollars except share data)**

	For the year ended December 31,		
	2008	2007	2006
<b>Common Shares</b>			
Balance at the beginning of the year	\$ 49,789,695	\$ 45,770,651	\$ 40,675,882
Issued upon exercise of stock options and warrants	2,050,030	3,497,476	102,310
Issued through conversion of debentures	-	246,591	3,256,821
Issued through private placement; net of issue costs and fair market value of warrants	-	-	775,732
Shares issued for services	44,396	274,977	959,906
Balance at end of the year	<u>51,884,121</u>	<u>49,789,695</u>	<u>45,770,651</u>
<b>Preferred Shares</b>			
Balance at the beginning and end of the year	<u>3,489,000</u>	<u>3,489,000</u>	<u>3,489,000</u>
<b>Contributed Capital</b>			
Balance at the beginning of the year	3,416,207	3,605,585	1,175,315
Fair market value of options and warrants	653,042	988,664	798,734
Fair market value of warrants issued pursuant to common share private placement	-	-	1,631,536
Contributed capital transferred to shares pursuant to exercise of options and warrants	(550,177)	(1,178,042)	-
Balance at end of the year	<u>3,519,072</u>	<u>3,416,207</u>	<u>3,605,585</u>
<b>Deficit</b>			
Balance at the beginning of the year	(51,561,879)	(51,912,310)	(47,638,207)
Net income (loss) for the year	(1,141,291)	350,431	(4,274,103)
Balance at end of the year	<u>(52,703,170)</u>	<u>(51,561,879)</u>	<u>(51,912,310)</u>
<b>Accumulated Other Comprehensive Income</b>			
Balance at the beginning of the year	710,935	710,935	701,028
Net other comprehensive income	-	-	9,907
Balance at end of the year	<u>710,935</u>	<u>710,935</u>	<u>710,935</u>
<b>Total Shareholders' Equity</b>	<u>\$ 6,899,958</u>	<u>\$ 5,843,958</u>	<u>\$ 1,663,861</u>

The accompanying notes to the consolidated financial statements are an integral part of the condensed consolidated statements of shareholder's equity (deficit).

**NXT ENERGY SOLUTIONS INC**  
**(Formerly Energy Exploration Technologies Inc)**  
**Notes to the Consolidated Financial Statements**  
**As at and for the year ended December 31, 2008**  
**(Expressed in Canadian dollars)**

## **1. Organization and Ability to Continue Operations**

NXT Energy Solutions Inc ("we", "company" or "NXT") was incorporated under the laws of the State of Nevada on September 27, 1994. NXT was continued from the State of Nevada to the Province of Alberta, Canada on October 24, 2003. The shareholders voted on and approved this change which moved the jurisdiction of incorporation from the U.S. to Canada. In November 2007 at our Annual General Meeting the shareholders voted on and approved changing our name. Effective September 22, 2008 our name changed from Energy Exploration Technologies Inc to NXT Energy Solutions Inc.

We own a proprietary technology called Stress Field Detection ("SFD"). SFD is a remote sensing airborne survey system that is designed to identify areas with oil and natural gas reserve potential. This technology was acquired from its current CEO and President on December 31, 2005 following a ten year period wherein the company controlled the technology through a series of licensing agreements. For the ten year period prior to 2006 the company had engaged in extensive activities that were effective in developing the technology to a stage wherein SFD was both technically ready and had the required industry validation to embark on the commercial phase of the company. These early activities included conducting SFD surveys for oil and gas industry partners on a cost recovery basis and participating as a joint venture partner in SFD identified exploration wells. By December 31, 2005 the company had accumulated approximately \$47.6 million of deficits in conducting these activities.

The company is in the early stage of commercializing its SFD technology. Its ability to generate cash flow from operations will depend on its ability to service its existing clients and develop new clients for its SFD services. Management recognizes that this early commercialization phase can last for several years. Consistent with this early stage of commercialization the company has a significant economic dependency on a few clients. While the company is in this early stage of commercialization, the company's financial position is materially impacted by the loss or gain of any one client. The company's ability to continue operations is dependent on attracting future customers through demonstrating the value that the company can bring to their exploration activities.

For the year ended December 31, 2008 the company recognized \$2,944,470 in SFD survey revenue, had a net loss of \$1,141,291 and used \$1,812,796 of cash in operating activities.

The company is in the early stage of commercializing its SFD technology. Its ability to generate cash flow from operations will depend on its ability to service its existing clients and develop new clients for its SFD services. Management recognizes that this early commercialization phase can last for several years. Consistent with this early stage of commercialization the company has a significant economic dependency on a few clients. While the company is in this early stage of commercialization, the company's financial position is materially impacted by the loss or gain of any one client.

The company anticipates generating both net income and cash from operations in future years with this business model; however this outcome cannot be predicted with certainty at this time. The company has an extensive prior history of generating net losses. These consolidated financial statements do not include any adjustments to amounts and classifications of assets and liabilities that may be necessary should we be unable to generate sufficient net income and cash from operations in future years in order to continue as a going concern.

## **2. Significant Accounting Policies**

### **Basis of Presentation**

These consolidated financial statements have been prepared by management in accordance with generally accepted accounting principles of the United States of America in accordance with the same accounting policies and methods used in preparing the consolidated financial statements for the fiscal years ended December 31, 2007 and 2006 and as at December 31, 2007, except as disclosed below.

In the year ended and as at December 31, 2007, the company's Canadian dollar functional currency financial statements were translated into United States dollars for reporting purposes. As of January 1, 2008 the company commenced reporting its financial statements in its Canadian dollar functional currency. The Canadian dollar was adopted for reporting purposes in 2008 as all our operations are now located in Canada.

For periods prior to 2007, when the functional currency of the company was the U.S. dollar, assets and liabilities were translated from the U.S. dollar functional currency to the Canadian dollar using period end exchange rates. The statements of operations and cash flows were translated at period average exchange rates. Any difference was recorded as an adjustment to accumulated other comprehensive income. At January 1, 2008, \$710,935 was recorded as an adjustment to accumulated other comprehensive income.

In September 2006, the FASB issued Statement of Financial Accounting Standards No. 157, "*Fair Value Measurements*". Statement No. 157 provides a common definition of fair value, establishes a framework for measuring fair value and expands disclosures about fair value measurements. However, this Statement does not require any new fair value measurements. Statement No. 157 was adopted effective January 1, 2008. The adoption of this standard did not impact the financial position, results of operation or cash flow of the company.

In February 2007, the FASB issued SFAS No. 159, "*The Fair Value Option for Financial Assets and Financial Liabilities - Including an Amendment of FASB Statement No. 115.*" This pronouncement permits entities to use the fair value method to measure certain financial assets and liabilities by electing an irrevocable option to use the fair value method at specified election dates. After election of the option, subsequent changes in fair value would result in the recognition of unrealized gains or losses as period costs during the period the change occurred. SFAS No. 159 was adopted effective January 1, 2008. The company did not elect to provide the provisions of SFAS No. 159 to any of its financial instruments; consequently, the adoption of this standard did not impact the financial position, results of operation or cash flow of the company.

### **Consolidation**

We have consolidated the accounts of our wholly owned subsidiaries in the course of preparing these consolidated financial statements. All significant inter-company balances and transactions amongst NXT and its subsidiaries have been eliminated and are therefore not reflected in these consolidated financial statements. On December 22, 2008 the company's fully owned Canadian subsidiaries, NXT Energy Canada Inc. and NXT Aero Canada Inc., were dissolved and all assets and liabilities were wound up into the company. As of December 31, 2008 the company consisted of NXT Energy Solutions Inc. and two inactive subsidiaries in the United States.

### **Estimates and Assumptions**

The preparation of these consolidated financial statements require management to make estimates and assumptions. These estimates and assumptions affect the reported amounts of assets and liabilities, including the disclosure of contingent assets and liabilities, at the date of these consolidated financial statements as well as revenues and expenses recorded during the reporting periods.

Estimates include allowances for doubtful accounts, estimated useful lives of assets, provisions for contingent liabilities, measurement of stock-based compensation, valuation of future tax assets and valuation of preferred shares including the likelihood that the conversion feature of the preferred shares will be achieved. The estimates and assumptions used are based upon management's best estimate. Estimates and assumptions are reviewed periodically and the effects of revisions are reflected in the period when determined. Actual results may differ from those estimates.

### **Cash and Cash Equivalents**

Cash and cash equivalents consist of cash on hand and short term securities with original maturity less than 90 days at the date of acquisition.

### **Short Term Investments**

Short term investments include short term securities, held by a major Canadian chartered bank, with original maturities greater than 90 days and less than one year. Investments are recorded at the lower of original cost and market value.

## Revenue Recognition

We recognize revenue on SFD survey contracts on a completed contract basis, net of government sales tax. All money received or invoiced in advance of completion of the contract is reflected as unearned revenue and treated as a current liability on our balance sheet. All survey expenditures and obligations related to SFD survey contracts are reflected as work-in-progress and treated as a current asset on our balance sheet. Upon completion of the related contract, unearned revenue and the work-in-progress is moved as appropriate to the statement of earnings (loss) as either revenue or survey cost. Sales commissions are included in survey costs. Survey cost does not include any amortization or depreciation of property and equipment.

Revenue associated with sales of oil and natural gas is recorded when title passes to the customer and collection of the resulting receivable is deemed reasonably assured.

## Fair Value of Financial Instruments

Our financial instruments consist of cash equivalents, short term investments, accounts receivable, trade payables and accrued liabilities. The carrying value of these financial instruments approximates their fair values due to their short term to maturity. We are not exposed to significant interest or credit risks arising from these financial instruments. We are exposed to foreign exchange risk as a result of holding of U.S. denominated cash. We have mitigated this risk by reducing the amount of funds we hold in U.S. dollars to \$13,121 as at December 31, 2008 (\$1,273,347 as at Dec 31, 2007).

## Oil and Natural Gas Properties

We follow the full cost method of accounting for oil and natural gas properties and equipment whereby we capitalize all costs relating to our acquisition of, exploration for and development of oil and natural gas reserves. All our oil and natural gas capital assets are located in Canada.

Under the full cost method of accounting, capitalized costs are accumulated in the Canadian cost centers. These costs are then depleted using the unit of production method based on estimated proved oil and gas reserves as determined by independent engineers.

In applying the full cost method of accounting, capital costs in each cost center, less accumulated depletion and depreciation and related deferred income taxes, are restricted from exceeding an amount equal to the sum of the present value of their related estimated future net revenues discounted at 10% less estimated future expenditures, and the lower of cost or estimated fair value of unproved properties included in the costs being amortized, net of related tax effects. Should this comparison indicate an excess carrying value, a write-down would be recorded.

The carrying amounts of unproved oil and natural gas properties, which are excluded from the depletion calculation, are assessed on a periodic basis to ascertain whether any impairment in value has occurred. Impairment is recorded if this assessment indicates the fair market value of unproved lands is less than carrying amounts.

All recoveries of costs through the sale or other disposition of oil and gas properties and equipment are accounted for as adjustments to capitalized costs, with no gain or loss recorded, unless the sale or disposition involves a significant change in the relationship between costs and the value of proved reserves or the underlying value of unproved property, in which case the gain or loss is recorded.

Any oil and natural gas exploration, drilling, development and production activity we conduct is through joint operations with partners and our consolidated financial statements reflect only our proportionate interest.

## Property and Equipment

We carry our other property and equipment at cost and depreciate or amortize them over their estimated service lives using the declining balance method, except for leasehold improvements where we use the straightline method, in accordance with the following annual rates:

- |   |                                  |
|---|----------------------------------|
| • Computer and SFD system equipment       | 30%                              |
| • Computer and SFD system software        | 100%                             |
| • Furniture, fixtures and other equipment | 20%                              |
| • Flight equipment                        | 10%                              |
| • Leasehold improvements                  | over the remaining term of lease |

Management periodically reviews the carrying value of our property and equipment to ensure that any permanent impairment in value is recognized and reflected in our results of operations.

## **Research and Development Expenditures**

We expense all research and development expenditures we incur to develop, improve and test our SFD survey system and related components. Any intellectual property acquired for the purpose of enhancing research and development projects, if there is no alternative use for the intellectual property, is expensed in the period acquired.

