Arrayit Corp
Form 10-K
April 15, 2014

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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FORM 10-K

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þ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)

OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2013

or

o TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d)

OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from: _____ to _____

_____

Arrayit Corporation
(Exact name of registrant as specified in its charter)

_____

Nevada	001-16381	76-0600966
(State or Other Jurisdiction of Incorporation or Organization)	(Commission File Number)	(I.R.S. Employer Identification No.)

927 Thompson Place, Sunnyvale, CA 94085

(Address of Principal Executive Offices) (Zip Code)

408-744-1331

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

None

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

Common Stock, $0.001 par value per share
OTCQB

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes o No þ

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes o No þ

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 þ No o

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§229.405 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 þ No o

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. Yes o No þ

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company.

Large accelerated filer o	Accelerated filer o	Non-accelerated filer o	Smaller reporting company þ

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

The issuer's revenues for the most recent fiscal year ended December 31, 2013 were $2,902,135.

The aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold, or the average bid and asked price of such common equity, as of the last business day of the registrant's most recently completed second fiscal quarter was $3,853.000.

As of April 14, 2014, there were 32,260,815 shares of common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

None

PART I

PART II

PART III

PART IV

PART I

ITEM 1. BUSINESS

CERTAIN STATEMENTS IN THIS ANNUAL REPORT ON FORM 10-K CONSTITUTE "FORWARD LOOKING STATEMENTS" WITHIN THE MEANING OF SECTION 27A OF THE SECURITIES ACT OF 1934, AS AMENDED, AND THE PRIVATE SECURITIES LITIGATION REFORM ACT OF 1995 (COLLECTIVELY, THE "REFORM ACT"). CERTAIN, BUT NOT NECESSARILY ALL, OF SUCH FORWARD-LOOKING STATEMENTS CAN BE IDENTIFIED BY THE USE OF FORWARD-LOOKING TERMINOLOGY SUCH AS "BELIEVES", "EXPECTS", "MAY", "SHOULD", OR "ANTICIPATES", OR THE NEGATIVE THEREOF OR OTHER VARIATIONS THEREON OR COMPARABLE TERMINOLOGY, OR BY DISCUSSIONS OF STRATEGY THAT INVOLVE RISKS AND UNCERTAINTIES. SUCH FORWARD-LOOKING STATEMENTS INVOLVE KNOWN AND UNKNOWN RISKS, UNCERTAINTIES AND OTHER FACTORS WHICH MAY CAUSE THE ACTUAL RESULTS, PERFORMANCE OR ACHIEVEMENTS OF ARRAYIT CORPORATION (THE "COMPANY", , “ARRAYIT”, “TELECHEM”, “AVANT DIAGNOSTICS”, “ARRAYIT MARKETING”, “ARRAYIT SCIENTIFIC SOLUTIONS”, "WE", "US" OR "OUR") TO BE MATERIALLY DIFFERENT FROM ANY FUTURE RESULTS, PERFORMANCE OR ACHIEVEMENTS EXPRESSED OR IMPLIED BY SUCH FORWARD-LOOKING STATEMENTS. YOU SHOULD NOT UNDULY RELY ON THESE STATEMENTS. FACTORS, RISKS, AND UNCERTAINTIES THAT COULD CAUSE ACTUAL RESULTS TO DIFFER MATERIALLY FROM THOSE IN THE FORWARD-LOOKING STATEMENTS INCLUDE, AMONG OTHERS:

our ability to raise capital,
our ability to provide our products and services at competitive rates,
our ability to execute our business strategy in a very competitive environment,
our degree of financial leverage,
risks associated with our acquiring and integrating companies into our own,
risks related to market acceptance and demand for our services,
the impact of competitive services, and
other risks referenced from time to time in our SEC filings.

With respect to any forward-looking statement that includes a statement of its underlying assumptions or bases, we caution that, while we believe such assumptions or bases to be reasonable and have formed them in good faith, assumed facts or bases may vary from actual results, and the differences between assumed facts or bases and actual results can be material depending on the circumstances. When, in any forward-looking statement, we or our management express an expectation or belief as to future results, that expectation or belief is expressed in good faith and is believed to have a reasonable basis, but there can be no assurance that the stated expectation or belief will result or be achieved or accomplished. All subsequent written and oral forward-looking statements attributable to us, or anyone acting on our behalf, are expressly qualified in their entirety by the cautionary statements. Except as required by applicable law, including the securities laws of the United States and/or if the existing disclosure fundamentally or materially changes, we do not undertake any obligations to publicly release any revisions to any forward-looking statements to reflect events or circumstances after the date of this report or to reflect unanticipated events that may occur.

REFERENCES IN THIS FORM 10-K, UNLESS ANOTHER DATE IS STATED, ARE TO DECEMBER 31, 2013.

INDUSTRY DATA

In this Form 10-K, we may rely on and refer to information regarding the biotech industry from market research reports, analyst reports and other publicly available information. Although we believe that this information is reliable, we cannot guarantee the accuracy and completeness of this information, and we have not independently verified it.

Item1. BUSINESS

General Business Description, Operations and Changes in Control

Overview of the Business:

Founded in November 1999, Arrayit Corporation, a Nevada Corporation, is a leading life sciences technology company providing innovative products and services that empower scientists and clinicians to study all living things, from humans, animals, and plants, to viruses and bacteria. This research is being performed in thousands of government, university, pharmaceutical, biotechnology, and agrigenomics laboratories around the world, where scientists seek to expand our knowledge of the biological functions essential for life. Beginning at the genetic level, where our tools are used to elucidate the correlation between gene sequence and biological processes, life science research expands to include the study of the cells, tissues, organs, systems, and other components that make up living organisms. Novel insights into the function of genes and proteins, early stage disease diagnostics, better and safer medicines, and safer and more nutritional crop plants are some of the many aspects of human health empowered by Arrayit technology. Arrayit has secured its position in the industry by leveraging the company's widely used patented microarray manufacturing platform and revolutionary VIP™ genotyping technology. Since 1999, Arrayit has built a powerful portfolio of patents, trade secrets, and more than 650 life sciences products. The company was featured on the television series NOVA in 2001, received successive appointments to the Inc. 500 list of fastest growing private companies in 2002 and 2003, and has received numerous local awards including the Rising Star award from the City of Sunnyvale and the Silicon Valley Top 50 award in 2003.

Arrayit has proven expertise in three key areas: the development and support of microarray tools and components, custom printing and analysis of microarrays for research, and the development of diagnostic microarrays and tools for early detection of treatable disease states. The Company's patented tools and trade secrets provide the performance, throughput, cost effectiveness and flexibility necessary to perform the billions of genetic tests needed to extract valuable medical information. The Company believes this information will enable researchers to correlate genetic variation and biological function, which will enhance drug discovery, drug development and clinical research, allowing diseases to be detected earlier and permitting better choices of drugs for individual patients.

Arrayit strives to increase shareholder equity by inventing, developing, manufacturing and selling sophisticated life sciences products and services to an extensive customer base spanning 50 countries. Our corporate philosophy is put into action by a highly skilled, multidisciplinary team of scientists, business professionals, engineers, investors, executive and support staff, all of whom place shareholder value, product quality, customer service and price competitiveness as our highest priorities. Arrayit technology empowers decisive strategic advantage and return on investment in the basic research, pharmaceutical diagnostic, and health care markets. We presently conduct operations through two wholly owned subsidiaries, one majority owned subsidiary, and one minority owned subsidiary as outlined below:

TeleChem International, Inc., a wholly owned subsidiary

Arrayit Marketing, Inc, a wholly owned subsidiary

Arrayit Scientific Solutions, 98% majority owned subsidiary

Avant Diagnostics, Inc., 38.46% minority owned subsidiary, of which the Company has no voting rights

Effective Thursday, March 19, 2009, Arrayit Corporation's common stock began trading on the OTC Bulletin Boards as "ARYC". The authorized common shares of the Company are 480,000,000 and the authorized preferred shares of the Company are 20,000,000.

Arrayit has a December 31 year end.

Arrayit's principal office is located at 927 Thompson Place in Sunnyvale, California. Arrayit presently has seven employees.

Arrayit Products and Services

Since 1999, Arrayit has focused on developing microarray laboratory instruments, glass substrate slides, kits and reagents using an open platform strategy, in contrast to the closed platform formats of its largest competitors. Arrayit's patented printing technology has become an industry standard for microarray manufacturing, allowing customers to manufacture microarrays of all types including DNA, protein, patient DNA, antibody, antigen, peptide, carbohydrate, whole cell and many others. This flexibility differentiates Arrayit's microarray technology from competitors, who are generally limited to DNA microarrays. Arrayit sells both small-scale microarray manufacturing robots (SpotBot®) and high throughput versions (NanoPrint™). The SpotBot® and NanoPrint product lines have been further enhanced to accommodate more stringent requirements for manufacturing protein microarrays. Arrayit also offers personal microarray scanners (SpotLight™) as well as high-end scanning instruments (InnoScan®). As the industry continues to grow, Arrayit is providing more fully integrated platforms such as the company's Platinum, Gold, Silver and Bronze Variation Identification Platform™ (VIP) genotyping systems, including cleanroom and laboratory versions. Arrayit is expanding its pre-printed microarray content to complement its flagship H25K Whole Human Genome Microarray, which is a premium product for biomarker discovery and drug compatibility testing. Arrayit is expanding its Microarray Services capabilities in connection with increased demand for microarrays of all kinds, and a trend toward outsourcing high end technical manufacturing. With the investment proposed in its business plan, Arrayit will create a variety of microarray based diagnostic tests using Arrayit's patented VIP Healthcare technology and related proprietary approaches. As microarrays move into clinical diagnostics and genetic screening applications, the Company expects to earn license and royalty fees in these areas. A full microarray product list with descriptions, scientific publications, protocols and pricing is available at http://arrayit.com.

The Microarray Industry

Arrayit's core business is in the life sciences research market, with customers in laboratories at universities, medical research centers and government institutions, as well as biotechnology and pharmaceutical companies. Researchers at these institutions use Arrayit products and services in a broad spectrum of scientific activities such as genotyping and gene expression, basic research into the function of genes in plants and animals, research on the human genome, development of diagnostics for personalized medicine, and diagnostic screening tools for drug development programs that identify toxicity patterns in patient populations. Arrayit products are cited in more than 4,700 scientific publications to date.

Health Care Industry Segment

Arrayit Corporation believes that the analysis of genetic variation and function will play an increasingly important role in molecular biology, and that by empowering genomic and proteomic analysis, our tools and trade secrets will advance disease research, drug development, and the creation of molecular diagnostic tests. In addition to developing all types of microarray-based solutions for life science, applied science, and consumer markets, Arrayit is facilitating the transition to the clinic, by supporting and carrying out clinical trials to gather data for regulatory submissions in the US and globally, and establishing infrastructure to offer products designed and manufactured in compliance with global quality standards for medical devices.

As personalized medicine progresses, it has become apparent that millions of people will need to be tested for various diseases or traits in order to identify whether or not a disease is present, or to determine compatibility with specific drug treatments. However, testing millions of patient samples, one at a time, would overwhelm laboratory testing facilities and be cost prohibitive. To solve this problem, Dr. Mark Schena developed and patented a method to place up to 100,000 individual patient samples on a single microarray substrate slide. That slide is then immersed in a solution that contains the known markers for a specific disease, such as congenital hearing loss, Parkinson's Disease, Alzheimer's Disease, etc. The results are as easy as reading a traffic signal. Should any one of those 100,000 patient samples contain the marker for the disease being tested, a red spot appears, and if not, a green spot appears. This procedure can also identify carriers as yellow spots. Because of the sophistication of this patented invention, one lab could test hundreds of thousands of patient samples a day after receiving a sample of DNA from each patient. It is the only method available to the industry that can accomplish this. Dr. Schena's multi-patient genotyping procedure is protected by the following patents:

US Patent 6,913,879

Australia 2002218740

Europe 1343911

Korea 10-0756015

New Zealand 523560

Singapore 94899

Taiwan I280282

Israel 153848

Other worldwide patents pending

Strategic Relationships and Licensing Arrangements

As of December 31, 2013, Arrayit Corporation owns 19.5 million shares in Avant Diagnostics, Inc. The shares basically have no voting rights as Avant Diagnostics, Inc. has issued Preferred Stock controlled by insiders at Avant with controlling voting rights. Avant was originally a 100% subsidiary of Arrayit Corporation. It was created as a vehicle to finance the FDA approval process and sales and marketing for Arrayit Corporation's microarray based test for ovarian cancer. Arrayit Corporation developed, manufactures, processes, and owns its ovarian cancer test and OvaDx® registered trademark. Arrayit Corporation conferred the right to sell an ovarian cancer test upon FDA approval to Avant Diagnostics, Inc, and Avant was tasked with raising $3-5 million for the FDA approval process and sales and marketing. After 5 years, Avant remains unsuccessful at raising $3-5 million for the FDA approval process. So, in the fourth quarter of 2013, Arrayit Corporation requested that the right to sell an ovarian cancer test be returned to Arrayit Corporation. The parties discussed various settlement arrangements, but were unable to reach an agreement. On March 31, 2013, Avant Diagnostics, Inc sued Arrayit Corporation. Arrayit Corporation is preparing a counter suit against Avant.

Arrayit Corporation decided to engage the services of DOCRO, the top diagnostic oncology research organization in the United States, to assist with the pre-IDE and 510(k) submissions for FDA approval of OvaDx®, as well as for CLIA approval of Arrayit's new microarray clean room laboratory facility in Sunnyvale, CA. Arrayit believes it is in the best interests of the Company and its shareholders to follow through with DOCRO and advance OvaDx® toward commercialization despite the failure of Avant to fund these obligations as previously required. We believe Avant is in complete default of any agreements with the Company and seek to remove Avant from any rights to an ovarian cancer test and OvaDx®.

Human noroviruses cause up to 21 million cases of foodborne disease in the United States annually and are the most common cause of acute gastroenteritis in industrialized countries. To reduce the burden of foodborne disease associated with viruses, the United States Department of Agriculture and Arrayit Corporation used Arrayit's colorimetric microarray platform to develop a method of simultaneously genotyping multiple norovirus strains associated with foodborne disease. USDA's findings led them to conclude that the use of Arrayit's microarrays enabled the accurate and rapid detection of norovirus genogroup I and II strains. Arrayit intends to license USDA's patent in this area and commercialize this product.

Arrayit provides a variety of customized solutions for its life science and pharmaceutical customers. We are the sole provider of custom microarray glass manufacturing services to a major life sciences tools company on an OEM basis. Our microarray manufacturing technology and substrates are being used to create the first allergy microarrays approved for the Taiwanese and Chinese markets. Arrayit is also providing OEM microarray manufacturing services for a breast cancer test, and CE approval was granted in 2013.

Product and Services Categories

Arrayit's revenues are generated through the following major product lines:

Patented Printing Technology

Arrayit manufactures the world's most widely used microarray printing technology consisting of Professional, 946, Stealth and ChipMaker® pins and printheads. Arrayit's patented printing technology allows the high-speed manufacture of DNA, protein, antibody, lipid, carbohydrate and other types of microarrays for research and diagnostic applications including gene expression, genotyping, protein profiling and many more.

Instrumentation

Automated microarray manufacturing instruments including NanoPrint™, SpotBot Titan, SpotBot Extreme, and SpotBot® Protein and Personal microarrayers. NanoPrint™ allows high-end, high throughput manufacturing, whereas SpotBot® systems are the only personal microarrayers in the industry that enable affordable benchtop use.

