

February 1, 2013

Via Edgar

Ms. Amanda Ravitz
Assistant Director
United States Securities and Exchange Commission
Washington, D.C. 20549

Re: Integrated Surgical Systems, Inc.
Form 10-K for the fiscal year ended December 31, 2011
Filed March 28, 2012
File No. 001-12471

Dear Ms. Ravitz:

Our client, Integrated Surgical Systems, a Delaware corporation, has provided me your letter to the company of December 27, 2012, in which you set forth several comments. I am responding to the comments on behalf of the company. Each of the comments is reproduced below with the company response thereafter.

If you have further questions about this response or other comments on the Form 10-K filed on March 28, 2012, please forward them to me as well as to the company. My email address is ahudders@golenbock.com, and my telephone number is 212-907-7349.

Form 10-K for the fiscal year ended December 31, 2011

Item 1. Business, page 3

1. We note your response to prior comment 1; however, because the sale of ClearSign shares to you and subsequent dividend of those shares to your shareholders appears to have been part of a distribution of ClearSign shares to the public, it appears that you and your shareholders were statutory underwriters of that distribution. In addition, it is not clear how you determined that the dividend of ClearSign shares to your shareholders was properly registered as a valid secondary offering of those shares, such that they are tradable "without restriction." We note in this connection that the prospectus disclosure (1) did not clearly indicate that the dividend was the transaction being registered, even though the prospectus suggested that a dividend might occur, and (2) omitted information that would have been required for a secondary offering of this nature, such as the identification of the selling shareholders as underwriters and required Regulation S-K Item 507 disclosure. Please provide additional analysis addressing why you believe that, even considering these facts, the transaction complied with Section 5 or, if you are unable to provide such analysis, revise future filings as appropriate to discuss any material impacts.

Response:

Integrated Surgical Systems, Inc. (“Integrated Surgical”) respectfully asserts that its dividend distribution of 450,952 out of an aggregate of 454,545 shares of common stock of Clearsign Combustion Corporation (“Clearsign”) on May 23, 2012, was not a primary distribution of those shares, and Integrated Surgical and the approximately 400 shareholders of Integrated Surgical did not act as an underwriter in connection with the dividend. Please note that the actual number of shareholders of Integrated Surgical is not determinable: there are approximately 135 record owners, and a substantial percentage of the shareholding is in “street name.”

The reason for Integrated Surgical effecting a disposition of the 454,545 shares of common stock of Clearsign that it held prior to May 2012 was to correct the allocation of assets that it held during the period May 2011 to May 2012 to terminate any mistaken perception that Integrated Surgical was acting as an investment company regulated under the Investment Company Act of 1940, as amended (“1940 Act”). The dividend distribution was to remove the equity investment as an asset of Integrated Surgical, in an abundance of caution, within the one year of its acquisition, so that if Integrated Surgical was no longer able to meet the definition of not being an investment company, it would be entitled to the exclusionary period offered to transient investment companies, provided by Rule 3a-2 promulgated under the 1940 Act.

The plan of distribution set forth in the Clearsign prospectus dated April 24, 2012, filed on May 1, 2012 (“Clearsign Prospectus”), covers a number of different methods by which Integrated Surgical contemplated the disposition of the 454,545 shares of Clearsign common stock it held. Integrated Surgical was not committed to only making a dividend distribution of the Clearsign common stock to its shareholders; a sale of the shares was also contemplated. Integrated Surgical, however, in respect of any disposition of the 454,545 shares, had to take into account tax considerations, market condition issues, preservation of value for its shareholders under its duty of due care and loyalty to its shareholders, and expediency to meet the requirements of the 1940 Act. So the multiplicity of means of disposition was an accurate and proper statement of all potential methods that might be employed. And, with respect to a dividend distribution, in all events there would have to be a necessary sale of a small number of shares in the market under the Clearsign Prospectus because it would be impossible to distribute all the shares by means of a dividend due to rounding issues to avoid fractional shares, which Clearsign was not willing to permit. As a result, the plan of distribution needed to provide many possible means of disposition to Integrated Surgical to be able to achieve its goal of disposing of the shares of Clearsign to continue to satisfy the definition of Section 3(b)(1) of the 1940 Act beyond the period afforded by Rule 3a-2.