## **Foreign Currency Translation**

The Canadian dollar is the company's functional currency in 2007 and 2008. Prior to 2007 only the Canadian subsidiaries used the Canadian dollar as their functional currency whereas all other NXT companies used the United States dollar as their functional currency. We use the following methodology to translate U.S. dollar transactions, assets, liabilities and shareholders equity into Canadian dollars:

- all asset and liability accounts are translated into Canadian dollars at the rate of exchange in effect as of the end of the applicable fiscal period;
- all shareholders' equity accounts are translated into Canadian dollars using historical exchange rates; and
- revenue and expense accounts are translated into Canadian dollars at the average rate of exchange for the applicable fiscal period.

Foreign currency translation adjustments resulting from these translations are included in other comprehensive income (loss). For the three years ended December 31, 2008 foreign currency translation adjustments are the only component of other comprehensive income (loss).

## **Income Taxes**

We follow the asset and liability method of accounting for income taxes. This method recognizes income tax assets and liabilities at the rates when the temporary differences are reversed or realized, based on temporary differences in reported amounts for financial statement and tax purposes. The effect of a change in income tax rates on future income tax assets and future income tax liabilities is recognized in income when enacted. Valuation allowances are provided when necessary to reduce future tax assets to an amount that is more likely than not to be realized.

On January 1, 2007 the company adopted FASB Interpretation No. 48, "*Accounting for Uncertainty in Income Taxes—an interpretation of FASB Statement No. 109*". Interpretation No. 48 clarifies the accounting for uncertainty in income taxes recognized in an enterprise's financial statements in accordance with FASB Statement No. 109, "*Accounting for Income Taxes*". The adoption of Interpretation No. 48 did not have a material impact on the financial statements.

## **Share-Based Payments**

The company follows the fair value method of accounting for stock options. Under this method, an estimate of the fair value of the cost of all stock options granted to employees, directors and consultants is calculated using the Black Scholes option pricing model and charged to income over the vesting period of the option, with a corresponding increase recorded in contributed surplus. Upon exercise of the stock option, the consideration received by the company and the amount previously recorded in contributed surplus, is recorded as an increase to the share capital of the company.

Stock-based compensation for non-employees is periodically re-measured until the non-employees' performance is complete, or the amortization period is complete. Changes to the re-measured compensation are recognized in the period of change and amortized over the remaining life of the vesting period in the same manner as the original option.

## **Convertible Debt**

We review the terms of convertible debt and equity instruments we issue to determine whether there are embedded derivative instruments, including the embedded conversion option, that are required to be bifurcated and accounted for separately as a derivative financial instrument. In circumstances where the convertible instrument contains more than one embedded derivative instrument, including the conversion option, that is required to be bifurcated, the bifurcated derivative instruments are accounted for as a single, compound derivative instrument. Also, in connection with the sale of convertible debt and equity instruments, we may issue freestanding warrants that may, depending on their terms, be accounted for as derivative instrument liabilities, rather than as equity.

Bifurcated embedded derivatives are initially recorded at fair value and are then revalued at each reporting date, with changes in the fair value reported as charges or credits to income. When the convertible debt or equity instruments contain embedded derivative instruments that are to be bifurcated and accounted for as liabilities, the total proceeds allocated to the convertible host instruments are first allocated to the fair value of all the bifurcated derivative instruments. The remaining proceeds, if any, are then allocated to the convertible instruments themselves, usually resulting in those instruments being recorded at a discount from their face amount.

The discount from the face value of the convertible debt, together with the stated interest on the instrument, is amortized over the life of the instrument through periodic charges to income, using the effective interest method.

### Recent Accounting Pronouncements

SFAS No. 141(R) replaces SFAS No. 141, "Business Combinations". SFAS No. 141(R) retains the fundamental requirements of SFAS No. 141 that the acquisition method of accounting be used for all business combinations and for an acquirer to be identified for each business combination, with the objective of improving the relevance and comparability of the information that a reporting entity provides in its financial reports about a business combination and its effects. SFAS No. 160 clarifies the classification of non-controlling interests in consolidated statements of financial position and the accounting for and reporting of transactions between the reporting entity and holders of such non-controlling interests. The requirements of these standards will be applied to business combinations subsequent to December 31, 2008.

SFAS No. 161, which amends SFAS No. 133, "Accounting for Derivative Instruments and Hedging Activities", requires companies with derivative instruments to disclose information about how and why a company uses derivative instruments, how derivative instruments and related hedged items are accounted for under SFAS 133, and how derivative instruments and related hedged items affect a company's financial position, financial performance, and cash flows. The required disclosures include the fair value of derivative instruments and their gains or losses in tabular format, information about credit-risk-related contingent features in derivative agreements, counterparty credit risk, and the company's strategies and objectives for using derivative instruments. SFAS 161 is effective prospectively for periods beginning on or after November 15, 2008. We are currently evaluating the impact that SFAS No. 161 may have on our financial statement disclosures.

In May 2008, FASB issued SFAS No. 162 "The Hierarchy of Generally Accepted Accounting Principles" which codifies the sources of accounting principles and the related framework to be utilized in preparing financial statements in conformity with U.S. GAAP. The adoption of this standard is not expected to impact the financial position, results of operation or cash flow of the company.

### 3. Oil and Natural Gas Properties

	As at December 31,	
	2008	2007
Proved property costs	\$ -	\$ 28,270
Unproved property costs	7,315	7,315
Balance at the end of year	<u>\$ 7,315</u>	<u>\$ 130,360</u>

Effective April 1, 2008, the company sold its 22.5% working interest in a well at Entice, Alberta, for a net proceeds of \$47,400. As at December 31, 2008 the company's interests in oil and gas properties consists only of undeveloped land and royalty interests.

### 4. Property and Equipment

	As at December 31,	
	2008	2007
Survey equipment	\$ 454,595	\$ 411,694
Furniture and other equipment	520,364	365,010
Computers and software	936,641	904,715
Vehicles	22,631	22,631
Leasehold improvements	69,986	13,513
Other property and equipment	2,004,217	1,717,563
Less accumulated depreciation, amortization and impairment	(1,382,821)	(1,213,403)
Net other property and equipment	<u>\$ 621,396</u>	<u>\$ 504,160</u>

Included in other property and equipment are assets acquired under capital lease arrangements with future minimum lease payments of \$8,874 over each of the next four years. Amortization of these assets is included in amortization and depreciation on the statement of income. At December 31, 2008 the capitalized cost of the leased assets is \$46,822 and related accumulated amortization is \$22,381.

## 5. Other Accrued Liabilities

	As at December 31,	
	2008	2007
Legal and accounting	\$ 198,570	\$ 186,311
Commission on sales	-	64,568
Consultant fees	37,500	2,250
Other	20,554	75,382
	<u>\$ 256,624</u>	<u>\$ 328,511</u>

The accrued commission on sales for 2007 was satisfied through the issuance of common shares in 2008.

## 6. Asset Retirement Obligation

In 2008 the company paid \$161,946 in abandonment and reclamation expenses plus accrued an additional \$20,000 in respect to one well drilled in 2000 and abandoned in 2008 for which no asset retirement obligation had been recorded.

The remaining asset retirement obligations relate to wells where the company has outstanding abandonment and reclamation obligations in accordance with government regulations. Management conducted a review in 2008 of all wells for which NXT had a historical participation and determined that 8 gross (1.1 net) wells drilled in the years 2000 through 2004 still require abandonment. Management has determined the asset retirement obligation based upon estimates of the costs to remediate, reclaim and abandon the wells and the estimated timing of the costs to be incurred. At December 31, 2008, the asset retirement obligation is estimated to be \$28,997 (December 31, 2007 – nil), based on a total future liability of \$42,454. These obligations are estimated to be settled in five years. This amount has been calculated using an inflation rate of 3.4% and discounted using a credit-adjusted risk-free interest rate of 10.0%.

The following table reconciles the asset retirement obligations:

	As at December 31, 2008
Asset retirement obligation, beginning of year	\$ -
Additions in the year	208,307
Accretion	2,636
Costs incurred	(161,946)
Asset retirement obligation, end of year	<u>\$ 48,997</u>

## 7. Common Shares

The following table provides a continuity of common shares and value since December 31, 2006.

	Common Shares	
	Shares	Amount
As at December 31, 2006	27,177,908	\$ 45,987,597
Transactions during the year ended December 31, 2007		
Issued through the conversion of convertible debentures and accrued interest	192,401	210,618
Issued on exercise of options	263,000	369,068
Issued in exchange for services provided	90,807	269,416
Issued on exercise of warrants	1,989,265	2,952,996
As at December 31, 2007	29,713,381	\$ 49,789,695
Transactions during the year ended December 31, 2008		
Issued to discharge accrued liabilities outstanding as at December 31, 2007	9,205	44,396
Issued on exercise of options	276,667	182,099
Issued on exercise of warrants	677,543	1,867,931
As at December 31, 2008	<u>30,676,796</u>	<u>\$ 51,884,121</u>

170,000 shares were issued to officers and directors on the exercise of options and warrants in 2008 (82,844 - 2007).

The company has an unlimited number of shares authorized.

### Reconciliation of Earnings per Share Calculations

For the year ended December 31, 2008

	Net Loss	Weighted Average Shares Outstanding	Per Unit
Basic and diluted	\$ (1,141,291)	30,369,586	\$ (0.04)

For the year ended December 31, 2007

	Net Income	Weighted Average Shares Outstanding	Per Unit
Basic	\$ 350,431	27,838,893	\$ 0.01
Options assumed exercised		2,048,371	
Warrants assumed exercised		2,776,560	
Preferred shares assumed converted		2,000,000	
Shares assumed purchased		(2,786,045)	
Diluted	\$ 350,431	31,877,779	\$ 0.01

For the year ended December 31, 2006

	Net Loss	Weighted Average Shares Outstanding	Per Unit
Basic and diluted	\$ (4,264,196)	25,038,200	\$ (0.17)

All options, warrants and preferred shares were excluded from the diluted earnings per share calculation for the years ended December 31, 2008 and 2006 as they were antidilutive.

### 8. Preferred Shares

The company committed to the issue of 10,000,000 series 1 preferred shares to its chief executive officer, president and director on December 31, 2005 pursuant to a 10 year license agreement for the SFD technology. This 2005 license agreement was superseded on December 31, 2006 by the execution of the Technical Transfer Agreement ("2006 TTA") wherein the company issued the 10,000,000 series 1 preferred shares and purchased outright the SFD Technology. The company is authorized to issue an unlimited number of preferred shares and has authorized the issuance of 10,000,000 series 1 preferred shares.

The 10,000,000 series 1 preferred shares have the following attributes:

- Series 1 preferred shares are conditionally convertible into common shares.
- 2,000,000 of the series 1 preferred shares became convertible into common shares upon issue.
- The remaining 8,000,000 series 1 preferred shares may become convertible into common shares in four 2,000,000 share increments should the company achieve specified cumulative revenue thresholds prior to December 31, 2015. These cumulative revenue thresholds are at U.S. \$50 million, U.S. \$100 million, U.S. \$250 million and U.S. \$500 million.
- Cumulative revenue is defined as the sum of total revenue earned plus proceeds from the sale of assets accumulated since January 1, 2007, all denominated in United States dollars, and calculated in accordance with generally accepted accounting principles.
- In the event that the final cumulative revenue threshold of U.S. \$500 million is not achieved prior to December 31, 2015, the company has the option to either redeem any unconvertible preferred shares for a price of \$0.01 per share and forfeit the SFD Technology, or retain the ownership of the SFD Technology by making all remain series 1 preferred shares convertible into common shares.
- Series 1 preferred shares shall not be transferable except with the consent of the board of directors.
- Series 1 preferred shares do not participate in dividends.

The preferred shares as reflected in these financial statements were evaluated at fair market value at December 31, 2005. This value did not change following the execution of the 2006 TTA. The preferred shares issued were valued at December 31, 2005 using an option-pricing model and this value was expensed in the year ended December 31, 2005.

## 9. Convertible Debentures

During 2005 we closed United States dollar denominated private placement bridge-financing contracts. Pursuant to these contracts the company issued financial instruments that converted automatically into U.S. \$1,955,342 of debentures and 1,989,265 warrants in exchange for cash proceeds of U.S. \$1,649,764 (net of commission paid of U.S. \$24,928) and the conversion of note payable and accrued interest of U.S. \$280,650 for aggregate net proceeds of U.S. \$1,930,414. The debentures were all converted into common shares in 2006 and 2007.