Other instruments include SpotLight™ CCD fluorescence scanners, SpotWare® colorimetric scanners, InnoScan® laser scanners, TrayMix™ Hybridization Stations, ArrayMix Hybridization Stations, high speed centrifuges, air jets, and vacuum products. Laboratory tools and bioinformatics computers complete the instrumentation line which are all designed to facilitate the quality and speed of microarray research.

Consumables

Arrayit manufactures and provides the microarray industry with variety of laboratory consumables, including glass substrates and slides, reagents, solutions, kits and clean room supplies.

Arrayit Super Microarray Substrates have been adopted by major Life Science companies and are used industry wide. They are polished atomically flat glass surfaces with proprietary coupling chemistry that afford high signal intensities and low background noise for premium quality microarray experimentation.

Arrayit buffers and solutions are optimized to increase the quality of microarray manufacturing, processing, and use. Purification kits provide both a high yield and superior purity. Applications include: DNA microarrays, fluorescent microarray purification, sequencing and others. Arrayit kits utilize proprietary binding membranes and purification chemistries for optimal performance.

Healthcare Platforms

Arrayit's patented Healthcare technology, the Variation Identification Platform (VIP), allows diagnostic tests to be performed by depositing as many as 100,000 patient samples onto a single microarray. VIP platforms enable the manufacture of extremely high-quality microarrays with superior precision and accuracy. These microarrays containing 100,000 individual features allow the simultaneous genotyping of 100,000 different patients in a single test, which dramatically reduces the cost of manufacturing and processing such genotyping tests by more traditional means.

Arrayit Opportunity in Diagnostics and Personalized Medicine

With the completion of the human genome sequencing project, genetic researchers have focused on identifying the variations in the DNA of specific genes in the genome. These DNA variations are partly what define individual characteristics, including disease states or a statistical propensity for disease as well as compatibility with specific pharmaceutical compounds. In addition to DNA analysis, it is now possible to identify messenger RNA (mRNA) and protein markers or biomarkers in the blood stream that provide definitive early warning signs for diseases such as Parkinson's Disease and ovarian cancer. Arrayit technology uniquely allows the analysis and identification of all of the major classes of molecules in the human body (DNA, mRNA and protein) using a single patented and proprietary microarray technology platform. The implications of this capability are far-reaching and impact not only the research community, but will also impact individual patients and medical and insurance providers in the near future. Diagnostic tests that detect diseases very early in their progression provide options for earlier treatments that may improve patient quality of life and prognosis by delaying or preventing disease progression or even death. The health care enterprise will incur major cost savings by avoiding costly late stage disease treatments.

We intend to pursue opportunities to license diagnostic markers that were developed using our platform and to acquire businesses that increase our disease diagnostic capability and expand our geographic reach. We also intend to acquire manufacturers of other highly engineered and customized ancillary or complementary products that will further our penetration into the life sciences, diagnostics and health care markets and our customer base served by these sectors. We favor academic and commercial candidates that have core competencies and business characteristics similar to our own, and those that we expect will benefit from some of the major positive trends occurring in our industry.

Competition within the Microarray Research and Development Industry

Arrayit competes with large and small, public and private companies. The industry has been historically dominated by Affymetrix which achieved strong market penetration by being the first public company to commercialize and promote microarray applications. Over the past few years, Illumina has taken significant market share from Affymetrix. However, both competitors face mid to long term scientific and technological challenges because they are limited by what they can deposit onto a microarray--DNA. Arrayit's patented printing technology can deposit any kind of molecule into a microarray, including DNA, proteins, antibodies, diagnostic elements and other compounds. These next generation microarrays represent the largest growth opportunity in the industry. Arrayit has a long-term advantage in its unique line of personal and high throughput microarray printers, highest sensitivity microarray scanners, top quality consumables, patented diagnostic methods, collaborative corporate culture, and competitive pricing. Arrayit's main competitors are:

Name and Location	Trading Symbol	Price per Common Share	Market Capitalization
Agilent Technologies, Inc., Santa Clara, California	NYSE: A	$52.77	$18.48B

Agilent provides bio-analytical and electronic solutions to the communications, electronics, life sciences and chemical analysis industries. The microarray division is a small portion of their total business. Agilent's process places spots in a microarray by means of an ink jet technology and is limited to DNA microarrays.

Affymetrix, Inc., Santa Clara, California	NasdaqGS: AFFX	$6.37	$539.26M

Affymetrix provides consumables and systems for genetic analysis in life sciences. Their process creates a microarray by means of photolithography and is limited to DNA microarrays.

Illumina, Inc., San Diego, California	NasdaqGS: ILMN	$135.24	$21.12B

Illumina provides a line of products and services to serve the sequencing, genotyping and gene expression markets. Their process places chemically reacted beads into a microarray format, and is limited to DNA microarrays.

(1) Share price and market cap values as of April 11, 2014. Source http://otcmarkets.com.

Research and Development

During 2013 we spend $63,534 on Research and Development, none of which was borne directly by our customers.

Advertising, Marketing and Sales

Arrayit has become a recognized brand through major broadcast television news media, full page advertisements in top scientific journals, trade shows and workshops, vendor fairs, direct mail campaigns, feature articles in major trade publications and via e-mail newsletters. All advertising and marketing efforts drive traffic to the Arrayit.com website and web based store resulting in sales. The Arrayit.com web site regularly receives more than 815 unique visitors per day and 26,000 visitors per month and over 685,000 hits per month. Because of the wealth of scientific information and protocols on the site, many consider it be the scientific portal of the microarray industry.

The Company's sales strategy relies on providing exceptional customer service and technical support. Arrayit has developed a network of more than 50 international distributors in Eastern and Western Europe, Asia, the Middle East, South Africa, India and other locations world-wide. These global distributors purchase directly from Arrayit for resale on net 30 day terms, and represent approximately 54% of the Company's 2013 revenues. These foreign receivables are insured through Atradius Trade Credit Insurance, Inc.

Facilities

Arrayit's corporate offices and research facilities are located at 927 Thompson Place, Sunnyvale, California 94085. The corporate headquarters covers 15,000 square feet which in addition to the executive offices, shipping and receiving, include 1,500 square feet of clean room space, preparation and packing facilities, and quality control and quality assurance work stations. The base rent is $19,500 per month plus a monthly operating expense charge of $3,750. The lease expires on December 31, 2021.

Avant Diagnostics, Inc operates from corporate offices located at 8561 East Anderson Drive, Suite 104, Scottsdale, AZ 95255.

Management believes these facilities are suitable and adequate for its current operations.

Regulatory Matters

We and our customers are subject to various government regulations, and we may incur significant expenses to comply with, and experience delays in our product commercialization as a result of, these regulations.

The FDA must approve certain in-vitro diagnostic products before they can be marketed in the United States. Certain in-vitro diagnostic products must also be approved by the regulatory agencies of foreign governments or jurisdictions before the product can be sold outside the United States. Commercialization of our and our collaborative partners' in-vitro diagnostic products outside of the research environment may depend upon successful completion of clinical trials. Clinical development is a long, expensive and uncertain process and we do not know whether we, or any of our collaborative partners, will be permitted to undertake clinical trials of any potential in-vitro diagnostic products. It may take us or our collaborative partners many years to complete any such testing, and failure can occur at any stage. Delays or rejections of potential products may be encountered based on changes in regulatory policy for product approval during the period of product development and regulatory agency review. Moreover, if and when our projects reach clinical trials, we or our collaborative partners may decide to discontinue development of any or all of these projects at any time for commercial, scientific or other reasons. Any of the foregoing matters could have a material adverse effect on our business, financial condition and results of operations.

Many of our products are labeled for research only. Even when a product is exempted from FDA clearance or approval, the FDA may impose restrictions as to the types of customers to which we can market and sell our products. Such restrictions may materially and adversely affect our business, financial condition and results of operations.

The FDA, the U.S. Department of Health and Human Services and foreign government regulators are increasingly focused on genetic analysis tools, including the use of microarrays that are labeled for research use only by cytogenetics labs, including labs certified under the Clinical Laboratory Improvement Amendments ("CLIA"). We cannot predict the extent of the FDA's future efforts in regulation and policies with respect to the sale and use of microarrays for the development of assays by CLIA laboratories, which are referred to as laboratory developed tests ("LDTs"). If new regulations restrict our customers' development of LDTs using our products labeled for research use only, or if we otherwise are required to obtain FDA premarket clearance or approval prior to commercializing these products, our ability to generate revenue from the sale of our products may be delayed or otherwise adversely affected. Moreover, our failure to comply with governmental rules and regulations related to our products could cause us to incur significant adverse publicity, or subject us to investigations and notices of non-compliance or lead to fines or restrictions upon our ability to sell our products.

Medical device laws and regulations are also in effect in many countries, ranging from comprehensive device approval requirements to requests for product data or certifications. The number and scope of these requirements are increasing. We may not be able to obtain regulatory approvals in such countries or may incur significant costs in obtaining or maintaining our foreign regulatory approvals. In addition, the export by us of certain of our products which have not yet been cleared for domestic commercial distribution may be subject to FDA or other export restrictions.

We have agreements relating to the sale of our products to government entities and, as a result, we are subject to various statutes and regulations that apply to companies doing business with the government. A failure to comply with these regulations might result in suspension of these contracts or administrative penalties, and could have a material adverse effect on our ability to compete for future government grants, contracts and programs.

Healthcare reform and restrictions on reimbursements

We are currently collaborating with our partners to develop diagnostic and therapeutic products. The ability of our collaborators to commercialize such products may depend, in part, on the extent to which reimbursement for the cost

of these products will be available under U.S. and foreign regulations that govern reimbursement for clinical testing services by government authorities, private health insurers and other organizations. In the U.S., third-party payer price resistance, the trend towards managed health care and legislative proposals to reform health care or reduce government insurance programs could reduce prices for health care products and services adversely affect the profits of our customers and collaborative partners and reduce our future royalties.

Handling of hazardous materials and other regulations governing environmental safety.

Our operations are subject to complex and stringent environmental, health, safety and other governmental laws and regulations that both public officials and private individuals may seek to enforce. Our activities that are subject to these regulations include, among other things, our use of hazardous materials and the generation, transportation and storage of waste. We could discover that we or an acquired business is not in material compliance. Existing laws and regulations may also be revised or reinterpreted, or new laws and regulations may become applicable to us, whether retroactively or prospectively, that may have a negative effect on our business and results of operations. It is also impossible to eliminate completely the risk of accidental environmental contamination or injury to individuals. In such an event, we could be liable for any damages that result, which could adversely affect our business. Our costs of compliance with environmental laws and regulations has been minimal, amounting to less than $6,000 during 2013.

Employees

As of March 21, 2014, we had 8 full time employees. We had no part-time employees. None of our employees are covered by a collective bargaining agreement with a union. We consider our relationship with our employees to be good.

Comment Letters Issued by the SEC

None

ITEM 1A. RISK FACTORS

Our business faces many risks. The risks described below may not be the only risks we face. Additional risks that we do not yet know of, or that we currently think are immaterial, may also negatively impact our business operations or financial results. If any of the events or circumstances described in this section occur, our business, financial condition or results of operations could be negatively affected to a significant extent. Our securities are highly speculative and should only be purchased by persons who can afford to lose their entire investment in our Company. The Company's business is subject to many risk factors, including the following:

Risks Related to the Growth of Our Business

We must continually develop and commercialize new or enhanced products and services to spur growth.

Our success depends in large part on our continual, timely development and commercialization of new or enhanced products and services that address evolving market requirements and are attractive to customers. The life sciences tools market is characterized by rapid and significant technological changes, frequent new product introductions and enhancements, evolving industry standards and changing customer needs. Standardization of tools and systems for genomic and proteomic research is ongoing. Other companies may introduce new technologies, techniques, products or services that render our products or services obsolete or less economical. If we do not appropriately innovate and invest in new technologies, then our technologies may become dated and our customers could move to new technologies offered by our competitors.

As a result, we are continually looking to develop, license or acquire new or enhanced technologies, products and services to further broaden and deepen our offerings. Some of the factors affecting market acceptance of our products and services include:

availability, quality and price as compared to competitive products and services;
the functionality of new and existing products and services;
the timing of introduction of our products and services as compared to competitive products and services;
the existence of product defects;
scientists' and customers' opinions of the utility of our products and services and our ability to incorporate their feedback into future products and services;
citation of our products in published research; and
general trends in life science research and life science informatics software development.

Our new or enhanced technologies, products or services may or may not be accepted by customers in our target markets. For example, once we have developed or obtained a new technology, we may fail to successfully commercialize new products and services based on that technology, particularly to the extent that our new products and services compete with established technologies or the products and services of more established competitors. Risks relating to product adoptions include the inability to accurately forecast demand and difficulties in managing different sales and support requirements due to the type or complexity of the new products.

Our growth depends in part on our ability to acquire new technologies, products and services, which may absorb significant resources and may or may not be successful.

As part of our strategy to develop and identify new technologies, products and services, we have made and may continue to make acquisitions. Our integration of the operations of acquired businesses requires significant efforts, including the coordination of information technologies, research and development, sales and marketing, operations, manufacturing and finance. These efforts result in additional expenses and divert significant amounts of management's time from other projects. Our failure to manage successfully and coordinate the growth of the combined company could also have an adverse impact on our business. In addition, there is no guarantee that some of the businesses we acquire will become profitable or remain so. If our acquisitions do not meet our initial expectations, we may record impairment charges.

Factors that affect the success of our acquisitions include:

- our ability to retain key employees of the acquired company;
- the performance of the acquired business, technology, product or service;
- our ability to integrate operations, financial and other systems;
- the ability of the combined company to achieve synergies among its constituent companies, such as increasing sales of the combined company's products and services, achieving expected cost savings and effectively combining technologies to develop new products and services;
- any disruption in order fulfillment due to integration processes and therefore loss of sales;
- the presence or absence of adequate internal controls and/or significant fraud in the financial systems of acquired companies;
- any decrease in customer and distributor loyalty and product orders caused by dissatisfaction with the combined companies' product lines and sales and marketing practices, including price increases; and
- Our assumption of known contingent liabilities that are realized, known liabilities that prove greater than anticipated, or unknown liabilities that come to light, to the extent that the realization of any of these liabilities increases our expenses or adversely affects our business or financial position.

Emerging market opportunities in molecular diagnostics may not develop as quickly as we expect.

Molecular diagnostics is the fastest growing segment of the diagnostics market. At present, this growth is largely driven by infectious disease testing, but molecular diagnostics is rapidly expanding into new areas such as reproductive health and cancer management, which are focus areas for our diagnostics business. The increasing efficacy of molecular diagnostics is driven by the continuing discovery of genomic and proteomic markers with proven clinical utility, the increasing adoption of genomic and proteomic based diagnostic tests, and the expansion of reimbursement programs to include a greater number of approved tests. We believe that our microarray technology, instruments and consumables are foundational and will provide for continuing growth in this market. However, we cannot be certain that molecular diagnostic markets will develop as quickly as we expect. At this time, there can be no certainty of the technical or commercial success our technologies will achieve in such markets.

Patent disputes can be costly to prosecute and defend, and adverse judgments could result in damage awards, increased royalties and other similar payments and decreased sales.

