Lightwave Logic, Inc.
Form 10-Q
May 15, 2012

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

(Mark One)

ý **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended March 31, 2012

OR

¨ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from _____to _____

Commission File Number 0-52567

Lightwave Logic, Inc.

(Exact name of registrant as specified in its charter)

Nevada	**82-049-7368**
(State or other jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)

111 Ruthar Drive **Newark, DE**	**19711**
(Address of principal executive offices)	(Zip Code)

(302) 356-2717

(Registrant s telephone number, including area code)

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 x No ¨

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Website, if any, every Interactive Date 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 x No ¨

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

Large accelerated filer	¨	Accelerated filer	¨
Non-accelerated filer	¨	Smaller reporting company	x

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act.) Yes ¨ No x

The number of shares of the registrant's Common Stock outstanding as of May 11, 2011 was 49,315,673.

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PART I FINANCIAL INFORMATION

Item 1

Financial Information

LIGHTWAVE LOGIC, INC.

(A Development Stage Company)

FINANCIAL STATEMENTS

MARCH 31, 2012

(UNAUDITED)

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LIGHTWAVE LOGIC, INC.

(A Development Stage Company)

BALANCE SHEETS

	March 31, 2012 (Unaudited)	December 31, 2011 (Audited)
ASSETS		
CURRENT ASSETS		
	$	$
Cash and cash equivalents	2,954,677	359,824
Subscription Receivable	200,001	-
Prepaid expenses and other current assets	44,148	41,756
	3,198,826	401,580
PROPERTY AND EQUIPMENT - NET	95,707	88,751
OTHER ASSETS		
Intangible assets - net	454,810	431,104
	$	$
TOTAL ASSETS	3,749,343	921,435
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES		
	$	$
Accounts payable	97,174	139,833
Accounts payable - related party	17,326	22,628
Accrued expenses	81,718	75,965
TOTAL LIABILITIES	196,218	238,426
STOCKHOLDERS' EQUITY		
Preferred stock, $0.001 par value, 1,000,000 authorized		
No shares issued or outstanding	-	-
Common stock $0.001 par value, 100,000,000 authorized		
47,686,618 and 45,337,092 issued and outstanding at		
March 31, 2012 and December 31, 2011	47,687	45,337
Additional paid-in-capital	28,252,112	24,513,000
Accumulated deficit	(15,827)	(15,827)

Deficit accumulated during development stage	(24,730,847)	(23,859,501)
TOTAL STOCKHOLDERS' EQUITY	3,553,125	683,009
	$	$
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	3,749,343	921,435

The accompanying notes are an integral part of these financial statements.

LIGHTWAVE LOGIC, INC.

(A Development Stage Company)

STATEMENTS OF OPERATIONS FOR THE THREE MONTHS ENDING

MARCH 31, 2012 AND 2011 AND FOR THE PERIOD

JANUARY 1, 2004 (INCEPTION OF DEVELOPMENT STAGE) TO MARCH 31, 2012

(UNAUDITED)

	Cumulative Since Inception	For the Three Months Ending March 31, 2012	For the Three Months Ending March 31, 2011
	$	$	$
NET SALES	3,200	-	-
COST AND EXPENSE			
Research and development	11,136,850	472,409	466,864
General and administrative	13,282,340	297,190	459,246
	24,419,190	769,599	926,110
LOSS FROM OPERATIONS	(24,415,990)	(769,599)	(926,110)
OTHER INCOME (EXPENSE)			
Interest income	30,696	198	179
Dividend income	1,551	-	-
Realized gain on investment	3,911	-	-
Realized gain on disposal of assets	637	-	-
Litigation settlement	(47,500)	-	-
Interest expense and commitment fee	(304,152)	(101,945)	(64)
	$	$	$
NET LOSS	(24,730,847)	(871,346)	(925,995)
		$	$
Basic and Diluted Loss per Share		(0.02)	(0.02)

Basic and Diluted Weighted Average Number of Shares	46,732,009	43,966,153

The accompanying notes are an integral part of these financial statements.

LIGHTWAVE LOGIC, INC.

(A Development Stage Company)

STATEMENT OF STOCKHOLDERS EQUITY

FOR THE PERIOD JANUARY 1, 2004 (INCEPTION OF DEVELOPMENT STAGE) TO MARCH 31, 2012
(UNAUDITED)

	Number of Shares	Common Stock	Paid-in Capital	Subscription Receivable/ Receivable for Issuance of Common Stock	Deferred Charges	Unrealized Loss on Securities	Accumulated Deficit	Deficit Accumulated During Development Stage	T
ENDING BALANCE AT DECEMBER 31, 2003	100	$ 1	$ -	$ -	$ -	$ -	$ (15,827)	$ -	$ (
Retroactive recapitalization upon reverse acquisition	706,973	706	(706)	-	-	-	-	-	
BALANCE AT JANUARY 1, 2004	707,073	707	(706)	-	-	-	(15,827)	-	(
Common stock issued to founders	13,292,927	13,293	(13,293)	-	-	-	-	-	
Common stock issued for future services in July 2004 at $0.16/share	1,600,000	1,600	254,400	-	-	-	-	-	2
Common stock issued at	2,000,000	2,000	(2,000)	-	-	-	-	-	

merger									
Common stock issued for future services in August 2004 at $0.12/share	637,500	638	74,362	-	-	-	-	-	
Conversion of note payable in December 2004 at $0.16/share	187,500	187	29,813	-	-	-	-	-	
Net loss for the year ended December 31, 2004	-	-	-	-	-	-	-	(722,146)	(7
BALANCE AT DECEMBER 31, 2004	18,425,000	18,425	342,576	-	-	-	(15,827)	(722,146)	(3
Common stock issued in private placement in April 2005 at $0.25/share	4,000,000	4,000	996,000	-	-	-	-	-	1,0
Conversion of notes payable in May 2005 at $0.16/share	3,118,750	3,119	495,881	-	-	-	-	-	4
Subscription receivable	-	-	-	(6,500)	-	-	-	-	
Common stock issued for future services in August 2005, valued at $2.79/share	210,000	210	585,290	-	-	-	-	-	5
Common stock issued for future services in August 2005, valued at $2.92/share	200,000	200	583,800	-	-	-	-	-	5
Warrants issued for services in May 2005, vested during 2005, valued at $1.13/share	-	-	37,000	-	-	-	-	-	
Warrants issued for services in	-	-	24,200	-	-	-	-	-	

September 2005, vested during 2005, valued at $1.45/share									
Warrants issued for services in October 2005, vested during 2005, valued at $0.53/share	-	-	15,900	-	-	-	-	-	
Warrants issued for future services in December 2005, vested during 2005, valued at $1.45/share	-	-	435,060	-	-	-	-	-	4
Deferred charges for common stock issued for future services in August 2005, valued at $2.92/share	-	-	-	-	(584,000)	-	-	-	(5
Amortization of deferred charges	-	-	-	-	265,455	-	-	-	2
Exercise of warrants in December 2005 at $0.25/share	300,000	300	74,700	-	-	-	-	-	
Net loss for the year ended December 31, 2005	-	-	-	-	-	-	-	(1,721,765)	(1,7
BALANCE AT DECEMBER 31, 2005	26,253,750	26,254	3,590,407	(6,500)	(318,545)	-	(15,827)	(2,443,911)	8
Common stock issued in private placement during 2006 at $0.50/share	850,000	850	424,150	-	-	-	-	-	4
Common stock issued for	300,000	300	269,700	-	-	-	-	-	2

future services in February 2006, valued at $0.90/share									
Common stock issued for future services in May 2006, valued at $1.55/share	400,000	400	619,600	-	-	-	-	-	6
Common stock issued for future services in June 2006, valued at $1.45/share	25,000	25	36,225	-	-	-	-	-	
Common stock issued for future services in November 2006, valued at $0.49/share	60,000	60	29,340	-	-	-	-	-	
Warrants issued for services in September 2005, vested during 2006, valued at $1.45/share	-	-	66,500	-	-	-	-	-	
Warrants issued for future services in June 2006, vested during 2006, valued at $1.55/share	-	-	465,996	-	-	-	-	-	
Options issued for services in February 2006, vested during 2006, valued at $1.01/share	-	-	428,888	-	-	-	-	-	
Contributed capital related to accrued interest	-	-	35,624	-	-	-	-	-	
Subscription receivable	-	-	-	6,500	-	-	-	-	
Amortization of deferred charges	-	-	-	-	318,545	-	-	-	3
	-	-	-	-	-	(26,000)	-	-	(

Unrealized gain (loss) on securities									
Net loss for the year ending December 31, 2006	-	-	-	-	-		-	(2,933,809)	(2,9
BALANCE AT DECEMBER 31, 2006	27,888,750	$ 27,889	$5,966,430	$ -	$ -	$ (26,000)	$ (15,827)	$ (5,377,720)	$ 5

The accompanying notes are an integral part of these financial statements.

LIGHTWAVE LOGIC, INC.

(A Development Stage Company)

STATEMENT OF STOCKHOLDERS EQUITY

FOR THE PERIOD JANUARY 1, 2004 (INCEPTION OF DEVELOPMENT STAGE) TO MARCH 31, 2012
(UNAUDITED) (CONTINUED)

	Number of Shares	Common Stock	Paid-in Capital	Subscription Receivable/ Receivable for Issuance of Common Stock	Deferred Charges	Unrealized Loss on Securities	Accumulated Deficit	Deficit Accumulated During Development Stage	
BALANCE AT DECEMBER 31, 2006	27,888,750	$ 27,889	$ 5,966,430	$ -	$-	$ (26,000)	$ (15,827)	$ (5,377,720)	$
Common stock issued in private placement during 2007 at $0.50/share	2,482,000	2,482	1,238,518	-	-	-	-	-	1
Common stock issued in private placement during 2007 at $0.60/share	1,767,540	1,768	1,058,756	-	-	-	-	-	1
Common stock subscription rescinded during 2007 at $0.50/share	(400,000)	(400)	(199,600)	-	-	-	-	-	
Common stock issued for future services in February	151,785	152	106,098	-	-	-	-	-	

2007, valued at $0.70/share								
Common stock issued for future services in March 2007, valued at $0.58/share	1,000,000	1,000	579,000	-	-	-	-	-
Common stock issued for services and settlement for accounts payable in April 2007, valued at $0.35/share	100,000	100						
Common stock issued for services in October 2007, valued at $0.68/share	150,000	150	101,850	-	-	-	-	-
Common stock issued for services in October 2007, valued at $0.90/share	150,000	150	134,850	-	-	-	-	-
Common stock issued for services in November 2007, valued at $0.72/share	400,000	400	287,600	-	-	-	-	-
Warrants issued for services in September 2005, vested during 2007, valued at $1.45/share	-	-	36,370	-	-	-	-	-
Warrants issued for services in March 2007, vested during 2007, valued at $0.63/share	-	-	52,180	-	-	-	-	-
Warrants issued for	-	-	293,476	-	-	-	-	-

services in April 2007, vested during 2007, valued at $0.69/share								
Warrants issued for services in April 2007, vested during 2007, valued at $0.63/share	-	-	140,490	-	-	-	-	-
Warrants issued for services in May 2007, vested during 2007, valued at $0.56/share	-	-	52,946	-	-	-	-	-
Warrants issued for services in October 2007, vested during 2007, valued at $0.61/share	-	-	61,449	-	-	-	-	-
Warrants issued for services in October 2007, vested during 2007, valued at $0.78/share	-	-	52,292	-	-	-	-	-
Warrants issued for services in December 2007, vested during 2007, valued at $0.55/share	-	-	1,159	-	-	-	-	-
Options issued for services in February 2006, vested during 2007, valued at $1.01/share	-	-	17,589	-	-	-	-	-
Options issued for services in February 2006, vested during	-	-	43,757	-	-	-	-	-

2007, valued at $1.09/share									
Options issued for services in November 2007, vested during 2007, valued at $0.60/share	-	-	41,653	-	-	-	-	-	
Warrants issued for future services in April 2007, vested during 2007, valued at $0.70/share	-	-	348,000	-	-	-	-	-	
Deferred charges for common stock issued for future services in March 2007, valued at $0.58/share	-	-	-	-	(928,000)	-	-	-	
Amortization of deferred charges	-	-	-	-	773,333	-	-	-	
Unrealized gain (loss) on securities	-	-	-	-	-	(32,610)	-	-	
Net loss for the year ending December 31, 2007	-	-	-	-	-	-	-	(4,223,449)	(4
BALANCE AT DECEMBER 31, 2007	33,690,075	33,690	10,449,763	-	(154,667)	$ (58,610)	(15,827)	(9,601,169)	
Common stock issued in private placement during 2008 at $0.60/share	690,001	690	413,310	-	-	-	-	-	
Common stock issued for services in March 2008, valued at $0.75/share	100,000	100	74,900	-	-	-	-	-	

Common stock issued for services in August 2008, valued at $1.80/share	200,000	200	359,800	-	-	-	-	-
Exercise of warrants at $0.25/share	320,000	320	79,680	-	-	-	-	-
Exercise of warrants at $0.25/share, pursuant to November 2008 adjusted stock offering	641,080	641	159,629					
Exercise of warrants at $0.50/share	270,000	270	134,730	-	-	-	-	-
Warrants issued for services in September 2005, vested during 2008, valued at $1.45/share	-	-	27,014	-	-	-	-	-
Warrants issued for services in March 2007, vested during 2008, valued at $0.63/share	-	-	10,885	-	-	-	-	-
Warrants issued for services in April 2007, vested during 2008, valued at $0.69/share	-	-	121,713	-	-	-	-	-
Warrants issued for services in April 2007, vested during 2008, valued at $0.63/share	-	-	48,738	-	-	-	-	-
Warrants issued for services in May	-	-	31,444	-	-	-	-	-

2007, vested during 2008, valued at $0.56/share								
Warrants issued for services in December 2007, vested during 2008, valued at $0.55/share	-	-	12,487	-	-	-	-	-
Options issued for services in November 2007, vested during 2008, valued at $0.60/share	-	-	286,803	-	-	-	-	-
Options issued for services in January 2008, vested during 2008, valued at $0.60/share	-	-	30,750	-	-	-	-	-
Options issued for services in July 2008, vested during 2008, valued at $1.48/share	-	-	114,519	-	-	-	-	-
Options issued for services in August 2008, vested during 2008, valued at $1.36/share	-	-	525,263	-	-	-	-	-
Options issued for services in November 2008, vested during 2008, valued at $0.50/share	-	-	6,439	-	-	-	-	-
Warrants issued for future services in March 2008, vested through September 2008, valued at	-	-	332,000	-	(332,000)	-	-	-

$0.83/share Warrants issued for services in May 2008, vested through September 2008, valued at $1.63/share	-	-	976,193	-	-	-	-	-	
Amortization of deferred charges	-	-	-	-	431,337	-	-	-	
Receivable for the issuance of common stock	-	-	-	(12,500)	-	-	-	-	
Realized loss reclassification	-	-	-	-	-	58,610	-	-	
Net loss for the year ending December 31, 2008	-	-	-	-	-	-	-	(4,340,607)	(4
BALANCE AT DECEMBER 31, 2008	35,911,156	$ 35,911	$14,196,060	$ (12,500)	$ (55,330)	$ -	$ (15,827)	$ (13,941,776)	$

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The accompanying notes are an integral part of these financial statements.