During the “in-registration period” while the Clearsign registration statement was being reviewed by the SEC, the form of selling shareholder prospectus included in the Clearsign IPO registration statement that related to the 454,545 shares to be distributed by Integrated Surgical consistently stated that the shares were subject to a lock up agreement for 180 days after the date of effectiveness of the IPO registration statement, and, additionally, the shares that might be distributed to certain persons who were management of Integrated Surgical and one other person would be subject to a more restrictive lock up period of one year. Therefore, no one reading any of the several preliminary prospectuses could think that the 454,545 shares being registered for distribution by Integrated Surgical were intended to help establish a liquid market for the Clearsign shares in connection with the IPO of Clearsign. Furthermore, the length of the lock up demonstrates that Integrated Surgical was not intending to act as an underwriter of a primary distribution, since any distribution it would be able to make would have to be long after an established market existed in the Clearsign common stock or the recipients of the shares would have to wait a considerable time before being able to sell the shares.

Moreover, the release of the lock up to which Integrated Surgical was subject was in the sole discretion of Clearsign. It was not until after the April 27, 2012, closing of the underwriting that Clearsign agreed to consider releasing the lock up to permit the proposed dividend distribution. It should be noted that the 424b3 prospectus relating to the Integrated Surgical shareholding was not filed until May 1, 2012, when it was established that Clearsign was willing to provide a limited release of the lock up with respect to only 272,545 of the Integrated Surgical holdings, which number of shares was what the non-management persons of Clearsign would receive. The Clearsign Prospectus retained the lock up limitation. Clearsign only formally confirmed the lock up release on May 23, 2012, which was for the above stated 272,545 shares representing only approximately 60% of the shares being distributed by dividend by Integrated Surgical. The remaining 40% of the Clearsign shares being distributed by dividend were to continue with a lock up until April 24, 2013.

We also wish to call to the attention of the Staff of the SEC that the actual number of shares that were released by Clearsign for distribution without restriction represented only 3.11% of the total shares outstanding of Clearsign on May 23, 2012, based on the 8,752,015 shares outstanding after the IPO, including the overallotment exercise which took place on May 15, 2012 and the conversion of certain obligations into shares in connection with the IPO. Therefore, it is an additional contention of Integrated Surgical that a mere 3.11% of the shares of Clearsign would not have had a material impact on the liquidity of the shares in the market, and supports the assertion that the dividend was not a statutory underwriting by Integrated Surgical or its shareholders.

Of the 272,545 shares that were distributed by means of a dividend by Integrated Surgical, it is believed that a large number of shareholders (97 record holders out of 120 record holders received 99 or less shares – the street name shareholders cannot be determined) were distributed to persons who would receive less than a round lot of 100 shares. Holders of shares in an amount less than a round lot of 100 shares have difficulty in being able to sell their shares because of the additional cost. Since the percentage of non-round lot holders of the dividend was seemingly large, and the fact was known to Integrated Surgical, it is a further contention that the distribution by dividend of shares of Clearsign was not part of a primary offering to establish a market for the Clearsign shares. Also, the holders of the Clearsign shares who received the shares by way of dividend did not necessarily sell their shares. By way of example, of the record shareholders that we currently can trace who received the dividend distribution, during the period May 24, 2012 to a recent date, 114 of the 120 record shareholders are still then holding their shares of Clearsign.