Patent positions can be highly uncertain and patent disputes in the medical industry are not unusual. An adverse result in a patent dispute involving our patents, or the patents of our collaborators, may lead to a determination by a court that the patent is not infringed, is invalid, and/or is unenforceable. Such an adverse determination could lead to our loss of market exclusivity. An adverse result in a patent dispute alleging that we have infringed patents held by a third party may lead to a determination by a court that the patent is infringed, valid, and enforceable. Such an adverse determination may preclude the commercialization of our products and/or may lead to significant financial damages for past and ongoing infringement. Due to the uncertainty surrounding patent litigation, parties may settle patent disputes by obtaining a license under mutually agreeable terms in order to decrease risk of an interruption in manufacturing and/or marketing of its products.

The potential for litigation regarding our intellectual property rights always exists and litigation may be initiated by third parties attempting to abridge our rights. Even if we are ultimately successful in a particular dispute, we may incur substantial costs in defending its patents and other intellectual property rights.

Risks Related to Our Sales

We face significant competition, and our failure to compete effectively could adversely affect our sales and results of operations.

We compete with companies that develop, manufacture and market genetic analysis tools for the life science and clinical healthcare markets. We face significant competition as our competitors develop new, improved or more economical products and services and as new companies enter the market with new and innovative technologies.

The market for molecular diagnostics products and services is highly competitive, has high barriers to entry, and has several other large companies with significant market share. For example, companies such as Affymetrix, Illumina, Agilent Technologies and Life Technologies have products for genetic analysis that are directly competitive with certain of our products. We also face competition from established diagnostic companies such as Beckman Coulter, Becton Dickinson, bioMérieux, Celera Diagnostics, Johnson & Johnson and Roche Diagnostics, which have made strategic commitments to diagnostics, have financial and other resources to invest in new technologies, and have substantial intellectual property portfolios. They also have substantial experience in new product development, regulatory expertise,

Many of our current and potential competitors have significantly greater financial, technical, marketing and other resources than we do. In addition, many current and potential competitors have greater name recognition, more extensive customer bases and access to proprietary genetic content.

Consolidation trends in both our market and that of our customers have increased competition.

There has been a trend toward industry consolidation in our markets for the past several years. We expect this trend toward industry consolidation to continue as companies attempt to strengthen or hold their market positions in an evolving industry and as companies are acquired or are unable to continue operations. We believe that industry consolidation may result in stronger competitors that are better able to compete as sole-source vendors for customers. This could lead to more variability in operating results and could harm our business.

Additionally, there has been a trend toward consolidation in many of the customer markets we sell to, in particular the pharmaceutical industry. Consolidation in our customer markets results in increased competition for important market segments and fewer available accounts, and larger consolidated customers may be able to exert increased pricing pressure on companies in our market.

Reduction or delay in research and development budgets and government funding may adversely impact our sales.

We expect that our revenues in the foreseeable future will be derived primarily from products and services provided to a relatively small number of academic, governmental and other research institutions, as well as pharmaceutical and biotechnology companies. Our operating results may fluctuate substantially due to reductions and delays in research and development expenditures by these customers.

Factors that could affect the spending levels of our customers include:

- weakness in the global economy and changing market conditions that affect our customers;
- changes in the extent to which the pharmaceutical industry may use genetic information and genetic testing as a methodology for drug discovery and development;
- changes in government programs that provide funding to companies and research institutions;
- changes in the regulatory environment affecting life science companies and life science research;
- impact of consolidation within the pharmaceutical industry; and
- cost reduction initiatives of customers.

Government funding of research and development is subject to the political process, which is inherently unpredictable. Any shift away from the funding of life science research and development or delays surrounding the approval of government budget proposals may cause our customers to delay or forego purchases of our products and services. Moreover, in the short term, our customers may delay or reduce their purchases of our products as they wait to learn whether, and to what extent, they will receive grant funding. Additionally, if our customers are unable to obtain funding they may reduce their research and development budgets, resulting in a decrease in demand for our products. A reduction or delay in demand will reduce our revenues and adversely affect our profitability.

If we are unable to maintain our relationships with collaborative partners, we may have difficulty developing and selling our products and services.

We believe that our success in penetrating our target markets depends in part on our ability to develop and maintain collaborative relationships with key companies as well as with key academic researchers. Relying on our collaborative relationships is risky to our future success because:

- our partners may develop technologies or components competitive with our products and services;
- our existing collaborations may preclude us from entering into additional future arrangements;
- our partners may not obtain regulatory approvals necessary to continue the collaborations in a timely manner;
- some of our agreements may terminate prematurely due to disagreements between us and our partners;
- our partners may not devote sufficient resources to the development and sale of our products and services;
- our partners may be unable to provide the resources required for us to progress in the collaboration on a timely basis;
- our collaborations may be unsuccessful; or
- some of our agreements have expired and we may not be able to negotiate future collaborative arrangements on acceptable terms.

The size and structure of our current sales, marketing and technical support organizations may limit our ability to sell our products and services.

Although we have invested significant resources to expand our direct sales force and our technical and support staff, we may not be able to support a global sales, marketing or technical support organization that is sufficient to sell, market or support our products globally. To assist our sales and support activities, we have entered into distribution agreements through certain distributors, principally in markets outside of North America and Europe. These and other third parties on whom we rely for sales, marketing and technical support may decide to develop and sell competitive products or otherwise become our competitors, which could harm our business.

Risks Related to the Manufacturing of Our Products

We rely on third parties whose operations are outside our control.

We rely on arrangements with third-party shippers and carriers such as independent shipping companies for timely delivery of our products to our customers. As a result, we may be subject to carrier disruptions and increased costs due to factors that are beyond our control, including labor strikes, inclement weather, natural disasters and rapidly increasing fuel costs. If the services of any of these third parties become unsatisfactory, we may experience delays in meeting our customers' product demands and we may not be able to find a suitable replacement on a timely basis or on commercially reasonable terms. Any failure to deliver products to our customers in a timely and accurate manner may damage our reputation and could cause us to lose customers.

We also utilize third party distributors to sell, install and service certain of our products. While we are selective in whom we choose to represent us, it is difficult for us to ensure that our distributors and manufacturer's representatives consistently act in accordance with the standards we set for them. To the extent any of our end-customers have negative experiences with any of our distributors; it could reflect poorly on us and damage our reputation, thereby negatively impacting our financial results.

We may need to adjust our manufacturing capacity based on business requirements or improvements made to our technological capabilities and there are risks associated with such adjustment.

If demand for our products is reduced or if we implement technologies that increase the density or yields of our microarrays, our manufacturing capacity could be under-utilized and some of our long-lived assets, including facilities and equipment, may be impaired, which would increase our expenses. In addition, factory planning decisions may shorten the useful lives of long-lived assets including facilities and equipment, and cause us to accelerate depreciation. These changes in demand for our products, and changes in our customers' product needs, could have a variety of negative effects on our competitive position and our financial results, and, in certain cases, may reduce our revenue, increase our costs, lower our gross margin percentage or require us to recognize impairments of our assets. In addition, if demand for our products is reduced or we fail to accurately forecast demand, we could be required to write down inventory since certain of our products have a limited shelf life, which would have a negative impact on our gross margin.

We may lose customers or sales if we are unable to meet customer demand for our products on a timely and cost-effective basis, or if we are unable to ensure the proper performance and quality of our products.

We produce our products in an innovative and complicated manufacturing process which has the potential for significant variability in manufacturing yields. We have encountered and may in the future encounter difficulties in manufacturing our products and, due to the complexity of our products and our manufacturing process, we may experience delays in the manufacture of our products or fail to ensure their proper performance or quality. As we

develop new and enhanced products, we must be able to resolve in a timely, cost-effective manner manufacturing issues that may arise from time to time.

We rely on internal quality control procedures to verify our manufacturing processes. Due to the complexity of our products and manufacturing process, however, it is possible that products that do not meet all of our performance specifications may not be identified before they are shipped. If our products do not consistently meet our customers' performance expectations, demand for our products may decline. In addition, we maintain minimal backup manufacturing capabilities for the production of our products. Any interruption in our ability to continue operations at our existing manufacturing facilities could delay our ability to develop or sell our products, which could result in lost revenue and seriously harm our business, financial condition and results of operations.

Risks Related to Our Operations

We have had significant operating losses and expect to continue to incur net losses for the near term.

Although we have been operating for over twenty years, we have been unable to consistently operate profitably. As of December 31, 2013, we had an accumulated deficit of approximately $24,697,483. We have reported net losses of approximately $381,894 and $576,470 for the fiscal years ended December 31, 2013 and 2012, respectively. Unless our sales increase substantially in the near future, we anticipate that we will continue to incur net losses in the near term, and we may never be able to achieve profitability. In order to achieve profitable operations we need to significantly increase our revenues from the sales of product and licensing fees. We cannot be certain that our business will ever be successful or that we will generate significant revenues and become profitable.

We may have substantial future cash requirements but no assured financing source to meet such requirements.

If we are able to generate funds from financing activities, we will have sufficient cash and cash equivalents to support our projected operating needs for the next fiscal year. However, with limited revenues from sales of our products and services, our business plan that calls for us to continue to improve our products, create new products, and more aggressively market our existing products will require us to obtain additional working capital. Our future capital requirements depend on many factors, including continued progress in product enhancements and new product development programs, the magnitude of these programs, the time and costs involved in completion of technological, manufacturing and market requirements, and the cost of finalizing licensing agreements to produce licensing revenues. We do not know whether additional financing will be available when needed, or on terms favorable to us or our stockholders – particularly in light of current economic conditions which have significantly adversely affected the availability of credit, and other sources of capital. We may raise necessary funds through public or private equity offerings, debt financings or additional corporate collaboration and licensing arrangements. To the extent we raise additional capital by issuing equity securities; our stockholders will experience further dilution. If we raise funds through debt financings, we may become subject to restrictive covenants. To the extent that we raise additional funds through collaboration and licensing arrangements, we may be required to relinquish some rights to our technologies or products, or grant licenses on terms that are not favorable to us.

Our operating results may vary significantly from quarter to quarter.

Our quarterly results may be materially and adversely affected by:

the timing and volume of work under new agreements;
general economic conditions;
the spending patterns of customers;
customer orders received;
losses experienced in our operations not otherwise covered by insurance;
a change in the demand or production of our products caused by severe weather conditions;
convertible debt and warrant grants categorized as derivative financial instruments require changes in fair value be recorded in the consolidated statement of operations;
a change in the mix of our customers, contracts and business;
increases in design and manufacturing costs; and
the ability of customers to pay their invoices owed to us and disagreements with customers related to product performance on delivery.

Accordingly, our operating results in any particular quarter may not be indicative of the results that you can expect for any other quarter or for an entire year.

We plan to engage in acquisitions and joint ventures, and may encounter unexpected difficulties identifying, pricing or integrating those businesses.

We seek to grow, in part, through strategic acquisitions that are intended to complement or expand our business, and expect to continue to do so in the future. The success of this strategy will depend on our ability to identify, price, finance and complete these transactions or arrangements. Success will also depend on our ability to integrate the businesses acquired in these transactions. We may encounter unexpected difficulties in completing and integrating acquisitions with our existing operations, and in managing strategic investments. Furthermore, we may not realize the degree, or timing, of benefits we anticipated when we first entered into a transaction. Any of the foregoing could adversely affect our business and results of operations.

We may be unsuccessful at generating internal growth.

Our ability to generate internal growth will be affected by, among other factors, our ability to attract new customers, increase the number or size of orders received by existing customers, hire and retain employees and increase volume utilizing our existing facilities. In addition, our customers may reduce the number or size of their orders. Many of the factors affecting our ability to generate internal growth may be beyond our control, and we cannot be certain that our strategies will be successful or that we will be able to generate cash flow sufficient to fund our operations and to support internal growth. If we are unsuccessful, we may not be able to achieve internal growth, expand our operations or grow our business.

The departure of key personnel could disrupt our business.

We depend on the continued efforts of Dr. Mark Schena, our president, and other senior management. We cannot be certain that any individual will continue in such capacity for any particular period of time. The loss of key personnel, or the inability to hire and retain qualified employees, could negatively impact our ability to manage our business.

Our business requires skilled labor, and we may be unable to attract and retain qualified employees.

Our ability to maintain our productivity and profitability will be limited by our ability to employ, train and retain skilled personnel necessary to meet our requirements. We may experience shortages of qualified personnel. We cannot be certain that we will be able to maintain an adequate skilled labor force necessary to operate efficiently and to support our growth strategy or that our labor expenses will not increase as a result of a shortage in the supply of skilled personnel. Labor shortages or increased labor costs could impair our ability to maintain our business or grow our revenues, and may adversely impact our profitability.

We carry insurance against many potential liabilities, but our risk management program may leave us exposed to unidentified or unanticipated risks.

Although we maintain insurance policies with respect to our related exposures, these policies contain deductibles and limits of coverage. We estimate our liabilities for known claims and unpaid claims and expenses based on information available as well as projections for claims incurred but not reported. However, insurance liabilities are difficult to estimate due to various factors. If any of our insurance policies or programs are not effective in mitigating our risks, we may incur losses that are not covered by our insurance policies or that exceed our accruals or that exceed our coverage limits and could adversely impact our consolidated results of operations, cash flows and financial position.

Future litigation could impact our financial results and condition.

Our business, results of operations and financial condition could be affected by significant future litigation or claims adverse to us. Types of potential litigation cases include: product liability, contract, employment-related, labor relations, personal injury or property damage, intellectual property, stockholder claims and claims arising from any injury or damage to persons, property or the environment from hazardous substances used, generated or disposed of in the conduct of our business.

An adverse ruling by the U.S. Internal Revenue Service could create significant liability.

Several of the persons, including consultants and executive officers, who provide services to us are treated as independent contractors or receive below market loans instead of salaries or wages. If the I.R.S examines our prior years' tax returns and determines that one or more of such persons were employees, the resulting liability for withholding and payroll taxes could be significant.

Market disruptions caused by the worldwide financial crisis could affect our ability to meet our liquidity needs at reasonable cost and our ability to meet long-term commitments, which could adversely affect our financial condition and results of operations.

We rely on our credit facility with our primary lender, amongst other avenues, to satisfy our liquidity needs. Further disruptions in the credit markets or further deterioration of the world economy may discourage or prevent our primary lender and other lenders from meeting their existing lending commitments, extending the terms of such commitments or agreeing to new commitments. Market disruptions may also limit our ability to issue debt securities in the capital markets. We can provide no assurances that our primary lender or any other lenders we may have will meet their existing commitments or that we will be able to access the credit markets in the future on terms acceptable to us or at all.

Longer term disruptions in the capital and credit markets as a result of uncertainty, reduced financing alternatives or failures of significant financial institutions could adversely affect our access to the liquidity needed for our business. Any disruption could require us to take measures to conserve cash until the market stabilizes or until alternative financing can be arranged. Such measures could include deferring capital expenditures and reducing other discretionary expenditures.

Continued market disruptions could cause a broad economic downturn that may lead to increased incidence of customers' failure to pay for services delivered, which could adversely affect our financial condition, results of operations and cash flow.

Continued capital market disruptions could result in increased costs related to variable rate debt. As a result, continuation of market disruptions could increase our interest expense and adversely impact our results of operations.

Restrictive loan covenants may impact our ability to operate our business and to pursue our business strategies, and our failure to comply with these covenants could result in an acceleration of our indebtedness.