Each debenture had a stated term that defined a termination of the debentures beginning on March 7, 2007 through to June 7, 2007. The debentures earned interest at ten percent per annum. Additionally, debenture holders were entitled to a two percent registration penalty as the underlying shares to the debenture were not made available for resale within 90 days of the original closing date of the debenture financing.

The debentures were assessed under SFAS 133 as containing an embedded derivative liability. Accordingly the company bifurcated the embedded conversion option and accounted for it as a derivative instrument liability because the conversion price of the debt was potentially adjusted if we issued common stock at a lower price than the stated conversion rate. This derivative instrument liability was initially recorded at its fair value and is then adjusted to fair value at the end of each subsequent period, with changes in the fair value charged or credited to income in the period of change. This embedded conversion option was revalued using the binomial option pricing model. The warrants issued along with the convertible debenture were classified as equity in accordance with EITF 00-19 and were valued using a Black Scholes model.

The proceeds received on issuance of the convertible debt during 2005 were first allocated to the fair value of the bifurcated embedded derivative instruments included in the convertible notes and the warrants, with the remaining proceeds allocated to the convertible debentures, resulting in the debentures being recorded at a significant discount from their face amounts as shown in the table below. This discount was then accreted, together with the stated interest on the debenture, using the effective interest method over the term of the debenture.

	U.S. Dollar
Proceeds received on issuance of the convertible debentures	\$ 1,913,260
Minus:	
Fair value of the conversion options (derivatives)	503,564
Fair value of warrants	963,730
Discount applied to convertible debentures	<u>1,467,294</u>
Convertible debentures discounted carrying value at date of issue	<u>\$ 445,966</u>

The fair value of the conversion options was an embedded derivative instrument that required fair market valuation at inception and at the end of each reporting period. This option was valued using an option-pricing model that assumed that the maximum price was the forced conversion feature price inherent in the convertible debenture. The value at inception was \$503,564, at December 31, 2005 the value was \$1,421,384, \$68,994 at December 31, 2006, nil at December 31, 2007 and nil at December 31, 2008. Change in the value of the conversion feature was expensed in the period when it occurred.

Immediately prior to the conversion of a convertible debenture to common shares we amortized the remaining debt discount for that debenture and revalued its conversion feature to fair market value. The resulting change in carrying value of the debenture and conversion feature was recorded as a charge or credit to income. Common shares issued through the conversion of a debenture were valued as the sum of the fair market value at the date of conversion of the fully accreted value of the debenture and value of the conversion feature.

In accordance with this accounting procedure, the value of the convertible debenture and the conversion feature as at December 31, 2008 and 2007 are as follows:

	For the year ended December 31,	
	2008	2007
Debtenture carrying value, registration penalty and accrued interest at beginning of year	\$ 178,540	\$ 663,294
Expense including interest, registration penalty and foreign exchange adjustment	-	24,883
Converted to common shares	-	(165,813)
Registration penalty paid	(178,540)	(343,824)
Debtenture carrying value, registration penalty and accrued interest at end of year	\$ -	\$ 178,540
Conversion feature carrying value at beginning of year	\$ -	\$ 80,406
Converted to common shares	-	(80,406)
Fair value of the conversion feature at end of year	\$ -	\$ -

During 2007 penalties of \$343,824 were paid out and the payment of the remaining \$178,540 in penalties was made in the first quarter of 2008.

## 10. Employee, Directors and Contractor Options

Summarized below are all outstanding options under the Plans as of December 31, 2008:

Range of exercise prices in U.S. dollars	Outstanding options	Weighted average exercise price of outstanding options	Options exercisable	Weighted average exercise price of exercisable options
\$0.50 - \$0.99	341,741	\$ 0.73	335,074	\$ 0.71
\$1.00 - \$1.99	1,451,463	\$ 1.51	627,296	\$ 1.39
\$2.00 - \$3.99	177,000	\$ 2.35	114,000	\$ 2.12
Over \$4.00	300,000	\$ 4.90	100,000	\$ 4.90
Total sum of outstanding	2,270,204	\$ 1.90	1,176,370	\$ 1.56

Summarized below are all outstanding options under the Plans as of December 31, 2007:

Range of exercise prices in U.S. dollars	Outstanding options	Weighted average exercise price of outstanding options	Options exercisable	Weighted average exercise price of exercisable options
under \$0.50	226,667	\$0.35	226,667	\$0.35
\$0.50 - \$0.99	381,741	\$0.72	298,408	\$0.69
\$1.00 - \$1.99	1,162,963	\$1.40	254,463	\$1.40
\$2.00 - \$3.99	277,000	\$2.16	235,000	\$2.18
Over \$4.00	300,000	\$4.90	-	\$0.00
Total sum of outstanding	2,348,371	\$1.72	1,014,538	\$1.14

Average contractual life for all outstanding options under the Plans as of December 31, 2008 and 2007:

Range of exercise prices in U.S. dollars	Weighted average remaining contractual life (years)	
	December 31, 2008	December 31, 2007
under \$0.50	-	0.8
\$0.50 - \$0.99	1.9	2.3
\$1.00 - \$1.99	2.8	3.6
\$2.00 - \$3.99	1.6	1.8
Over \$4.00	4.0	5.0
Total sum of outstanding	2.7	3.1

Continuity of options for the years ended December 31, 2008 and 2007:

Exercise prices in U.S. dollars	For the year ended December 31, 2008		For the year ended December 31, 2007	
	# of options	Weighted average exercise price	# of options	Weighted average exercise price
Outstanding as at beginning of year	2,348,371	\$ 1.72	1,588,205	\$ 1.15
Granted	403,500	\$ 2.05	1,220,500	\$ 2.32
Expired or forfeited	(205,000)	\$ 2.13	(197,334)	\$ 1.57
Exercised	(276,667)	\$ 0.44	(263,000)	\$ 1.14
Options outstanding as at end of year	2,270,204	\$ 1.90	2,348,371	\$ 1.72
Exercisable as at end of year	1,176,370	\$ 1.56	1,014,538	\$ 1.14

In 2008 and 2007 the company's officers and directors had the following options granted, forfeited or exercised:

Average exercise prices in U.S. dollars	For the year ended December 31, 2008		For the year ended December 31, 2007	
	# of options	Weighted average exercise price	# of options	Weighted average exercise price
Granted	-	\$ -	885,000	\$ 2.62
Expired or forfeited	-	\$ -	(60,000)	\$ 1.18
Exercised	(110,000)	\$ 0.35	(70,000)	\$ 0.37

The 2006 Stock Option Plan was approved on September 30, 2006 by company shareholders at the Annual General Meeting. The 2006 Stock Option Plan set forth terms and conditions whereby options to purchase common shares of the company can be issued to directors, officers and employees of the company and to consultants retained by the company. The aggregate number of common shares reserved for issuance under this Plan, or any other prior Plan of the company shall not, at time of the stock option grant, exceed ten percent of the total number of issued and outstanding common shares (calculated on a non-diluted basis) unless the company receives permission of the stock exchange or exchanges on which the shares are then listed to exceed such threshold.

Issuance of options to any one participant shall not exceed five percent of the total number of issued and outstanding common shares in any 12 month period with consultants retained for investor relations duties further restricted to two percent in any 12 month period without permission of the stock exchange or exchanges on which the common shares of the company are listed. Furthermore, shareholder approval is required for grants of options to insiders of options that exceed ten percent of the issued common shares within any 12 month period. No options shall be granted for a term exceeding five years without permission of the stock exchange or exchanges on which the shares of the company are listed. All options issued under Plans are issued from treasury.

Unvested options outstanding as of December 31, 2008 and 2007 vest over the three year period starting from the date of grant dependant on the continued provision of services. The options vest one-third at the end of each of the first three years following the grant date. Options generally lapse, if unexercised, five years from the date of vesting.

We received \$1,499,853, \$2,319,433 and \$102,310 cash from the exercise of stock options and warrants during the year ended December 31, 2008, 2007 and 2006 respectively.

#### Compensation Expense Associated with Grant of Options

In the year ended December 31, 2008 the company recorded stock-based compensation expense of \$653,042 (2007 - \$505,914 and 2006 - 456,236).

The grant date fair value is calculated in U.S. dollars using the Black Scholes option valuation model utilizing the following weighted average assumptions:

	For the year ended December 31,		
	2008	2007	2006
Expected dividends paid per common share	Nil	Nil	Nil
Expected life (years)	3	3	3
Expected volatility in the price of common shares (%)	88%	65%	127%
Risk free interest rate (%)	4%	4%	4%
Weighted average grant date fair market value per share in U.S. dollars	\$ 1.19	\$ 1.96	\$ 0.64
Intrinsic value of options exercised in U.S. dollars	\$ 2.18	\$ 2.87	\$ 0.67

As of December 31, 2008 and 2007 there were \$985,473 and \$1,232,097 respectively of total unrecognized compensation cost related to non-vested share-based compensation awards granted under the stock option plans. This cost will be recognized over the remaining vesting period.

## 11. Warrants

Continuity of warrants for the years end December 31, 2008 and 2007:

	As at December 31, 2008		As at December 31, 2007	
	# of warrants	Weighted average exercise price	# of warrants	Weighted average exercise price
Outstanding as at beginning of the year	2,776,560	\$ 1.96 U.S.	4,615,825	\$ 1.54 U.S.
Issued for services	-	-	150,000	\$ 2.20 Cdn
Exercised	(702,543)	\$ 2.00 U.S.	(1,989,265)	\$ 1.00 U.S.
Expired	(1,924,017)	-	-	-
Outstanding as at end of the year	150,000	\$ 2.20 Cdn	2,776,560	\$ 1.96 U.S.

On June 30, 2007 NXT entered into agreements with a member dealer of the TSX Venture Exchange ("TSX-V") to act as sponsoring dealer for NXT's listing application to the TSX-V. Pursuant to the agreement, NXT issued 150,000 common share warrants to the dealer upon becoming listed on the TSX-V on December 3, 2007. The fair market value of these warrants was estimated at \$482,750. The warrants have an exercise price of \$2.20 and expire on December 3, 2009 unless NXT's common shares close at or above \$6.00 per share on the TSX-V for 20 consecutive days at which point the exercise period will expire 30 days following this condition being met.

The company has historically issued warrants in U.S. and Canadian dollars. At December 31, 2008, all warrants outstanding are exercisable in Canadian dollars.

Outstanding warrants as of December 31, 2008 and 2007:

	As at December 31, 2008		As at December 31, 2007	
	Outstanding warrants	Weighted average remaining contractual life (years)	Outstanding warrants	Weighted average remaining contractual life (years)
Exercise prices				
\$1.60 U.S.	-	0.0	350,000	0.3
\$2.00 U.S.	-	0.0	2,276,560	0.3
\$2.20 Cdn	150,000	1.0	150,000	2.0
Total sum of outstanding	150,000	1.0	2,776,560	0.4

The grant date fair value of warrants issued was calculated using the Black Scholes option valuation model utilizing the following weighted average assumptions:

	For the year ended December 31, 2007
Expected dividends paid per common share	Nil
Expected life (years)	2
Weighted average volatility	81%
Risk free interest rate (%)	4%

In 2008 and 2007 the company's officers and directors had the following warrants exercised in U.S. dollars:

	For the year ended December 31, 2008		For the year ended December 31, 2007	
	# of warrants	exercise price	# of warrants	exercise price
Exercised	-	\$ -	32,844	\$ 1.00

## 12. Income Taxes

Our income tax for accounting purposes is different from the amount computed by applying the statutory Canadian federal and provincial income tax rate to income or loss before taxes.