We also point out to the Staff of the SEC that the underwriting by MDB Capital Group LLC was extremely successful and created a liquid market irrespective of the dividend distribution which happened one month after the IPO of Clearsign. In the underwriting there were distributed 1,750,000 shares to 19 institutional customers, 1,288,750 shares to 77 retail customers and an additional 686,250 shares to 108 customers through the 10 member syndicate. The trading volume in the period after the IPO was robust (see attached table and graph), demonstrating that there was an active market created in the Clearsign shares well before the dividend distribution by Integrated Surgical. In fact, neither the dividend record date on May 9, 2012, nor the dividend distribution, a month after the IPO, on May 23, 2012, seemed to have had much impact on the market trading or pricing. The table of trading volume and pricing shows that the trading stayed relatively consistent in and around the date of the dividend distribution by Integrated Surgical and the price of the stock continued to increase for approximately five months thereafter and was not depressed by additional shares in the market.

In the Clearsign Prospectus (filed on May 1, 2012) at page 58, in the section entitled "Shares Registered for Distribution," there is disclosure that both Clearsign and Integrated Surgical believes satisfies the disclosure requirements of Item 507 of Regulation S-K, and the third paragraph of the cover and the sixth paragraph of the section entitled "Plan of Distribution," of that prospectus contain statements that the selling shareholder and intermediaries through whom the securities are sold may be deemed "underwriters" within the meaning of the Securities Act of 1933, as amended and any profits realized or commissions received may be deemed underwriting compensation.

The Clearsign Prospectus (filed May 1, 2012) was prepared by Clearsign under the requirements of a registration rights agreement dated May 11, 2011, between Clearsign and Integrated Surgical, to enable Integrated Surgical to distribute or sell the shares of common stock that Integrated Surgical obtained in a private placement by Clearsign consummated in May 2011. The Clearsign IPO thus created the legal obligation on the part of Clearsign to register the Clearsign common stock held by Integrated Surgical.

We suggest that there can be certain parallels about the dividend distribution by Integrated Surgical under the principles discussed in SEC Staff Legal Bulletin No. 4. The concerns of the Staff expressed in that bulletin were that a spin off distribution, which is essentially a dividend of securities, might result in an active market without adequate public information about the issuer and might violate the anti-fraud provisions of the federal securities laws. The same concerns may also be raised in respect of the Integrated Surgical dividend, but the dividend methodology used by Integrated Surgical largely addresses those concerns in a similar manner as a spin off distribution is made. In the case of the Integrated Surgical dividend, at the time of the dividend distribution, ClearSign was a registrant under both the Securities Act of 1933 and Securities Exchange Act of 1934, and its securities were actively traded on the NASDAQ market. The Integrated Surgical shareholders did not have to provide any consideration for the ClearSign shares received in dividend. The distribution of the ClearSign shares to the Integrated Surgical shareholders was pro-rata. Integrated Surgical provided information to its shareholders by means of the 8-K report about the dividend (filed April 27, 2012) and by means of the ClearSign Prospectus (filed May 1, 2012) distributed with the share certificates at the time of the dividend distribution on May 23, 2012. Integrated Surgical had a valid purpose in making the dividend so as not to be considered an investment company. Integrated Surgical had held the shares for approximately one year. Integrated Surgical is a company reporting with the SEC under the federal securities laws. The dividend was of all the shares that could be distributed as whole shares; no fractional shares could be created in the Integrated Surgical dividend distribution. The number of dividend shares that were free trading and not subject to the lock up that was released in conjunction with the distribution represented only 3.11% of the outstanding shares of ClearSign. The ClearSign shares distributed to the management persons of Integrated Surgical are subject to a lock up ending on April 24, 2013, one year after the ClearSign IPO.

Overall, given the disclosure associated with the dividend distribution, the limited number of shares that would be available for sale by the Integrated Surgical shareholders after distribution, the active market for the ClearSign common stock on a national stock exchange that existed as a result of a successful IPO and during the month before the dividend distribution, all these elements point to the fact that the dividend distribution was not an event that should be characterized as a primary distribution.

Item 8. Financial Statements and Supplementary Data, page 20

2. We note that your response to prior comment 2 presents an analysis limited to your investment in ClearSign Combustion shares, rather than all of the assets that should be considered “investment securities.” Given the proportion of your remaining assets that are held in “available-for-sale securities” *other than* your prior investment in ClearSign, please expand your analysis to address why you should not be considered an investment company within the meaning of Section 3 of the Investment Company Act of 1940.