LIGHTWAVE LOGIC, INC.

(A Development Stage Company)

STATEMENT OF STOCKHOLDERS EQUITY

FOR THE PERIOD JANUARY 1, 2004 (INCEPTION OF DEVELOPMENT STAGE) TO MARCH 31, 2012 (UNAUDITED) (CONTINUED)

3	Number of Shares	Common Stock	Paid-in Capital	Subscription Receivable/ Receivable for Issuance of Common Stock	Deferred Charges	Unrealized Loss on Securities	Accumulated Deficit	Deficit Accumulated During Development Stage	Tota
BALANCE AT DECEMBER 31, 2008	35,911,156	$ 35,911	$ 14,196,060	$ (12,500)	$ (55,330)	$ -	$ (15,827)	$ (13,941,776)	$ 206
Rights to purchase shares issued in January 2009, vested during 2009, valued at $0.33/share	-	-	132,058	-	-	-	-	-	132
Common stock issued for services in January 2009, valued at $0.58/share	100,000	100	57,900	-	-	-	-	-	58
Common stock issued for services & settlement for accounts payable	100,000	100	24,900	-	-	-	-	-	25

January 2009 valued at $0.25/share									
Exercise of purchase right agreement in January 2009 at $0.25/share	180,550	181	44,957	-	-	-	-	-	45
Exercise of warrants at $0.25/share, pursuant to November 2008 adjusted stock offering	1,279,336	1,279	318,555			-			319
Exercise of warrants at $0.001/share	400,000	400	-	-	-	-	-	-	
Exercise of warrants at $1.00/share	355,000	355	354,645			-			355
Options issued for services in November 2007, vested during 2009, valued at $0.60/share	-	-	199,234	-	-	-	-	-	199
Options issued for services in January 2008, vested during 2009, valued at $0.60/share	-	-	13,583	-	-	-	-	-	13
Options issued for services in July 2008, vested during 2009, valued at $1.48/share	-	-	67,838	-	-	-	-	-	67
Options issued for services in August 2008, vested during 2009, valued at $1.36/share	-	-	623,246	-	-	-	-	-	623
	-	-	61,346	-	-	-	-	-	61

Options issued for services in November 2008, vested during 2009, valued at $0.50/share									
Options issued for services in January 2009, vested during 2009, valued at $0.53/share	-	-	13,136	-	-	-	-	-	13
Options issued for services in February 2009, vested during 2009, valued at $0.38/share	-	-	9,583	-	-	-	-	-	9
Options issued for services in June 2009, vested during 2009, valued at $0.85/share	-	-	21,085	-	-	-	-	-	21
Warrants issued for services in June 2009, vested during 2009, valued at $0.85/share	-	-	177,881	-	-	-	-	-	177
Contribution of accrued payroll in February 2009	-	-	52,129	-	-	-	-	-	52
Amortization of deferred charges	-	-	-	-	55,330	-	-	-	55
Payment for the issuance of common stock	-	-	-	12,500	-	-	-	-	12
Common stock issued	116,000	116	39,884	-	-	-	-	-	40

for services in June 2009, valued at $0.34/share									
Common stock issued for services & settlement for accounts payable June 2009 valued at $0.34/share	145,000	145	49,855	-	-	-	-	-	50
Common stock issued in private placement during June 2009 at $0.34/share	2,479,500	2,480	852,520	-	-	-	-	-	855
Common stock issued for services in July 2009, valued at $0.75/share	100,000	100	74,900	-	-	-	-	-	75
Net loss for the year ending December 31, 2009	-	-	-	-	-	-	-	(2,721,871)	(2,721,
BALANCE AT December 31, 2009	41,166,542	41,167	17,385,295	-	-	-	(15,827)	(16,663,647)	746
						-			
Options issued for services in November 2007, vested during 2010, valued at $0.60/share	-	-	174,866	-	-		-	-	174
Options issued for services in January 2008, vested during 2010, valued at $0.60/share	-	-	14,873	-	-	-	-	-	14
	-	-	74,061	-	-	-	-	-	74

Options issued for services in July 2008, vested during 2010, valued at $1.48/share	-	-	643,812	-	-	-	-	-	643
Options issued for services in August 2008, vested during 2010, valued at $1.36/share	-	-	31,478	-	-	-	-	-	31
Options issued for services in November 2008, vested during 2010, valued at $0.50/share	-	-	213,459	-	-	-	-	-	213
Warrants issued for services in June 2009, vested during 2010, valued at $0.85/share			580,167			-			580
Warrants issued for services in January 2010, vested during 2010, valued at $1.83/share	-	-	214,063	-	-	-	-	-	214
Warrants issued for services in March 2010, vested during 2010, valued at $1.86/share	-	-	27,434	-	-	-	-	-	27
Options issued for services in August 2010, vested during 2010, valued at $1.31/share	-	-	286,002	-	-	-	-	-	286

Options issued for services in December 2010, vested during 2010, valued at $1.14/share									
Exercise of warrants at $0.25/share	947,200	947	235,853	-	-	-	-	-	236
Exercise of options at $0.25/share	15,000	15	3,735	-	-	-	-	-	3
Exercise of warrants at $0.345/share	10,000	10	3,440	-	-	-	-	-	3
Exercise of warrants at $0.50/share	25,000	25	12,475	-	-	-	-	-	12
Exercise of warrants at $1.00/share	282,500	283	282,218	-	-	-	-	-	282
Common stock issued in private placement during 2010 at $1.00/share	1,500,000	1,500	1,498,500	-	-	-	-	-	1,500
Common stock issued for services in August 2010, valued at $1.25/share	4,800	4	5,996	-	-	-	-	-	6
Common stock issued for services in November 2010, valued at $0.93/share	5,000	5	4,645	-	-	-	-	-	4
Common stock issued for services in December 2010, valued at $01.20/share	10,000	10	11,990	-	-	-	-	-	12
Net loss for the year ending	-	-	-	-	-	-	-	-	(3,713,

December 31, 2010									
BALANCE AT DECEMBER 31, 2010	43,966,042	$ 43,966	$ 21,704,361	$ -	$ -	$ -	$ (15,827)	$ (20,376,879)	$ 1,355

The accompanying notes are an integral part of these financial statements.

LIGHTWAVE LOGIC, INC.

(A Development Stage Company)

STATEMENT OF STOCKHOLDERS EQUITY

FOR THE PERIOD JANUARY 1, 2004 (INCEPTION OF DEVELOPMENT STAGE) TO MARCH 31, 2012 (UNAUDITED) (CONTINUED)

	Number of Shares	Common Stock	Paid-in Capital	Subscription Receivable/ Receivable for Issuance of Common Stock	Deferred Charges	Unrealized Loss on Securities	Accumulated Deficit	Deficit Accumulated During Development Stage	Total
BALANCE AT DECEMBER 31, 2010	43,966,042	$ 43,966	$ 21,704,361	$ -	$ -	$ -	$ (15,827)	$ (20,376,879)	$ 1,355,62
Common stock issued for services in March 2011, valued at $1.45/share	10,000	10	14,490	-	-	-	-	-	14,50
Options issued for services in January 2008, vested during 2011, valued at $0.60/share	-	-	285	-	-	-	-	-	28
Options issued for services in July 2008, vested during 2011, valued at $1.48/share	-	-	39,829	-	-	-	-	-	39,82
Options issued for	-	-	383,881	-	-	-	-	-	383,88

services in August 2008, vested during 2011, valued at $1.36/share									
Options issued for services in November 2008, vested during 2011, valued at $0.50/share	-	-	26,648	-	-	-	-	-	26,64
Warrants issued for services in January 2010, vested during 2011, valued at $1.83/share	-	-	306,765	-	-	-	-	-	306,76
Warrants issued for services in March 2010, vested during 2011, valued at $1.86/share	-	-	64,983	-	-	-	-	-	64,98
Options issued for services in August 2010, vested during 2011, valued at $1.31/share	-	-	65,447	-	-	-	-	-	65,44
Options issued for services in December 2010, vested during 2011, valued at $1.14/share	-	-	212,136	-	-	-	-	-	212,13
Warrants issued for services in January 2011, vested during 2011, valued at $1.05/share	-	-	36,585	-	-	-	-	-	36,58
Warrants issued for	-	-	109,820	-	-	-	-	-	109,82

services in April 2011, vested during 2011, valued at $0.98/share									
Options issued for services in May 2011, vested during 2011, valued at $0.97/share	-	-	79,702	-	-	-	-	-	79,70
Options issued for services in August 2011, vested during 2011, valued at $0.82/share	-	-	17,204	-	-	-	-	-	17,20
Options issued for services in November 2011, vested during 2011, valued at $0.53/share	-	-	4,384	-	-	-	-	-	4,38
Options issued for services in December 2011, vested during 2011, valued at $0.82/share	-	-	53,124	-	-	-	-	-	53,12
Warrants issued for services in December 2011, vested during 2011, valued at $1.05/share	-	-	1,288	-	-	-	-	-	1,28
Common stock issued for commitment shares, valued at $1.08/share	150,830	151	162,746	-	-	-	-	-	162,89
Common stock issued	185,185	185	199,815	-	-	-	-	-	200,00

to institutional investor, valued at $1.08/share									
Common stock issued for additional commitment shares, valued at $1.15/share	3,017	3	3,467	-	-	-	-	-	3,47
Common stock issued for services in June 2011, valued at $1.04/share	10,000	10	10,390	-	-	-	-	-	10,40
Common stock issued in private placement during 2011 at $1.00/share	1,000,000	1,000	999,000	-	-	-	-	-	1,000,00
Common stock issued for services in September 2011, valued at $1.45/share	10,000	10	14,490	-	-	-	-	-	14,50
Common stock issued for services in May 2011 through August 2011, valued at $0.90/share to $1.25/share	2,018	2	2,161	-	-	-	-	-	2,16
Net loss for the nine months ending December 31, 2011	-	-	-	-	-	-	-	(3,482,622)	(3,482,62
BALANCE AT DECEMBER 31, 2011	45,337,092	$ 45,337	$ 24,513,000	$ -	$ -	$ -	$ (15,827)	$ (23,859,501)	$ 683,00

The accompanying notes are an integral part of these financial statements.

LIGHTWAVE LOGIC, INC.

(A Development Stage Company)

STATEMENT OF STOCKHOLDERS EQUITY

FOR THE PERIOD JANUARY 1, 2004 (INCEPTION OF DEVELOPMENT STAGE) TO MARCH 31, 2012 (UNAUDITED) (CONTINUED)

	Number of Shares	Common Stock	Paid-in Capital	Subscription Receivable/ Receivable for Issuance of Common Stock	Deferred Charges	Unrealized Loss on Securities	Accumulated Deficit	Deficit Accumulated During Development Stage	Tota
BALANCE AT DECEMBER 31, 2011	45,337,092	45,337	24,513,000	-	-	-	(15,827)	(23,859,501)	683,
Common stock issued to institutional investor, valued at $1.013/share	197,433	198	199,802	-	-	-	-	-	200,
Common stock issued for additional commitment shares, valued at $1.64/share	3,017	3	4,945	-	-	-	-	-	4,
Common stock issued to institutional investor, valued at $1.197/share	167,084	167	199,832	-	-	-	-	-	199,
Common stock issued for additional commitment	3,017	3	5,035	-	-	-	-	-	5,

shares, valued at $1.67/share									
Common stock issued to institutional investor, valued at $1.58/share	316,455	317	499,682	-	-	-	-	-	499,
Common stock issued for additional commitment shares, valued at $2.87/share	7,542	7	21,638	-	-	-	-	-	21,
Common stock issued to institutional investor, valued at $1.66/share	120,482	120	199,880	-	-	-	-	-	200,
Common stock issued for additional commitment shares, valued at $1.97/share	3,017	3	5,940	-	-	-	-	-	5,
Common stock issued to institutional investor, valued at $1.897/share	158,144	158	299,841	-	-	-	-	-	299,
Common stock issued for additional commitment shares, valued at $2.60/share	4,525	5	11,760	-	-	-	-	-	11,
Common stock issued to institutional investor, valued at $2.073/share	96,479	97	199,904	-	-	-	-	-	200,
Common stock issued for additional commitment shares, valued at $2.64/share	3,017	3	7,962	-	-	-	-	-	7,
Common stock issued to institutional investor, valued at $2.19/share	91,324	92	199,908	-	-	-	-	-	200,

Common stock issued for additional commitment shares, valued at $2.23/share	3,017	3	6,725	-	-	-	-	-	6,
Common stock issued to institutional investor, valued at $1.68/share	119,048	119	199,882	-	-	-	-	-	200,
Common stock issued for additional commitment shares, valued at $1.80/share	3,017	3	5,428	-	-	-	-	-	5,
Common stock issued to institutional investor, valued at $1.81/share	220,994	221	399,778	-	-	-	-	-	399,
Common stock issued for additional commitment shares, valued at $1.88/share	3,017	3	5,669	-	-	-	-	-	5,
Common stock issued for additional commitment shares, valued at $1.92/share	3,017	3	5,790	-	-	-	-	-	5,
Common stock issued to institutional investor, valued at $1.53/share	130,719	131	199,870	-	-	-	-	-	200,
Common stock issued for additional commitment shares, valued at $1.60/share	3,017	3	4,824	-	-	-	-	-	4,
Common stock issued to institutional investor, valued at $1.667/share	119,976	120	199,880	-	-	-	-	-	200,
	3,017	3	5,820	-	-	-	-	-	5,

Common stock issued for additional commitment shares, valued at $1.93/share									
Common stock issued to institutional investor, valued at $1.51/share	132,450	132	199,867	-	-	-	-	-	199,9
Common stock issued for additional commitment shares, valued at $1.70/share	6,034	6	10,252	-	-	-	-	-	10,2
Common stock issued to institutional investor, valued at $1.677/share	119,261	119	199,882	-	-	-	-	-	200,0
Exercise of options at $0.65/share	250,000	250	162,250	-	-	-	-	-	162,5
Exercise of warrants at $1.25/share	40,000	40	49,960	-	-	-	-	-	50,0
Exercise of warrants at $0.34/share	20,000	20	6,880	-	-	-	-	-	6,9
Common stock issued for services in October 2011 through January 2012, valued at $0.65/share to $2.70/share	1,406	1	1,606	-	-	-	-	-	1,6
Options issued for services in August 2010, vested during 2012, valued at $1.31/share	-	-	16,317	-	-	-	-	-	16,3
Options issued for services in December 2010, vested during 2012, valued at $1.14/share	-	-	21,207	-	-	-	-	-	21,2

Warrants issued for services in April 2011, vested during 2012, valued at $0.98/share	-	-	27,455	-	-	-	-	-	27,4
Options issued for services in May 2011, vested during 2012, valued at $0.97/share	-	-	12,061	-	-	-	-	-	12,0
Options issued for services in August 2011, vested during 2012, valued at $0.82/share	-	-	10,233	-	-	-	-	-	10,2
Options issued for services in November 2011, vested during 2012, valued at $0.53/share	-	-	6,540	-	-	-	-	-	6,5
Options issued for services in December 2011, vested during 2012, valued at $0.82/share	-	-	12,778	-	-	-	-	-	12,7
Warrants issued for services in December 2011, vested during 2012, valued at $1.05/share	-	-	39,067	-	-	-	-	-	39,0
Options issued for services in March 2012, vested during 2012, valued at $1.37/share	-	-	44,309	-	-	-	-	-	44,3
Options issued for services in March 2012, vested during 2012, valued at $1.37/share	-	-	21,798	-	-	-	-	-	21,7
Warrants issued for services in March 2012,	-	-	6,855	-	-	-	-	-	6,8

vested during 2012, valued at $1.37/share									
Net loss for the three months ending March 31, 2012	-	-	-	-	-	-	-	(871,346)	(871,3
BALANCE AT MARCH 31, 2012 (UNAUDITED)	47,686,618	$ 47,687	$ 28,252,112	$ -	$ -	$ -	$ (15,827)	$ (24,730,847)	3,553,1

The accompanying notes are an integral part of these financial statements.