Our credit facility with our primary lender contains certain restrictive covenants. The majority of the liquidity derived from our credit facility is based on availability determined by a borrowing base. Specifically, the availability of credit is dependent upon our eligible receivables, inventory and certain liens. We may not be able to maintain adequate levels of eligible assets to support our required liquidity.

Due to the international nature of our business, political or economic changes or other factors could harm our business.

A significant amount of our revenue is currently generated from sales outside the United States. Although such transactions are primarily denominated in U.S. dollars, our future revenue, gross margin, expenses and financial condition are still affected by such factors as changes in foreign currency exchange rates; unexpected changes in, or impositions of, legislative or regulatory requirements, including export and trade barriers and taxes; longer payment cycles and greater difficulty in accounts receivable collection.

We also are subject to general geopolitical risks in connection with international operations, such as political, social and economic instability, potential hostilities, epidemics and changes in diplomatic and trade relationships. We cannot assure investors that one or more of the foregoing factors will not have a material adverse effect on our business, financial condition and operating results or require us to modify our current business practices.

Our effective tax rate may vary significantly.

Our operations are subject to income and transaction taxes in the United States and in multiple foreign jurisdictions. Estimates and judgments are required in determining our worldwide provision for income taxes. Some of these estimates are based on interpretations of existing tax laws or regulations. The ultimate amount of tax liability may be uncertain as a result.

Changes in overall levels and the geographic mix of pretax earnings may adversely impact our effective tax rate. Certain jurisdictions have lower tax rates, and the amount of earnings in these jurisdictions may fluctuate. If we do not have profitable operations in these jurisdictions, our effective tax rate could be adversely impacted. Changes in tax laws and regulatory requirements in the countries in which we operate could have a material impact on our tax provision. To the extent that we are unable to continue to reinvest a substantial portion of our profits in our foreign operations, we may be subject to effective income tax rate increases in the future. Tax authorities may challenge the allocation of profits between our subsidiaries and we may not prevail in any such challenge. If we were not to prevail, we could be subject to higher tax rates or double tax.

Estimates are required in determining any valuation allowance to be recorded against our net deferred tax assets. Changes in the amount of valuation allowance required may significantly impact our financial results of operations.

Risks Related to Government Regulation and Litigation

We and our customers are subject to various government regulations, and we may incur significant expenses to comply with, and experience delays in our product commercialization as a result of, these regulations.

The FDA must approve certain in-vitro diagnostic products before they can be marketed in the United States. Certain in-vitro diagnostic products must also be approved by the regulatory agencies of foreign governments or jurisdictions before the product can be sold outside the United States. Commercialization of our and our collaborative partners' in-vitro diagnostic products outside of the research environment may depend upon successful completion of clinical trials. Clinical development is a long, expensive and uncertain process and we do not know whether we, or any of our collaborative partners, will be permitted to undertake clinical trials of any potential in-vitro diagnostic products. It may take us or our collaborative partners many years to complete any such testing, and failure can occur at any stage. Delays or rejections of potential products may be encountered based on changes in regulatory policy for product approval during the period of product development and regulatory agency review. Moreover, if and when our projects reach clinical trials, we, or our collaborative partners, may decide to discontinue development of any or all of these projects at any time for commercial, scientific or other reasons. Any of the foregoing matters could have a material

adverse effect on our business, financial condition and results of operations.

Many of our products are labeled for research only. Even when a product is exempted from FDA clearance or approval, the FDA may impose restrictions as to the types of customers to which we can market and sell our products. Such restrictions may materially and adversely affect our business, financial condition and results of operations.

The FDA, the U.S. Department of Health and Human Services and foreign government regulators are increasingly focused on genetic analysis tools, including the use of arrays that are labeled for research use only by cytogenetics labs, including labs certified under the Clinical Laboratory Improvement Amendments ("CLIA"). We cannot predict the extent of the FDA's future efforts in regulation and policies with respect to the sale and use of arrays for the development of assays by CLIA laboratories, which are referred to as laboratory developed tests ("LDTs"). If new regulations restrict our customers' development of LDTs using our products labeled for research use only, or if we otherwise are required to obtain FDA premarket clearance or approval prior to commercializing these products, our ability to generate revenue from the sale of our products may be delayed or otherwise adversely affected. Moreover, our failure to comply with governmental rules and regulations related to our products could cause us to incur significant adverse publicity, subject us to investigations and notices of non-compliance or lead to fines or restrictions upon our ability to sell our products.

Medical device laws and regulations are also in effect in many countries, ranging from comprehensive device approval requirements to requests for product data or certifications. The number and scope of these requirements are increasing. We may not be able to obtain regulatory approvals in such countries or may incur significant costs in obtaining or maintaining our foreign regulatory approvals. In addition, the export by us of certain of our products which have not yet been cleared for domestic commercial distribution may be subject to FDA or other export restrictions.

We have agreements relating to the sale of our products to government entities and, as a result, we are subject to various statutes and regulations that apply to companies doing business with the government. A failure to comply with these regulations might result in suspension of these contracts or administrative penalties, and could have a material adverse effect on our ability to compete for future government grants, contracts and programs.

Healthcare reform and restrictions on reimbursements may limit our returns on molecular diagnostic products that we may develop with our collaborators.

We are currently collaborating with our partners to develop diagnostic and therapeutic products. The ability of our collaborators to commercialize such products may depend, in part, on the extent to which reimbursement for the cost of these products will be available under U.S. and foreign regulations that govern reimbursement for clinical testing services by government authorities, private health insurers and other organizations. In the United States, third-party payer price resistance, the trend towards managed health care and legislative proposals to reform health care or government insurance programs could reduce prices for health care products and services, adversely affecting the profits of our customers and collaborative partners and reduce our future royalties.

Risks related to handling of hazardous materials and other regulations governing environmental safety.

Our operations are subject to complex and stringent environmental, health, safety and other governmental laws and regulations that both public officials and private individuals may seek to enforce. Our activities that are subject to these regulations include, among other things, our use of hazardous and materials and the generation, transportation and storage of waste. We could discover that we or an acquired business is not in material compliance. Existing laws and regulations may also be revised or reinterpreted, or new laws and regulations may become applicable to us, whether retroactively or prospectively, that may have a negative effect on our business and results of operations. It is also impossible to eliminate completely the risk of accidental environmental contamination or injury to individuals. In such an event, we could be liable for any damages that result, which could adversely affect our business.

We may be exposed to liability due to product defects.

The risk of product liability claims is inherent in the testing, manufacturing, marketing and sale of human diagnostic and therapeutic products and we may be subjected to such claims. We may seek to acquire additional insurance for clinical or product liability risks. We may not be able to obtain such insurance or general product liability insurance on acceptable terms or in sufficient amounts. A product liability claim or recall could have a serious adverse effect on our business, financial condition and results of operations.

Ethical, legal and social concerns surrounding the use of genetic information could reduce demand for our products.

Genetic testing has raised ethical issues regarding privacy and the appropriate uses of the resulting information. For these reasons, governmental authorities may call for limits on or regulation of the use of genetic testing or prohibit testing for genetic predisposition to certain conditions, particularly for those that have no known cure. Similarly, such concerns may lead individuals to refuse to use genetics tests even if permissible. Any of these scenarios could reduce the potential markets for our molecular diagnostic products, which could have a material adverse effect on our business, financial condition and results of operations.

Risks Related to Our Intellectual Property

We may be unable to effectively protect or enforce our intellectual property, which could harm our competitive position.

Maintaining a strong patent position is critical to our business. Patent law relating to the scope of claims in the technology fields in which we operate is uncertain, so we cannot be assured the patent rights we have or may obtain will be valuable. Others have filed, and in the future are likely to file, patent applications that are similar or identical to ours or those of our licensors. To determine the priority of inventions, we may have to participate in interference proceedings declared by the United States Patent and Trademark Office that could result in substantial costs in legal fees and could substantially affect the scope of our patent protection. We cannot be assured our patent applications will have priority over those filed by others. Also, our intellectual property may be subject to significant administrative and litigation proceedings such as opposition proceedings against our patents in Europe, Asia and other jurisdictions.

Legal actions to enforce our patent rights can be expensive and may involve the diversion of significant management time. In addition, these legal actions could be unsuccessful and could also result in the invalidation of our patents or a finding that they are unenforceable. We may or may not choose to pursue litigation or interferences against those that have infringed on our patents, or used them without authorization, due to the associated expense and time commitment of monitoring these activities. If we fail to protect or to enforce our intellectual property rights successfully, our competitive position could suffer, which could harm our results of operations.

In addition to patent protection, we also rely upon copyright and trade secret protection, as well as non-disclosure agreements with our employees, consultants and third-parties, to protect our confidential and proprietary information. Such measures may not provide adequate protection for our proprietary information.

Litigation or other proceedings or third party claims of intellectual property infringement could require us to spend significant time and money and could prevent us from selling our products or services or impact our stock price.

As we enter new markets, we expect that competitors will claim that our products infringe their intellectual property rights as part of business strategies designed to impede our successful entry into those markets. In addition, third parties may have obtained, and may in the future obtain, patents allowing them to claim that the use of our technologies infringes these patents. We could incur substantial costs and divert the attention of our management and technical personnel in defending ourselves against any of these claims. Any adverse ruling or perception of an adverse ruling in defending ourselves against these claims could have a material adverse impact on our stock price, which may be disproportionate to the actual import of the ruling itself. Furthermore, parties making claims against us may be able to obtain injunctive or other relief, which could block our ability to develop, commercialize and sell products, and could result in the award of substantial damages against us. In the event of a successful claim of infringement against us, we may be required to pay damages and obtain one or more licenses from third parties, or be prohibited from selling certain products. In addition, we may be unable to obtain these licenses at a reasonable cost, if at all. We could therefore incur substantial costs related to royalty payments for licenses obtained from third parties, which could negatively affect our gross margins. In addition, we could encounter delays in product introductions while we attempt to develop alternative methods or products. Defense of any lawsuit or failure to obtain any of these licenses on favorable terms could prevent us from commercializing products, and the prohibition of sale of any of our products could materially affect our ability to grow and maintain profitability.

Risks Relating to Our Organization

Our certificate of incorporation authorizes our board to create new series of preferred stock without further approval by our stockholders, which could adversely affect the rights of the holders of our common stock.

Our board of directors has the authority to fix and determine the relative rights and preferences of preferred stock. Our board of directors also has the authority to issue preferred stock without further stockholder approval. As a result, our board of directors could authorize the issuance of a series of preferred stock that would grant to holders the preferred right to our assets upon liquidation, the right to receive dividend payments before dividends are distributed to the holders of common stock and the right to the redemption of the shares, together with a premium, prior to the redemption of our common stock. In addition, our board of directors could authorize the issuance of a series of preferred stock that has greater voting power than our common stock or that is convertible into our common stock, which could decrease the relative voting power of our common stock or result in dilution to our existing stockholders.

Your ability to influence corporate decisions is limited because our executive officers and directors own a controlling percentage of our common stock.

A majority of our voting securities are owned by senior officers and directors who are all members of the same family. Therefore, they, with influence from other members of the family, control all matters submitted to our stockholders for approval, including the election of directors and approval of any merger, consolidation or sale of all or substantially all of our assets. This concentration of voting power could delay or prevent an acquisition of our company on terms that other stockholders may desire. In addition, as the interests of the controlling family and our minority stockholders may not always be the same, this large concentration of voting power may lead to stockholder votes that are inconsistent with your best interests or the best interest of us as a whole.

Limitations of Liability; Indemnification

Our Articles of Incorporation and Bylaws contain provisions that limit the liability of directors for monetary damages and provides for indemnification of officers and directors under certain circumstances. Such provisions may discourage stockholders from bringing a lawsuit against directors for breaches of fiduciary duty and may also have the effect of reducing the likelihood of derivative litigation against directors and officers even though such action, if successful, might otherwise have benefited our stockholders. In addition, a stockholder's investment in the company may be adversely affected to the extent that costs of settlement and damage awards against our officers or directors are paid by the company pursuant to such provisions.

If we fail to develop and maintain an effective system of internal controls, we may not be able to accurately report our financial results or prevent fraud. As a result, our current and potential stockholders could lose confidence in our financial reports, which could harm our business and the trading price of our common stock.

Effective internal controls are necessary for us to provide reliable financial reports and effectively prevent fraud. Section 404 of the Sarbanes-Oxley Act of 2002 requires us to evaluate and report on our internal controls over financial reporting and may in the future require our independent registered public accounting firm to annually attest to our evaluation, as well as issue their own opinion on our internal controls over financial reporting. The process of implementing and maintaining proper internal controls and complying with Section 404 is expensive and time consuming. We cannot be certain that we can attract and retain a sufficient number of independent directors that includes independent members of our audit committee and accomplish the other measures that ensure we will maintain adequate controls over our financial processes and reporting in the future. Furthermore, if we are able to rapidly grow our business, the internal controls that we will need will become more complex, and significantly more resources and independent officers and directors will be required to ensure our internal controls remain effective. Failure to implement required controls, or difficulties encountered in their implementation, could harm our operating results or cause us to fail to meet our reporting obligations. If we or our auditors discover a material weakness in our internal controls, the disclosure of that fact, even if the weakness is quickly remedied, could diminish investors' confidence in our financial statements and harm our stock price. In addition, non-compliance with Section 404 could subject us to a variety of administrative sanctions, including the suspension of trading, ineligibility for future listing on NYSE Amex or another national securities exchange, and the inability of registered broker-dealers to make a market in our common stock, which may reduce our stock price.

Because we became public through a reverse merger, we may not be able to attract the attention of major brokerage firms.

There may be risks associated with us becoming public through a reverse merger. Securities analysts of major brokerage firms may not provide coverage of us since there is no incentive to brokerage firms to recommend the purchase of our common stock. No assurance can be given that brokerage firms will, in the future, want to conduct any public or private offerings on our behalf.

Our Growth Will Place Significant Strains On Our Resources.

The Company's growth, if any, is expected to place a significant strain on the Company's managerial, operational and financial resources. Furthermore, assuming the Company receives additional contracts, and obtains additional partners, it will be required to manage multiple relationships with other third parties. These requirements will be exacerbated in the event of further growth of the Company or in the number of its contracts, partnerships and employees. There can be no assurance that the Company's systems, procedures or controls will be adequate to support the Company's operations or that the Company will be able to achieve the rapid execution necessary to successfully offer its services and continue its business plan. The Company's future operating results, if any, will also depend on its

ability to add additional personnel commensurate with the growth of its business, if any. If the Company is unable to manage growth effectively, the Company's business, results of operations and financial condition will be adversely affected.

Risks Related to Our Common Stock

The market price of our common stock is likely to be highly volatile and could fluctuate widely in response to various factors, many of which are beyond our control, including the following:

technological innovations or new products and services by us or our competitors;

additions or departures of key personnel;

limited availability of freely-tradable “unrestricted” shares of our common stock to satisfy purchase orders and demand;

our ability to execute our business plan;

operating results that fall below expectations;

loss of any strategic relationship;

industry developments;

we have issued warrants and options that may have a dilutive effect for our stockholders;

economic and other external factors; and

period-to-period fluctuations in our financial results.

In addition, the securities markets have from time to time experienced significant price and volume fluctuations that are unrelated to the operating performance of particular companies. These market fluctuations may also significantly affect the market price of our common stock.

There may be a limited market for our securities and we may fail to qualify for a NASDAQ, NYSE or other listing.