Response:

Integrated Surgical satisfies the statutory definition of not being an investment company under Section 3(b)(1) of the 1940 Act, because it is not primarily engaged, directly or indirectly or through wholly – owned subsidiaries, in the business of investing, reinvesting, owning, holding or trading in securities. This provision is self-operating in that an issuer may rely on the definitional provisions of Section 3(b)(1) without seeking an order by the SEC.

The SEC set forth in the case, *In the Matter of The Tonopah Mining Company of Nevada* (26 S.E.C. 426 (1947)), a five part test to evaluate whether a company met the definition of not being investment company under Section 3(b)(1) of the 1940 Act. The Tonopah ruling and the five part test emphasize the nature of the assets and income of the company, such that those factors served as a proxy for what a “reasonable investor” would believe to be an investment company. We note, however, that the Tonopah ruling and the test developed thereunder has been judicially distinguished in *SEC v. Nat’l Presto Industries, Inc.*, 486 F.3d 305 (7th Cir. May 15, 2007), to subordinate the five factor test to the “perception of a reasonable investor,” which thus emphasizes how the company effects its disclosure about its activities and what the financial statements imply. Integrated Surgical believes that it fully satisfies the Presto judicial analysis and also satisfies the Tonopah ruling as it stood prior to the Presto Seventh Circuit decision.

The first factor of the Tonopah test is the issuer’s historical development. Integrated Surgical was an operating company incorporated in Delaware in 1990 to design, manufacture, sell and service image-directed, computer-controlled robotic software and hardware products for use in orthopedic surgical procedures. In 2007 it completed the sale of its then remaining assets, and since then Integrated Surgical’s operations have been and are limited to maintaining its public company status, considering dissolution, or seeking to complete a business combination, acquisition of operating assets or strategic alliance if suitable candidate(s) are identified. This kind of statement of business purpose for a business combination, acquisition of operating assets or strategic alliance has been made repeatedly in its SEC filings since 2008. There is no statement in its disclosure documentation that would suggest that Integrated Surgical was intending to be or acting as an investment company with the cash resources it held. Because of the economic crisis in 2008 and the market uncertainty thereafter, the opportunities for such a transaction of merger or acquisition for a company the size of Integrated Surgical have not been frequent or many. Notwithstanding the lack of opportunities, Integrated Surgical has reviewed a number of target opportunities during the period which were terminated after review, and more recently, it is considering a couple of opportunities to acquire operating businesses.

The second factor of the Tonopah test is its public representations policy. Integrated Surgical, since 2008, consistently has held itself out as a company seeking a business combination, acquisition or strategic alliance since it terminated its former operations. It has never held itself out as an investment company to the public. In fact, historically, but for the investment in Clearsign Combustion Corporation, the assets of Integrated Surgical have been dominated by holdings of cash, certificates of deposit and US agency securities (the latter two being components of the line item in the financial statements of the company denoted "Investment in available-for-sale securities" which is explained in the footnotes to the financial statements). Integrated Surgical has monitored its asset position to make sure that it kept its assets in investment securities at less than 45% of its total assets, maintaining a majority of its total assets in cash, certificates of deposit, federal agency securities and other non-investment security assets at the following percentages: [2007 - after the disposition of operating assets, 100%]; [2008 - 100%]; [2009 - 91.19%]; [2010 - 56.14%] and [2011 before May 2011 - 57.67%]; and [2012 - after May, 2012 - more than 70.47%]. Even during the period during which it held the Clearsign shares, except for the one quarter ended December 31, 2011, it held the majority of its assets in cash, certificates of deposit federal agency securities and other non-investment security assets at the following percentage of assets excluding the Clearsign securities: [6/30/2001 - 74.12%]; [9/30/2001- 72.64%]; and [3/30/2012 - 76.54%]. Moreover, in each of the years 2008, 2009, 2010 and 2011, Integrated Surgical has had an after tax net loss. Because Integrated Surgical invests in interest and dividend bearing items such as cash deposits, certificates of deposit, US agency securities and short term bond there is little likelihood of income loss from investing. Integrated Surgical follows such a pattern of asset placement so that it will preserve the cash it has and not be characterized as investing for appreciation or capital gain. In 2012, Integrated Surgical will have a non-cash gain based on the distribution of the Clearsign common stock, but this income was generated while the company could avail itself of the one year exemption from being characterized as an investment company under Rule 3a-2 under the 1940 Act, to the extent that Section 3(b)(1) does not apply during the period it held the Clearsign common stock.