	For the year ended December 31,	
	2008	2007
Canadian statutory income tax rate	29.5%	32.1%
Income tax expense (recovery) at statutory rate	\$ (336,681)	\$ 120,125
Impact of non deductible expenses on income tax		
Stocked-based compensation	192,648	369,200
Forfeited in year	108,133	179,611
Exchange adjustment	(449,071)	275,975
Rate reduction	(85,122)	588,652
Other	(3,203)	(99,276)
Valuation allowance	573,296	(1,434,287)
	\$ -	\$ -
	As at December 31,	
	2008	2007
Deferred income tax assets		
Net operating loss carry forward USA (expiration dates: 2009-2028)	\$ 2,412,739	1,963,668
Net operating loss carry forward Canada (expiration dates: 2009-2029)	2,749,895	2,709,856
Property and equipment	2,311,416	2,227,230
Valuation reserve	(7,474,050)	(6,900,754)
	\$ -	\$ -

We have not provided for any amount of current or deferred U.S. or Canadian federal, state or provincial income taxes for the years ended December 31, 2008, 2007 and 2006. We have provided a full valuation allowance on the deferred tax asset and liability, consisting primarily of net operating loss carry forwards and timing differences on property and equipment, because of uncertainty regarding their realization. The increase in the valuation allowance on the deferred tax asset during the year ended December 31, 2008 was \$573,296 compared with a decrease \$1,434,287 for the year ended December 31, 2007. The 2007 decrease is largely due to the reduction in Canadian income tax rates, exchange fluctuations affecting U.S. net operating loss and to the application of FIT assets to reduce current taxes to zero. All income and losses for tax purposes generated during the three years are substantially in Canada.

Prior to 2008, the company and its subsidiaries had incurred losses since their incorporation and have not been assessed by tax authorities. Accordingly, all taxation years remain subject to review by tax authorities.

## 13. Related Party Transactions

Summarized below is information concerning related party transactions and balances not disclosed elsewhere in these consolidated financial statements for the years ended December 31, 2008, 2007, and 2006:

	For the year ended December 31,		
	2008	2007	2006
Collective wages, fees, bonuses and benefits paid to executive officers of NXT, who were also directors of NXT	\$ 231,244	\$ 220,121	\$ 183,755
Interest expense recognized or paid to related parties and officers	\$ -	\$ 13,371	\$ 16,647

110,000 shares were issued to officers and directors pursuant to the exercise of options at a strike price of U.S. \$0.14 - \$0.43 in the year ended December 31, 2008.

In the year ended December 31, 2008, 5,000 shares were issued to the spouse of an officer of the company pursuant to the exercise of warrants at a strike price of U.S. \$2.00.

A Director of NXT is also an officer for one of our SFD survey clients. We recorded revenue from this client for the years ended December 31, 2008, 2007 and 2006 of \$1,200,000, nil and \$600,000, respectively. At December 31, 2006 there was a \$300,000 account receivable due from this client that was received in 2007.

In 2006, 582,787 common shares were issued to discharge U.S. \$729,341 of accrued liabilities as at December 31, 2005. These obligations were related to services provided by consultants for corporate strategy and planning services provided in 2005. Of these shares, 65,534 were issued to an individual who is currently an officer of the company and 400,000 were issued to an individual who is currently a director of the company. In both cases the services were provided prior to these individuals accepting their positions with the company.

The company's board of directors authorized 403,500 options to be issued to directors, officers, employees and contractors of the company. The options were issued with an exercise price ranging from U.S. \$1.90 to U.S. \$2.80 based on the closing trading price of the company's common shares on the OTCBB for the date of issue. Of these 294,000 were issued to consultants for services and 109,500 were issued to employees.

The company recorded a liability of \$38,310 to an outgoing director for services rendered in a prior year.

#### **14. Commitments and Contingencies**

In 2002 we were served a Statement of Claim whereby the plaintiff alleged that NXT failed to pay him compensation of \$74,750, plus interest, under a consulting agreement and further alleged that NXT unlawfully obstructed him from trading his shares of NXT. On December 10, 2002 we filed our Statement of Defense. The plaintive is a past president and director of NXT. On August 15, 2008 a settlement was reached on this Statement of Claim wherein we paid \$90,000 and the plaintiff provided us with a complete release to any claim against NXT, its directors or officers, or any claim of an interest in the SFD technology.

On March 18, 2003 we were served a Statement of Claim naming NXT and others as defendants. The plaintiffs allege that the defendants were negligent and in breach of a ferry flight contract under which an aircraft was to be delivered to Greece. The aircraft crashed enroute. The Plaintiffs are seeking, among other things, damages in the amount of Cdn. \$450,000 or loss and damages to the aircraft and cargo, and damages in respect to search and rescue expenses, salvage, storage, transportation expenses and pollution and contamination expenses. NXT was not party to the Ferry Flight Contract. The outcome of the claim is not determinable. Management believes the claim is without merit and we intend to defend ourselves against the claim.

In May 2008 we entered into a revised lease agreement for expanded office space in our current location. The original lease was for a six year term beginning November 1, 2006 and ending October 31, 2012. The amended lease is effective June 1, 2008 and ends October 31, 2012. The minimum sublease payments will be \$29,483 per month beginning June 1, 2008 and \$30,729 per month for the final three years of the lease.

#### **15. Comparative Figures**

Certain amounts in the consolidated financial statements have been reclassified in the comparative periods to conform to the current year's presentation. All comparative periods have been converted from the company's prior reporting currency, the U.S. dollar, to the current reporting and functional currency the Canadian dollar.

#### **16. Subsequent Event**

On April 13, 2009 the company executed a contract with a Colombian subsidiary of a Canadian oil and gas company to conduct a U.S. \$2,300,000 SFD® survey in Colombia. The survey commenced in the second quarter of 2009.

## ITEM 9. THE OFFER AND LISTING

### A. Offer and listing details

The following tables set forth the price history of the company's common stock listed on the OTCBB in the United States and the TSX Venture Exchange (the "TSX-V") in Canada.

		OTCBB US\$ per share	
Period		High	Low
Year ended-	December 31, 2008	\$4.87	\$0.35
Year ended-	December 31, 2007	\$5.89	\$1.05
Year ended-	December 31, 2006	\$1.75	\$0.70
Year ended-	December 31, 2005	\$2.30	\$0.55
Year ended-	December 31, 2004	\$3.00	\$1.10
Quarter ended-	March 31, 2009	\$1.20	\$0.41
Quarter ended-	December 31, 2008	\$1.49	\$0.35
Quarter ended-	September 30, 2008	\$2.45	\$1.01
Quarter ended-	June 30, 2008	\$3.65	\$1.96
Quarter ended-	March 31, 2008	\$4.87	\$2.10
Quarter ended-	December 31, 2007	\$5.89	\$3.70
Quarter ended-	September 30, 2007	\$5.09	\$1.80
Quarter ended-	June 30, 2007	\$2.60	\$1.80
Quarter ended-	March 31, 2007	\$2.44	\$1.05
Month ended-	May 31, 2009	\$1.25	\$0.82
Month ended-	April 30, 2009	\$1.24	\$0.60
Month ended-	March 31, 2009	\$1.20	\$0.47
Month ended-	February 28, 2009	\$0.70	\$0.42
Month ended-	January 31, 2009	\$0.63	\$0.41
Month ended-	December 31, 2008	\$0.75	\$0.35
		TSX-V Cdn\$ per share	
Period <sup>1</sup>		High	Low
Year ended-	December 31, 2008	\$4.90	\$0.49
Quarter ended-	March 31, 2009	\$1.20	\$0.41
Quarter ended-	December 31, 2008	\$1.33	\$0.49
Quarter ended-	September 30, 2008	\$2.28	\$1.00
Quarter ended-	June 30, 2008	\$3.70	\$2.00
Quarter ended-	March 31, 2008	\$4.90	\$2.01
Month ended-	May 31, 2009	\$1.48	\$0.95
Month ended-	April 30, 2009	\$1.45	\$0.80
Month ended-	March 31, 2009	\$1.20	\$0.47
Month ended-	February 28, 2009	\$0.70	\$0.42
Month ended-	January 31, 2009	\$0.63	\$0.41
Month ended-	December 31, 2008	\$0.95	\$0.49

<sup>1</sup> The company's common stock began trading on the TSX-V on December 3, 2007.

**B. Plan of distribution**

Not applicable – The company is filing this Form 20-F as an annual report.

**C. Markets**

Our common shares are quoted in the United States on the OTCBB under the symbol “NSFDF.OB”, in Canada on the TSX Ventures Exchange under the symbol “SFD.V” and in Europe on the Frankfurt and Berlin Exchanges under the symbol “EFW”. The company’s common shares commenced trading on the OTCBB pursuant to a reverse take-over in 1996; and were approved for listing on the Frankfurt and Berlin Exchanges in January 2004 and TSX Ventures Exchange in December 2007.

**D. Selling shareholders**

Not applicable – The company is filing this Form 20-F as an annual report.

**E. Dilution**

Not applicable – The company is filing this Form 20-F as an annual report.

**F. Expenses of the issue**

Not applicable – The company is filing this Form 20-F as an annual report.

**ITEM 10. ADDITIONAL INFORMATION**

**A. Share capital**

Not applicable – The company is filing this Form 20-F as an annual report.

**B. Memorandum and articles of association**

NXT was incorporated in the State of Nevada. With respect to the foregoing items, the law applicable to NXT in the Province of Alberta is not significantly different from that in the State of Nevada. NXT was established in Alberta pursuant to a Certificate of Continuance issued October 24, 2003 by the Registrar of Corporations of the Province of Alberta. NXT’s Alberta Corporate Access Number is 2010730915. The Articles of Continuance of NXT were amended to create the Series 1 Shares on December 28, 2006. The Articles provide that there are no restrictions on the nature of the business that may be carried on by NXT. On September 19, 2008 pursuant to Articles of Amendments the name of the company was changed from Energy Exploration Technologies Inc to NXT Energy Solutions Inc.

**Quorum**

The board of directors of NXT may fix the quorum for meetings of the board of directors or of a committee of the board of directors, but unless so fixed, a majority of the directors or of a committee of directors holding office at the time of the meeting constitutes a quorum provided that no business may be transacted unless at least half of the directors present are resident Canadians. Business cannot be transacted without a quorum. A quorum of directors may vote on any matter of business properly brought before the meeting provided that where a director is a party to a material contract or proposed material contract or is a director or an officer of or has a material interest in any person who is a party to a material contract or proposed material contract with NXT, such director must disclose his or her interest at the earliest possible date, request the conflict be noted in the minutes of the meeting and, with few exceptions, refrain from voting on the matter in which the director has conflict of interest. There is no limitation on the board of directors to vote on matters of their remuneration as a director, officer, employee or agent of NXT or of an affiliate of NXT.

### Borrowing Powers

The board of directors may, without authorization of the shareholders of NXT:

- (a) borrow money on the credit of NXT;
- (b) issue, reissue, sell or pledge debt obligations of NXT;
- (c) subject to restrictions respecting financial assistance prescribed in the ABCA, guarantee, on behalf of NXT, the performance of an obligation of any person; and
- (d) mortgage, hypothecate, pledge or otherwise create a security interest in all or any property of NXT, owned or subsequently acquired, to secure any obligation of NXT.

The board of directors of NXT may, by resolution, delegate to a director, a committee of directors or an officer all or any of the foregoing borrowing powers.

### Directors

A person is qualified to be or stand for election as a director provided such person is at least 18 years of age, is not bankrupt and is not mentally incapacitated pursuant to applicable mental health legislation of the Province of Alberta or pursuant to an order of the courts of the Province of Alberta. There is no provision in NXT's Articles or By-Laws relating to the retirement or non-retirement of directors under an age limit requirement. There is also no requirement in NXT's Articles or By-Laws for a director to hold securities of NXT.

Pursuant to the ABCA, a director or officer shall not be disqualified by his office, or be required to vacate his office, by reason only that he is a party to, or is a director or officer or has a material interest in any person who is a party to, a material contract or proposed material contract with NXT or subsidiary thereof. Such a director or officer shall, however, disclose the nature and extent of his interest in the contract at the time and in the manner provided by the ABCA. Any such contract or proposed contract shall be referred to the board of directors of NXT or shareholders for approval even if such contract is one that in the ordinary course of NXT's business would not require approval by the board or shareholders. Subject to the provisions of the ABCA, a director shall not by reason only of his office be accountable to NXT or to its shareholders for any profit or gain realized from such a contract or transaction, and such contract or transaction shall not be void or voidable by reason only of the director's interest therein, provided that the required declaration and disclosure of interest is properly made, the contract or transaction is approved by the directors or shareholders, and it is fair and reasonable to NXT at the time it was approved and, if required by the ABCA, the director refrains from voting as a director on the contract or transaction and absents himself from the director's meeting at which the contract is authorized or approved by the directors, except attendance for the purpose of being counted in the quorum.