Although we plan on applying for listing of our common stock on the NASDAQ, NYSE or a different national exchange once we meet the qualifications, there can be no assurance that our initial listing application will be granted, when the required listing criteria will be met or when, or if, our application will be granted. Thereafter, there can be no assurance that trading of our common stock on such market will be sustained or desirable. At the present time, we do not qualify for certain of the initial listing requirements of the NASDAQ, NYSE or other national exchanges. In the event that our common stock fails to qualify for initial or continued inclusion, our common stock could thereafter only be quoted on the OTC Bulletin Board or in what are commonly referred to as the “pink sheets.” Under such circumstances, you may find it more difficult to dispose of, or to obtain accurate quotations, for our common stock, and our common stock would become substantially less attractive to certain purchasers, such as financial institutions, hedge funds, and large investors.

Offers or availability for sale of a substantial number of shares of our common stock may cause the price of our common stock to decline.

If our stockholders sell substantial amounts of our common stock in the public market, including shares covered by this Private Placement Memorandum forms a part, upon the expiration of any regulatory holding period, under Rule 144, or issued upon the exercise of outstanding options or warrants, could create a circumstance commonly referred to as an “overhang” and in anticipation of which the market price of our common stock could fall. The existence of an overhang, whether or not sales have occurred or are occurring, also could make more difficult our ability to raise additional financing through the sale of equity or equity-related securities in the future at a time and price that we deem reasonable or appropriate.

We do not expect to pay dividends in the future. As a result, any return on investment may be limited to the value of our common stock.

We do not anticipate paying cash dividends on our common stock in the foreseeable future. The payment of dividends on our common stock will depend on our earnings, financial condition and other business and economic factors as our board of directors may consider relevant. If we do not pay dividends, our common stock may be less valuable because a return on your investment will only occur if our stock price appreciates.

Our quarterly results have historically fluctuated significantly and may continue to do so. Failure to meet financial expectations may disappoint securities analysts or investors and result in a decline in our stock price.

Our revenues and operating results may fluctuate significantly due in part to factors that are beyond our control and which we cannot predict. The timing of our customers’ orders may fluctuate from quarter to quarter. Historically, we have experienced customer ordering patterns for instrumentation and consumables where the majority of the shipments occur in the last month of the quarter. These ordering patterns may limit management’s ability to accurately forecast our future revenues or product mix. Additionally, license revenue may also be unpredictable and may fluctuate due to the timing of payments of non-recurring licensing fees. Because our expenses are largely fixed in the short to medium term, any material shortfall in revenues may cause us to experience material losses.

Because of this difficulty in predicting future performance, our operating results may fall below our own expectations and the expectations of securities analysts or investors in some future quarter or quarters. Our failure in the past to meet these expectations has adversely affected the market price of our common stock and may continue to do so.

In addition to factors that affect the spending levels of our customers described above, additional factors could cause our operating results to fluctuate, including:

- competition;
- our inability to produce products in sufficient quantities and with appropriate quality;
- the frequency of experiments conducted by our customers;
- our customers’ inventory of products;
- the receipt of relatively large orders with short lead times; and
- our customers’ expectations as to how long it takes us to fill future orders.

We have a limited operating history as a public company upon which you can assess our prospects and we are subject to the risks associated with any new public company.

As a result of our short history of operations as a public company, there is little historical information regarding our operations upon which you can base your investment decision. In addition, we are subject to all of the business risks and uncertainties associated with any newly public business enterprise. Additionally, our management has limited experience operating a public company. As such, our Company may not be able to continue to meet its continued filing requirements and may be late in its periodic filings, which late filings may cause the Company to be delisted from the Over-The-Counter Bulletin Board. If this were to happen, any investment in the Company could become devalued or worthless.

We incur significant costs as a result of operating as a fully reporting company in connection with section 404 of the Sarbanes-Oxley Act, and our management is required to devot substantial time to compliance initiatives.

We anticipate incurring significant legal, accounting and other expenses in connection with our status as a fully reporting public company. The Sarbanes-Oxley Act of 2002 (the "Sarbanes-Oxley Act") and new rules subsequently implemented by the SEC have imposed various new requirements on public companies, including requiring changes in corporate governance practices. As such, our management and other personnel will need to devote a substantial amount of time to these new compliance initiatives. Moreover, these rules and regulations will increase our legal and financial compliance costs and will make some activities more time-consuming and costly. In addition, the Sarbanes-Oxley Act may require, among other things, that we maintain effective internal controls for financial reporting and disclosure of controls and procedures. Our testing may reveal deficiencies in our internal controls over financial reporting that are deemed to be material weaknesses. Our compliance with Section 404 may require that we incur substantial accounting expense and expend significant management efforts. We currently do not have an internal audit group, and we may need to hire additional accounting and financial staff with appropriate public company experience and technical accounting knowledge. Moreover, if we are not able to comply with the requirements of Section 404 in a timely manner, the market price of our stock could decline, and we could be subject to sanctions or investigations by the SEC or other regulatory authorities, which would require additional financial and management resources.

There is currently only limited market for our common stock, and the market for our common stock may continue to be illiquid, sporadic and volatile.

There is currently only a limited market for our common stock, and as such, we anticipate that such market will be illiquid, sporadic and subject to wide fluctuations in response to several factors moving forward, including, but not limited to:

(1) actual or anticipated variations in our results of operations;
(2) our ability or inability to generate new revenues;
(3) the number of shares in our public float;
(4) increased competition;
(5) conditions and trends in the market for biotech developers

Furthermore, because our common stock is traded on the Over-The-Counter Bulletin Board, our stock price may be impacted by factors that are unrelated or disproportionate to our operating performance. These market fluctuations, as well as general economic, political and market conditions, such as recessions, interest rates or international currency fluctuations may adversely affect the market price of our common stock. Additionally, at present, we have a limited number of shares in our public float, and as a result, there could be extreme fluctuations in the price of our common stock. Further, due to the limited volume of our shares which trade and our limited public float, we believe that our stock prices (bid, ask and closing prices) are entirely arbitrary, are not related to the actual value of the Company, and do not reflect the actual value of our common stock. Shareholders and potential investors in our common stock should exercise caution before making an investment in the Company, and should not rely on the publicly quoted or traded stock prices in determining our common stock value, but should instead determine the value of our common stock based on the information contained in the Company's public reports, industry information, and those business valuation methods commonly used to value private companies.

Investors may face significant restrictions on the resale of our common stock due to federal regulations of penny stocks.

Our common stock will be subject to the requirements of Rule 15(g) 9, promulgated under the Securities Exchange Act as long as the price of our common stock is below $5.00 per share. Under such rule, broker-dealers who recommend low-priced securities to persons other than established customers and accredited investors must satisfy special sales practice requirements, including a requirement that they make an individualized written suitability determination for the purchaser and receive the purchaser's consent prior to the transaction. The Securities Enforcement Remedies and Penny Stock Reform Act of 1990, also requires additional disclosure in connection with any trades involving a stock defined as a penny stock.

Generally, the Commission defines a penny stock as any equity security not traded on an exchange or quoted on NASDAQ that has a market price of less than $5.00 per share. The required penny stock disclosures include the delivery, prior to any transaction, of a disclosure schedule explaining the penny stock market and the risks associated with it. Such requirements could severely limit the market liquidity of the securities and the ability of purchasers to sell their securities in the secondary market.

In addition, various state securities laws impose restrictions on transferring "penny stocks" and as a result, investors in the common stock may have their ability to sell their shares of the common stock impaired.

Available Information

The Company files annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and all amendments to those reports with the Securities and Exchange Commission and files all required reports under the Exchange Act of 1934, as amended. The public may read and copy any materials the Company files with the SEC at the SEC’s Public Reference Room at 100F Street, NE, Washington DC 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC at http://www.sec.gov.

Item 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

Arrayit's corporate offices and research facilities are located at 927 Thompson Place, Sunnyvale, California 94085. The corporate headquarters covers 15,000 square feet which in addition to the executive offices, shipping and receiving, include a 1500 square foot microarray manufacturing cleanroom, preparation and packing facilities, and quality control and quality assurance work stations. The base rent is $19,500 per month plus a monthly operating expense charge of $3,750. The lease expires on December 31, 2021.

Avant Diagnostics, Inc. operates from offices located at 8561 East Anderson Drive, Suite 104, Scottsdale, AZ 85255.

ITEM 3. LEGAL PROCEEDINGS

On March 13, 2013, Plaintiffs Recap Marketing and Consulting LLP sued Defendants Arrayit Corporation in Fort Bend County Texas Case No. 13-DCV-204747 for breach of contract with regard to warrants to purchase common stock. Recap seeks damages or specific performance, exemplary damages, costs of court and reasonable attorney's fees. On April 16, 2013, the Company's counsel submitted an unopposed motion to transfer venue to Harris County Texas and, subject to the motion to transfer venue, original answer denying the allegations and offered the affirmative defenses of failure of condition precedent and expiration of contract, estoppel, failure of consideration and waiver, and in the alternative that the number of shares is incorrect. The parties attended a voluntary mediation conference on September 18, 2013, but were unable to reach a settlement agreement. The case is currently scheduled for trial in July of 2014.

On September 24, 2013, Plaintiffs Sanders Ortoli Vaughn-Flam Rosenstadt LLP sued Defendants Arrayit Corporation for breach of contract, account stated and unjust enrichment, Index No. 653313/13 in New York County. On February 26, 2014, the Parties reached and executed a settlement agreement. Arrayit Corporation expects to record a minor loss on the settlement of this suit.

On October 24, 2013, Baker Hughes and TeleChem International, Inc. and Arrayit Corporation reached agreement to settle Case 106-CV-075502. Baker Hughes accepted payment or performance other than that specified in the judgment in full satisfaction of the judgment. On October 25, 2013, Baker Hughes filed an acknowledgement of full satisfaction of the judgment in Case 106-CV-075502, and released TeleChem International, Inc and Arrayit Corporation from this judgment. The Company recorded a gain on extinguishment of debt with regard to this matter in the fourth quarter 2013.

On January 13, 2014, Plaintiff Tamarin Lindenberg sued Arrayit Corporation, Arrayit Diagnostics, Inc., Avant Diagnostics, Inc., John Howell, Steven Scott and Gregg Linn in Civil Action No. L7698-13. Plaintiff was employed by Avant Diagnostics, Inc. and was fired for cause in October 2013. Plaintiff alleges violations of the New Jersey Conscientious Employee Protection Act NJSA 34:19-1 to NJSA 34:19-8 ("CEPA"), breach of contract, breach of covenant of good faith and fair dealing, economic duress and intentional infliction of emotional distress. Plaintiff seeks compensatory damages, damages for all economic loss, physical and emotional distress, anxiety, humiliation, emotional harm, pain and suffering, career, family and social disruption and other grievous harm, pumitive and exemplary damages, costs and disbursements including reasonable attorneys' fees and prejudgment interest. On February 10, 2014, Arrayit Corporation requested the removal of the State Action from the Superior Court of New Jersey, Law Division, Essex County to the United States District Court for the District of New Jersey. The Company does not believe it should be a party to this litigation and intends on vigorously defending such action.

Avant Diagnostics, Inc. was tasked with raising $3-5 million to finance the FDA approval process and sales and marketing of an ovarian cancer test that Arrayit Corporation developed, manufactures, processes, and owns. To date, Avant did not raise $3-5 million to finance the FDA approval process and sales and marketing in Avant, so in the fourth quarter of 2013, Arrayit Corporation asked that sales and marketing rights be returned to Arrayit Corporation. The parties attempted to reach a settlement agreement, but were not able to come to terms. On March 31, 2014, Avant Diagnostics, Inc. sued Arrayit Corporation and Crucible Capital Group, Inc. in The Superior Court of the State of Arizona in and for the County of Maricopa, Case No. CV2014-092882. Avant alleges breach of contract, fraud, negligent misrepresentation, tortious interference with business expectancy, breach of duty of good faith and fair dealing, declaratory judgment, conversion, unjust enrichment, promissory estoppel. Avant seeks compensatory, incidental, and consequential damages, punitive damages, reasonable attorneys' fees and costs incurred, access to the technology owned by Avant, a declaration by the Court as to Avant's ownership of the technology and an order granting Avant access to the technology. Arrayit Corporation denies all allegations and intends to counter sue Avant for causes of action that could include breach of contract, fraud, negligent misrepresentation, tortious interference with business expectancy, breach of duty of good faith and fair dealing, declaratory judgment, conversion, unjust enrichment, promissory estoppel, and other causes of action yet to be determined. The Company intends to vigorously defend this matter.

There are no other legal proceedings, although we may, from time to time, be party to certain legal proceedings and other various claims and lawsuits in the normal course of our business, which, in the opinion of management, are not material to our business or financial condition. A few investors have made claims to the Company and seeking their investment returned. The Company has not had an opportunity to investigate these claims and has not taken a position.

We are not aware, of any governmental authority contemplating any proceeding to which we are a party or to which any of our properties is subject.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Market Information and Holders

Transfer Agent

Our transfer agent and warrant agent is Standard Registrar and Transfer Co., Inc., 12528 South 1840 East Street, Draper, Utah 84020

Price Range of Common Stock

Our common stock now trades publicly on the OTC Bulletin Board under the symbol "ARYC". The OTCBB is a regulated quotation service that displays real-time quotes, last-sale prices and volume information in over-the-counter equity securities. The OTCBB securities are traded by a community of market makers that enter quotes and trade reports. This market is extremely limited and any prices quoted are not a reliable indication of the value of our common stock.

The following table sets forth the quarterly high and low bid prices per share of our common stock by the OTCBB during the last two fiscal years. The quotes represent inter-dealer quotations, without adjustment for retail mark-up, markdown or commission and may not represent actual transactions. The trading volume of our securities fluctuates and may be limited during certain periods. As a result of these volume fluctuations, the liquidity of an investment in our securities may be adversely affected.

QUARTER ENDED	HIGH	LOW
January 1, 2014 – March 26, 2014	$0.60	$0.13
December 31, 2013	$0.95	$0.29
September 30, 2013	$0.75	$0.10
June 30, 2013	$0.19	$0.09
March 31, 2013	$0.20	$0.11
December 31, 2012	$0.23	$0.10
September 30, 2012	$0.34	$0.13
June 30, 2012	$0.31	$0.10
March 31, 2012	$0.49	$0.07

As of December 31, 2013, we had 38,139,616 shares of common stock issued and outstanding held by approximately 375 shareholders of record based on information provided by our transfer agent. The foregoing number of record holders does not include any persons who hold their stock in "street name." In addition we had 22,034 shares of Series A Convertible Preferred Stock issued and outstanding and 87,145 shares of Series C Convertible Preferred Stock issued and outstanding.

Dividends

We have never declared or paid any cash dividends on our common stock, and we do not anticipate paying any cash dividends in the foreseeable future. We intend to devote any earnings to fund the operations and the development of our business.

Common Stock

Holders of shares of common stock are entitled to one vote per share on each matter submitted to a vote of shareholders. In the event of liquidation, holders of common stock are entitled to share pro rata in the distribution of assets remaining after payment of liabilities, if any. Holders of common stock have no cumulative voting rights, and, accordingly, the holders of a majority of the outstanding shares have the ability to elect all of the directors. Holders of common stock have no pre-emptive or other rights to subscribe for shares. Holders of common stock are entitled to such dividends as may be declared by the Board out of funds legally available therefore. The outstanding shares of common stock are validly issued, fully paid and non-assessable.