LIGHTWAVE LOGIC, INC.

(A Development Stage Company)

STATEMENTS OF CASH FLOW FOR THE THREE MONTHS ENDING

MARCH 31, 2012 AND 2011 AND

FOR THE PERIOD JANUARY 1, 2004 (INCEPTION OF DEVELOPMENT STAGE) TO

MARCH 31, 2012
(UNAUDITED)

	Cumulative Since Inception	For the Three Months Ending March 31, 2012	For the Three Months Ending March 31, 2011
CASH FLOWS FROM OPERATING ACTIVITIES			
	$	$	$
Net loss	(24,730,847)	(871,346)	(925,995)
Adjustment to reconcile net loss to net cash used in operating activities			
Amortization of deferred charges	4,392,456	-	-
Amortization of prepaid expenses	75,000	-	-
Warrants issued for services	3,840,824	73,377	202,256
Stock options issued for services	5,118,621	145,243	292,334
Common stock issued for services and fees	1,427,314	103,443	14,500
Purchase right agreement amortization	132,058	-	-
Depreciation and amortization of patents	152,975	9,548	7,714
Realized gain on investments	(3,911)	-	-
Realized gain on disposal of assets	(637)	-	-
(Increase) decrease in assets			
Receivables	(30,461)	-	-
Prepaid expenses and other current assets	(44,148)	(2,392)	(8,912)
Increase (decrease) in liabilities			
Accounts payable	230,089	(42,659)	12,058
Accounts payable - related party	17,326	(5,302)	9,485
Accrued expenses	68,332	5,753	9,614
Net cash used in operating activities	(9,355,009)	(584,335)	(386,946)
CASH FLOWS FROM INVESTING ACTIVITIES			
Cost of intangibles	(466,305)	(26,518)	(13,544)

Proceeds from sale of available for sale securities	203,911	-	-
Proceeds from receipt of note receivable	100,000	-	-
Purchase of available for sale securities	(200,000)	-	-
Purchase of equipment, furniture and leasehold improvements	(199,937)	(13,692)	(4,750)
Net cash used in investing activities	(562,331)	(40,210)	(18,294)
CASH FLOWS FROM FINANCING ACTIVITIES			
Issuance of common stock, private placement	7,495,524	-	-
Common stock rescinded, private placement	(200,000)	-	-
Issuance of common stock, exercise of options and warrants	1,796,404	219,400	-
Issuance of common stock, exercise of purchase right agreement	45,138	-	-
Issuance of common stock, institutional investor	3,199,998	2,999,998	-
Repayment of notes payable	(14,970)	-	-
Proceeds from subscription receivable	19,000	-	-
Advances to stockholders	(4,933)	-	-
Proceeds from convertible notes	529,000	-	-
Advances from officers	1,498	-	-
Net cash provided by financing activities	12,866,659	3,219,398	-
NET (DECREASE) INCREASE IN CASH AND CASH EQUIVALENTS	2,949,319	2,594,853	(405,240)
CASH AND CASH EQUIVALENTS - BEGINNING OF PERIOD	5,358	359,824	953,867
CASH AND CASH EQUIVALENTS - END OF PERIOD	$ 2,954,677	$ 2,954,677	$ 548,627

The accompanying notes are an integral part of these financial statements.

LIGHTWAVE LOGIC, INC.

(A Development Stage Company)

STATEMENTS OF CASH FLOW FOR THE THREE MONTHS ENDING

MARCH 31, 2012 AND 2011 AND

FOR THE PERIOD JANUARY 1, 2004 (INCEPTION OF DEVELOPMENT STAGE) TO

MARCH 31, 2012
(UNAUDITED) (CONTINUED)

	Cumulative Since Inception	For the Three Months Ending March 31, 2012	For the Three Months Ending March 31, 2011
SUPPLEMENTAL DISCLOSURES OF CASH FLOW INFORMATION			
CASH PAID DURING THE PERIOD FOR:	$	$	$
Interest	23,341	109	64
SUPPLEMENTAL DISCLOSURE OF NON-CASH INVESTING AND FINANCING ACTIVITIES			
	$	$	$
Common stock issued in exchange for deferred charges	3,142,400	-	-
	$		$
Warrants issued in exchange for deferred charges	1,581,056		-
	$	$	$
Common stock issued as settlement for accounts payable	74,708	-	-
Realized loss reclassification	$	$	$

	-	-	-
	$	$	$
Accrued interest contributed as capital	35,624	-	-
	$	$	$
Common stock issued in the conversion of notes payable	529,000	-	-
	$	$	$
Acquisition of automobile through loan payable	24,643	-	-
Common stock issued upon exercise of a warrant			
	$	$	$
in exchange for receivable	75,000	-	-
	$	$	$
Insurance company pay off of note payable	9,673	-	-
	$	$	$
Receivable for issuance of common stock	210,001	200,001	-
	$	$	$
Contribution of officer accrued payroll	52,129	-	-
	$	$	$
Common stock issued for prepaid expense	75,000	-	-

The accompanying notes are an integral part of these financial statements.

LIGHTWAVE LOGIC, INC.

(A Development Stage Company)

NOTES TO FINANCIAL STATEMENTS

MARCH 31, 2012 AND 2011

NOTE 1- FINANCIAL STATEMENTS

The accompanying unaudited financial statements have been prepared by Lightwave Logic, Inc. (the Company). These statements include all adjustments (consisting only of its normal recurring adjustments) which management believes necessary for a fair presentation of the statements and have been prepared on a consistent basis using the accounting polices described in the Summary of Accounting Policies included in the 2011 Annual Report. Certain financial information and footnote disclosures normally included in financial statements prepared in accordance with accounting principles generally accepted in the United States have been condensed or omitted pursuant to those rules and regulations, although the Company firmly believes that the accompanying disclosures are adequate to make the information presented not misleading. The financial statements should be read in conjunction with the financial statements and notes thereto included in the Company s Annual Report on Form 10-K for the year ended December 31, 2011, as filed with the Securities and Exchange Commission. The interim operating results for the three months ending March 31, 2012 may not be indicative of operating results expected for the full year.

Loss Per Share

The Company follows Financial Accounting Standards Board Accounting Standards Codification (FASB ASC) 260, Earnings per Share , resulting in the presentation of basic and diluted earnings per share. Because the Company reported a net loss in 2012 and 2011, common stock equivalents, including stock options and warrants were anti-dilutive; therefore, the amounts reported for basic and dilutive loss per share were the same.

Comprehensive Income

The Company follows FASB ASC 220.10, Reporting Comprehensive Income. Comprehensive income is a more inclusive financial reporting methodology that includes disclosure of certain financial information that historically has not been recognized in the calculation of net income. Since the Company has no items of other comprehensive income, comprehensive income (loss) is equal to net loss.

Recently Issued Accounting Pronouncements Not Yet Adopted

As of March 31, 2012, there are no recently issued accounting standards not yet adopted which would have a material effect on the Company s financial statements.

Recently Adopted Accounting Pronouncements

As of March 31, 2012 and for the period then ended, there were no recently adopted accounting pronouncements that had a material effect on the Company s financial statements.

LIGHTWAVE LOGIC, INC.

(A Development Stage Company)

NOTES TO FINANCIAL STATEMENTS

MARCH 31, 2012 AND 2011

NOTE 2 SUBSCRIPTION RECEIVABLE

Under the Company s May 2011 agreement with an institutional investor, a purchase of 119,261 shares of common stock was made by the institutional investor on March 30, 2012 in the amount of $200,001 which settled on April 2, 2012.

NOTE 3 EQUIPMENT

Equipment consists of the following:

	March 31, 2012	December 31, 2011
	$	$
Office equipment	14,206	12,816
Lab equipment	181,330	169,028
Furniture	3,494	3,494
Leasehold Improvements	5,368	5,368
	204,398	190,706
Less: Accumulated depreciation	108,691	101,955
	$	$
	95,707	88,751

Depreciation expense for the three months ending March 31, 2012 and 2011 was $6,736 and $7,469.

NOTE 4 INTANGIBLE ASSETS

This represents legal fees and patent fees associated with the registration of patents. The Company has recorded amortization expenses on the Spacer and Chromophore patent applications accepted by the United States Patent and Trademark Office in February 2011 and April 2011 which are amortized over its legal life of 20 years. No amortization expense has been recorded on the remaining patents since the patents have yet to be declared effective. Once issued, the cost of the patents will be amortized over their remaining legal lives, which is generally 20 years.

Patents consists of the following:

	March 31, 2012	December 31, 2011
	$	$
Patents	466,305	439,787
Less: Accumulated amortization	11,495	8,683
	$	$
	454,810	431,104

Amortization expense for the three months ending March 31, 2012 and 2011 was $2,811 and $245.

LIGHTWAVE LOGIC, INC.

(A Development Stage Company)

NOTES TO FINANCIAL STATEMENTS

MARCH 31, 2012 AND 2011

NOTE 5 INCOME TAXES

There is no income tax benefit for the losses for the three months ended March 31, 2012 and 2011 since management has determined that the realization of the net deferred tax asset is not assured and has created a valuation allowance for the entire amount of such benefits.

The Company s policy is to record interest and penalties associated with unrecognized tax benefits as additional income taxes in the statement of operations. As of January 1, 2012, the Company had no unrecognized tax benefits, or any tax related interest of penalties. There were no changes in the Company s unrecognized tax benefits during the period ended March 31, 2012. The Company did not recognize any interest or penalties during 2012 related to unrecognized tax benefits. With few exceptions, the U.S. and state income tax returns filed for the tax years ending on December 31, 2008 and thereafter are subject to examination by the relevant taxing authorities.

NOTE 6 STOCKHOLDERS EQUITY

Preferred Stock

Pursuant to our Company s Articles of Incorporation, our board of directors is empowered, without stockholder approval, to issue series of preferred stock with any designations, rights and preferences as they may from time to time determine. The rights and preferences of this preferred stock may be superior to the rights and preferences of our common stock; consequently, preferred stock, if issued could have dividend, liquidation, conversion, voting or other rights that could adversely affect the voting power or other rights of the common stock. Additionally, preferred stock, if issued, could be utilized, under special circumstances, as a method of discouraging, delaying or preventing a change in control of our business or a takeover from a third party.

Common Stock and Warrants

The stockholders deficit at January 1, 2004 has been retroactively restated for the equivalent number of shares received in the reverse acquisition at July 14, 2004 (Note 1) after giving effect to the difference in par value with the offset to additional paid-in-capital.

In July 2004, the Company issued to related parties 1,600,000 shares of its common stock for professional services valued at $256,000, fair value.

In August 2004, the Company issued 637,500 shares of its common stock for professional services to related parties valued at $75,000, fair value.

LIGHTWAVE LOGIC, INC.

(A Development Stage Company)

NOTES TO FINANCIAL STATEMENTS

MARCH 31, 2012 AND 2011

NOTE 6 STOCKHOLDERS EQUITY (CONTINUED)

Common Stock and Warrants

In December 2004, the Company converted a note payable of $30,000 into 187,500 shares of common stock at a conversion price of $0.16 per share.

In April 2005, the Company issued 4,000,000 shares of its common stock in a private placement for proceeds of $1,000,000.

On May 4, 2005, the Company converted the notes payable of $499,000 into 3,118,750 shares of common stock at a conversion price of $0.16 per share. An unpaid note payable in the amount of $6,500 has been reflected as a subscription receivable. During 2006, the Company deemed this $6,500 outstanding subscription receivable to be uncollectible.

During August 2005, the Company issued 210,000 shares of common stock for professional services rendered valued at $585,500, fair value. Consulting expense of $375,500 was recognized during 2005, and at December 31, 2005, the remaining balance of $210,000 is reflected as a deferred charge on the balance sheet. During 2006, consulting expense of $210,000 was recognized. This agreement ended in May 2006.

In August 2005, in conjunction with a management services contract with a related party, the Company issued 200,000 shares of common stock valued at $584,000. Management expense of $265,455 was recognized during 2005, and at December 31, 2005, the remaining balance of $318,545 is reflected as a deferred charge in a contra-equity account. During 2006, management expense of $318,545 was recognized. This agreement ended in June 2006.

During May 2005, the Company issued Stock Purchase Warrants to purchase 100,000 shares of common stock at an exercise price of $2.10 in exchange for consulting services. The warrants are exercisable until May 2008 and vest as follows: 50,000 shares during the first year of the agreement, 25,000 shares during the second year of the agreement, and 25,000 shares during the third year. In accordance with the fair value method, the Company used the Black-Scholes model to calculate the grant-date fair value, with the following assumptions: no dividend yield, expected volatility of 60%, risk-free interest rate of 3.8% and expected life of option of three years. The fair market value of the warrants was $113,250. In accordance with the fair value method as described in accounting requirements of FASB ASC 718 Stock Compensation, the Company recognized consulting expense of $37,000 in 2005. This warrant was cancelled during 2006.

LIGHTWAVE LOGIC, INC.

(A Development Stage Company)

NOTES TO FINANCIAL STATEMENTS

MARCH 31, 2012 AND 2011

NOTE 6 STOCKHOLDERS EQUITY (CONTINUED)

Common Stock and Warrants (Continued)

During September 2005, the Company issued Stock Purchase Warrants to purchase 100,000 shares of common stock at an exercise price of $2.00 in exchange for consulting services. The warrants expire in September 2008 and vest as follows: 50,000 shares during the first year of the agreement, 25,000 shares during the second year of the agreement, and 25,000 shares during the third year of the agreement. In accordance with the fair value method, the Company used the Black-Scholes model to calculate the grant-date fair value, with the following assumptions: no dividend yield, expected volatility of 60%, risk-free interest rate of 3.8% and expected life of option of three years. The fair market value of the warrants was $145,100. The Company recognized consulting expense of $27,014, $36,370, $66,500 and $24,200 for the years ended December 31, 2008, 2007, 2006 and 2005 in conjunction with this agreement. These warrants expired in September 2008.

On October 15, 2005, the Company issued Stock Purchase Warrants to purchase 30,000 shares of common stock at an exercise price of $1.40 in exchange for consulting services. The warrants expire in October 2006 and are exercisable immediately. In accordance with the fair value method, the Company used the Black-Scholes model to calculate the grant-date fair value, with the following assumptions: no dividend yield, expected volatility of 60%, risk-free interest rate of 4.15% and expected life of option of one year. The fair market value of the warrants was $15,900. In accordance with the fair value method as described in accounting requirements of FASB ASC 718 Stock Compensation, the Company recognized consulting expense of $15,900 during 2005. These warrants expired in October 2006.