### Rights Attached to Common Shares

The holders of the common shares are entitled to dividends as and when declared by the directors of NXT, to one vote per share at meetings of shareholders of NXT, and upon liquidation, subject to the rights of the holders of preferred shares, are entitled to share rateably with the holders of the common shares in all distributions of assets of NXT.

### Rights Attached to Preferred Shares

Preferred shares may be issued from time to time in one or more series. The board of directors of NXT is expressly authorized to provide by resolution duly adopted prior to issuance, for the creation of each such series and to fix the designation, rights, privileges, restrictions and conditions attached to the shares of each such series, including the rate or amount of dividends or the method of calculating dividends, the dates of payment of dividends, the redemption, purchase and/or conversion prices and terms and conditions of redemption, purchase and/or conversion, and any sinking fund or other provisions.

The preferred shares of each series shall, with respect to the payment of dividends and the distribution of assets or return of capital in the event of liquidation, dissolution or winding-up of NXT, whether voluntary or involuntary, or any other return of capital or distribution of the assets of NXT among its shareholders for the purpose of winding up its affairs, rank on a parity with the preferred shares of every other series and be entitled to preference over the common shares and over any other shares of NXT, if any, ranking junior to the preferred shares. The preferred

shares of any series may also be given other preferences, not inconsistent with the articles of continuance of NXT (the "Articles"), over the common shares and any other shares of NXT ranking junior to the preferred shares of a series as may be fixed by the board of directors of NXT.

If any cumulative dividends or amounts payable on the return of capital in respect of a series of preferred shares are not paid in full, all series of preferred shares shall participate rateably in respect of accumulated dividends and return of capital.

Unless the board of directors of NXT otherwise determine in the articles of amendment designating a series of preferred shares, the holder of each share of a series of preferred shares shall not, as such, be entitled to receive notice of or vote at any meeting of shareholders, except as otherwise specifically provided in the ABCA.

#### Rights Attached to Preferred Shares - Series 1 Shares

NXT is authorized to issue up to 10,000,000 Series 1 Shares. As at December 31, 2006 10,000,000 Series 1 Shares were issued and outstanding, with the following material attributes.

#### Voting Rights

Subject to applicable law, the holders of the Series 1 Shares shall not be entitled to any voting rights or to receive notice of or to attend any meeting of the shareholders of NXT.

#### Dividends

The holders of the Series 1 Shares shall not be entitled to receive any dividends on the Series 1 Shares.

#### Conversion

The Series 1 Shares are convertible as follows:

- (a) as to 20% of the total issued Series 1 Shares on December 31, 2006;
- (b) as to 20% of the total issued Series 1 Shares on the date that gross cumulative aggregate revenues of NXT reach \$50 million;
- (c) as to 20% of the total issued Series 1 Shares on the date that gross cumulative aggregate revenues of NXT reach \$100 million;
- (d) as to 20% of the total issued Series 1 Shares on the date that gross cumulative aggregate revenues of NXT reach \$250 million; and
- (e) as to 20% of the total issued Series 1 Shares on the date that gross cumulative aggregate revenues of NXT reach \$500 million.

Upon a change of control of NXT, as to the amount of Series 1 Shares not yet expired, converted or redeemed, as the case may be, in accordance with the terms thereof, the Series 1 Shares shall become convertible as follows:

- (a) as to all of the total issued Series 1 Shares if the sale price per common share paid by an acquirer on transaction constituting a change of control of NXT or the per share amount received by the holders of common shares on a liquidation of the assets of NXT or the winding-up or re-arrangement of NXT's business is equal to or exceeds \$10;
- (b) as to 60% of the total issued Series 1 Shares if the sale price per common share paid by an acquirer on transaction constituting a change of control of NXT or the per share amount received by the holders of common shares on a liquidation of the assets of NXT or the winding-up or re-arrangement of NXT's business is equal to or exceeds \$5; and
- (c) as to 20% of the total issued Series 1 Shares regardless of the sale price per common share paid by an acquirer on transaction constituting a change of control of NXT or the per share amount received by the holders of common shares on a liquidation of the assets of NXT or the winding-up or re-arrangement of NXT's business.

The Series 1 Shares specified above held by the holder shall be convertible at the option of the holder, subject to the terms and provisions hereof, into common shares at the rate of one common share per each Series 1 Share, without payment of any additional consideration.

Upon a change of control, a holder shall be entitled to convert, in full or in part, the Series 1 Shares specified above, until the expiration of ninety (90) days after the date on which the holder of the Series 1 Shares gives or receives notice that such holder will no longer be providing services to NXT, or the date on which such holder is terminated by NXT.

The conversion of Series 1 Shares into common shares shall be evidenced by the holder delivering at any time during usual business hours at the head office of NXT:

- (a) written notice, signed by the holder, specifying the number of Series 1 Shares to be converted; and
- (b) the certificate or certificates representing the Series 1 Shares to be converted.

The rights of the holder of such Series 1 Shares, as the holder thereof, shall cease at the date of conversion into common shares and the person or persons entitled to receive common shares upon such conversion shall be treated for all purposes as having become the holder or holders of record of such common shares at such time.

The registered holder of any common shares resulting from any such conversion shall be entitled to rank equally with the registered holders of all other common shares in respect of all dividends declared payable to holders of common shares of record on any date after the date of conversion into common shares.

The board of directors shall have the right at any time to cause the conversion of all or a portion of the Series 1 Shares in the discretion of the board of directors.

NXT shall be entitled to make all tax withholdings, if any, as required by law, with respect to a conversion of Series 1 Shares for common shares.

#### Redemption

Subject to applicable law and subject to NXT's right to force the conversion of the Series 1 Shares, NXT shall be required to redeem and shall be deemed to have redeemed all of the Series 1 Shares held by the holder on December 31, 2015 at a price of \$0.001 per Series 1 Share ("Redemption Price").

On any redemption of Series 1 Shares, NXT shall give a notice in writing of its redemption of the Series 1 Shares (the "Redemption Notice") to each person who at the date of giving of such notice is a registered holder of Series 1 Shares to be redeemed, setting out the date the Series 1 Shares are to be redeemed or are deemed to have been redeemed (the "Redemption Date") and the number of Series 1 Shares which are to be redeemed or are deemed to have been redeemed.

#### Liquidation

The holders of Series 1 Shares shall not be entitled in the event of any liquidation, dissolution or winding up of NXT, whether voluntary or involuntary, or any other distribution of the assets of NXT among its shareholders for the purpose of winding up its affairs to any return of capital other than payment of the Redemption Price for each Series 1 Share in preference to the holders of common shares.

After payment to the holders of the Series 1 Shares of the amounts so payable to them, the holders of Series 1 Shares shall not be entitled to share in any further distribution of the property or assets of NXT.

#### Alteration of the Rights of Shareholders

Under the ABCA, any substantive change to the Articles (including, but not limited to, change of any maximum number of shares that NXT is authorized to issue, creation of new classes of shares, add, change or remove any rights, privileges, restrictions and conditions in respect of all or any of its shares, whether issued or unissued, change the shares of any class or series, whether issued or unissued, into a different number of shares of the same class or series or into the same or a different number of shares of other classes or series) or other fundamental changes to the

capital structure of NXT, including a proposed amalgamation or continuance of NXT out of the jurisdiction, requires shareholder approval by not less than 2/3 of the votes cast by shareholders voting in person or by proxy at a shareholders' meeting called for that purpose. In certain prescribed circumstances, holders of shares of a class or of a series are entitled to vote separately as a class or series on a proposal to amend the Articles whether or not shares of a class or series otherwise carry the right to vote. The holders of a series of shares of a class are entitled to vote separately as a series only if the series is affected by an amendment in a manner different from other shares of the same class.

#### Meetings of Shareholders

NXT's By-Laws provide that the board of directors shall call an annual meeting of shareholders to be held not later than eighteen months after the date of incorporation and subsequently, not later than fifteen months after holding the last preceding annual meeting. NXT's By-Laws provide that the board of directors may at any time call a special meeting of shareholders. Only the registered holders of shares are entitled to receive notice of and vote at annual and special meetings of shareholders, except to the extent that:

- (a) if a record date is fixed, the person transfers ownership of any of the person's shares after the record date; or
- (b) if no record date is fixed, the person transfers ownership of any of the person's shares after the date on which the list of shareholders is prepared; and
- (c) the transferee of those shares;
  - produces properly endorsed share certificates; or
  - otherwise establishes ownership of the shares; and
  - demands, not later than ten (10) days before the meeting, that the transferee's name be included in the list before the meeting;

in which case the transferee is entitled to vote the shares.

The ABCA also permits the holders of not less than 5% of the issued voting securities of NXT to give notice to the board of directors requiring them to call and hold a meeting of NXT.

The only persons entitled to be present at a meeting of shareholders are:

- (a) the shareholders entitled to vote at the meeting;
- (b) the board of directors of NXT;
- (c) the external auditor of NXT; and
- (d) any others who, although not entitled or required under the provision of the ABCA, any unanimous shareholder agreement, the Articles or the By-Laws to be present at the meeting.

Any other person may be admitted only on the invitation of the Chairperson of the meeting or with the consent of the meeting.

There are no restrictions in NXT's Articles or By-Laws as to on the number of shares that may be held by non-residents other than restrictions set out in the *Investment Canada Act* (Canada).

#### Change of Control

There are no specific provisions in the Articles or By-Laws of NXT that have the effect of delaying, deferring or preventing a change of control of NXT and that would operate only with respect to a merger, acquisition or corporate restructuring involving NXT (or any of its subsidiaries). Notwithstanding this, the board of directors, under the general powers conferred to it under NXT's By-Laws, have the authority to approve and invoke a shareholders rights plan that will protect shareholders from unfair, abusive or coercive take-over strategies, including the acquisi-

tion or control of NXT by a bidder in a transaction or series of transactions that does not treat all shareholders equally or fairly or that does not afford all shareholders an equal opportunity to share in any premium paid upon an acquisition of control. NXT has not adopted such a plan.

#### Shareholder Ownership Disclosure

There are no provisions in NXT's By-Laws regarding public disclosure of individual shareholdings.

### **C. Material contracts**

Each material contract, other than contracts entered into in the ordinary course of business, to which the company has been a party, for the two years immediately preceding publication of this annual report, is listed as an exhibit to this annual report and is summarized elsewhere herein.

### **D. Exchange controls**

There are no governmental laws, decrees or regulations in Canada relating to restrictions on the export or import of capital, or affecting the remittance of interest, dividends or other payments to non-residents. Dividends paid to U.S. residents, however, are subject to a 15% withholding tax or a 5% withholding tax for dividends if the shareholder is a corporation owning at least 10% of the outstanding voting shares of NXT pursuant to Article X of the reciprocal tax treaty between Canada and the U.S.

Except as provided in the Investment Canada Act (the "ICA"), which has provisions that restrict the holding of voting shares by non-Canadians, there are no limitations specific to the rights of non-Canadians to hold or vote the common shares under the laws of Canada or the Province of Alberta, or in the charter documents of NXT or its subsidiaries.

Management of NXT believes that the following summary fairly describes those provisions of the ICA pertinent to an investment in NXT by a person who is not a Canadian resident (a "non-Canadian").

The ICA requires a non-Canadian making an investment which would result in the acquisition of control of a Canadian business (i.e. the gross value of the assets of which exceed a certain monetary threshold) to identify, notify, or file an application for review with the Investment Review Division of Industry Canada ("IRD").

The notification procedure involves a brief statement of information about the investment on a prescribed form which is required to be filed with the IRD by the investor at any time up to 30 days following implementation of the investment. It is intended that investments requiring only notification will proceed without government intervention unless the investment is in a specific type of business activity related to Canada's cultural heritage and national identity.