RECENT SALES OF UNREGISTERED SECURITIES

On February 1, 2012, we issued 110,005 unregistered common shares upon conversion of 314 Preferred Class C shares. The Company relied upon the exemption under Section 4(2) of the Securities Act.

On February 6, 2012, we issued 31,325 unregistered common shares in exchange for engineering consulting services. The Company relied upon the exemption under Section 4(2) of the Securities Act.

On February 7, 2012, we issued 75,000 unregistered common shares in exchange for business development consulting services. The Company relied upon the exemption under Section 4(2) of the Securities Act.

On April 3, 2012, we issued 110,005 unregistered common shares upon conversion of 314 Preferred Class C shares. The Company relied upon the exemption under Section 4(2) of the Securities Act.

On May 30, 2012, we issued 500,010 unregistered common shares upon conversion of 1,429 Preferred Class C shares. The Company relied upon the exemption under Section 4(2) of the Securities Act.

On October 23, 2012, we issued 149,250 unregistered common shares in exchange for engineering consulting services. The Company relied upon the exemption under Section 4(2) of the Securities Act.

On October 23, 2012, we issued 75,000 unregistered common shares in exchange for business development consulting services. The Company relied upon the exemption under Section 4(2) of the Securities Act.

On December 5, 2012, we issued 25,000 unregistered common shares in exchange for public relations, communications, consulting and advisory services. The Company relied upon the exemption under Section 4(2) of the Securities Act.

On December 5, 2012, we issued 125,000 unregistered common shares in exchange for public relations, communications, consulting and advisory services. The Company relied upon the exemption under Section 4(2) of the Securities Act.

On January 3, 2013, we issued 110,005 unregistered common shares upon conversion of 314 Preferred Class C shares. The Company relied upon the exemption under Section 4(2) of the Securities Act.

On June 20, 2013, we issued 1,346,154 unregistered common shares, 673,077 purchase share warrants, exercisable at $0.15 and 673,077 purchase share warrants expiring on June 30, 2016 exercisable at $0.18 expiring on June 30, 2016, in exchange for $175,000 cash from accredited investors. The Company relied upon the exemption under Section 4(2) of the Securities Act.

On July 19, 2013, we issued 500,000 unregistered common shares in exchange for extinguishment of guarantee of debt of $60,000 in Avant Diagnostics, Inc. The Company relied upon the exemption under Section 4(2) of the Securities Act.

On September 11, 2013, we issued 500,010 unregistered common shares upon conversion of 1,429 Preferred Class C shares. The Company relied upon the exemption under Section 4(2) of the Securities Act.

On September 30, 2013, we issued 100,000 unregistered common shares in exchange for $18,000 cash from an accredited investor. The Company relied upon the exemption under Section 4(2) of the Securities Act.

On September 30, 2013, we issued 184,350 unregistered common shares on exercise of stock options. The Company relied upon the exemption under Section 4(2) of the Securities Act.

On December 18, 2013, we issued 7,220,001 unregistered common shares and 3,610,000 purchase share warrants, exercisable at $0.45 expiring on December 18, 2016, in exchange for $2,166,000 cash from accredited investors. The Company relied upon the exemption under Section 4(2) of the Securities Act.

Proceeds are expected to be used for development of the Company’s technology and products, working capital, general and administrative costs, marketing and business development and other general operating costs.

ITEM 6. SELECTED FINANCIAL DATA

Not required.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINACIAL CONDITION AND RESULTS OF OPERATIONS

Critical Accounting Policies

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires the Company to make estimates and assumptions that affect amounts reported in the accompanying consolidated financial statements and related footnotes. These estimates and assumptions are evaluated on an on-going basis based on historical developments, market conditions, industry trends and other information the Company believes to be reasonable under the circumstances. There can be no assurance that actual results will conform to the Company’s estimates and assumptions, and that reported results of operations will not be materially adversely affected by the need to make accounting adjustments to reflect changes in these estimates and assumptions from time to time. The following policies are those the Company believes to be the most sensitive to estimates and judgments. The Company’s significant accounting policies are more fully described in Note 2 to our consolidated financial statements.

Use of Estimates

The Company's significant estimates include an allowance for doubtful accounts and accrued expenses. These estimates and assumptions affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. While the Company believes that such estimates are fair when considered in conjunction with the financial statements taken as a whole, the actual amounts of such estimates, when known, will vary from these estimates. If actual results significantly differ from the Company's estimates, the Company's financial condition and results of operations could be materially impacted.

Revenue recognition:

Overview

The Company recognizes revenue when persuasive evidence of an arrangement exists, delivery has occurred, the fee is fixed or determinable, and collectability is reasonably assured. In instances where final acceptance of the product or system is required, revenue is deferred until all the acceptance criteria have been met.

Product Sales

Product sales include sales of microarrays, reagents and related instrumentation. Microarray, reagent and instrumentation revenues are recognized when earned, which is generally upon shipment and transfer of title to the customer and fulfilment of any significant post-delivery obligations. Accruals are provided for anticipated warranty expenses at the time the associated revenue is recognized.

Services

Services revenue is comprised of equipment service revenue; revenue from custom microarray design fees; and scientific services revenue, which includes associated consumables.

Diagnostic Revenue

Revenue from medical testing and scientific services is recognized upon shipment of the reported results.

Other Income

We recognize interest income as earned.

Patent Costs

Costs incurred with registering and defending patent technology are charged to expense as incurred.

Non-controlling Interest:

We account for the non-controlling interest in our subsidiary under ASC 810-10-45-16, Non-controlling Interest in a Subsidiary. This standard defines a non-controlling interest, previously called a minority interest, as the portion of equity in a subsidiary not attributable, directly or indirectly, to a parent. The standard requires, among other items, that a non-controlling interest be included in the consolidated statement of financial position within equity separate from the parent's equity; consolidated net income to be reported at amounts inclusive of both the parent's and non-controlling interest's shares and, separately, the amounts of consolidated net income attributable to the parent and non-controlling interest all on the consolidated statement of operations; and if a subsidiary is deconsolidated, any retained non-controlling equity investment in the former subsidiary be measured at fair value and a gain or loss be recognized in net income based on such fair value. Additionally, the standard defines a non-controlling interest as a financial instrument issued by a subsidiary that is classified as equity in the subsidiary's financial statements. A financial instrument issued by a subsidiary that is classified as a liability in the subsidiary's financial statements based on the guidance in other standards is not a controlling interest because it is not an ownership interest.

Royalty interests that entitle the holder to participate in future earnings and are not repayable are classified as non-controlling interests.

Deferred Offering Costs:

The Company may incur legal and accounting fees, as well as due diligence fees related to the preparation of our pending financing. Such costs are initially deferred until the offering is completed, at which time they are recorded as a reduction of gross proceeds from the offering, or expensed to operations if the offering is unsuccessful.

Nature and Classification of the Non-Controlling Interest in the Consolidated Financial Statements:

Arrayit Corporation is the controlling interest of the affiliated group, since it maintains an investment in each of the operating entities. As of December 31, 2013, Arrayit Corporation had a 42.71% ownership investment in Avant Diagnostics, Inc., which is now 38.46%, and 100% ownership investment in TeleChem International, Inc. and Arrayit Marketing, Inc, and 98% ownership investment in Arrayit Scientific Solutions, Inc. As of December 31, 2012, Avant Diagnostics was deconsolidated from Arrayit Corporation due to Arrayit Corporation's ownership investment changing to 47%.

Effective December 12, 2011, Arrayit Corporation signed an Agreement and Plan of Distribution with its subsidiary, Avant Diagnostics, Inc., whereby 19,350,000 shares of common stock of Avant Diagnostics owned by Arrayit Corporation will be distributed ratably to the shareholders of Arrayit Corporation on the record date which will be upon successful completion of the filing of a Form S-1 registration statement by Avant Diagnostics, Inc. The shares of Arrayit Corporation entitled to participate in the "spin-off" shares will include shareholders of Arrayit Corporation issuable on the record date upon conversion of outstanding securities and exercise of outstanding warrants and options. Avant Diagnostics, Inc. has never completed the filing of a Form S-1 registration statement.

A non-controlling interest is the portion of the equity in a subsidiary not attributable, directly or indirectly, to a parent. A non-controlling interest is the ownership held by owners other than the consolidating parent. The non-controlling interest is reported in the consolidated statement of financial position separately from the parent's equity, within the equity section of the balance sheet. The minority interest in the current year's income (loss) is segregated from the earnings (loss) attributable to the controlling parent. Minority ownership equity interest in the consolidating subsidiaries is increased by equity contributions and proportionate share of the subsidiaries earnings and is reduced by dividends, distributions and proportionate share of the subsidiaries incurred losses.

Recent Accounting Pronouncements

The Company has reviewed all recently issued, but not yet effective, accounting pronouncements and does not believe the future adoption of any such pronouncements may be expected to cause a material impact on its financial condition or the results of its operations.

PLAN OF OPERATIONS FOR THE NEXT TWELVE MONTHS

During fiscal 2014, we plan to continue investing to support our long-term growth initiatives. We plan to partner with other alliances, enter new markets and further expand our presence in existing markets. Should we not be successful in raising funds, we will curtail the development of our diagnostics business and concentrate our efforts on the sale of our tools and consumables.

DEBT OBLIGATIONS

At December 31, 2013, the Company had $768,001 of debt (2012 - $929,269). The debt is comprised of advances from creditors of $26,117 (2012 - $30,749); a past due loan from minority shareholders of $250,000 (2012 - $275,000); and $491,884 (2012 - $608,520) is due to shareholders, Arrayit Officers and Directors, and their families. To date, the Company has been able to meet the servicing of debts from cash flow generated by operations.

COMPARISON OF OPERATING RESULTS

RESULTS OF OPERATIONS FOR THE YEAR ENDED DECEMBER 31, 2013 COMPARED TO THE YEAR ENDED DECEMBER 31, 2012

Gross revenues for the twelve months ended December 31, 2013 and 2012 were $2,902,135 and $2,491,834, respectively, representing a 16% increase from the prior period.

The cost of sales for the twelve months ended December 31, 2013 and 2012 were $1,777,348 and $1,273,744, respectively, resulting in a gross profit for the twelve months ended December 31, 2013 and 2012 of $1,124,787 and $1,218,090, respectively. The Company’s cost of sales and gross profit are dependent upon product mix.

Selling, general and administrative expenses for the twelve months ended December 31, 2013 and 2012 were $1,765,971 and $3,112,800, respectively. The majority of the decrease of $1,346,829 for the year ended December 31, 2013 is attributable to deconsolidated financial reporting of Avant Diagnostics, Inc. (formerly Arrayit Diagnostics, Inc.) and reduction of issuances of stock for services.

Net loss from operations was $381,894 for the year ended December 31, 2013 compared with net income from operations was $229,134 for year ended December 31, 2012. The decrease in net income is primarily attributable to an increase in general and administrative expenses.

Legal expenses for the year ended December 31, 2013 and 2012 were $75,213 and $85,295, respectively. The majority of legal expenses for both periods related to litigation with Baker Hughes.

Interest expense was $298,562 and $267,083 for the years ended December 31, 2013 and 2012, respectively. The interest costs for 2013 and 2012 include the amortized cost of debt arrangement fees and warrants issued in connection with financing. The decrease in total interest costs was the result of negotiating a lower interest rate on debt and decreased amortization.

Net loss attributable to the non-controlling interest in Avant Diagnostics, Inc. amounted to $0 for the year ended December 31, 2013 and $805,604 for the year ended December 31, 2012. Financial reporting was deconsolidated at December 31, 2012.

The Company had net loss attributable to common shareholders of $381,894 for the year ended December 31, 2013 compared to net income of $229,134 for the year ended December 31, 2012, an increase in net loss of $611,028.

LIQUIDITY AND CAPITAL RESOURCES

We had total assets of $1,537,705 and total liabilities of $7,142,744 as of December 31, 2013. We had total negative working capital of $5,605,039 as of December 31, 2013.

We had total assets of $565,683 and total liabilities of $8,207,828 as of December 31, 2012. We had total negative working capital of $7,642,145 as of December 31, 2012.

We had accounts payable and accrued liabilities of $5,828,229 at December 31, 2013 compared to $6,567,136 at December 31, 2012.

For the year ended December 31, 2013, net cash used by operating activities was $1,859,701. For the year ended December 31, 2012, net cash provided by operating activities was $30,023.

For the year ended December 31, 2012, net cash provided by financing activities was $2,207,288. For the year ended December 31, 2012, net cash used by financing activities was $30,928.

We relied on our officers and directors and our shareholders to supplement our operations or provide us with financing. If we are unable to increase revenues from operations, to raise additional capital from conventional sources and/or additional sales of stock in the future, we may be forced to curtail or cease our operations. In the future, we may be required to seek additional capital by selling debt or equity securities. The sale of additional equity or debt securities, if accomplished, may result in dilution to our then shareholders. We provide no assurance that financing will be available in amounts or on terms acceptable to us, or at all.

In the long term, the Company will need significant amounts of net cash to fund its research and development, to provide working capital and to repay its debt. Failure to raise new capital will severely impact the Company’s ability to complete its business plan as more fully described above.

OFF BALANCE SHEET ARRANGEMENTS

None

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Not required.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

ARRAYIT CORPORATION
CONSOLIDATED FINANCIAL STATEMENTS
For the Years Ended December 31, 2013 and 2012

ARRAYIT CORPORATION

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

REPORT OF INDEPENDENT REGISTERED CERTIFIED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of

Arrayit Corporation

Sunnyvale, California

We have audited the accompanying consolidated balance sheets of Arrayit Corporation and subsidiaries as of December 31, 2013 and 2012, and the related consolidated statements of operations, changes in stockholders' equity (deficit), and cash flows for the years then ended. Arrayit Corporation's management is responsible for these consolidated financial statements. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Arrayit Corporation and subsidiaries as of December 31, 2013 and 2012, and the results of their operations and their cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 3 to the consolidated financial statements, the Company has suffered recurring losses and has working capital and stockholder deficits which raise substantial doubt about its ability to continue as a going concern. Management's plans regarding these matters are also described in Note 3. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ Moss, Krusick and Associates, LLC

Winter Park, Florida

April 15, 2014

ARRAYIT CORPORATION

CONSOLIDATED BALANCE SHEETS

As of December 31, 2013 and 2012

	2013	2012
ASSETS		
Current Assets		
Cash	$290,659	$518
Accounts receivable, net	401,467	227,743
Inventory	457,678	316,807
Prepaid expenses	190,492	2,250
Total current assets	1,340,296	547,318
Property and equipment, net	78,485	-
Deposits	118,924	18,365
Total assets	$1,537,705	$565,683
Liabilities and Stockholders' Deficit		
Current liabilities:		
Accounts payable and accrued liabilities	$5,828,229	$6,567,136
Bank overdraft	-	129,495
Due to related parties	478,533	577,033
Customer deposits	67,981	4,895
Notes payables, current portion including related parties	768,001	929,269
Total current liabilities	7,142,744	8,207,828
Notes payable, long term	-	-
Total liabilities	7,142,744	8,207,828
Commitments and contingencies	-	-
Stockholders' Deficit		
Preferred stock, $0.001 par value; 20,000,000 shares authorized;		
Preferred stock, Series 'A' 22,034 shares issued and outstanding	22	22
Preferred stock, Series 'C' 87,145 and 88,888 shares issued and outstanding	87	89
Common stock, $0.001 par value, voting, 480,000,000 shares authorized, 38,139,616 and 28,179,096 issued and outstanding	37,948	27,988
Additional paid-in capital	19,054,387	16,645,345
Accumulated deficit	(24,697,483)	(24,315,589)
Total stockholders' equity (deficit)	(5,605,039)	(7,642,145)
Total liabilities and stockholders' deficit	$1,537,705	$565,683