Given the disclosure of its corporate purpose, allocation of its assets in instruments that are more for preservation of value than trading, its asset placement not intending to generate capital gains or trading profit but rather seeking interest and dividend return, the conservative nature of the few investment securities it holds, and the consistency of an after tax loss, Integrated Surgical clearly does not present itself as an investment company. Integrated Surgical believes that a reasonable investor would not seek out an investment in the company on the basis of the company being an investment company.

The third factor of the Tonopah test is the activities of the officers and directors. Integrated Surgical has two directors that are engaged in the investment banking business. The other two directors are engaged in sales of robotic and similar automation equipment and consulting and accounting services to small businesses, respectively. The chief financial officer of Integrated Surgical is also otherwise employed in the investment banking business. However, none of the directors spend any appreciable time on the direct management of the assets of the company and the CFO spends less than 2% of his time on the management of the assets, focusing on his activities for Integrated Surgical on SEC and financial reporting and asset monitoring. Rather, the investment function is delegated to third party, under the oversight of the CFO.

The fourth factor of the Tonopah test is the nature of the present assets. As discussed in respect of the second factor, the majority of the assets over time have been in cash, certificates of deposit, US agency securities and other non-cash assets, orientated towards asset preservation. The bond and municipal securities that have been held from time to time have largely been short term instruments of one year or less to maturity, and have been conservative investments, with higher ratings. Overall, the assets have not been allocated to seek an investment or capital return, but only to preserve their value. The fact that (i) Integrated Surgical has focused on the higher grade investments, (ii) Integrated Surgical has not generated income from its investments sufficient to cover its operating expenses of maintaining its public reporting status and (iii) the lack of an operating profit and the maintenance of a majority of assets in cash, certificates of deposit and US agency securities, all would not lead a reasonable investor to believe that Integrated Surgical was operating as an investment fund. Therefore, under the Presto analysis Integrated Surgical would fully satisfy the definition of not being an investment company provided by Section 3(b)(1).

The fifth factor of the Tonopah test is the sources of the present income. As mentioned above, Integrated Surgical has operated at a net after tax loss in each of the years 2008, 2009, 2010 and 2011, and the fact that there will be net income in 2012 is only due to the non-cash accounting gain on the distribution of Clearsign common stock.

During the period 2008 to the present, Integrated Surgical has neither offered for sale nor sold nor repurchased any of its shares of common stock.

Even though Integrated Surgical held shares of common stock of Clearsign which were investment securities under the 1940 Act, these securities were illiquid and did not provide any dividend or other income. One of the reasons for the purchase of the Clearsign investment was because Integrated Surgical was contemplating a merger with Clearsign which would have terminated the issue of whether or not it was a company potentially subject to the 1940 Act. In any event, because of the restricted nature of the Clearsign securities and the absence of any income from them, the fact that Clearsign was a private company, and a public company for only a month before the shares were distributed by Integrated Surgical, it is the contention of Integrated Surgical that the Clearsign investment did not eliminate its ability to rely on Section 3(b)(1) of the 1940 Act, because that one investment should not cause it to be considered in the business of investing, reinvesting, owning, holding or trading in securities. And even if Integrated Surgical was not able to rely on Section 3(b)(1) during the one year period it held the Clearsign securities and received non-cash income on the disposition of the Clearsign securities, it should be able to take advantage of Rule 3a-2 promulgated under the 1940 Act to obviate the registration obligations of the 1940 Act flowing from the holding of the Clearsign securities and receipt of the non-cash income on the disposition of the Clearsign securities during that period.