If an investment is reviewable under the ICA, an application for review in the form prescribed is normally required to be filed with the IRD prior to the investment taking place and the investment may not be implemented until the review has been completed and the Minister of Industry Canada ("Minister") (the Minister responsible for Investment Canada) is satisfied that the investment is likely to be of net benefit to Canada. The Minister has up to 75 days to make this determination. If the Minister is not satisfied that the investment is likely to be of net benefit to Canada, the non-Canadian must not implement the investment or, if the investment has been implemented, may be required to divest himself of control of the business that is the subject of the investment.

The following investments by non-Canadians are subject to notification under the ICA:

1. An investment to establish a new Canadian business; and
2. An investment to acquire control of a Canadian business that is not reviewable pursuant to the Act.

The following investments by a non-Canadian are subject to review under the ICA:

1. An investment is reviewable if there is an acquisition of a Canadian business and the asset value of the Canadian business being acquired equals or exceeds the following thresholds:

- (a) For non-World Trade Organization (“WTO”) investors, the threshold is \$5 million for a direct acquisition and \$50 million for an indirect acquisition; the \$5 million threshold will apply however for an indirect acquisition if the asset value of the Canadian business being acquired exceeds 50% of the asset value of the global transaction;
- (b) Except as specified in paragraph (c) below, a threshold is calculated annually for reviewable direct acquisitions by or from WTO investors. The threshold for 2004 is \$227 million. Pursuant to Canada’s international commitments, indirect acquisitions by or from WTO investors are not reviewable;
- (c) The limits set out in paragraph (a) apply to all investors for acquisitions of a Canadian business that:
  - (i) engages in the production of uranium and owns an interest in a producing uranium property in Canada;
  - (ii) provides any financial service;
  - (iii) provides any transportation services; or
  - (iv) is a cultural business.

Notwithstanding the above, any investment which is usually only notifiable, including the establishment of a new Canadian business, and which falls within a specific business activity, including the publication and distribution of books, magazines, newspapers, film or video recordings, audio or video music recordings, or music in print or machine-readable form may be reviewed if an Order-in-Council directing a review is made and a notice is sent to the investor within 21 days following the receipt of a certified complete notification.

Generally speaking, an acquisition is direct if it involves the acquisition of control of the Canadian business or of its direct or indirect Canadian parent and an acquisition is indirect if it involves the acquisition of control of a non-Canadian direct or indirect parent of an entity carrying on the Canadian business. No change of voting control will be deemed to have occurred if less than one-third of the voting control of a Canadian corporation is acquired by an investor.

A WTO investor, as defined in the ICA, includes an individual who is a national of a member country of the WTO or who has the right of permanent residence in relation to that WTO member, a government or government agency of a WTO investor-controlled corporation, a limited partnership, trust or joint venture that is neither WTO-investor controlled or Canadian controlled of which two-thirds of its board of directors, general partners or trustees, as the case may be, are any combination of Canadians and WTO investors.

The ICA exempts certain transactions from the notification and review provisions of ICA, including, among others, (a) an acquisition of voting shares if the acquisition were made in the ordinary course of that person’s business as a trader or dealer in securities; (b) an acquisition of control of the company in connection with the realization of a security interest granted for a loan or other financial assistance and not for any purpose related to the provisions of the ICA; (c) the acquisition of voting interests by any person in the ordinary course of a business carried on by that person that consists of providing, in Canada, venture capital on terms and conditions not inconsistent with such terms and conditions as may be fixed by the Minister; and (d) acquisition of control of the company by reason of an amalgamation, merger, consolidation or corporate reorganization, following which the ultimate direct or indirect control in fact of the company, through the ownership of voting interests, remains unchanged.

## **E. Taxation**

### Certain U.S. Federal Income Tax Considerations

The following is a summary of certain material U.S. federal income tax consequences to a U.S. Holder (as defined below) arising from and relating to the acquisition, ownership, and disposition of the company’s common shares.

This summary is for general information purposes only and does not purport to be a complete analysis or listing of all potential U.S. federal income tax consequences that may apply to a U.S. Holder as a result of the acquisition, ownership, and disposition of our common shares. In addition, this summary does not take into account the individual facts and circumstances of any particular U.S. Holder that may affect the U.S. federal income tax consequences of the acquisition, ownership, and disposition of our common shares. Accordingly, this summary is not intended to be, and should not be construed as, legal or U.S. federal income tax advice with respect to any U.S. Holder. Each

U.S. Holder should consult its own tax advisor regarding the U.S. federal, U.S. state and local, and foreign tax consequences of the acquisition, ownership, and disposition of our common shares.

No legal opinion from U.S. legal counsel or ruling from the Internal Revenue Service (the “IRS”) has been requested, or will be obtained, regarding the U.S. federal income tax consequences of the acquisition, ownership, and disposition of common shares. This summary is not binding on the IRS, and the IRS is not precluded from taking a position that is different from, and contrary to, the positions taken in this summary.

**Notice Pursuant To IRS Circular 230: Anything contained in this summary concerning any U.S. federal tax issue is not intended or written to be used, and it cannot be used by a U.S. Holder, for the purpose of avoiding federal tax penalties under the Internal Revenue Code. This summary was written to support the promotion or marketing of the transactions or matters addressed by this Form 20-F. Each U.S. Holder should seek U.S. federal tax advice, based on such U.S. Holder’s particular circumstances, from an independent tax advisor.**

## Scope of this Summary

### Authorities

This summary is based on the Internal Revenue Code of 1986, as amended (the “Code”), Treasury Regulations (whether final, temporary, or proposed), published rulings of the Internal Revenue Service (“IRS”), published administrative positions of the IRS, the Convention Between Canada and the United States of America with Respect to Taxes on Income and on Capital, signed September 26, 1980, as amended (the “Canada-U.S. Tax Convention”), and U.S. court decisions that are applicable and, in each case, as in effect and available, as of the date of this Form 20-F. Any of the authorities on which this summary is based could be changed in a material and adverse manner at any time, and any such change could be applied on a retroactive basis. This summary does not discuss the potential effects, whether adverse or beneficial, of any proposed legislation that, if enacted, could be applied on a retroactive basis.

### U.S. Holders

For purposes of this summary, a “U.S. Holder” is a beneficial owner of our common shares that, for U.S. federal income tax purposes, is (a) an individual who is a citizen or resident of the U.S., (b) a corporation, or any other entity classified as a corporation for U.S. federal income tax purposes, that is created or organized in or under the laws of the U.S. or any state in the U.S., including the District of Columbia, (c) an estate if the income of such estate is subject to U.S. federal income tax regardless of the source of such income, or (d) a trust if (i) such trust has validly elected to be treated as a U.S. person for U.S. federal income tax purposes or (ii) a U.S. court is able to exercise primary supervision over the administration of such trust and one or more U.S. persons have the authority to control all substantial decisions of such trust.

### Non-U.S. Holders

For purposes of this summary, a “non-U.S. Holder” is a beneficial owner of our common shares other than a U.S. Holder. This summary does not address the U.S. federal income tax consequences of the acquisition, ownership, and disposition of our common shares to non-U.S. Holders. Accordingly, a non-U.S. Holder should consult its own tax advisor regarding the U.S. federal, U.S. state and local, and foreign tax consequences (including the potential application of and operation of any tax treaties) of the acquisition, ownership, and disposition of our common shares.

### U.S. Holders Subject to Special U.S. Federal Income Tax Rules Not Addressed

This summary does not address the U.S. federal income tax consequences of the acquisition, ownership, and disposition of our common shares to U.S. Holders that are subject to special provisions under the Code, including the following U.S. Holders: (a) U.S. Holders that are tax-exempt organizations, qualified retirement plans, individual retirement accounts, or other tax-deferred accounts; (b) U.S. Holders that are financial institutions, insurance companies, real estate investment trusts, or regulated investment companies; (c) U.S. Holders that are dealers in securities or currencies or U.S. Holders that are traders in securities that elect to apply a mark-to-market accounting method; (d) U.S. Holders that have a “functional currency” other than the U.S. dollar; (e) U.S. Holders that own our common shares as part of a straddle, hedging transaction, conversion transaction, constructive sale, or other arrangement involving more than one position; (f) U.S. Holders that acquired our common shares in connection with the exercise of employee stock options or otherwise as compensation for services; (g) U.S. Holders that hold our common shares

other than as a capital asset within the meaning of Section 1221 of the Code; (h) U.S. expatriates or former long-term residents of the U.S.; or (i) U.S. Holders that own, directly, indirectly, or by attribution, 10% or more, by voting power or value, of the outstanding shares of the company. U.S. Holders that are subject to special provisions under the Code, including U.S. Holders described immediately above, should consult their own tax advisor regarding the U.S. federal, U.S. state and local, and foreign tax consequences of the acquisition, ownership, and disposition of our common shares.

If an entity that is classified as a partnership (or “pass-through” entity) for U.S. federal income tax purposes holds our common shares, the U.S. federal income tax consequences to such partnership (or “pass-through” entity) and the partners of such partnership (or owners of such “pass-through” entity) generally will depend on the activities of the partnership (or “pass-through” entity) and the status of such partners (or owners). Partners of entities that are classified as partnerships (or owners of “pass-through” entities) for U.S. federal income tax purposes should consult their own tax advisor regarding the U.S. federal income tax consequences of the acquisition, ownership, and disposition of our common shares.

#### Tax Consequences Not Addressed

This summary does not address the U.S. state and local, U.S. federal alternative minimum tax, U.S. federal estate and gift, or foreign tax consequences to U.S. Holders of the acquisition, ownership, and disposition of our common shares. Each U.S. Holder should consult its own tax advisor regarding the U.S. state and local, U.S. federal alternative minimum tax, U.S. federal estate and gift, and foreign tax consequences of the acquisition, ownership, and disposition of our common shares.

### ***U.S. Federal Income Tax Consequences of the Acquisition, Ownership, and Disposition of Our Common Shares***

#### Distributions on Our Common Shares

A U.S. Holder that receives a distribution, including a constructive distribution, with respect to our common shares will be required to include the amount of such distribution in gross income as a dividend (without reduction for any foreign income tax withheld from such distribution) to the extent of the current or accumulated “earnings and profits” of the company. To the extent that a distribution exceeds the current and accumulated “earnings and profits” of the company, such distribution will be treated (a) first, as a tax-free return of capital to the extent of a U.S. Holder’s tax basis in our common shares and, (b) thereafter, as gain from the sale or exchange of such common shares. However, the company does not intend to maintain the calculations of earnings and profits in accordance with U.S. federal income tax principles, and each U.S. Holder should therefore assume that any distribution by the company with respect to our common shares will constitute ordinary dividend income. (See more detailed discussion at “Disposition of Our Common Shares” below). Dividends paid on our common shares generally will not be eligible for the “dividends received deduction.”

For taxable years beginning before January 1, 2011, a dividend paid by the company generally will be taxed at the preferential tax rates applicable to long-term capital gains if (a) the company is a “qualified foreign corporation” (as defined below), (b) the U.S. Holder receiving such dividend is an individual, estate, or trust, and (c) certain holding period requirements are met.

The company generally will be a “qualified foreign corporation” under Section 1(h)(11) of the Code (a “QFC”) if (a) the company is incorporated in a possession of the U.S., (b) the company is eligible for the benefits of the Canada-U.S. Tax Convention, or (c) our common shares are readily tradable on an established securities market in the U.S. However, even if the company satisfies one or more of such requirements, the company will not be treated as a QFC if the company is a “passive foreign investment company” (or “PFIC”, as defined below) for the taxable year during which the company pays a dividend or for the preceding taxable year.

As discussed below, the company does not believe that it was a PFIC for the taxable year ended December 31, 2008, and based on current business plans and financial projections, the company does not expect that it will be a PFIC for the taxable year ending December 31, 2009. (See more detailed discussion at “Passive Foreign Investment Company Rules” below).

If the company is not a PFIC, but a U.S. Holder otherwise fails to qualify for the preferential tax rate applicable to dividends discussed above, a dividend paid by the company to a U.S. Holder, including a U.S. Holder that is an in-

dividual, estate, or trust, generally will be taxed at ordinary income tax rates (and not at the preferential tax rates applicable to long-term capital gains). The dividend rules are complex, and each U.S. Holder should consult its own tax advisor regarding the dividend rules.