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

ARRAYIT CORPORATION
CONSOLIDATED STATEMENTS OF OPERATIONS
For the years ended December 31, 2013 and 2012

	2013	2012
Total revenues	$2,902,135	$2,491,834
Cost of sales	1,777,348	1,273,744
Gross margin	1,124,787	1,218,090
Selling, general and administrative	1,765,971	3,112,800
Research and development	63,534	67,884
Legal expense	75,213	85,295
Loss from operations	(779,931)	(2,047,889)
Gain on Extinguishment of Liabilities	696,599	-
Gain on deconsolidation of subsidiary, net	-	1,738,502
Interest (expense)	(298,562)	(267,083)
Net loss	(381,894)	(576,470)
Less: Net loss attributable to the non-controlling interest	-	(805,604)
Net loss attributable to common shareholders	(381,894)	229,134
Income (loss) per share - basic	$(0.01)	$0.01
Basic weighted average number of common shares	29,740,979	27,581,235
Income (loss) per share - diluted	$(0.01)	$0.00
Diluted weighted average number of common shares	29,740,979	59,920,675

The accompanying notes are an integral part of these consolidated financial statement

ARRAYIT CORPORATION
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)
For the years ended December 31, 2013 and 2012

	TOTAL ARRAYIT CORPORATION STOCKHOLDERS' EQUITY (DEFICIENCY)									NC
	Preferred Series A		Preferred Series C		Common Stock		Additional Paid In	Accumulated		Royalt
Description	Number	Dollar	Number	Dollar	Number	Dollar	Capital	Deficit	Total	Interes
Balance, December 31, 2011	22,034	$22	90,945	$92	26,978,501	26,788	16,546,092	(24,544,723)	(7,971,729)	$285,00
Convert Preferred C to Common	-	-	(2,057)	(3)	720,020	720	(717)	-	-	-
Issuance of shares for services	-	-	-	-	480,575	480	99,970	-	100,450	-
Increase in non-controlling interest	-	-	-	-	-	-	-	-		-
Gain on deconsolidation of subsidiary	-	-	-	-	-	-	-	-		(285,0
Net Income (Loss) for the year ended ended December 31, 2012	-	-	-	-	-	-	-	229,134	229,134	-
Balance, December 31, 2012	22,034	22	88,888	89	28,179,096	27,988	16,645,345	(24,315,589)	(7,642,145)	-
Convert Preferred C to Common	-	-	(1,743)	(2)	610,015	610	(608)	-	-	-
Issuance of shares on exercise of options	-	-	-	-	184,350	184	(184)	-	-	-

Issuance of shares for debt conversion	-	-	-	-	500,000	500	59,500	-	60,000	-
Issuance of shares for cash	-	-	-	-	8,666,155	8,666	2,350,334	-	2,359,000	-
Net Income (Loss) for the year ended December 31, 2013	-	-	-	-	-	-	-	(381,894)	(381,894)	-
Balance, December 31, 2013	22,034	$22	87,145	$87	$38,139,616	$37,948	$19,054,387	$(24,697,483)	$(5,605,039)	-

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

ARRAYIT CORPORATION

CONSOLIDATED STATEMENTS OF CASH FLOWS
For the Years Ended December 31, 2013 and 2012

	2013	2012
Cash flows from operating activities:		
Net loss	$(381,894)	$(576,470)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:		
Depreciation	-	16,310
Gain on extinguishment of liabilities	(696,599)	-
Provision for bad debts	20,961	43,047
Increase in non-controlling interest	-	1,460,870
Gain on deconsolidation of subsidiary	-	(1,738,502)
Stock paid for services	-	100,450
Changes in operating assets and liabilities		
Inc/dec in accounts receivable	(155,724)	6,164
Inc/dec in inventory	(140,871)	(136,169)
Inc/dec in prepaids	(188,244)	-
Inc/dec in deposits	(100,559)	-
Inc/dec in accounts payable and accrued liabilities	(42)	853,863
Inc/dec in bank overdraft	(227,699)	(43,767)
Inc/dec in due to related parties	(98,500)	(38,750)
Inc/dec in accrued interest	46,384	82,977
Inc/dec in customer deposits	63,086	-
Net cash provided by (used in) operating activities	(1,859,701)	30,023
Cash flows from investing activities:		
Cash paid for purchase of fixed assets	(57,446)	-
Cash of deconsolidated subsidiary	-	(96)
Net cash used in investing activities	(57,446)	(96)
Cash flows from financing activities:		
Proceeds from loans, net	237,156	163,447
Repayment of notes payable	(388,868)	(194,375)
Proceeds from issuance of common stock	2,359,000	
Net cash provided by (used in) financing activities	2,207,288	(30,928)
Net increase (decrease) in cash	290,141	(1,001)
Cash, beginning of period	518	1,519
Cash, end of period	$290,659	$518
Supplemental cash flow information:		
Cash paid for interest	$215,767	$125,654

Cash paid for income taxes	$-	$-
Noncash Transaction:		
Liquidation of debt from former subsidiary for shares	$60,000	$-
Conversion of accrued interest to notes payable	$46,382	$82,977
Conversion of preferred stock	$610	$720

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

ARRAYIT CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
December 31, 2013

NOTE 1 – ORGANIZATION AND BUSINESS OPERATIONS

Arrayit Corporation (the "Company" or "Arrayit") is a Nevada "C" Corporation that entered into the life science industry in 1996. Arrayit is a leading edge developer, manufacturer and marketer of next-generation life science tools and integrated systems for the large-scale analysis of genetic variation, biological function and diagnostics. Using Arrayit's proprietary technologies, the Company provides a comprehensive line of products and services that currently serve the sequencing, genotyping, gene expression and protein analysis markets, and the Company expects to enter the market for molecular diagnostics.

Arrayit has earned respect as a leader in the health care and life sciences industries with its proven expertise in three key areas: the development and support of microarray tools and components, custom printing and analysis of microarrays for research, and the identification and development of diagnostic microarrays and tools for early detection of treatable disease states. As a result, Arrayit has provided tools and services to thousands of the leading genomic research centers, pharmaceutical companies, academic institutions, clinical research organizations, government agencies and biotechnology companies worldwide.

The Company's patented tools and trade secrets provide researchers around the world with the performance, throughput, cost effectiveness and flexibility necessary to perform the billions of genetic tests needed to extract valuable medical information. The Company believes this information will enable researchers to correlate genetic variation and biological function, which will enhance drug discovery, drug development and clinical research, allowing diseases to be detected earlier and permitting better choices of drugs for individual patients.

Effective Thursday, March 19, 2009, the final steps of the business combination with Integrated Media Holdings, Inc (IMHI) were completed and the Company's common stock began trading on the OTC Bulletin Boards as "ARYC". In addition, the Company changed its name to "Arrayit Corporation", was reincorporated to Nevada from Delaware, and reverse-split its common stock and Series A Convertible Preferred stock in the ratio of one for thirty shares. The reverse split was only applicable to the Company's Class "A" Preferred shares and its Common Shares. The Class "C" Preferred Shares were not affected by the reverse split. The reverse split had no effect upon the convertible debt which fixed the amount of shares to be issued at 12,478,357 both pre and post split. As the March 19, 2009, Directors Resolution did not change the authorized share capital of the Company, the authorized number of Common Shares was reduced from 100,000,000 to 3,333,333. The Directors approved the reverse split to create a more orderly market for the trading of its Common Shares on the OTC BB.

On August 31, 2009, a majority of the stockholders provided written consent in lieu of a meeting to approve an increase in the authorized common shares of the Company from 3,333,333 to 480,000,000 and an increase in the authorized preferred shares of the Company from 166,667 to 20,000,000. A Certificate of Amendment to the Restated Certificate of Incorporation of the Company was filed on December 18, 2009. The forgoing was published in form DEF 14-C on November 18, 2009.

The effects of the Reverse Stock Split have been reflected retroactively in the accompanying consolidated financial statements and notes thereto for all periods presented.

Arrayit has a December 31 year end.

Arrayit's principal office is in Sunnyvale, California. Arrayit presently has seven employees.

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation

The following includes a description of subsidiaries and percentage ownership at December 31, 2013:

Subsidiary	Date of Incorporation	Business of Entity	Ownership
TeleChem International, Inc.	November 1, 1993	Import, export, manufacturing and distribution of wholesale industrial chemicals	100% owned by Arrayit Corporation
Arrayit Marketing Inc.	September 3, 2008	Inactive	100% owned by Arrayit Corporation
Arrayit Scientific Solutions, Inc.	October 15, 2009	Markets a test for Parkinson's Disease incorporating the technology and equipment developed by Arrayit Corporation	98% owned by Arrayit Corporation and 2% owned by the former President of Arrayit Scientific Solutions, Inc.
Avant Diagnostics, Inc.	June 2, 2009	Markets a test for Ovarian Cancer incorporating the technology and equipment developed by Arrayit Corporation	42.71% owned by Arrayit Corporation at December 31, 2013

The Company had previously consolidated the financial statements of Avant Diagnostics, Inc. as a majority owned subsidiary and this is reflected in the unaudited consolidated financial statements for the year ended December 31, 2012. On December 31, 2012, Avant Diagnostics, Inc. issued additional shares of its common stock, which reduced the Company's ownership interest in Avant Diagnostics, Inc. so that the Company no longer had a controlling financial interest. In accordance with FASB ASC 810-10-40, "Deconsolidation of a Subsidiary or Derecognition of a Group of Assets", as of December 31, 2012, the Company deconsolidated its majority ownership interest and recognized a non-cash, net gain on the transaction. Thus, the Company's 2013 financial statements do not include the effect of the financial statements of Avant Diagnostics, Inc.

In July 2013, the Company issued 500,000 shares of its common stock with a market price of $0.12 per share or $60,000 to settle debt of Avant Diagnostics, Inc. Arrayit was the guarantor of the debt. The Company recorded a charge of $38,962 on the transaction and received equipment from Avant Diagnostics, Inc. valued at $21,038.

On December 12, 2011, Arrayit signed an Agreement and Plan of Distribution with its subsidiary, Avant Diagnostics, Inc., whereby 19,350,000 shares of common stock of Avant Diagnostics (42.71% of the total outstanding) owned by Arrayit will be distributed ratably to the shareholders of Arrayit on the record date which will occur upon approval by the SEC of a Form S-1 registration statement to be submitted by Avant Diagnostics, Inc.

Summary of Significant Accounting Policies

Financial Reporting:

The Company prepares its financial statements in conformity with accounting principles generally accepted in the United States of America. Revenues and expenses are reported on the accrual basis, which means that income is recognized as it is earned and expenses are recognized as they are incurred.

Management further acknowledges that it is solely responsible for adopting sound accounting practices, establishing and maintaining a system of internal accounting control and preventing and detecting fraud. The Company's system of internal accounting control is designed to assure, among other items, that 1) recorded transactions are valid; 2) valid transactions are recorded; and 3) transactions are recorded in the proper period in a timely manner to produce financial statements which present fairly the financial condition, results of operations and cash flows of the Company for the respective periods being presented.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting periods. Actual results could differ from those estimates.

Cash and Cash Equivalents

Cash includes all cash and highly liquid investments with original maturities of three months or less. The Company maintains cash in bank deposit accounts, which, at times, exceed federally insured limits. The Company has not experienced any losses on these accounts.

Property and Equipment

Property and equipment are recorded at cost less accumulated depreciation. Depreciation and amortization on property and equipment are determined using the straight-line method over the three to five year estimated useful lives of the assets.

Impairment of Long-Lived Assets

Arrayit reviews its long-lived assets for impairment when events or changes in circumstances indicate that the book value of an asset may not be recoverable. Arrayit evaluates, at each balance sheet date, whether events and circumstances have occurred which indicate possible impairment. The Company uses an estimate of future undiscounted net cash flows of the related asset or group of assets over the estimated remaining life in measuring whether the assets are recoverable. If it is determined that an impairment loss has occurred based on expected cash flows, such loss is recognized in the statement of operations.

Inventory

Inventories are stated at the lower of cost or market, cost determined on the basis of FIFO.

Revenue recognition:

Overview

The Company recognizes revenue when persuasive evidence of an arrangement exists, delivery has occurred, the fee is fixed or determinable, and collectability is reasonably assured. In instances where final acceptance of the product or system is required, revenue is deferred until all the acceptance criteria have been met.

Product Sales

Product sales include sales of microarrays, reagents and related instrumentation. Microarray, reagent and instrumentation revenues are recognized when earned, which is generally upon shipment and transfer of title to the customer and fulfillment of any significant post-delivery obligations. Accruals are provided for anticipated warranty expenses at the time the associated revenue is recognized.

Services

Services revenue is comprised of equipment service revenue; revenue from custom microarray design and manufacturing fees; and scientific services revenue, which includes associated consumables.

Diagnostic Revenue

Revenue from medical testing and scientific services is recognized upon shipment of the reported results.

Other Income

The Company recognizes interest income as earned.

Shipping and Handling Costs

Shipping and handling costs billed to customers are recorded as revenue. Shipping and handling costs paid to vendors are recorded as cost of sales.

Fair Value of Financial Instruments

The Company follows accounting guidance relating to fair value measurements. This guidance establishes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value into three levels as follows:

Level 1 – quoted prices (unadjusted) in active markets for identical assets or liabilities that the Company has the ability to access as of the measurement date.

Level 2 – inputs other than quoted prices included within Level 1 that are directly observable for the asset or liability or indirectly observable through corroboration with observable market data.

Level 3 – unobservable inputs for the asset or liability only used when there is little, if any, market activity for the asset or liability at the measurement date.

The asset or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair measurement. Valuation techniques used need to maximize the use of observable inputs and minimize the unobservable inputs.

The fair value of the Company's notes payable approximates stated value. The notes payable fair value was based on Level 2 inputs. See notes 8 and 9.

Sale of Accounts Receivable to Factoring Company

The Company accounts for its sales of Accounts Receivable to the Factoring Company in accordance with the provisions of ASC 860-10-40. In order for a transfer of financial assets to be considered a sale, the assets transferred by the Company must have been isolated from the seller, even in bankruptcy or other receivership, and the purchaser must have the right to pledge or exchange the assets transferred. In addition, the sale accounting rules of ASC 860-10-40-5 require the Company to relinquish effective control over the loans sold as of the sale date.

Allowance for Doubtful Accounts

The Company records an allowance for estimated losses on customer accounts. The allowance is increased by a provision for bad debts, which is charged to expense, and reduced by charge-offs, net of recoveries.

Patent Costs

Costs incurred with registering and defending patent technology are charged to expense as incurred.

Income Taxes

Upon completion of the March 19, 2009 transaction with IMHI as more fully described in Note 1, Arrayit became a Nevada "C" Corporation.

Deferred taxes are computed using the asset and liability method. Under the asset and liability method, deferred tax assets and liabilities are recognized for future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. Deferred tax assets are not recognized unless it is more likely than not that the asset will be realized in future years.

Legal Proceedings

The costs of prosecuting and defending legal actions are expensed as incurred.