In December 2005, in conjunction with a consulting contract, the Company issued Stock Purchase Warrants to purchase 300,000 shares of common stock at an exercise price of $0.25 per share valued at $435,060, fair value. The warrants expire in December 2007 and were exercisable immediately. In accordance with the fair value method, the Company used the Black-Scholes model to calculate the grant-date fair value, with the following assumptions: no dividend yield, expected volatility of 60%, risk-free interest rate of 4.41% and expected life of option of two years. In accordance with the fair value method as described in accounting requirements of FASB ASC 718 Stock Compensation, the Company recognized consulting expense of $199,435, and at December 31, 2005, the remaining balance in deferred charges amounted to $235,625. The 300,000 warrants were fully exercised on December 31, 2005 for $75,000. The Company recognized $18,128 and $217,497 in consulting expense in conjunction with this agreement for the years ended December 31, 2007 and 2006, which was cancelled during 2007.

During 2006, the Company issued 850,000 shares of common stock and warrants to purchase 425,000 shares of common stock for proceeds of $425,000 in accordance to a private placement memorandum amended December 18, 2006. Pursuant to the terms of the amended offering, up to 20 units were offered at the offering price of $50,000 per unit, with each unit comprise of 100,000 shares and a warrant to purchase 50,000 shares of common stock at $0.50 per share. In November 2007, 400,000 shares of common stock and warrants to purchase 200,000 shares of common stock were rescinded. As of December 31, 2008, warrants to purchase 210,000 shares of common stock were fully exercised for proceeds of $105,000, and warrants to purchase 15,000 shares expired.

During February 2006, the Company issued 300,000 shares of common stock for professional services rendered valued at $270,000, fair value. The Company recognized consulting expense of $16,875 and $118,125 and legal expense of $16,875 and $118,125 during 2007 and 2006. The contracts expired during 2007. The legal services were provided by a related party.

LIGHTWAVE LOGIC, INC.

(A Development Stage Company)

NOTES TO FINANCIAL STATEMENTS

MARCH 31, 2012 AND 2011

NOTE 6 STOCKHOLDERS EQUITY (CONTINUED)

Common Stock and Warrants (Continued)

During May 2006, the Company issued 400,000 shares of common stock for professional services rendered valued at $620,000, fair value. The Company recognized consulting expense of $258,333 and $361,667 during 2007 and 2006, and at December 31, 2006. The contracts expired during 2007.

During June 2006, the Company issued 25,000 shares of common stock to a related party for professional services rendered valued at $36,250, fair value. The Company recognized legal expense of $16,615 and $19,635 during 2007 and 2006, and at December 31, 2006. The contracts expired during 2007.

During November 2006, the Company issued 60,000 shares of common stock for professional services valued at $29,400, fair value. The Company recognized investor relations expense of $25,480 and $3,920 during 2007 and 2006. The contract expired during 2007.

In June 2006, in conjunction with an addendum to an existing consulting contract effective December 2005, the Company issued Stock Purchase Warrants to purchase 300,000 shares of common stock at an exercise price of $0.25 per share. The warrants expire in June 2008 and were exercisable immediately. In accordance with the fair value method, the Company used the Black-Scholes model to calculate the grant-date fair value, with the following assumptions: no dividend yield, expected volatility of 186%, risk-free interest rate of 4.41% and expected life of option of two years. The fair market value of the warrants was $465,996. During 2007 and 2006, the Company recognized consulting expense of $330,948 and $135,048 in conjunction with this agreement. The contract was cancelled during 2007. The 300,000 warrants were fully exercised on March 12, 2008 for proceeds of $75,000.

During 2006, the Company cancelled a warrant issued during May 2005 to purchase 100,000 shares of the Company s common stock at an exercise price of $2.10, and issued an option to purchase 500,000 shares of the Company s common stock at an exercise price of $1 per share and the same option s expiration and vesting terms were modified during November 2006. This option expired in June 2007. The incremental cost of the modified option was $394,030

and will be expensed over the vesting terms. The Company recognized $17,589 and $406,215 as a consulting expense in 2007 and 2006, which includes $337,290 of the incremental cost of the modified option.

During February 2006, the Company awarded an employee with an option to purchase 200,000 shares of common stock at an exercise price of $1.00 per share under the 2005 Employee Stock Option Plan. These options were valued at $217,628 using the Black-Scholes Option Pricing Formula. The employee compensation expense recognized during 2007 and 2006 is $43,757 and $22,673. In June 2007, the employee was terminated and the vesting ceased. After September 2007, the vested options expired.

During 2006, the Company recognized contributed capital of $35,624 related to the conversion of accrued interest payable.

During 2006, the Company deemed a May 2005 outstanding subscription receivable of $6,500 to be uncollectible.

LIGHTWAVE LOGIC, INC.

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NOTES TO FINANCIAL STATEMENTS

MARCH 31, 2012 AND 2011

NOTE 6 STOCKHOLDERS EQUITY (CONTINUED)

Common Stock and Warrants (Continued)

During 2007, the Company issued 2,482,000 shares of common stock and warrants to purchase 1,241,000 shares of common stock for proceeds of $1,241,000 in accordance to a private placement memorandum amended December 18, 2006. Pursuant to the terms of the amended offering, up to 20 units were offered at the offering price of $50,000 per unit, with each unit comprised of 100,000 shares and a warrant to purchase 50,000 shares of common stock at $0.50 per share. For the six month ending June 30, 2009, the remaining 600,000 outstanding warrants expired.

During 2007, the Company issued 1,767,540 shares of common stock and warrants to purchase 883,770 shares of common stock for proceeds of $1,060,524 in accordance to a private placement memorandum issued on October 3, 2007. Pursuant to the terms of the offering, up to 20 units were offered at the purchase price of $60,000 per unit, with each unit comprised of 100,000 shares and a warrant to purchase 50,000 shares of common stock at $1.00 per share. During 2009 and 2008, 416,000 and 82,770 warrants were exercised, respectively. For the year ending December 31, 2009, the remaining 385,000 outstanding warrants expired.

During 2007, as previously described, a shareholder that was issued 400,000 shares of the Company s common stock and a warrant to purchase 200,000 shares of common stock at $0.50 per share rescinded his shares and warrant.

During February 2007, the Company issued 151,785 shares of common stock for investor relations services valued at $106,250, fair value, which was recorded as a deferred charge and amortized over one year, the term of the services contract. During 2007, the Company recognized $97,396 in investor relations expense. During 2008, the Company recognized $8,854 in investor relations expense. This contract expired in February 2008.

During February 2007, the Company terminated its then CEO. The option to purchase 56,000 shares of common stock that was recorded as deferred charges of $42,730 were not vested and were forfeited. The option to purchase 444,000 shares of common stock that were vested expired during 2007.

During March 2007, the Company issued 1,000,000 shares of common stock to a related party for management consulting services valued at $580,000, fair value. During April 2007, the Company issued 500,000 warrants as an addendum to the original contract for management consulting services valued at $348,000, fair value. This contract was recorded as a contra-equity deferred charges account and is amortized over one year, the term of the contract. Management consulting expense recognized during 2008 and 2007 is $154,667 and $773,333. This contract was renewed in March, 2008. In December 2010, the warrant was partially exercised to purchase 100,000 shares of common stock for proceeds of $25,000. As of March 31, 2012, warrants to purchase 400,000 shares of common stock are still outstanding.

During April 2007, the Company issued 100,000 shares of common stock for legal services to a related party valued at $35,000, fair value, to settle $29,708 of accounts payable and as payment for $5,292 of legal services incurred in April 2007.

During October 2007, the Company issued 150,000 shares of common stock for investor relations services valued at $102,000, fair value to a related party. During 2007 the Company recognized $102,000 in investor relation expense.

During October 2007, the Company issued 150,000 shares of common stock for investor relations services valued at $135,000, fair value. During 2007, the Company recognized $135,000 in investor relations expense.

LIGHTWAVE LOGIC, INC.

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NOTES TO FINANCIAL STATEMENTS

MARCH 31, 2012 AND 2011

NOTE 6 STOCKHOLDERS EQUITY (CONTINUED)

Common Stock and Warrants (Continued)

During November 2007, the Company issued 400,000 shares of common stock under the 2007 Stock Option Plan to the acting Chief Executive Officer for services rendered valued at $288,000, fair value. The Company recognized $288,000 in consulting expense during 2007.

During March 2007, the Company issued a warrant to purchase 100,000 shares of common stock for consulting services at an exercise price of $0.25 per share. The warrant was valued at $63,065 using the Black-Scholes Option Pricing Formula and expensed over the life of the contract associated with the consulting services, which is one year. The consulting expense recognized during 2008 and 2007 is $10,885 and $52,180. In April 2010, the warrant was exercised to purchase 100,000 shares of common stock for proceeds of $25,000.

During April 2007, the Company issued warrants to purchase 900,000 shares of common stock for consulting services at an exercise price of $0.25 per share. The warrants were valued at $604,416 using the Black-Scholes Option Pricing Formula and expensed over the life of the contracts associated with the consulting services, which is one year. The consulting expense recognized during 2008 and 2007 is $170,451 and $433,966. In July 2008, the warrant was partially exercised to purchase 20,000 shares of common stock for proceeds of $5,000. In April 2010, the warrant was partially exercised to purchase 380,000 shares of common stock for proceeds of $95,000. The remaining warrant to purchase 500,000 shares of common stock is still outstanding as of March 31, 2012.

During May 2007, the Company issued a warrant to purchase 150,000 shares of common stock for consulting services at an exercise price of $0.25 per share. The warrant was valued at $84,390 using the Black-Scholes Option Pricing Formula and expensed over the life of the contract associated with the consulting services, which is one year. The consulting expense recognized during 2008 and 2007 is $31,444 and $52,946. In April 2010, the warrant was exercised to purchase 150,000 shares of common stock for proceeds of $37,500.

During October 2007, the Company issued a warrant to purchase 100,000 shares of common stock at a purchase price of $0.25 per share for accounting services rendered. The warrant was valued at $61,449 using the Black-Scholes Option Pricing Formula. The Company recognized $61,449 in accounting expense during 2007. The warrant is still outstanding as of March 31, 2012.

During October 2007, the Company issued a warrant to purchase 67,200 shares of common stock at a purchase price of $0.25 per share for consulting services rendered. The warrant was valued at $52,292 using the Black-Scholes Option Pricing Formula. During 2007, the Company recognized $52,292 in consulting expense. In October 2010, the warrant was exercised to purchase 67,200 shares of common stock for proceeds of $16,800.

During December 2007, the Company issued a warrant to purchase 25,000 shares of common stock at a purchase price of $0.50 per share for accounting services rendered. The warrant was valued at $13,646 using the Black-Scholes Option Pricing Formula and expensed over the life of the contract, which is one year. The Company recognized $12,487 and $1,159 in consulting expense during 2008 and 2007. In June 2010, the warrant was exercised to purchase 25,000 shares of common stock for proceeds of $12,500.

LIGHTWAVE LOGIC, INC.

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NOTES TO FINANCIAL STATEMENTS

MARCH 31, 2012 AND 2011

NOTE 6 STOCKHOLDERS EQUITY (CONTINUED)

Common Stock and Warrants (Continued)

During November 2007, under the 2007 Employee Stock Option Plan, the Company issued options to purchase 1,752,000 shares of common stock at a purchase price of $0.72 per share. The options were valued at $1,045,077 using the Black-Scholes Option Pricing Formula. During 2008, an option to purchase 750,000 shares of common stock, of which 125,000 shares were vested, forfeited. The expense recognized during 2010, 2009, 2008 and 2007 is $174,866, $199,233, $286,803 and $41,653. The options are still outstanding as of March 31, 2012.

In January 2008, under the 2007 Employee Stock Option Plan, the Company issued an option to purchase 100,000 shares of common stock at a purchase price of $0.72 per share. The option was valued at $59,490, fair value, using the Black-Scholes Option Pricing Formula and is being recognized based on vesting terms over a three year period. The expense recognized during 2011, 2010, 2009 and 2008 is $285, $14,873, $13,582, and $30,750. The options are still outstanding as of March 31, 2012.

During 2008, the Company issued 690,001 shares of common stock and warrants to purchase 345,001 shares of common stock for proceeds of $414,000 in accordance to a private placement memorandum issued on October 3, 2007. Pursuant to the terms of the offerings, up to 25 units were offered at the purchase price of $60,000 per unit, with each unit comprised of 100,000 shares and a warrant to purchase 50,000 shares of common stock at $1.00 per share. During 2009 and 2008, the warrant was partially exercised to purchase 25,834 and 20,000 shares of common stock for proceeds of $25,834 and $20,000. In April 2010, the warrant was partially exercised to purchase 282,500 shares of common stock for proceeds of $282,500. During the six month ending June 30, 2010, the remaining warrants to purchase 16,667 shares of common stock expired.

During March 2008, the Company issued a warrant to purchase 400,000 shares of common stock as an addendum to the original contract for management consulting services provided by a related party, valued at $332,000, fair value using Black-Scholes Option Pricing Formula, vesting immediately. This contract was recorded as a contra-equity deferred charges account and is amortized over one year beginning February 28, 2008, the term of the contract. For the year ending December 31, 2009 and 2008, the Company recognized $55,330 and $276,670 of management consulting expense. In January 2009, the warrant was fully exercised to purchase 400,000 shares of common stock for

proceeds of $400.

During March 2008, the Company issued 100,000 shares of common stock for legal services to a related party valued at $75,000, fair value. The Company recognized $75,000 of legal expense for the year ending December 31, 2008.

During April 2008, the Company issued a warrant to purchase 600,000 shares of common stock at a purchase price of $0.73 per share for consulting services rendered. The warrant was valued at $976,193, fair value, using the Black-Scholes Option Pricing Formula, vesting immediately. For the year ended December 31, 2008, the Company recognized $976,193 in consulting expense. The warrant is still outstanding as of March 31, 2012.

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NOTES TO FINANCIAL STATEMENTS

MARCH 31, 2012 AND 2011

NOTE 6 STOCKHOLDERS EQUITY (CONTINUED)

Common Stock and Warrants (Continued)

In July 2008, the Company issued options to purchase 200,000 shares of common stock at a purchase price of $1.75 per share to members of the board of directors, under the 2007 Employee Stock Option Plan. Using the Black-Scholes Option Pricing Formula, the options were valued at $296,247, fair value, vesting 50,000 immediately and the remaining in annual equal installments of 50,000 over the next three years. The expense is being recognized based on vesting terms over a three year period. The expense recognized during 2011, 2010, 2009 and 2008 is $39,829, $74,061, $67,840 and $114,519. The options are still outstanding as of March 31, 2012.

In August 2008, under the 2007 Employee Stock Option Plan, the Company issued options to purchase 550,000 and 1,050,000 shares of common stock at a purchase price of $1.42 and $1.75 per share to members of the board of directors and the Chief Executive Officer, vesting 212,500 immediately and the remaining in annual equal installments of 112,500 over the next three years and vesting in quarterly equal installments of 87,500 commencing November 1, 2008, respectively. The options were valued at $2,176,201, fair value, using the Black-Scholes Option Pricing Formula and are being recognized based on vesting terms over a three year period. The expense recognized during 2011, 2010, 2009 and 2008 is $383,881, $643,812, $623,246 and $525,263. The options are still outstanding as of March 31, 2012.