#### Disposition of Our Common Shares

A U.S. Holder will recognize gain or loss on the sale or other taxable disposition of our common shares in an amount equal to the difference, if any, between (a) the amount of cash plus the fair market value of any property received and (b) such U.S. Holder's tax basis in our common shares sold or otherwise disposed of. Subject to the PFIC rules discussed below, any such gain or loss generally will be capital gain or loss, which will be long-term capital gain or loss if our common shares are held for more than one year. Gain or loss recognized by a U.S. Holder on the sale or other taxable disposition of our common shares generally will be treated as "U.S. source" for purposes of applying the U.S. foreign tax credit rules, unless such gains are resourced as "foreign source" under an applicable income tax treaty, and an election is filed under the Code. (See more detailed discussion at "Foreign Tax Credit" below).

Preferential tax rates apply to long-term capital gains of a U.S. Holder that is an individual, estate, or trust. There are currently no preferential tax rates for long-term capital gains of a U.S. Holder that is a corporation. Deductions for capital losses are subject to significant limitations under the Code.

#### Receipt of Foreign Currency

The amount of any distribution paid in foreign currency to a U.S. Holder in connection with the ownership of our common shares, or on the sale, exchange or other taxable disposition of our common shares, generally will be equal to the U.S. dollar value of such foreign currency based on the exchange rate applicable on the date of receipt (regardless of whether such foreign currency is converted into U.S. dollars at that time). A U.S. Holder that receives foreign currency and converts such foreign currency into U.S. dollars at a conversion rate other than the rate in effect on the date of receipt may have a foreign currency exchange gain or loss, which generally would be treated as U.S. source ordinary income or loss.

Taxable dividends with respect to common shares that are paid in foreign currency will be included in the gross income of a U.S. Holder as translated into U.S. dollars calculated by reference to the exchange rate prevailing on the date of actual or constructive receipt of the dividend, regardless of whether the foreign currency are converted into U.S. dollars at that time. If the foreign currency received is not converted into U.S. dollars on the date of receipt, a U.S. Holder will have a basis in the foreign currency equal to its U.S. dollar value on the date of receipt. Any U.S. Holder who receives payment in foreign currency and engages in a subsequent conversion or other disposition of the foreign currency may have a foreign currency exchange gain or loss that would be treated as ordinary income or loss, and generally will be U.S. source income or loss for foreign tax credit purposes. Each U.S. Holder should consult its own U.S. tax advisor regarding the U.S. federal income tax consequences of receiving, owning, and disposing of foreign currency.

#### Foreign Tax Credit

A U.S. Holder who pays (whether directly or through withholding) foreign income tax with respect to dividends paid on our common shares generally will be entitled, at the election of such U.S. Holder, to receive either a deduction or a credit for such foreign income tax paid. Generally, a credit will reduce a U.S. Holder's U.S. federal income tax liability on a dollar-for-dollar basis, whereas a deduction will reduce a U.S. Holder's income subject to U.S. federal income tax. This election is made on a year-by-year basis and applies to all foreign taxes paid (whether directly or through withholding) by a U.S. Holder during a year.

Complex limitations apply to the foreign tax credit, including the general limitation that the credit cannot exceed the proportionate share of a U.S. Holder's U.S. federal income tax liability that such U.S. Holder's "foreign source" taxable income bears to such U.S. Holder's worldwide taxable income. In applying this limitation, a U.S. Holder's various items of income and deduction must be classified, under complex rules, as either "foreign source" or "U.S. source." In addition, this limitation is calculated separately with respect to specific categories of income. Dividends paid by the company generally will constitute "foreign source" income and generally will be categorized as "passive income." The foreign tax credit rules are complex, and each U.S. Holder should consult its own tax advisor regarding the foreign tax credit rules.

### Passive Foreign Investment Company Rules

If the company were to constitute a PFIC (as defined below) for any year during a U.S. Holder's holding period, then certain different and potentially adverse tax consequences would apply to such U.S. Holder's acquisition, ownership and disposition of our common shares.

The company generally will be a PFIC under Section 1297 of the Code if, for a taxable year, (a) 75% or more of the gross income of the company for such taxable year is passive income or (b) 50% or more of the assets held by the company either produce passive income or are held for the production of passive income, based on the fair market value of such assets (or on the adjusted tax basis of such assets, if the company is not publicly traded and either is a "controlled foreign corporation" or makes an election). "Gross income" generally means all revenues less the cost of goods sold, and "passive income" includes, for example, dividends, interest, certain rents and royalties, certain gains from the sale of stock and securities, and certain gains from commodities transactions. Active business gains arising from the sale of commodities generally are excluded from passive income if substantially all of a foreign corporation's commodities are (a) stock in trade of such foreign corporation or other property of a kind which would properly be included in inventory of such foreign corporation, or property held by such foreign corporation primarily for sale to customers in the ordinary course of business, (b) property used in the trade or business of such foreign corporation that would be subject to the allowance for depreciation under Section 167 of the Code, or (c) supplies of a type regularly used or consumed by such foreign corporation in the ordinary course of its trade or business.

In addition, for purposes of the PFIC income test and asset test described above, if the company owns, directly or indirectly, 25% or more of the total value of the outstanding shares of another corporation, the company will be treated as if it (a) held a proportionate share of the assets of such other corporation and (b) received directly a proportionate share of the income of such other corporation. In addition, for purposes of the PFIC income test and asset test described above, "passive income" does not include any interest, dividends, rents, or royalties that are received or accrued by the company from a "related person" (as defined in Section 954(d)(3) of the Code), to the extent such items are properly allocable to the income of such related person that is not passive income.

Under certain attribution rules, if the company is a PFIC, U.S. Holders will be deemed to own their proportionate share of any subsidiary of the company which is also a PFIC (a "Subsidiary PFIC"), and will be subject to U.S. federal income tax on (i) a distribution on the shares of a Subsidiary PFIC or (ii) a disposition of shares of a Subsidiary PFIC, both as if the holder directly held the shares of such Subsidiary PFIC.

The company does not believe that it was a PFIC for the taxable year ended December 31, 2008, and based on current business plans and financial projections, the company does not expect that it will be a PFIC for the taxable year ending December 31, 2009. The determination of whether the company will be a PFIC for a taxable year depends, in part, on the application of complex U.S. federal income tax rules, which are subject to differing interpretations. In addition, whether the company will be a PFIC for its current taxable year depends on the assets and income of the company over the course of each such taxable year and, as a result, cannot be predicted with certainty as of the date of this Form 20-F. Consequently, there can be no assurance regarding the company's PFIC status for any taxable year during which U.S. Holders hold our Common Shares, and there can be no assurance that the IRS will not challenge the determination made by the company concerning its PFIC status.

Under the default PFIC rules, a U.S. Holder would be required to treat any gain recognized upon a sale or disposition of our common shares as ordinary (rather than capital), and any resulting U.S. federal income tax may be increased by an interest charge which is not deductible by non-corporate U.S. Holders. Rules similar to those applicable to dispositions will generally apply to distributions in respect of our common shares which exceed a certain threshold level.

While there are U.S. federal income tax elections that sometimes can be made to mitigate these adverse tax consequences (including, without limitation, the "QEF Election" and the "Mark-to-Market Election"), such elections are available in limited circumstances and must be made in a timely manner. U.S. Holders are urged to consult their own tax advisers regarding the potential application of the PFIC rules to the ownership and disposition of our common shares, and the availability of certain U.S. tax elections under the PFIC rules.

U.S. Holders should be aware that, for each taxable year, if any, that the company or any Subsidiary PFIC is a PFIC, the company can provide no assurances that it will satisfy the record keeping requirements of a PFIC, or that it will

make available to U.S. Holders the information such U.S. Holders require to make a QEF Election under Section 1295 of the Code with respect of the company or any Subsidiary PFIC. Each U.S. Holder should consult its own tax advisor regarding the availability of, and procedure for making, a QEF Election with respect to the company and any Subsidiary PFIC.

#### **Information Reporting; Backup Withholding Tax For Certain Payments**

Under U.S. federal income tax law and regulations, certain categories of U.S. Holders must file information returns with respect to their investment in, or involvement in, a foreign corporation. Penalties for failure to file certain of these information returns are substantial. U.S. Holders of our common shares should consult with their own tax advisors regarding the requirements of filing information returns, and if applicable, any mark-to-market or QEF election.

Payments made within the U.S., or by a U.S. payor or U.S. middleman, of dividends on, and proceeds arising from certain sales or other taxable dispositions of, our common shares generally will be subject to information reporting and backup withholding tax, at the rate of 28%, if a U.S. Holder (a) fails to furnish such U.S. Holder's correct U.S. taxpayer identification number (generally on Form W-9), (b) furnishes an incorrect U.S. taxpayer identification number, (c) is notified by the IRS that such U.S. Holder has previously failed to properly report items subject to backup withholding tax, or (d) fails to certify, under penalty of perjury, that such U.S. Holder has furnished its correct U.S. taxpayer identification number and that the IRS has not notified such U.S. Holder that it is subject to backup withholding tax. However, U.S. Holders that are corporations generally are excluded from these information reporting and backup withholding tax rules. Any amounts withheld under the U.S. backup withholding tax rules will be allowed as a credit against a U.S. Holder's U.S. federal income tax liability, if any, or will be refunded, if such U.S. Holder furnishes required information to the IRS in a timely manner. Each U.S. Holder should consult its own tax advisor regarding the information reporting and backup withholding tax rules.

#### **F. Dividends and paying agents**

Not applicable – The company is filing this Form 20-F as an annual report.

#### **G. Statement by experts**

Not applicable – The company is filing this Form 20-F as an annual report.

#### **H. Documents on display**

We will furnish our shareholders with annual reports, which will include a review of operations and annual audited consolidated financial statements prepared in conformity with U.S. GAAP. We intend, although we are not obligated to do so, to furnish when requested by our shareholders quarterly reports by mail with the assistance of a corporate services provider, which will include unaudited interim financial information prepared in conformity with U.S. GAAP for each of the three quarters of each fiscal year following the end of each such quarter. We may discontinue providing quarterly reports at any time without prior notice to our shareholders. For additional information on the company, please consult our web page [www.nxtenergy.com](http://www.nxtenergy.com), or the SEDAR webpage <http://sedar.com>.

Our reports and other information, including this annual report and the exhibits hereto, as filed with the SEC in accordance with the Exchange Act, may be inspected and copied at the public reference facilities maintained by the SEC at 100 F Street, Washington, D.C. 20549. In addition, copies of such reports and other information filed with the SEC can be obtained from [www.sec.gov](http://www.sec.gov).

### **ITEM 11. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

#### **Currency Fluctuations**

We currently hold our cash largely in Canadian currency, yet periodically we may earn revenue in US currency. Any transaction in a currency other than the Canadian dollar exposes us to the impact of exchange rate fluctuations between the Canadian and United States currencies. We do not engage in activities to mitigate the effects of foreign currency fluctuation. At December 31, 2008 we had negligible cash, cash equivalents and short term investments held in U.S. dollars and had no revenue in the year based in currencies other than the Canadian dollar. According-

ly, a hypothetical 10% change in the value of one U.S. dollar expressed in Canadian dollars during the year ended December 31, 2008 would have had no material affect on foreign exchange gain or loss.

#### Interest Fluctuations

At December 31, 2008 we held approximately \$6,900,000 in cash, cash equivalents and short term investments. If all this cash was held in an interest bearing account, an actual 1% change in interest rates during the year ended December 31, 2008 would have resulted in approximately a \$69,000 change in interest income for the year.

### **ITEM 12. DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES**

Not applicable – The company is filing this Form 20-F as an annual report.

## **PART II**

### **ITEM 13. DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES**

There have not been any defaults, dividend arrears or delinquencies.

### **ITEM 14. MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS**

There have been no material modifications to the rights of security holders except as outlined in Item 4.B “Key Contract on Which We Rely” within this Form 20-F.

### **ITEM 15T. CONTROLS AND PROCEDURES**

We maintain a set of disclosure controls and procedures designed to ensure that information required to be disclosed by the company in reports that it files or submits under the Exchange Act, is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms. Disclosure controls and procedures include controls and procedures designed to ensure that information required to be disclosed in our reports is accumulated and communicated to management, to allow timely decisions regarding required disclosure.