The company acknowledges that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Sincerely,

/S/ Andrew D. Hudders

Andrew D. Hudders

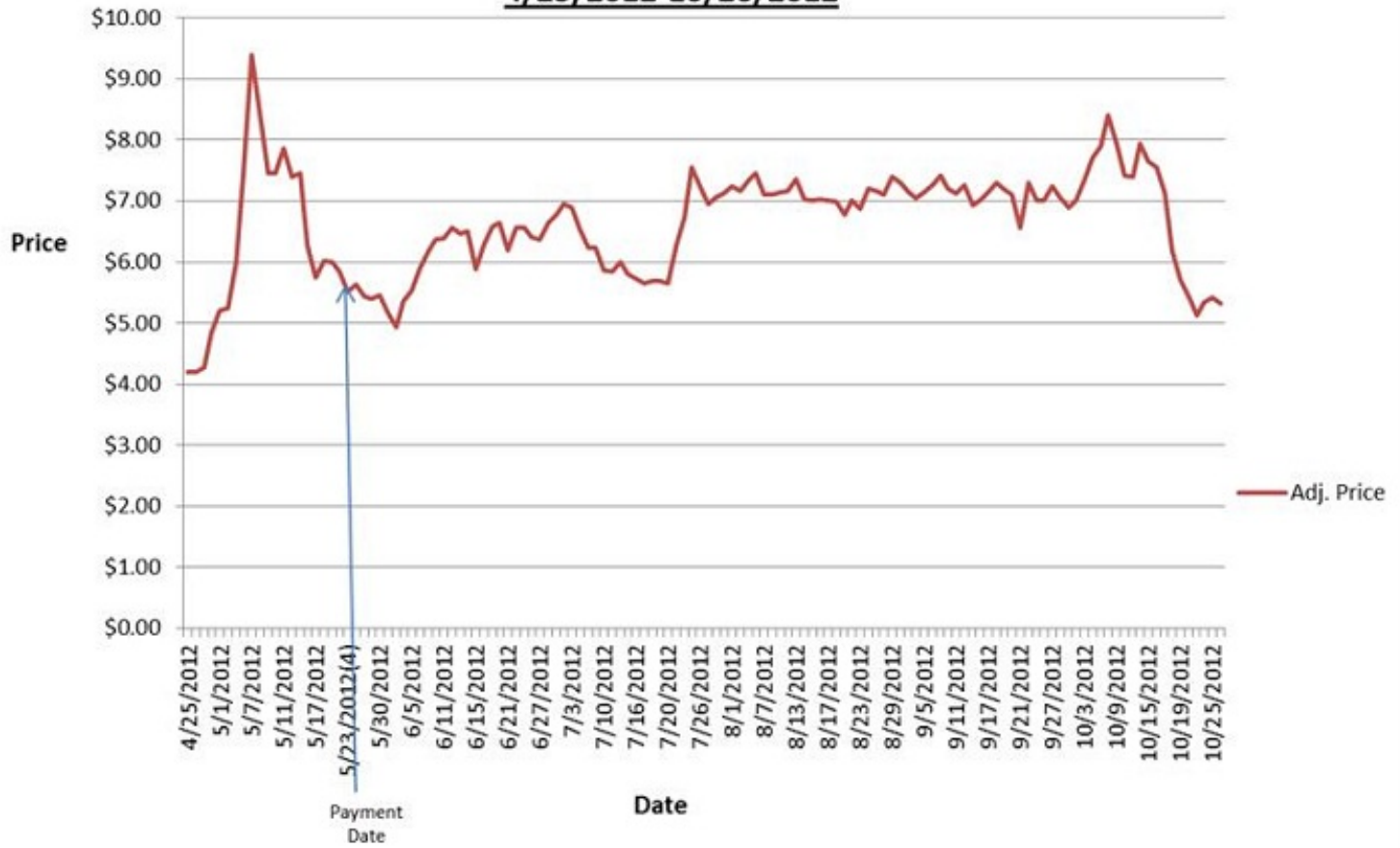
Integrated Surgical Systems, Inc. Assets (2007 - 9/30/2012)