In August 2008, the Company issued 200,000 shares of common stock under the 2007 Stock Option Plan to its new Chief Executive Officer as part of the employment agreement valued at $360,000, fair value. The Company recognized $360,000 in consulting expense for the year ending December 31, 2008.

In 2008, January through August warrant holders exercised warrants to purchase 270,000 shares at $0.50 per share for proceeds of $135,000.

On October 28, 2008, the Company s board of directors authorized the Company to raise up to $600,000 of capital through an Adjusted Common Stock Offering to certain warrant holders. This offering provided eligible warrant holders with the opportunity to purchase four (4) shares of common stock for each dollar invested pursuant to their existing warrant agreement. As of December 31, 2008, warrants to purchase 641,080 shares of common stock were exercised with proceeds of $160,270. For the three month period ending March 31, 2009, warrants to purchase 1,279,336 shares of common stock were exercised with proceeds of $319,834. In January 2009, the term of the 2008 Adjusted Common Stock offering was extended until January 31, 2009.

In November 2008, the Company issued an option to purchase 250,000 shares of common stock under the 2007 Stock Option Plan at a purchase price of $.65 per share to a new member of its board of directors. Using the Black-Scholes Option Pricing Formula, the options were valued at $125,911, fair value, vesting 62,500 immediately and the remaining in annual equal installments of 62,500 over the next three years. The expense is being recognized based on vesting terms over a three year period. The expense recognized during 2011, 2010, 2009 and 2008 is $26,648, $31,478, $61,346 and $6,439. In January 2012, the option was exercised to purchase 250,000 shares of common stock for proceeds of $162,500.

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NOTES TO FINANCIAL STATEMENTS

MARCH 31, 2012 AND 2011

NOTE 6 STOCKHOLDERS EQUITY (CONTINUED)

Common Stock and Warrants (Continued)

In January 2009, an employee was granted with an option to purchase up to 25,000 shares of common stock at a purchase price of $.25 per share. Using the Black-Scholes Option Pricing Formula, the options were valued at valued at $13,136, fair value. These options expire in 5 years and vest immediately. The expense recognized during 2009 is $13,136. In May 2010, the option was partially exercised to purchase 15,000 shares of common stock for proceeds of $3,750. As of March 31, 2012, options to purchase 10,000 shares of common stock are still outstanding.

During January 2009, the Company issued 100,000 shares of common stock to an officer, under the 2007 Stock Option Plan, for services rendered valued at $58,000, fair value.

During January 2009, the Company issued 100,000 shares of common stock for legal services to a related party valued at $25,000, to settle accounts payable for $10,000 and $15,000 for legal services.

During January 2009, the officers, directors, and employees of the Company were each given the right to purchase from the Company s 2007 Employee Stock Plan up to 40,000 shares of common stock at a purchase price of $.25 per share, 400,000 shares in the aggregate, all of which were valued at $132,058, fair value using the Black-Scholes Option Pricing Formula. The rights to purchase vested immediately. A total of 180,550 shares were purchased pursuant to the rights to purchase with total proceeds of $35,138 and a common stock receivable of $10,000 which was paid in May, 2009. The rights to purchase the remaining 219,450 shares expired on January 31, 2009.

At December 31, 2008 the Company had accrued officer salaries and payroll taxes of $98,205. On February 19, 2009, two officers, who are also shareholders, agreed to waive their rights to unpaid wages and salary amounting to $52,129. Accordingly in the first quarter 2009, the accrued expense was adjusted from $98,205 to $42,088 with the $52,129 treated as contributed capital and $3,988 reversed from payroll taxes.

In February 2009, an employee was granted with an option to purchase up to 25,000 shares of common stock at a purchase price of $.45 per share. Using the Black-Scholes Option Pricing Formula, the options were valued at valued at $9,583, fair value. These options expire in 5 years and vest immediately. The expense recognized during 2009 is $9,583. The options are still outstanding as of March 31, 2012.

During June 2009, in accordance to private placement memorandum, the Company issued 2,479,500 shares of common stock for proceeds of $855,000 dated June 10, 2009. Pursuant to the terms of the offering, up to 18 units were offered at the offering price of $50,000 per unit, with each unit comprised of 145,000 shares to purchase at $0.34 per share.

During June 2009, the Company issued a warrant to purchase 464,000 shares of common stock at a purchase price of $0.34 per share for accounting services rendered. The warrant was valued at $391,342 using the Black-Scholes Option Pricing Formula, vesting 46,400 immediately and the remaining on equal monthly installments of 23,200 over the next eighteen months. The warrant expires in 5 years. The expense is being recognized based on service terms of the agreement over a twenty two month period. The expense recognized during 2010 and 2009 is $213,459 and $177,883. In April 2010, the warrant was partially exercised to purchase 10,000 shares of common stock for proceeds of $3,450. In February 2012, the warrant was partially exercised to purchase 20,000 shares of common stock for proceeds of $6,900. As of March 31, 2012, warrants to purchase 434,000 shares of common stock are still outstanding.

LIGHTWAVE LOGIC, INC.

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NOTES TO FINANCIAL STATEMENTS

MARCH 31, 2012 AND 2011

NOTE 6 STOCKHOLDERS EQUITY (CONTINUED)

Common Stock and Warrants (Continued)

In June 2009, an employee was granted with an option to purchase up to 25,000 shares of common stock at a purchase price of $.34 per share. Using the Black-Scholes Option Pricing Formula, the options were valued at valued at $21,085, fair value. These options expire in 5 years and vest immediately. The expense recognized during 2009 is $21,085. The option is still outstanding as of March 31, 2012.

During June 2009, the Company issued 145,000 shares of common stock for legal services to a related party valued at $50,000, to settle accounts payable for $35,000 and $15,000 for legal services.

During June 2009, the Company issued 116,000 shares of common stock for accounting services valued at $40,000, fair value. The Company recognized $40,000 of accounting expense for the year ending December 31, 2009.

During July 2009, the Company issued 100,000 shares of common stock for investor relation services valued at $75,000, fair value vesting 25,000 shares each quarter commencing July 1, 2009. The investor relation expense recognized during 2010 and 2009 is $37,500 and $37,500.

In January 2010, the Company issued a warrant to purchase 650,000 shares of common stock at a purchase price of $1.51 per share to a new member of its board of directors serving as the Company s full-time non-executive chair of the board of directors. Using the Black-Scholes Option Pricing Formula, the warrants were valued at $1,188,000, fair value, vesting 162,500 immediately and the remaining in annual equal installments of 162,500 over the next three years. The warrant expires in 5 years. During 2011, the warrant to purchase 650,000 shares of common stock, of which 487,500 shares were vested, forfeited. The consulting expense recognized during 2011 and 2010 is $306,765 and $580,167. The warrant to purchase 487,500 shares of common stock is still outstanding as of March 31, 2012.

In March 2010, the Company issued a warrant to purchase 150,000 shares of common stock for consulting services at an exercise price of $0.25 per share. Using the Black-Scholes Option Pricing Formula, the warrants were valued at $279,045, fair value, vesting immediately. The warrant expires in 3 years. The consulting expense recognized during 2011 and 2010 is $64,983 and $214,063. In June and July 2010, the warrant was fully exercised to purchase 150,000 shares of common stock for proceeds of $37,500.

In June 2010, an employee was granted with an option to purchase up to 100,000 shares of common stock at a purchase price of $1.50 per share. Using the Black-Scholes Option Pricing Formula, the options were valued at valued at $131,075, fair value. These options expire in 5 years and vest in equal installments of 12,500 over the next two years commencing August 1, 2010. The expense recognized during 2011 and 2010 is $65,447 and $27,434. For the three month ending March 31, 2012 and 2011, the Company recognized $16,317 and $16,138 of expense. The options are still outstanding as of March 31, 2012.

LIGHTWAVE LOGIC, INC.

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NOTES TO FINANCIAL STATEMENTS

MARCH 31, 2012 AND 2011

NOTE 6 STOCKHOLDERS EQUITY (CONTINUED)

Common Stock and Warrants (Continued)

During 2010, the Company issued 1,500,000 shares of common stock and warrants to purchase 375,000 shares of common stock with 156,250 warrants expiring September 2011 and 218,750 warrants expiring December 2011 for proceeds of $1,500,000 in accordance to a private placement memorandum as amended on September 14, 2010. Pursuant to the terms of the offerings, up to 30 units were offered at the purchase price of $50,000 per unit, with each unit comprised of 50,000 shares and a warrant to purchase 12,500 shares of common stock at $1.25 per share. During September 2011, all warrants were extended one year expiring September 2012 and December 2012. In January 2012, the warrant was partially exercised to purchase 40,000 shares of common stock for proceeds of $50,000. The remaining warrants to purchase 335,000 shares of common stock at $1.25 per share are still outstanding as of March 31, 2012.

Effective July 8, 2010, the number of shares of the Company s common stock available for issuance under the 2007 Employee Stock plan was increased from 3,500,000 to 6,500,000 shares.

During August 2010, the Company issued 4,800 shares of common stock for investor relations services valued at $6,000, fair value. The Company recognized $6,000 of investor relations expense for the year ending December 31, 2010.

In November 2010, the board of directors approved a grant to employees of options to purchase up to 250,000 shares of common stock at a purchase price of $1.00 per share. These options were granted on December 13, 2010. Using the Black-Scholes Option Pricing Formula, the options were valued at $283,787, fair value. These options expire in 5 years with 125,000 vesting on December 13, 2010 and 125,000 vesting on June 13, 2011. The expense recognized during 2011 and 2010 is $127,080 and $156,707. The options are still outstanding as of March 31, 2012.

In November 2010, the board of directors approved a grant to employees of options to purchase up to 35,000 shares of common stock at a purchase price of $1.00 per share. These options were granted on December 13, 2010. Using the

Black-Scholes Option Pricing Formula, the options were valued at $39,730, fair value. These options expire in 5 years and vest on December 13, 2010. The expense recognized during 2010 is $39,730. The options are still outstanding as of March 31, 2012.

In November 2010, the board of directors approved a grant to three outside directors of options to purchase up to 300,000 shares of common stock at a purchase price of $1.00 per share. These options were granted on December 13, 2010. Using the Black-Scholes Option Pricing Formula, the options were valued at valued at $340,545, fair value. These options expire in 5 years and vest 75,000 on December 13, 2010 and the remaining in equal annual installments of 75,000 over the next three years commencing November 4, 2011. The expense recognized during 2011 and 2010 is $85,056 and $89,565. For the three month ending March 31, 2012 and 2011, the Company recognized $21,207 and $20,973 of expense. The options are still outstanding as of March 31, 2012.

In November 2010, 5,000 shares of common stock were issued for investor relation services valued at $4,650, fair value. The Company recognized $4,650 of investor relations expense for the year ending December 31, 2010.

During December 2010, the Company issued 10,000 shares of common stock for investor relations services valued at $12,000, fair value. The Company recognized $12,000 of investor relations expense for the year ending December 31, 2010.

LIGHTWAVE LOGIC, INC.

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NOTES TO FINANCIAL STATEMENTS

MARCH 31, 2012 AND 2011

NOTE 6 STOCKHOLDERS EQUITY (CONTINUED)

Common Stock and Warrants (Continued)

In January 2011, the Company issued a warrant to a related party to purchase 10,000 shares of common stock for legal services at an exercise price of $1.25 per share. Using the Black-Scholes Option Pricing Formula, the warrants were valued at $10,453, fair value. These warrants expire in 3 years and vest immediately. The expense recognized during 2011 is $10,453. The warrants are still outstanding as of March 31, 2012.

In January 2011, the Company issued a warrant to purchase 25,000 shares of common stock for research and development at an exercise price of $1.25 per share. Using the Black-Scholes Option Pricing Formula, the warrants were valued at $26,132, fair value. These warrants expire in 3 years and vest immediately. The expense recognized during 2011 is $26,132. The warrants are still outstanding as of March 31, 2012.

During March 2011, the Company issued 10,000 shares of common stock for investor relations expense valued at $14,500, fair value. The Company recognized $14,500 of investor relations expense for the year ending December 31, 2011.

During April 2011, the Company issued warrants to purchase 150,000 shares of common stock at a purchase price of $1.18 per share for accounting services rendered commencing January 1, 2011. The warrant was valued at $146,425 using the Black-Scholes Option Pricing Formula, vesting 37,500 immediately and the remaining on equal monthly installments of 9,375 over the next twelve months expiring in 5 years. The expense is being recognized based on service terms of the agreement over a sixteen month period. The accounting expense recognized during 2011 is $109,820. For the three month ending March 31, 2012 and 2011, the Company recognized $27,455 and $27,455 of expense. The warrants are still outstanding as of March 31, 2012.

In May 2011, the board of directors approved a grant to a new outside director of an option to purchase up to 200,000 shares of common stock at a purchase price of $1.12 per share. Using the Black-Scholes Option Pricing Formula, the option was valued at $193,686, fair value. The option expires in 5 years and vests 50,000 immediately and the

remaining in annual equal installments of 50,000 over the next three years. The expense recognized during 2011 is 79,702. For the three month ending March 31, 2012, the Company recognized $12,061 of expense. As of March 31, 2012, options to purchase 200,000 shares of common stock are still outstanding.

In May 2011, the Company has signed an agreement with an institutional investor to sell up to $20 million of common stock. Under the agreement subject to certain conditions and at the Company's sole discretion, the institutional investor has committed to invest up to $20 million in the Company's common stock over a 30-month period. The Company filed a registration statement with the U.S. Securities and Exchange Commission covering the resale of the shares that may be issued to the institutional investor. The institutional investor is obligated to make purchases as the Company directs in accordance with the agreement, which may be terminated by the Company at any time, without cost or penalty. Sales of shares will be made in specified amounts and at prices that are based upon the market prices of the Company's common stock immediately preceding the sales to the institutional investor. The Company has issued 150,830 shares of common stock to the institutional investor as an initial commitment fee valued at $162,896, fair value and 301,659 shares of common stock are reserved for additional commitment fees to the institutional investor in accordance with the terms of the agreement. During June, 2011 through March, 2012, the institutional investor purchased 2,175,034 shares of common stock for proceeds of $3,399,997 with $200,000 settling April 2, 2012. The Company issued 51,288 shares of common stock as additional commitment fee, valued at $105,306, fair value, leaving 250,371 in reserve for additional commitment fees. For the three month ending March 31, 2012, the institutional investor purchased 1,989,849 shares of common stock for proceeds of $3,199,998 with $200,001 settling April 2, 2012 and the Company issued 48,271 shares of common stock as additional commitment fee, valued at $101,836, fair value.

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NOTES TO FINANCIAL STATEMENTS

MARCH 31, 2012 AND 2011

NOTE 6 STOCKHOLDERS EQUITY (CONTINUED)

Common Stock and Warrants (Continued)

During June 2011, the Company issued 10,000 shares of common stock for investor relations expense valued at $10,400, fair value. The Company recognized $10,400 of investor relations expense for the year ending December 31, 2011.

In August 2011, the board of directors approved a grant to a new employee of an option to purchase up to 150,000 shares of common stock at a purchase price of $1.01 per share. Using the Black-Scholes Option Pricing Formula, the option was valued at $123,241, fair value. The option expires in 5 years and vests in equal quarterly installments of 12,500 over the next three years beginning November 1, 2011. The expense recognized during 2011 is 17,204. For the three month ending March 31, 2012, the Company recognized $10,233 of expense. As of March 31, 2012, options to purchase 150,000 shares of common stock are still outstanding.