The company's Chief Executive Officer and Chief Financial Officer (the "Responsible Officers") are responsible for establishing and maintaining disclosure controls and procedures, or causing them to be designed under their supervision, for the company to provide reasonable assurance that material information relating to the company is made known to the Responsible Officers by others within the organization, particularly during the period in which the company's quarterly and year-end financial statements, Form 20-F and Canadian MD&A are being prepared.

As of December 31, 2008 we carried out an evaluation, under the supervision and with the participation of our management, including our Responsible Officers, of the effectiveness of the design and operation of our disclosure controls and procedures as defined in the Exchange Act Rule 13a-15(e). Based upon the foregoing, our Responsible Officers concluded that, as at December 31, 2008, our disclosure controls and procedures were effective at the reasonable assurance level.

Our management, under the supervision of the Responsible Officers, is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rule 13a-15(f) of the Exchange Act. Our internal control system was designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation and fair presentation of our consolidated financial statements for external purposes in accordance with generally accepted accounting principles. Our Responsible Officers assessed the effectiveness of our internal control over financial reporting as of December 31, 2008. In making this assessment, they used the criteria established in *Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission* (COSO). Based on this assessment, our Responsible Officers have concluded that, as of December 31, 2008, our internal control over financial reporting was effective based on those criteria. Notwithstanding the foregoing, all internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective may not prevent or detect misstatements and can provide only reasonable assur-

ance with respect to financial statement preparation and presentation. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Our internal controls over financial reporting were not required to be independently audited. Accordingly, no independent audit was performed over the effectiveness of internal controls as at December 31, 2008.

As stated above, we have concluded on the effectiveness of our internal controls over financial reporting. During this process, we identified the following two areas of potential concern, which are common to many companies of our size:

- Due to the limited number of staff at the company it is not feasible to achieve complete segregation of incompatible duties. The company has mitigated this concern in controls by adding management review procedures of the areas where segregation is an issue. In addition to management review procedures, our board of directors is actively involved in many aspects, including approval of all Authorities of Expenditure, including those with limited financial impact; and
- The company does not retain staff with specialized and current income tax, financial reporting and complex accounting expertise. The company prepares their best estimate of complex accounting calculations and relies on reviews by management, external consultants and the Audit Committee for quality assurance.

This annual report does not include an attestation report of the company's registered public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation by the company's registered public accounting firm pursuant to temporary rules of the Securities and Exchange Commission that permit the company to provide only management's report in this annual report.

There has been no change in the company's internal control over financial reporting identified in connection with the evaluation required by Exchange Act Rule 13a-15(d) that occurred during the period covered by this annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting.

#### **ITEM 16A. AUDIT COMMITTEE FINANCIAL EXPERT**

Our board of directors has determined that we have at least one audit committee financial expert serving on our Audit Committee. Our Audit Committee financial expert is Brian Kohlhammer, a Chartered Accountant and the CFO of a TSX listed company. Mr. Kohlhammer is an "independent" director, as that term is defined in the listing standards of NASDAQ.

#### **ITEM 16B. CODE OF ETHICS**

We have adopted a Code of Ethics that applies to all of our directors, officers and employees. This Code of Ethics is incorporated in our Employee Handbook which forms an integral part of the employee contract. The Handbook contains sections on Business Ethics, Employee Practices and Conflicts of Interest.

During 2008 the company did not amend its Code of Ethics or grant any waiver, including any implicit waiver, from any provision of the Code of Ethics to any directors, officers or employees. Copies of NXT's Code of Ethics are available without charge to any person upon request from NXT's Chief Financial Officer at [nxt\\_info@nxtenergy.com](mailto:nxt_info@nxtenergy.com) or at NXT's headquarters at Suite 1400, 505 – 3<sup>rd</sup> Street SW, Calgary Alberta, T2P 3E6, Canada.

#### **ITEM 16C. PRINCIPAL ACCOUNTANT FEES AND SERVICES**

The following table sets forth the aggregate audit fees, audit-related fees, tax fees of our principal accountants and all other fees billed for products and services provided by our principal accountants for each of the fiscal years 2008 and 2007.

	<b>Year ended</b>	
	<b>December 31,</b>	
	<b>2008</b>	<b>2007</b>
Audit fees	\$ 170,810	\$ 158,456
Audit-related fees (20-F review)	20,320	20,320
	<u>191,130</u>	<u>178,776</u>
Tax fees	-	-
All other fees (S-8 registration review / TSX-V listing review / ICFR)	2,000	40,640
Total fees	<u>\$ 193,130</u>	<u>\$ 219,416</u>

#### Audit Committee's Pre-approval Policies and Procedures

Our Audit Committee nominates and engages our independent auditors to audit our financial statements. Our Audit Committee also requires management to obtain the Audit Committee's approval on a case-by-case basis before engaging our independent auditors to provide any audit or permitted non-audit services to us or our subsidiaries. All fees shown have been pre-approved by the Audit Committee.

#### **ITEM 16D. EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES**

Not applicable.

#### **ITEM 16E. PURCHASES OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS**

Not applicable.

### **PART III**

#### **ITEM 17. FINANCIAL STATEMENTS**

The company's consolidated financial statements and related notes are included in Item 8 to this annual report.

#### **ITEM 18. FINANCIAL STATEMENTS**

The company elected to provide consolidated financial statements pursuant to Item 17 of Form 20-F.

**ITEM 19. EXHIBITS**

**EXHIBIT INDEX**

<b><u>Exhibit No.</u></b>	<b><u>Description</u></b>
1.1 <sup>(1)</sup>	Articles of Incorporation of Auric Mining Corporation as filed with the Nevada Secretary of State on September 27, 1994
1.2 <sup>(1)</sup>	Amendment to Articles of Incorporation of Auric Mining Corporation as filed with the Nevada Secretary of State on February 23, 1996
1.3 <sup>(1)</sup>	Certificate of Amendment to Articles of Incorporation of Pinnacle Oil International, Inc. as filed with the Nevada Secretary of State on April 1, 1998
1.4 <sup>(4)</sup>	Certificate of Amendment to Articles of Incorporation of Pinnacle Oil International, Inc. as filed with the Nevada Secretary of State on June 13, 2000
1.5 <sup>(1)</sup>	Amended By-laws for Energy Exploration Technologies
1.6 <sup>(8)</sup>	Amended By-laws of Energy Exploration Technologies, - Amended September 20, 2002
1.8	Articles of Amendment of Energy Exploration Technologies Inc as filed with the province of Alberta, Canada on September 22, 2008
2.1 <sup>(1)</sup>	Pinnacle Oil International, Inc. specimen common stock certificate
2.3 <sup>(4)</sup>	Energy Exploration Technologies specimen common stock certificate
2.5 <sup>(1)</sup>	1997 Pinnacle Oil International, Inc. Stock Plan
2.5.1 <sup>(3)</sup>	Amendment No. 1 to 1997 Pinnacle Oil International, Inc. Stock Plan
2.6 <sup>(3)</sup>	Form of Stock Option Certificate for grants to employees under the 1997 Pinnacle Oil International, Inc. Stock Plan
2.7 <sup>(1)</sup>	Warrant certificate for 200,000 Common Shares issued to SFD Investment LLC
2.8 <sup>(3)</sup>	1999 Pinnacle Oil International, Inc. Executive Stock Option Plan
2.9 <sup>(3)</sup>	Form of Stock Option Certificate for grants under the 1999 Pinnacle Oil International, Inc. Executive Stock Option Plan
2.10 <sup>(16)</sup>	2000 Pinnacle Oil International, Inc. Directors' Stock Plan
2.11 <sup>(16)</sup>	Form of Stock Option Certificate for grants to directors under the 2000 Pinnacle Oil International, Inc. Directors' Stock Plan
2.12 <sup>(1)</sup>	Stockholder Agreement dated April 3, 1998 among Pinnacle Oil International, Inc., R. Dirk Stinson, George Liszicasz and SFD Investment LLC
2.13 <sup>(12)</sup>	2004 Stock Award and Stock Option Plan
2.14 <sup>(17)</sup>	2006 Stock Option Plan
2.15 <sup>(15)</sup>	Schedule of Series Provisions, Preferred Shares, Series I
4.19 <sup>(1)</sup>	Form of Indemnification Agreement between Pinnacle Oil International, Inc. and each Director and Executive Officer
4.32 <sup>(13)</sup>	Loan Agreement dated May 19, 2005 and entered into with 1107200 Alberta Ltd.
4.33 <sup>(13)</sup>	Notice of Termination of Restated Technology Agreement with Momentum Resources Corporation dated September 9, 2005
4.35 <sup>(14)</sup>	Loan Agreement Amendment dated April 7, 2006 and entered into with our CEO, Mr. George Liszicasz
4.36 <sup>(15)</sup>	Second Amended and Restated Technical Services Agreement dated December 31, 2006
4.37 <sup>(15)</sup>	SFD Technology Ownership Agreement dated December 31, 2006
4.39 <sup>(15)</sup>	Technology Transfer Agreement dated December 31, 2006
4.40	Air Partners Corporation contract dated May 8, 2009
4.41	Pacific Stratus Energy contract dated April 14, 2009
8.1 <sup>(18)</sup>	List of Subsidiaries
11.1 <sup>(9)</sup>	Code of Business Code and Ethics
12.1	Rule 13a-14(a)/15d-14(a) Certification of Chief Executive Officer and President
12.2	Rule 13a-14(a)/15d-14(a) Certification of VP Finance and Chief Financial Officer
13.1	Section 1350 Certification of Chief Executive Officer and President
13.2	Section 1350 Certification of VP Finance and Chief Financial Officer
15.2	Consent of KPMG LLP

- 1 Previously filed by our company as an Exhibit to our Registration Statement on Form 10 filed on June 29, 1998 (U.S. Securities and Exchange Commission File No. 0-24027).
- 2 Previously filed by our company as an Exhibit to our Annual Report on Form 10-K for our year ended December 31, 1998 as filed on March 31, 1999.
- 3 Previously filed by our company as an Exhibit to our Registration Statement on Form S-8 (U.S. Securities and Exchange Commission File No. 333-89251) as filed on October 18, 1999.
- 4 Previously filed by our company as an Exhibit to our Amendment No. 1 to our Annual Report on Form 10-K for our year ended December 31, 1999 as filed on July 28, 2000.
- 5 Previously filed by our company as an Exhibit to our Quarterly Report on Form 10-Q for the quarter ended March 31, 2000 as filed on May 15, 2000.
- 6 Previously filed by our company as an Exhibit to our Annual Report on Form 10-K for the year ended December 31, 2001 as filed on April 1, 2002.
- 7 Previously filed by our company as an Exhibit to our Quarterly Report on Form 10-Q for the quarter ended September 30, 2002 as filed on November 14, 2002.
- 8 Previously filed by our company as an Exhibit to our Annual Report on Form 10-K for the year ended December 31, 2002, as filed on March 31, 2003.
- 9 Previously filed by our company as an Exhibit to our Annual Report on Form 10-K for the year ended December 31, 2003 as filed on April 14, 2004.
- 10 Previously filed by our company as an Exhibit to a Current Report on Form 8-K dated November 4, 2004 as filed on November 12, 2004.
- 11 Previously filed by our company as an Exhibit to our Quarterly Report on Form 10-Q for the quarter ended September 30, 2004 as filed on November 22, 2004.
- 12 Previously filed by our company as an Exhibit to our Quarterly Report on Form 10-Q for the quarter ended March 31, 2005 as filed on May 23, 2005.
- 13 Previously filed by our company as an Exhibit to our Quarterly Report on Form 10-Q for the quarter ended June 30, 2005 as filed on September 22, 2005.
- 14 Previously filed by our company as an Exhibit to our Annual Report on Form 10-K for the year ended December 31, 2005 as filed on April 16, 2006.
- 15 Previously filed as an Exhibit to Form 6-K as filed on January 12, 2007.
- 16 Previously filed as an Exhibit to Form 10-K for the year ended December 31, 2000 as filed on April 2, 2001.
- 17 Previously filed as Schedule “A” to the Information Circular as at August 28, 2006 furnished on Form 6-K on August 31, 2007.
- 18 See Item 4.C – Organizational Structure.

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

NXT Energy Solutions Inc.

By: /s/ George Liszicasz  
George Liszicasz  
Director, Chairman, Chief Executive Officer and President

Dated: June 25, 2009