	2007	2008	2009	2010	3/31/2011 (quarterly)	6/30/2011 (quarterly)	9/30/2011 (quarterly)	2011	3/31/2012 (quarterly)	6/30/2012 (quarterly)	9/30/2012 (quarterly)
Assets											
Cash	3,099,199	3,322,358	210,966	40,361	1,530,853	339,362	773,307	422,984	611,867	242,998	802,797
Other Current Assets	51,333	62,822	49,891	47,160	15,356	15,086	24,823	21,868	13,150	18,271	27,094
US Federal Agency Securities	--	1,116,151	1,050,384	274,342	51,573	51,200	35,785	15,564	15,457	19,956	19,899
Certificates of Deposit	--	--	2,595,207	1,941,659	751,860	1,820,941	1,334,284	753,623	1,603,389	1,754,492	1,194,852
Municipal Securities	--	--	--	--	--	--	--	--	--	231,364	59,559
Corporate (Debt) Securities	--	--	377,218	1,799,543	1,724,458	777,383	816,580	1,722,586	687,805	597,338	720,937
ClearSign Stock	--	--	--	--	--	1,000,000 ¹	1,000,000	1,000,000	1,000,000	24,361	25,295
Total (Exclude ClearSign Stock)	3,150,532	4,501,331	4,283,666	4,103,065	4,074,100	3,003,972	2,984,779	2,936,625	2,931,668	2,864,419	2,825,138
Total (Include ClearSign Stock)	--	--	--	--	--	3,003,972	3,984,779	3,936,625	3,931,668	2,888,780	2,850,433
% of Total											
Cash, US Agency, CD, Other	3,150,532	4,501,331	3,906,448	2,303,522	2,349,642	2,226,589	2,168,199	1,214,039	2,243,863	2,035,717	2,044,642
% of Total for Non-security Assets (Exclude ClearSign Stock)	100.00%	100.00%	91.19%	56.14%	57.67%	74.12%	72.64%	41.34%	76.54%	71.07%	72.37%
% of Total for Non-security Assets (Include ClearSign Stock)	--	--	--	--	--	74.12%	54.41%	30.84%	57.07%	70.47%	71.73%
Security Assets:											
Municipal, Corp. Securities (Exclude ClearSign)	0	0	377,218	1,799,543	1,724,458	777,383	816,580	1,722,586	687,805	828,702	780,496
Security Assets: ClearSign	--	--	--	--	--	1,000,000 ¹	1,000,000	1,000,000	1,000,000	24,361	25,295
% of Total for Security Assets (Exclude ClearSign Stock)	0.00%	0.00%	8.81%	43.86%	42.33%	25.88%	27.36%	58.66%	23.46%	28.93%	27.63%
% of Total for Security Assets (Include ClearSign Stock)	--	--	--	--	--	358.77%	45.59%	69.16%	42.93%	29.53%	28.27%
Income (Loss)	4,926,556	(174,846)	(271,594)	(204,250)	(34,952)	(135,583)	(27,335)	(262,751)	(67,143)	717,389 ²	(34,873)

Notes:

- On April 20, 2011, the Company purchased 363,636 shares of common stock of ClearSign Combustion Corporation, a privately-held Washington corporation ("ClearSign"), for an aggregate purchase price of approximately \$1,000,000, or \$2.75 per share, in connection with ClearSign's private offering of up to \$3,000,000 of its common stock. Prior to 6/30/2012, this investment was accounted for as a cost-basis investment, as the Company owns less than 20% of the voting securities and does not have the ability to exercise significant influence over operating and financial policies of the entity.
- Non-cash gain based on distribution of common stock of ClearSign Combustion Corporation acquired May 16, 2011, distributed May 23, 2012.

Daily Price for ClearSign
4/25/2012-10/26/2012



Daily Volume for ClearSign
4/25/2012-10/26/2012