During September 2011, the Company issued 10,000 shares of common stock for investor relations expense valued at $14,500, fair value. The Company recognized $14,500 of investor relations expense for the year ending December 31, 2011.

During 2011, the Company issued 2,018 shares of common stock to a director serving as a member of the Company s Operations Committee valued at $2,163, fair value. The Company recognized $2,163 of expense for the year ending December 31, 2011.

During 2011, the Company issued 1,000,000 shares of common stock and warrants to purchase 1,000,000 shares of common stock expiring September 2013 for proceeds of $1,000,000 in accordance to a private placement memorandum dated August 26, 2011. Pursuant to the terms of the offerings, up to 4 units were offered at the purchase price of $250,000 per unit, with each unit comprised of 250,000 shares and a warrant to purchase 125,000

shares of common stock at $1.00 per share and a warrant to purchase 125,000 shares of common stock at $1.25 per share. The warrants to purchase 500,000 shares of common stock at $1.00 and the warrants to purchase 500,000 shares of common stock at $1.25 per share are still outstanding as of March 31, 2012.

In November 2011, the board of directors approved a grant to a new employee of an option to purchase up to 150,000 shares of common stock at a purchase price of $0.63 per share. Using the Black-Scholes Option Pricing Formula, the option was valued at $78,764, fair value. The option expires in 5 years and vests in equal quarterly installments of 12,500 over the next three years beginning February 1, 2012. The expense recognized during 2011 is $4,384. For the three month ending March 31, 2012, the Company recognized $6,540 of expense. As of March 31, 2012, options to purchase 150,000 shares of common stock are still outstanding.

In December 2011, the board of directors approved a grant to the member of its board of directors serving as the Company s non-executive chair of the board of directors of an option to purchase up to 250,000 shares of common stock at a purchase price of $1.01 per share. Using the Black-Scholes Option Pricing Formula, the option was valued at $205,197, fair value. The option expires in 5 years and vests 62,500 immediately and the remaining in annual equal installments of 62,500 over the next three years. The expense recognized during 2011 is$53,124. For the three month ending March 31, 2012, the Company recognized $12,778 of expense. As of March 31, 2012, options to purchase 250,000 shares of common stock are still outstanding.

LIGHTWAVE LOGIC, INC.

(A Development Stage Company)

NOTES TO FINANCIAL STATEMENTS

MARCH 31, 2012 AND 2011

NOTE 6 STOCKHOLDERS EQUITY (CONTINUED)

Common Stock and Warrants (Continued)

In December 2011, the board of directors approved a grant to a senior advisor of a warrant to purchase up to 150,000 shares of common stock at a purchase price of $1.30 per share. Using the Black-Scholes Option Pricing Formula, the option was valued at $158,415, fair value. The warrant expires in 5 years and vests 37,500 immediately and the remaining in annual equal monthly installments of 9,375 over the next year. The expense recognized during 2011 is $1,288. For the three month ending March 31, 2012, the Company recognized $39,067 of expense. As of March 31, 2012, warrants to purchase 150,000 shares of common stock are still outstanding.

During February 2012, the Company issued 1,406 shares of common stock to a director serving as a member of the Company s Operations Committee valued at $1,607, fair value. For the three month ending March 31, 2012, the Company recognized $1,607 of expense.

In March 2012, the board of directors approved a grant to an employee of an option to purchase up to 100,000 shares of common stock at a purchase price of $1.69 per share. Using the Black-Scholes Option Pricing Formula, the option was valued at $168,909, fair value. The option expires in 10 years and vests 25,000 immediately and the remaining vest 25,000 in six months, nine months and twelve months from date of grant. The option is expensed over the vesting terms. For the three month ending March 31, 2012, the Company recognized $44,309 of expense. As of March 31, 2012, options to purchase 100,000 shares of common stock are still outstanding.

In March 2012, the board of directors approved a grant to an employee of an option to purchase up to 25,000 shares of common stock at a purchase price of $1.69 per share. Using the Black-Scholes Option Pricing Formula, the option was valued at $42,227, fair value. The option expires in 10 years with 12,500 vesting immediately and 12,500 vesting in six months from date of grant. The option is expensed over the vesting terms. For the three month ending March 31, 2012, the Company recognized $21,798 of expense. As of March 31, 2012, options to purchase 25,000 shares of common stock are still outstanding.

In March 2012, the Company issued a warrant to purchase up to 10,000 shares of common stock for legal services at an exercise price of $1.69 per share. Using the Black-Scholes Option Pricing Formula, the warrants were valued at $13,709, fair value. These warrants expire in 5 years and vest immediately and are being expensed over the service period. For the three month ending March 31, 2012, the Company recognized $6,855 of legal expense. As of March 31, 2012, the warrants to purchase 10,000 shares of common stock are still outstanding.

LIGHTWAVE LOGIC, INC.

(A Development Stage Company)

NOTES TO FINANCIAL STATEMENTS

MARCH 31, 2012 AND 2011

NOTE 7 STOCK BASED COMPENSATION

The Company uses the Black-Scholes option pricing model to calculate the grant-date fair value of an award, with the following assumptions for 2012 and 2011: no dividend yield in both years, expected volatility, based on the Company s historical volatility, 217% in 2012 and between 119% and 125% in 2011, risk-free interest rate 2.26% in 2012 and between 0.96% and 2.15% in 2011 and expected option life of five to ten years in 2012 and three to five years in 2011.

As of March 31, 2012, there was $850,547 of unrecognized compensation expense related to non-vested market-based share awards that is expected to be recognized through December 2014.

The following tables summarize all stock option and warrant activity of the Company since December 31, 2004:

LIGHTWAVE LOGIC, INC.

(A Development Stage Company)

NOTES TO FINANCIAL STATEMENTS

MARCH 31, 2012 AND 2011

	Non-Qualified Stock Options and Warrants Outstanding and Exercisable		
	Number of Shares	Exercise Price	Weighted Average Exercise Price
		$	$
Outstanding, December 31, 2004	-	-	-
		$	$
Granted	680,000	0.25-$2.10	0.99
		$	$
Exercised	(300,000)	0.25	0.25
		$	$
Outstanding, December 31, 2005	380,000	1.40-$2.10	0.68
		$	$
Granted	1,425,000	0.25-$1.00	0.70
		$	$
Cancelled	(260,000)	1.40-$2.10	(0.48)
		$	$
Expired	(70,000)	1.40-$2.00	(0.12)
		$	$
Outstanding, December 31, 2006	1,475,000	0.25-$2.00	0.83
		$	$
Granted	5,768,971	0.25-$0.72	0.48
		$	$
Rescinded	(200,000)	0.50	0.50

		$	$
Forfeited	(125,019)	1.00	1.00
		$	$
Expired	(574,981)	1.00	1.00
		$	$
Outstanding, December 31, 2007	6,343,971	0.25-$2.00	0.48
		$	$
Granted	3,495,001	0.001-$1.75	1.16
		$	$
Expired	(115,000)	0.50-$2.00	0.07
		$	$
Forfeited	(750,000)	0.72	0.72
		$	$
Exercised	(807,770)	0.25-$0.50	0.53
		$	$
Outstanding, December 31, 2008	8,166,202	0.001-$1.75	0.79
		$	$
Granted	939,000	0.25-$0.45	0.30
		$	$
Expired	(1,204,451)	0.25-$1.00	0.61
Forfeited	-		
		$	$
Exercised	(1,488,384)	0.001-$1.00	0.20
		$	$
Outstanding, December 31, 2009	6,412,367	0.25-$1.75	0.83
		$	$
Granted	1,860,000	0.25-$1.51	1.20
		$	$
Expired	(16,667)	1.00	1.00
Forfeited	-	-	-
Exercised	(1,279,700)	$	$

			0.25-$1.00		0.42
		$		$	
Outstanding, December 31, 2010	6,976,000		0.25-$1.75		1.00
		$		$	
Granted	2,085,000		0.63-$1.30		1.09
Expired	-		-		-
		$		$	
Forfeited	(162,500)		1.51		1.51
Exercised	-		-		-
		$		$	
Outstanding, December 31, 2011	8,898,500		0.25-$1.75		1.01
		$		$	
Granted	135,000		1.69		1.69
Expired	-		-		-
Forfeited	-		-		-
		$		$	
Exercised	(310,000)		0.34-$1.25		0.71
		$		$	
Outstanding, March 31, 2012	8,723,500		0.25-$1.75		1.03
		$		$	
Exercisable, March 31, 2012	7,779,750		0.25-$1.75		1.03

LIGHTWAVE LOGIC, INC.

(A Development Stage Company)

NOTES TO FINANCIAL STATEMENTS

MARCH 31, 2012 AND 2011

NOTE 7 STOCK BASED COMPENSATION (CONTINUED)

	Non-Qualified Stock Options and Warrants Outstanding		
Range of Exercise Prices	Number Outstanding Currently Exercisable at March 31, 2012	Weighted Average Remaining Contractual Life	Weighted Average Exercise Price of Options and Warrants Currently Exercisable
$0.25 - $1.75	7,779,750	1.89 Years	$ 1.03

NOTE 8 RELATED PARTY

At March 31, 2012 the Company has accrued salaries to one officer and two beneficial owners of $46,088.

NOTE 9 SUBSEQUENT EVENTS

During April 2012, warrants to purchase 42,500 shares of common stock were exercised with total proceeds of $10,625.

During April 2012, warrants to purchase 357,500 shares of common stock were exercised with total proceeds of $89,375.

During April 2012, warrants to purchase 500,000 shares of common stock were exercised with total proceeds of $125,000.

In April 2012, a warrant to purchase 25,000 shares of common stock at an exercise price of $1.25 per share was voided.

In May, 2012, the board of directors appointed its current Non-Executive Chairman of the board of directors as its new Chief Executive Officer and Executive Chairman of the board of directors and approved a grant of an option to purchase up to 500,000 shares of common stock at a purchase price of $1.30 per share. Using the Black-Scholes Option Pricing Formula, the option was valued at $618,805, fair value. The option expires in 10 years and vests quarterly over one year in equal installments of 125,000 shares per quarter commencing May 1, 2012 and will be expensed over the vesting terms.

During April through May 2012, the institutional investor under the Company s May 2011 agreement purchased 716,987 shares of common stock for proceeds of $800,000. The Company issued 12,068 shares of common stock as additional commitment fee, valued at $15,357, fair value, leaving 238,303 in reserve for additional commitment fees.

Item 2

Management's Discussion and Analysis of Financial Condition and Results of Operations

The following management's discussion and analysis of financial condition and results of operations provides information that management believes is relevant to an assessment and understanding of our plans and financial condition. The following selected financial information is derived from our historical financial statements and should be read in conjunction with such financial statements and notes thereto set forth elsewhere herein and the "Forward-Looking Statements" explanation included herein.

Overview

Lightwave Logic, Inc. (then known as Eastern Idaho Internet Service, Inc.) was organized under the laws of the State of Nevada in 1997, where we engaged in the business of marketing Internet services until June 30, 1998 when our operations were discontinued. We were then inactive until we acquired PSI-TEC Corporation as our wholly owned subsidiary on July 14, 2004, at which time our name was changed to PSI-TEC Holdings, Inc. On October 20, 2006, we completed a parent-subsidiary merger with PSI-TEC Corporation whereby we were the surviving corporation of the merger, and our name was changed to Third-Order Nanotechnologies, Inc. On March 10, 2008, we changed our name to Lightwave Logic, Inc. to better suit our strategic business plan and to facilitate stockholder recognition of our Company and our business. Unless the context otherwise requires, all references to the **Company**, **we**, **our** or **us** other similar terms means Lightwave Logic, Inc., a Nevada corporation.

We are a development stage research and development company. We have developed and are continuing to develop Application Specific Electro-Optic Polymers (ASEOP) and Non-Linear All-Optical Polymers (NLAOP), which have high electro-optic and optical activity. Both types of materials are thermally and photo-chemically stable, which we believe could have utility across a broad range of applications in devices. We engineer our proprietary electro-optic polymers at the molecular level for superior performance, stability, cost-efficiency and ease of processing. We expect our NLAOP polymers to broadly replace more expensive, lower-performance materials that are currently used in, telecommunication, data communications, computing, photovoltaic cells, wireless, and satellite communication networks.

In order to transmit digital information at extremely high-speeds (wide bandwidth) over the Internet, it is necessary to convert the electrical signals produced by a computer into optical signals for transmission over long-distance fiber-optic cable. A molecularly engineered material known as an electro-optic polymer may perform the actual conversion of electricity to an optical signal.

We are currently developing electro-optic polymers that promise performance many times faster than any technology currently available and that have unprecedented thermal stability. High-performance electro-optic materials produced by our Company have demonstrated stability as high as 350 degrees Celsius. Stability above 250 degrees Celsius is necessary for vertical integration into many semi-conductor production lines. In December 2011 one of our non-linear optical polymers demonstrated an unusually high electro-optical effect of

greater than 250 picometers per volt with excellent thermal and photo stability. Independent research laboratories at Photon-X and The University of Colorado confirmed these characteristics.

Our non-linear all optical polymers have demonstrated resonantly enhanced Third-order properties about 2,630 times larger than fused silica, which means that they are very photo-optically active in the absence of an RF layer. In this way they differ from our electro-optical polymers and are considered more advanced next-generation materials.

Our revenue model relies substantially on the assumption that we will be able to successfully develop electro-optic products for applications within the industries described below. When appropriate, we intend to create specific materials for each of these applications and use our proprietary knowledge base to continue to enhance its discoveries.

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Satellite Reconnaissance

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Navigational Systems

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Radar Applications

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Telecommunications

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Optical Interconnects

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Optical Computing

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Optical Limiters

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Entertainment

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Medical Applications

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Solar Panels (Photovoltaic cells)

To be successful, we must, among other things:

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Develop and maintain collaborative relationships with strategic partners;

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Continue to expand our research and development efforts for our products;

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Develop and continue to improve on our manufacturing processes and maintain stringent quality controls;

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Produce commercial quantities of our products at commercially acceptable prices;

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Rapidly respond to technological advancements;

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Attract, retain and motivate qualified personnel; and

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Obtain and retain effective intellectual property protection for our products and technology.

We believe that Moore's Law (a principle which states the number of transistors on a silicon chip doubles approximately every eighteen months) will create markets for our high-performance electro-optic material products.

Plan of Operation

Since our inception, we have been engaged primarily in the research and development of our polymer materials technologies and potential products. We are devoting significant resources

to engineer next-generation electro-optic polymers for future applications to be utilized by electro-optic device manufacturers, such as telecommunications component and systems manufacturers, networking and switching suppliers, semiconductor companies, aerospace companies and government agencies. We expect to continue to develop products that we intend to introduce to these rapidly changing markets and to seek to identify new markets. We expect to continue to make significant operating and capital expenditures for research and development activities.

As we move from a development stage company to a product vendor, we expect that our financial condition and results of operations will undergo substantial change. In particular, we expect to record both revenue and expense from product sales, to incur increased costs for sales and marketing and to increase general and administrative expense. Accordingly, the financial condition and results of operations reflected in our historical financial statements are not expected to be indicative of our future financial condition and results of operations.

On August 8, 2006, we contracted with Triple Play Communications Corporation, a design and market consulting company, to deliver a comprehensive market opportunity assessment report for high-speed 40G (commercial) & 100G+ (military/aerospace) modulators and system applications.

In August, 2006, we entered into a co-location agreement with InPlane Photonics, a New Jersey-based micro-optics company that allowed our scientists to establish a pre-production line in order to test and integrate our organic materials into waveguide devices and system prototypes as a first step toward product commercialization. This agreement was terminated at the end of January 2007 so that we could focus on pursuing a strategic relationship with Photon-X LLC, a Pennsylvania-based firm with extensive experience in polymer waveguide processing. We entered into a non-binding memorandum of understanding with Photon-X, LLC in December 2006 to work towards creating a fee for services agreement with Photon-X, LLC to design, develop, produce and market electro-optic components based upon our polymer technology, which we ultimately finalized in March 2007. This agreement with Photon-X, LLC enables our Company access to a full suite of fabrication facilities capable of producing commercial quantities of precision micro-optic devices such as high-speed (40GHz) telecom modulators, optical filters, and optical interconnects important to military and civilian global information movement and management markets.

On September 25, 2006, we obtained independent laboratory results that confirmed the thermal stability of our Perkinamine™ electro-optic materials. Thermal stability as high as 350 degrees Celsius was confirmed, significantly exceeding many other commercially available high performance electro-optic materials, such as CLD-1 that exhibits thermal degradation in the range of 250 degrees Celsius to 275 degrees Celsius. This high temperature stability of our materials eliminates a major obstacle to vertical integration of electro-optic polymers into standard microelectronic manufacturing processes (e.g. wave/vapor-phase soldering) where thermal stability of at least 250 degrees Celsius is required. In independent laboratory tests, ten-percent material degradation, a common evaluation of overall thermal stability, did not occur until our Perkinamine™ materials base was exposed to temperatures as high as 350 degrees Celsius, as determined by Thermo-Gravimetric Analysis (TGA). The test results supported our

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Company's progress to introduce our materials into commercial applications such as optical interconnections, high-speed telecom and datacom modulators, and military/aerospace components.

On September 26, 2006, we were awarded the 2006 Electro-Optic Materials Technology Innovation of the Year Award by Frost & Sullivan. Frost & Sullivan's Technology Innovation of the Year Award is bestowed upon candidates whose original research has resulted in innovations that have, or are expected to bring, significant contributions to multiple industries in terms of adoption, change, and competitive posture. This award recognizes the quality and depth of our Company's research and development program as well as the vision and risk-taking that enabled us to undertake such an endeavor.

In July 2007, our Company developed an innovative process to integrate our unique architecture into our anticipated commercial devices, whereby dendritic spacer systems are attached to its core chromophore. In the event we are successful in developing a commercially viable product, we believe these dendrimers will reduce the cost of manufacturing materials and reduce the cost and complexity of tailoring the material to specific customer requirements.

In January 2008, we retained TangibleFuture, Inc., a San Francisco based technology analysis and business development consulting company, to generate an independent assessment of our business opportunities in the fiber-optic telecommunications and optical computing sectors and develop strategies to penetrate those potential markets.

In March 2008, we commenced production of our first prototype photonic chip, which we delivered to Photon-X, LLC to fabricate a prototype polymer optical modulator and measure its technical properties. As a result of delays caused by engineering setbacks related to our material production, the production of our first prototype photonic chip was temporarily halted, along with the completion of our proof of concept tests that were being administered by Dr. Robert Norwood at the University of Arizona Photonics Department. In order to address this issue, our Chief Technology Officer Dr. David F. Eaton s role and responsibilities with the Company were significantly expanded, and we added two veteran synthetic chemists to our science and technology team. We have since overcome a majority of these engineering setbacks and we are currently in the continual process of extensive testing for material performance, including, among other tests, the (r33) Teng-Man testing protocol.

In June 2009, we released test results conducted by Dr. C.C. Teng that re-confirmed our previous test results, and we intend to deliver completed independent validated material performance test results, including the (r33) Teng-Man testing protocol, as they become ripe for release.

In August 2009, Photon-X, LLC commenced a compatible study, process sequences and fabricated wafers/chips containing arrays of phase modulators. The first one hundred plus modulators were completed at the end of October 2009, and were successfully characterized for insertion loss, Vpi, modulation dynamic range and initial frequency response in March 2010. The multi-step manufacturing process we utilized to fabricate our modulators involved exposing our proprietary Perkinamine™ materials to extreme conditions that are typically found in standard

commercial manufacturing settings. Our step-by-step analysis throughout the fabrication process demonstrated to us that our Perkinamine™ materials could successfully withstand each step of the fabrication process without damage. We anticipated completing the development and building of functional prototype 40 Gb/s and 100 Gb/s modulators during the second quarter of 2010. However, we incurred delays in this process due to slower than expected material production within our laboratories, delays caused by the production of the modulator and testing procedures, and with the current application driven projects and evaluations. The completion of the modulator design will most likely be pushed out to at least the fourth quarter of 2012 in order for us to focus on current application driven projects and evaluations that will more quickly generate revenue for our Company. However, our current schedule has the completion of our newly designed prototype modulator using our Perkinamine Indigo™ materials anticipated during the third quarter of 2012 subject to the successful characterization of those materials both on a stand alone basis and in a modulator design.

In August 2009, we retained Perdix, Inc. in Boulder, Colorado to help us identify and build prototype products for high growth potential target markets in fiber optic telecommunications systems. During October 2009, we initiated the development and production of our prototype amplitude modulator, which can ultimately be assembled into 1- and 2-dimensional arrays that are useful for optical computing applications, such as encryption and pattern recognition. We expected our initial prototype amplitude modulator to be completed by the end of the second quarter 2010. We continued to work with our strategic partner on this device throughout 2010 and discovered its design had limitations so we terminated the program to take a different design approach. We embarked on the new design approach in 2011 with another partner, Boulder Nonlinear Systems (BNS). A feasibility study with the new design partner was started in late 2011. This research and development program will continue through 2012.

In November 2009, we introduced our new prototype phase modulator to the Gilder/Forbes Telecosm Conference in Tarrytown, New York and discussed how Lightwave s material could be spun onto silicon chips prior to stacking and used for input, output, and interconnect due to the stability of Lightwave s electro-optic polymer and Lightwave s recent demonstration that its proprietary Perkinamine ™ materials can survive all of the rigors of standard commercial manufacturing processes. Other applications discussed with the conference attendees included low cost modulators for fiber optic communications, multi-channel modulators for ultra dense wavelength division multiplex systems, and optical computing.

In December 2009, we filed our sixth patent application. The provisional application covers stable free radical chromophores for use in Non-Linear optical applications. The new polymeric electro-optic material has enormous potential in spatial light modulation and all optical signal processing (light switching light).

In January 2010, we entered into an agreement with The University of Alabama at Tuscaloosa to conduct cooperative development, analytical testing, optimization, and scale-up of our proprietary materials platform, which should help shorten the time to market for our new Polymeric Electro-Optic materials. The agreement with The University of Alabama expired March 31, 2012.

In March 2010, we successfully concluded the electrical and optical performance testing stage of our proof of principle prototype phase modulator and began Application Engineering of our technology in customer design environments and working directly with interested large system suppliers to attempt to engineer specific individual product materials and device designs for sale to or by these suppliers.

In October of 2010, we completed the concept stage of a novel design for an advanced optical computing application and moved forward into the design stage with Celestech, Inc. of Chantilly, Virginia. This application is presently on hold by Celestech due to its customer s schedule. Additionally, we are working on three other applications with Celestech, two of which are in white paper design stage. If these projects continue to move forward, they will incorporate one or more of our Company s advanced electro-optical polymer materials.

In October of 2010, we announced the results of testing performed by Lehigh University that demonstrated the Third-order non-linear properties of our proprietary molecules in the Perkinamine NR™ chromophore class. Lehigh University determined that the material was 100 times stronger than the highest off-resonance small molecule currently known. They also determined that it was 2,600 times more powerful than fused silica and demonstrated extremely fast (less than 1 picosecond) photo-induced non-linear response that would be capable of modulation at a rate of 1 THz (terahertz).

In February and April 2011, respectively, the United States Patent Office granted our Company two patents: US Patent No. 7,894,695 covering our Tricyclic Spacer System for Non-Linear Optical Devices and US Patent No. 7,919,619 for Heterocyclical Chromophore Architectures directed to our Perkinamine™ chromophores. These composition of matter patents taken together protect the core of our electro-optical materials portfolio.

In March 2011, we entered into a research and development agreement with the City University of New York s Laboratory for Nano Micro Photonics (LaNMP) to develop Third-order non-linear devices. We believe that the combination of LaNMP s device capabilities together with our materials expertise should accelerate the development of all-optical devices. The agreement ran through the end of 2011. The goal of the project was to fabricate and test slot waveguides embedded with two types of nonlinear optical polymers obtained from our Company. These two polymers were Perkinamine™ and Perkinamine NR™. In CUNY s final report it showed they successfully demonstrated that the Perkinamine and Perkinamine NR survived their 170° C processing temperature without degradation. According to their report, they were successful in one processing run wherein they showed the possibility to realize waveguides with very smooth sidewalls. Reflectivity measurements carried out under optical pumping showed phase shift in the Perkinamine™ material. We now intend to continue research in this area with another organization.

In March 2011, the City University of New York s Laboratory for Nano Micro Photonics (LaNMP) fabricated our first-ever all optical waveguide using one of our Perkinamine™ chromophores. It is anticipated that LaNMP will use this device architecture to develop various all-optical devices including an all-optical transistor.

In March 2011, we announced that the State of Alabama slated to fund a two-year research and development program on advanced solar energy capture and organic photovoltaics. The University of Alabama is exploring the advanced energy capture properties of our Perkinamine™ class of chromophores. Our material absorbs light across a wide range of wavelengths from near infrared into the near ultraviolet. The University intends to explore how to efficiently capture solar radiation with our material.

In December 2011, we announced the discovery of a new material named Perkinamine Indigo™. We believe this represents a major advancement in the field of organic nonlinear optical materials. The material demonstrated an unusually high electro-optical effect of greater than 250 picometers per volt with excellent thermal and photo stability. Independent research laboratories at Photon-X and The University of Colorado confirmed these characteristics. We do, however, have to do a complete characterization of these materials to fully understand what material properties are causing these results before any of our partners will move forward with this material. The major microelectronics company we are working with has also required this characterization before moving forward. However, due to university delays, the major microelectronics company is planning on characterizing the material at their location while we continue our work with CU Boulder and the University of Arizona. The University of Arizona will use their Mach-Zehnder interferometry test method to further characterize our Perkinamine Indigo™ class of materials. They are currently working this process and have asked us to reconfigure our test samples. We expect to deliver new test coupons designed to their technical requirements in May or June 2012.

We ultimately intend to use our next-generation electro-optic polymers for future applications vital to the following industries. We expect to create specific materials for each of these applications as appropriate:

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Satellite Reconnaissance

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Navigational Systems

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Radar Applications

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Telecommunications

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Optical Interconnects

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Optical Computing

.

Optical Limiters

.

Entertainment

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Medical Applications

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Solar Panels (Photovoltaic cells)

In an effort to maximize our future revenue stream from our electro-optic polymer products, our business model anticipates that our revenue stream will be derived from one or some combination of the following: (i) technology licensing for specific product applications; (ii) joint venture relationships with significant industry leaders; or (iii) the production and direct sale of our own electro-optic device components. Our objective is to be a leading provider of proprietary technology and know-how in the electro-optic device markets. In order to meet this

objective, subject to successful testing of our technology and having available financial resources, we intend to:

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Develop electro-optic product devices.

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Continue to develop proprietary intellectual property.

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Streamline our product development process.

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Develop a comprehensive marketing plan.

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Maintain/develop strategic relationships with government agencies, private firms, and academic institutions.

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Attract seasoned executives and science and technology personnel to our Company.

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Expand into a state-of-the-art development, testing and manufacturing facility.

Our Proprietary Products in Development

As part of a two-pronged marketing strategy, our Company is developing several devices, which are in various stages of development that utilize our organic nonlinear optical materials.

They include:

Telecommunications Modulator

We recently began a second-generation design of a unique telecommunications modulator incorporating our newly developed material Perkinamine™ Indigo. We intend to have a working bench-top prototype sometime during 2012 for commercial marketing. We anticipate this modulator will be able to greatly exceed the performance of existing legacy modulators and will allow for improvements in the form of reduced power consumption and reduced device cost.

Spatial Light Modulator

We have been developing a Spatial Light Modulator with Boulder Nonlinear Systems (BNS) utilizing certain Perkinamine™ chromophores. A spatial modulator is a form of optical computer that can perform advanced tasks such as object and facial recognition, by using advanced mathematical calculations known as Fourier Transforms. Our organic nonlinear optical materials can potentially produce update rates of more than a million times per second, which is a significant improvement in processing speed over existing Liquid Crystal Display technology that updates at only 30 times per second. We are currently in the process of coating these modulators with our material for testing. We look forward to the results of this work and will report them when complete.

Optical Filter

We are in preliminary design and fabrication phases of development of an optical filter using our proprietary Perkinamine™ and Perkinamine NR™ materials within a SiNx photonics platform. Initial work has been done in collaboration with City University of New York, but

limitations in their process capabilities have led us to seek alternate fabrication facilities, which are underway at this time.

Optical Limiter

An optical limiter is a device that protects an optical detector (or a human eye) from damage by attack from high power laser weapons. In order to provide protection for these systems, an optical attenuator device with an exceptionally fast reaction time is required. We are utilizing the third-order nonlinearities of our Perkinamine™ and Perkinamine NR™ materials to explore this utility as a potential product. We are currently in the very early stages of feasibility studies in collaboration with Celestech and AFRL, a government agency laboratory.

All-Optical Switch

An all-optical switch is one that enables signals in optical fibers or networks to be selectively switched from one fiber or circuit to another. Many device designs have been developed and commercialized in today s telecom networks to effect optical switching by using mechanical or electrical control elements to accomplish the switching event. Future networks will require all-optical switches that can be more rapidly activated with a low energy and short duration optical control pulse. We are in early development of an all-optical switch in collaboration with a potential customer.

Multi-Channel Optical Modem

We are in an early feasibility study of a multi-wavelength optical modem that will enable a significant increase in Internet capacity over legacy fiber.

Additionally, we must create an infrastructure, including operational and financial systems, and related internal controls, and recruit qualified personnel. Failure to do so could adversely affect our ability to support our operations.

We have incurred substantial net losses since inception. We have satisfied our capital requirements since inception primarily through the issuance and sale of our common stock. During 2004 we raised approximately $529,000 from the issuance of convertible promissory notes, of which $30,000 was converted into common stock of the company during 2004 and the remaining $499,000 converted in 2005. Also, during 2005, we raised an aggregate of $1,000,000

from the private sale of our common stock. During 2006, we raised approximately $425,000 from the private sale of our common stock, of which $200,000 was rescinded during 2007. During 2007, we raised approximately $2,301,524 from the private sale of our common stock. During 2008, we raised approximately $414,000 from the private sale of our common stock and $375,270 from the exercise of outstanding warrants. Through June 30, 2009, we raised approximately $855,000 from the private sale of our common stock. We have also issued shares of our common stock and warrants to purchase shares of our common stock in exchange for services rendered to our company, including professional services. During October 2009 we obtained proceeds of $455,000 from the exercise of outstanding warrants.

During 2010, we raised $1,500,000 from the private sale of our common stock and $539,000 from the exercise of outstanding options and warrants. We also issued shares of our common stock and warrants to purchase shares of our common stock in exchange for services rendered to our company. During 2011, we raised $1,000,000 from the private sale of our common stock and warrants to purchase our common stock. We also issued shares of our common stock and warrants to purchase shares of our common stock in exchange for services rendered to our Company.

Additionally, in May 2011, we signed an agreement with an institutional investor to sell up to $20 million of common stock. Under the agreement subject to certain conditions and at our sole discretion, the institutional investor has committed to invest up to $20 million in our common stock over a 30-month period. We filed a registration statement with the U.S. Securities and Exchange Commission covering the resale of the shares that may be issued to the institutional investor. The institutional investor is obligated to make purchases as we direct in accordance with the agreement, which may be terminated by us at any time, without cost or penalty. Sales of shares are made in specified amounts and at prices that are based upon the market prices of our common stock immediately preceding the sales to the institutional investor. During 2011, the institutional investor purchased 185,185 shares of common stock for proceeds of $200,000. During January 1, 2012 through March 31, 2012, the institutional investor purchased 1,989,849 shares of common stock for proceeds of $3,199,998 with $200,001 settling on April 2, 2012. From April 1, 2012 to May 11, 2012, the institutional investor purchased 716,987 shares of common stock for proceeds of $800,000.

Results of Operations

Comparison of three months ended March 31, 2012 to three months ended March 31, 2011

Revenues

As a development stage research and development company, we had no revenues during the three months ended March 31, 2012 and March 31, 2011. The Company is at various stages with potential customers and expects additional revenues once customers release purchase orders against outstanding proposals or once customers complete product evaluations and product development.

Operating Expenses

Our operating expenses were $769,599 and $926,110 for the three months ended March 31, 2012 and 2011, respectively, for a decrease of $156,511. This decrease in operating expenses was due primarily to a decrease in non

cash amortization of options and warrants and investor relation expenses offset by increases in laboratory electro-optic device prototype design, development and testing expense and wages and salaries.

Included in our operating expenses for the three months ended March 31, 2012 was $472,409 for research and development expenses compared to $466,864 for the three months ended March 31, 2011, for an increase of $5,545. This is primarily due to increases in laboratory

electro-optic device prototype design, development and testing expense and salaries and wages offset by decreases in non-cash stock compensation and stock option amortization.

Research and development expenses currently consist primarily of compensation for employees engaged in internal research, product and application development activities; laboratory operations, outsourced prototype electro-optic device design, development and processing work; customer testing; material testing; fees; costs; and related operating expenses.

We expect to continue to incur substantial research and development expense to develop and commercialize our electro-optic material platform. These expenses will increase as a result of accelerated development effort to support commercialization of our non-linear optical polymer materials technology; subcontracting work to build prototypes; expanding and equipping in-house laboratories; hiring additional technical and support personnel; engaging a senior technical advisor; pursuing other potential business opportunities and collaborations; customer testing and evaluation; and incurring related operating expenses.

Non-cash stock compensation and stock option amortization decreased $87,586 from $236,511 for the three months ended March 31, 2011 to $148,925 for the three months ended March 31, 2012.

Laboratory electro-optic and optical device prototype, development and testing expense increased $65,598 from $48,383 for the three months ended March 31, 2011 to $113,981 for the three months ended March 31, 2012.

Wages and salaries increased $17,491 from $118,324 for the three months ended March 31, 2011 to $135,815 for the three months ended March 31, 2012 primarily due to additional employees hired during 2011 including a full time Chief Technology Officer.

General and administrative expense consists primarily of compensation and support costs for management staff, and for other general and administrative costs, including executive, sales and marketing, investor relations, accounting and finance, legal, consulting and other operating expenses.

General and administrative expenses decreased $162,056 to $297,190 for the three months ended March 31, 2012 compared to $459,246 for the three months ended March 31, 2011. The decrease is due primarily to decrease in non-cash amortization of warrants as part of the employment agreement entered into with the Company s former Chair which ended December 31, 2011 and amortization of warrants for a financial investor advisory board member during

2011 and decrease in investor relations expense offset by increases in wages and salaries.

Non-cash stock compensation decreased $184,786 from $247,626 for the three months ended March 31, 2011 to $62,840 for the three months ended March 31, 2012. This decrease in stock compensation is primarily due to the non cash amortization of warrants as part of the employment agreement entered into with the Company s former Chair which ended December 31, 2011 and amortization of warrants for a financial investor advisory board member during 2011.

Investor relations expense decreased $10,925 from 33,710 for the three months ended March 31, 2011 to $22,785 for the three months ended March 31, 2012.

Wages and salaries increased $36,992 from $28,013 for the three months ended March 31, 2011 to $65,005 for the three months ended March 31, 2012 primarily due to the employment of a Vice President of Sales and Marketing during the fall of 2011.

Legal fees increased $3,765 to $28,762 for the three months ended March 31, 2012 compared to $24,997 for the three months ended March 31, 2011.

We expect general and administrative expense to increase in future periods as we increase the level of corporate and administrative activity, including increases associated with our operation as a public company; and increase expenditures related to the future business development and sales of our products.

Other Income (Expense)

Other income (expense) was ($101,747) for the for the three months ended March 31, 2012 compared to $115 for the three months ended March 31, 2011 for an increased expense of $101,862, relating primarily to the non cash commitment fee associated with the resale of shares to an institutional investor during the three months ended March 31, 2012.

Net Loss

Net loss was $871,346 and $925,995 for the three months ended March 31, 2012 and 2011, respectively, for a decrease of $54,649, primarily resulting from a decrease in non cash amortization of options and warrants and investor relation expenses offset by increases in laboratory electro-optic device prototype design, development and testing expense and wages and salaries and non cash commitment fee associated with the resale of shares to an institutional investor during the three months ended March 31, 2012.

Significant Accounting Policies

Our discussion and analysis of our financial condition and results of operations are based on our financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. On an ongoing basis, we evaluate our estimates based upon historical experience and various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Our actual results may differ materially from these estimates.

We believe our significant accounting policies affect our more significant estimates and judgments used in the preparation of our financial statements. Our Annual Report on Form 10-K

for the year ended December 31, 2011 contains a discussion of these significant accounting policies. There have been no significant changes in our significant accounting policies since December 31, 2011. See our Note 1 in our unaudited financial statements for the three months ended March 31, 2012, as set forth herein.

Liquidity and Capital Resources

During the three months ended March 31, 2012, net cash used in operating activities was $584,335 and net cash used in investing activities was $40,210, which was due primarily to the Company s research and development activities and general and administrative expenditures. Net cash provided by financing activities for the three months ended March 31, 2012 was $3,219,398. At March 31, 2012, our cash and cash equivalents totaled $2,954,677, our assets totaled $3,749,343, our liabilities totaled $196,218, and we had stockholders equity of $3,553,125.

Sources and Uses of Cash

Our future expenditures and capital requirements will depend on numerous factors, including: the progress of our research and development efforts; the rate at which we can, directly or through arrangements with original equipment manufacturers, introduce and sell products incorporating our polymer materials technology; the costs of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights; market acceptance of our products and competing technological developments; and our ability to establish cooperative development, joint venture and licensing arrangements. We expect that we will incur in excess of $2,000,000 of expenditures over the next 12 months. Our cash requirements are expected to increase at a rate consistent with the Company s path to revenue growth as we expand our activities and operations with the objective of commercializing our electro-optic polymer technology during 2012.

Our business does not presently generate the cash needed to finance our current and anticipated operations. We believe we have raised sufficient capital to finance our operations through August 2013; however, we will need to obtain additional future financing after that time to finance our operations until such time that we can conduct profitable revenue-generating activities.

Such future sources of financing may include cash from equity offerings, exercise of stock options, warrants and proceeds from debt instruments; but we cannot assure you that such equity or borrowings will be available or, if available, will be at rates or prices acceptable to us.

In May 2011 we signed our stock purchase agreement with Lincoln Park whereby subject to certain conditions and at our sole discretion, Lincoln Park has committed to purchase up to $20 million of our common stock over a 30-month period. For the three month ending March 31, 2012, Lincoln Park purchased 1,989,849 shares of common stock for proceeds of $3,199,998 with $200,001 settling on April 2, 2012. During June 2011 through March 31, 2012, Lincoln Park purchased 2,175,034 shares of our common stock for proceeds of $3,399,997 with $200,001

settling on April 2, 2012. From April 1, 2012 to May 11, 2012, Lincoln Park purchased 716,987 shares of common stock for proceeds of $800,000.

Lincoln Park is obligated to make purchases as the Company directs in accordance with the purchase agreement, which may be terminated by the Company at any time, without cost or penalty. Sales of shares will be made in specified amounts and at prices that are based upon the market prices of our Company's common stock immediately preceding the sales to Lincoln Park. We expect this financing to provide our Company with sufficient funds to maintain its operations for the foreseeable future. With the additional capital, we expect to achieve a level of revenues attractive enough to fulfill our development activities and adequate enough to support our business model for the foreseeable future. We cannot assure you that we will meet the conditions of the stock purchase agreement with Lincoln Park in order to obligate Lincoln Park to purchase our shares of common stock. In the event we fail to do so, and other adequate funds are not available to satisfy either short-term or long-term capital requirements, or if planned revenues are not generated, we may be required to substantially limit our operations. This limitation of operations may include reductions in capital expenditures and reductions in staff and discretionary costs.

There are no trading volume requirements or restrictions under the purchase agreement, and we will control the timing and amount of any sales of our common stock to Lincoln Park. Lincoln Park has no right to require any sales by us, but is obligated to make purchases from us as we direct in accordance with the purchase agreement. We can also accelerate the amount of common stock to be purchased under certain circumstances. There are no limitations on use of proceeds, financial or business covenants, restrictions on future funding, rights of first refusal, participation rights, penalties or liquidated damages in the purchase agreement. We may terminate the purchase agreement at any time, at our discretion, without any penalty or cost to us. Lincoln Park may not assign or transfer its rights and obligations under the purchase agreement.

We expect that our cash used in operations will increase during 2012 and beyond as a result of the following planned activities:

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The addition of management, sales, marketing, technical and other staff to our workforce;

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Increased spending for the expansion of our research and development efforts, including purchases of additional laboratory and production equipment;

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Increased spending in marketing as our products are introduced into the marketplace;

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Developing and maintaining collaborative relationships with strategic partners;

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Developing and improving our manufacturing processes and quality controls; and

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Increases in our general and administrative activities related to our operations as a reporting public company and related corporate compliance requirements.

Analysis of Cash Flows

For the three months ended March 31, 2012

Net cash used in operating activities was $584,335 for the three months ended March 31, 2012, consisting of payments for research and development, legal, professional and consulting expenses, rent and other expenditures necessary to develop our business infrastructure, offset by $73,377 in warrants issued for services, $145,243 in options issued for services, $103,443 in common stock issued for services, $9,548 in depreciation and patent amortization expenses, ($2,392) in prepaid expenses and other current assets and ($42,208) in accounts payable and accrued expenses.

Net cash used by investing activities was $40,210 for the three months ended March 31, 2012, consisting of $26,518 in cost for intangibles (patents) and $13,692 in asset additions for the lab and research and development activities.

Net cash provided by financing activities was $3,219,398 for the three months ended March 31, 2012 and consisted of $2,999,998 proceeds from sale of common stock to an institutional investor and $219,400 from the exercise of options and warrants.

Inflation and Seasonality

We do not believe that our operations are significantly impacted by inflation. Our business is not seasonal in nature.

Item 4

Controls and Procedures

Evaluation of Disclosure Controls and Procedures. The Company s management, with the participation of the Company s Principal Executive Officer and Principal Financial Officer, evaluated the effectiveness of the Company s disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended) as of March 31, 2012. Based on this evaluation, the Company s Principal Executive Officer and Principal Financial Officer concluded that, as of March 31, 2012 the Company s disclosure controls and procedures were effective, in that they provide reasonable assurance that information required to be disclosed by the Company in the reports that it files or submits under the Securities Exchange Act of 1934, as amended, is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission s rules and forms, and is accumulated and communicated to the Company s management, including the Company s Principal Executive Officer and Principal Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

Changes in Internal Control Over Financial Reporting. There were no changes in our internal control over financial reporting during the quarter ended March 31, 2012 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II OTHER INFORMATION

Item 2

Unregistered Sales of Equity Securities and Use of Proceeds

During the period covered by this report, we sold the following unregistered securities:

Securities issued for services

Date	Security/Value
February 2012	Common stock 1,406 shares of common stock. The common stock was valued at $1,607.
March 2012	Option - 100,000 shares of common stock at $1.69 per share. The option was valued at $168,909 using the Black-Scholes Option Pricing Formula.
March 2012	Option - 25,000 shares of common stock at $1.69 per share. The option was valued at $42,227 using the Black-Scholes Option Pricing Formula.
March 2012	Warrant - 10,000 shares of common stock at $1.69 per share. The warrant was valued at $13,709 using the Black-Scholes Option Pricing Formula.

No underwriters were utilized and no commissions or fees were paid with respect to any of the above transactions. We relied on Section 4(2) of the Securities Act of 1933, as amended, since the transactions did not involve any public offering.

Item 5

Other Information

On April 27, 2012 we entered into a lease with Delaware Technology Park, Inc. to lease approximately 1,999 square feet of laboratory space. The initial period of the lease commenced on May 1, 2012 and it ends on April 30, 2014. A

mutually agreed two-year option period will extend the lease until April 30, 2016. The base rent is $5,270.75 per month.

Item 6

Exhibits

The following exhibits are included herein:

Exhibit No.	Description of Exhibit
10.1	Purchase Agreement, dated as of May 3, 2011, by and between the Company and Lincoln Park Capital Fund, LLC (incorporated by reference to our Form 8-K filed on May 6, 2011).
10.2	Registration Rights Agreement, dated as of May 3, 2011, by and between the Company and Lincoln Park Capital Fund, LLC (incorporated by reference to our Form 8-K filed on May 6, 2011).
10.3	Lease - Delaware Technology Park Premises.

31.1	Certification pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934, as amended, executed by the Principal Executive Officer of the Company.
31.2	Certification pursuant to Rule 13a-14(a) of the Securities Exchange Act of 1934, as amended, executed by the Principal Financial Officer of the Company.
32.1	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, executed by the Principal Executive Officer of the Company.
32.2	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, executed by the Principal Financial Officer of the Company.
101	The following financial information from Lightwave Logic Inc.'s Quarterly Report on Form 10-Q for the quarter ended March 31, 2012, formatted in XBRL (eXtensible Business Reporting Language): (i) Balance Sheets (ii) Statements of Operations (iii) Statements of Stockholders Equity (iv) Statements of Cash Flows, and (v) the Notes to Financial Statements.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

LIGHTWAVE LOGIC, INC.

Registrant

By: /s/ Thomas E. Zelibor
Thomas E. Zelibor,

Chief Executive Officer

Date: May 15, 2012

By: /s/ Thomas E. Zelibor
Thomas E. Zelibor,

Chief Executive Officer

Date: May 15, 2012

By: /s/ Andrew J. Ashton
Andrew J. Ashton,

Treasurer

Date: May 15, 2012

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