Accounting for Uncertainty in Income Taxes

The Financial Accounting Standards Board has issued guidance on Accounting for Uncertainty in Income Taxes, FASB ASC 740, Income Taxes which prescribes a recognition threshold and a measurement attribute for the financial statement recognition and measurement of tax positions taken or expected to be taken in a tax return. For those benefits to be recognized, a tax position must be more likely than not to be sustained upon examination by taxing authorities. The amount recognized is measured as the largest amount of benefit that has a greater than 50% likelihood of being realized upon ultimate settlement. Management has concluded that the Company has taken no uncertain tax positions that require adjustment to the financial statements to comply with the provisions of this guidance. When applicable, the Company will include interest and penalties related to uncertain tax positions in income tax expense.

Earnings (Loss) per Common Share

The computation of basic income(loss) per common share is computed using the weighted average number of common shares outstanding during the year. The computation of diluted earnings per common share is based on the weighted average number of shares outstanding during the year plus common stock equivalents which would arise from their exercise using the treasury stock method and the average market price per share during the year. The Company determined that the effect of common stock equivalents (Stock Options, Stock Warrants and convertible Series “C” Preferred Shares) outstanding at December 31, 2012 should be included in diluted earnings per common share for the year ended December 31, 2012. The Company’s diluted earnings per share calculation excludes approximately 31.5 million potential shares for the year ended December 31, 2013 due to their anti-dilutive effect.

	December 31 2013	December 31 2012
Basic weighted average shares outstanding	29,740,979	27,581,235
Effect of dilutive securities:		
Preferred A shares	-	211,526
Preferred C Shares	-	31,110,800
Warrants and option	-	1,017,114
Diluted weighted average shares outstanding	29,740,979	59,920,675

Stock-Based Compensation

The Company accounts for stock issued to employees, officers and directors in accordance with accounting standards for share-based payments which requires all new share-based payments to employees, including grants of employee stock options, to be recognized in the financial statements based on their fair values.

Non-Controlling Interest

The Company accounts for the non-controlling interest in its subsidiaries under ASC 810-10-45-16, Non-controlling Interest in a Subsidiary. This standard defines a non-controlling interest, previously called a minority interest, as the portion of equity in a subsidiary not attributable, directly or indirectly, to a parent. The standard requires, among other items, that a non-controlling interest be included in the consolidated statement of financial position within equity separate from the parent's equity; consolidated net income to be reported at amounts inclusive of both the parent's and non-controlling interest's shares and, separately, the amounts of consolidated net income attributable to the parent and non-controlling interest all on the consolidated statement of operations; and if a subsidiary is deconsolidated, any retained non-controlling equity investment in the former subsidiary be measured at fair value and a gain or loss be recognized in net income based on such fair value. Additionally, the standard defines a non-controlling interest as a financial instrument issued by a subsidiary that is classified as equity in the subsidiary's financial statements. A financial instrument issued by a subsidiary that is classified as a liability in the subsidiary's financial statements based on the guidance in other standards is not a controlling interest because it is not an ownership interest.

Royalty interests that entitle the holder to participate in future earnings and are not repayable were classified as non-controlling interests.

Deferred Offering Costs:

The Company may incur legal and accounting fees, as well as due diligence fees related to the preparation of pending financings. Such costs are initially deferred until the offering is completed, at which time they are recorded as a reduction of gross proceeds from the offering, or expensed to operations if the offering is unsuccessful.

Nature and Classification of the Non-Controlling Interest in the Consolidated Financial Statements:

Arrayit is the controlling interest of the affiliated group, since it maintains an investment in each of the operating entities. As of December 31, 2013, Arrayit has a 100% ownership interest in TeleChem International, Inc., and Arrayit Marketing Inc., and a 98% ownership interest in Arrayit Scientific Solutions, Inc.

The Company had previously consolidated the financial statements of Avant Diagnostics, Inc. (formerly Arrayit Diagnostics, Inc.) as a majority owned subsidiary. On December 31, 2012, Avant Diagnostics, Inc. issued additional shares of its common stock which reduced the Company's ownership interest in Avant Diagnostics, Inc. so that the Company no longer had a controlling financial interest. In accordance with FASB ASC 810-10-40, "Deconsolidation of a Subsidiary or Derecognition of a Group of Assets", as of December 31, 2012, the Company deconsolidated its majority ownership interest and recognized a non-cash, net gain of $1,738,502 on the transaction. The retained non-controlling interest was originally valued at $290,250 pursuant to the equity method of accounting and then immediately written off as it was deemed to be impaired. The gain on deconsolidation was reduced for the impairment charge and also reduced by $505,537 which represented amounts due to the Company from Avant Diagnostics, Inc. and considered uncollectible. Net assets deconsolidated at December 31, 2012 included cash of $96, total liabilities of $1,625,521 and the carrying value of the non-controlling interest of $618,614. During 2012, the non-controlling interest was increased by $1,460,870 for share issuances by Avant Diagnostics, Inc, for cash of $145,870 and services valued at $1,315,000.

Effective December 12, 2011 Arrayit signed an Agreement and Plan of Distribution with its subsidiary, Avant Diagnostics, Inc., whereby 19,350,000 shares of common stock of Avant Diagnostics then owned by Arrayit Corporation (currently 42.71% of total shares) would be distributed ratably to the shareholders of Arrayit on the record date which will be upon successful completion of the filing of a Form S-1 registration statement by Avant Diagnostics, Inc. The shares of Arrayit entitled to participate in the "spin-off" shares will include shares of Arrayit issuable on the record date upon conversion of outstanding securities and exercise of outstanding warrants and options.

Equity Method Investments

Investments where the Company has the ability to exercise significant influence, but does not control, are accounted for under the equity method of accounting in the balance sheet. Significant influence typically exists if the Company has a 20% to 50% ownership interest in the investee. Under this method of accounting, the Company's share of the net earnings or losses of the investee is included in other income (expense) in the statements of operations. The Company evaluates equity method investments for impairment whenever events or changes in circumstances indicate that the carrying amounts of such investments may be impaired. If a decline in the value of an equity method investment is determined to be other than temporary, a loss is recorded in earnings in the current period. As of December 31, 2013 and 2012, equity method investments totaled zero and the Company's share of net earnings related to these investments was zero in 2013 and 2012. During 2012, the Company recorded an impairment charge of $290,250 to reduce the carrying value of an equity investment to zero. The impairment charge was applied against gain on deconsolidation of subsidiary in the statements of operations.

Recent Accounting Pronouncements

The Company has reviewed all recently issued, but not yet effective, accounting pronouncements and does not believe the future adoption of any such pronouncements may be expected to cause a material impact on its financial condition or the results of its operations.

Leases and Deferred Rent

The Company accounts for its leases under the provisions of ASC 840, Leases.

The Company evaluates and classifies its leases as either operating or capital leases for financial reporting purposes. Operating lease commitments consist principally of leases for the Company's laboratory and corporate office.

Deferred rent represents the difference between rent paid and the amounts expensed for operating leases. The Company's premises lease includes a period of free or reduced rent as an inducement to enter into the lease agreement ("rent holidays"). The Company recognizes rent expense for rent holidays on a straight-line basis over the term of the underlying leases, without regard to when rent payments are made. The calculation of straight-line rent is based on the "reasonably assured" lease term as defined in ASC 840 and may exceed the initial non-cancelable lease term.

Landlord allowances for tenant improvements, or lease incentives, are recorded as deferred rent and amortized on a straight-line basis over the "reasonably assured" lease term as a component of rent expense.

NOTE 3 – GOING CONCERN

The accompanying consolidated financial statements of the Company were prepared on a going concern basis, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business. The Company has large working capital deficits and accumulated deficits. At December 31, 2013, Arrayit had a working capital deficit of $5,802,448, and an accumulated deficit of $24,697,483. The Company currently devotes a significant amount of its resources on developing clinical protein biomarker diagnostic products and services, and it does not expect to generate substantial revenue until certain diagnostic tests are cleared by the United States Food and Drug Administration and commercialized. Management believes that current available resources will not be sufficient to fund the Company's planned expenditures, including required past due payroll and payroll tax payments, over the next 12 months. The Company's ability to continue to meet its obligations and to achieve its business objectives is dependent upon, among other things, raising additional capital or generating sufficient revenue in excess of costs. At such time as the Company requires additional funding, the Company will seek to raise such additional funding from various possible sources, including its parent company, the public equity market, private financings, sales of assets, collaborative arrangements and debt. If the Company raises additional capital through the issuance of equity securities or securities convertible into equity, stockholders will experience dilution, and such securities may have rights, preferences or privileges senior to those of the holders of common stock or convertible senior notes. If the Company raises additional funds by issuing debt, the Company may be subject to limitations on its operations, through debt covenants or other restrictions. If the Company obtains additional funds through arrangements with collaborators or strategic partners, the Company may be required to relinquish its rights to certain technologies or products that it might otherwise seek to retain. There can be no assurance that the Company will be able to raise additional funds, or raise them on acceptable terms. If the Company is unable to obtain financing on acceptable terms, it may be unable to execute its business plan, the Company could be required to delay or reduce the scope of its operations, and the Company may not be able to pay off its obligations, if and when they come due.

These factors create substantial doubt about Arrayit's ability to continue as a going concern. These consolidated financial statements do not include any adjustments relating to the recoverability or classification of recorded assets and liabilities or other adjustments that may be necessary should the Company not be able to continue as a going concern.

The ability of Arrayit to continue as a going concern is dependent on Arrayit generating cash from the sale of its common stock or obtaining debt financing and attaining future profitable operations. Management's plans include selling its equity securities and obtaining debt financing to fund its capital requirement and ongoing operations; however, there can be no assurance Arrayit will be successful in these efforts.

NOTE 4 – ACCOUNTS RECEIVABLE

Accounts receivable are shown net of an Allowance for Doubtful Accounts. As more fully explained in Note 5 below, accounts receivable are also shown net of Accounts Receivable loans sold with recourse.

	December 31, 2013	December 31, 2012
Gross accounts receivable	$627,269	$590,449
Less		
Allowance for doubtful accounts	(115,000)	(133,000)
Loan value of receivables sold with recourse (see Note 5)	(110,802)	(229,706)
Total	$401,467	$227,743

NOTE 5 – ACCOUNTS RECEIVABLE SOLD WITH RECOURSE

Pursuant to an agreement dated July 5, 2007 and renewed on September 10, 2013, the Company has sold some of its Accounts Receivable to a financial institution with full recourse. The financial institution retains a 15% portion of the proceeds from the receivable sales as reserves, which are released to the Company as the Receivables are collected. The maximum commitment under this facility is $450,000, and is limited to receivables that are less than 31 days outstanding. The facility bears interest at 16% at December 31, 2013, and is secured by an unconditional guarantee of the Company and a first charge against the Accounts Receivable. At December 31, 2013, the balance outstanding under the recourse contracts was $110,802 net of a hold back reserve of $113,788, (December 31, 2012, $229,706 net of a hold back reserve of $86,984). Because of the Company's credit policies, repossession losses and refunds in the event of default have not been significant and losses under the present recourse obligations are not expected to be significant, it is at least reasonably possible that the Company's estimate will change within the near term.

NOTE 6 – FIXED ASSETS

Property and equipment consisted of the following:

	December 31, 2013	December 31, 2012
Fixed assets – cost	$327,648	$311,157
Less		
Accumulated depreciation	(249,163)	(311,157)
Total	$78,485	$-

Depreciation expense totaled $Nil and $16,310, respectively, for the years ended December 31, 2013 and 2012.

NOTE 7 – ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

Accounts payable and accrued liabilities, consisted of the following:

	December 31, 2013	December 31, 2012
Trade vendors	$1,028,943	$1,501,267
Professional advisors	2,738,824	3,059,594
Total accounts payable	3,767,767	4,560,861
ACCRUED LIABILITIES		
Payroll and applicable taxes	1,704,468	1,112,313
Judgment interest	181,481	482,404
Other	174,513	411,558
Total accrued liabilities	2,060,462	2,006,275
TOTAL	$5,828,229	$6,567,136

NOTE 8 – DEBT

	December 31, 2013	December 31, 2012
Notes Payable – Arrayit Corporation		
Notes payable, interest at 10%, which was due August 10, 2010 and is now past due, secured by 1,000,000 shares of the Company's common stock, pledged to the private lender without compensation by the Company's Chairman. Interest was being accrued at 25% default rate. The terms also called for the lender to withhold proceeds of $20,000 as a debt origination fee and the issuance of 200,000 warrants issuable for shares of common stock at $1.00 per share.	$250,000	$275,000
Note payable, 0% interest, due on demand, together with 75,000 shares of common stock in the form of common stock warrants	-	15,000
Notes payable, interest at 8%, unsecured due on demand from Arrayit creditors	26,117	30,749
Notes payable, interest at rates varying from 8% to 10%, unsecured due on demand from Officers and Directors, their families and other shareholders	491,884	608,520
Total notes payable, including related parties	$768,001	$929,269
Long term debt	-	-
Short term debt	$768,001	$929,269

NOTE 9 – WARRANTS AND OPTIONS

Warrants

On January 19, 2008 the Company issued 1,250,000 warrants, expiring on January 19, 2013, exercisable at $0.01.

On April 25, 2010 the Company issued 150,000 share purchase warrants, expiring on April 25, 2012, exercisable at $1.00 for consulting services. The warrants expired in 2012.
On September 30, 2010 the Company issued 200,000 share purchase warrants expiring on October 1, 2014 exercisable at $0.20 to the President of Avant Diagnostics, Inc. The 200,000 warrants were exercised in September 2013.
On October 14, 2010 the Company issued 300,000 share purchase warrants expiring on February 15, 2013 exercisable at $0.22 in connection with a debt financing.
During 2012, 90,000 warrants were issued and 350,000 warrants expired.
On January 19, 2013 1,250,000 warrants issued in 2008 expired. The warrants holders are disputing the expiry and have launched legal action to compel the Company to issue shares underlying these warrants. The Company disagrees and is defending its action in court. An additional 15,000 warrants also expired in 2013.
On June 30, 2013 the Company issued 673,077 share purchase warrants exercisable at $0.15 expiring on June 30, 2016
On June 30, 2013 the Company issued 673,077 share purchase warrants exercisable at $0.18 expiring on June 30, 2016
On December 18, 2013 the Company issued 3,610,000 share purchase warrants exercisable at $0.45 expiring on December 18, 2016

Options

On October 1, 2009, the Company granted 450,000 options to the President of Avant Diagnostics, Inc. at an exercise price of $0.32. The $189,000 intrinsic value of these options was recorded as an expense on that date. The 450,000 options were exercised in September 2013.

The following table summarizes options and warrants outstanding at December 31, 2013:

	Number of Options and Warrants	Weighted Average Exercise Price Per Share
Outstanding at December 31, 2011	2,350,000	$0.23
Granted	75,000	$0.19
Cancelled/forfeited	-	-
Expired	350,000	$1.00
Exercised	-	-
Outstanding at December 31, 2012	2,075,000	$0.08
Granted	4,956,154	$0.37
Cancelled/forfeited	-	-
Expired	1,265,000	$0.05
Exercised	650,000	$0.30
Outstanding at December 31, 2013	5,116,154	$0.37

On January 19, 2008 the Company issued 1,250,000 warrants, expiring on January 19, 2013, exercisable at $0.01.

On April 25, 2010 the Company issued 150,000 share purchase warrants, expiring on April 25, 2012, exercisable at $1.00 for consulting services. The warrants expired in 2012.

On May 12, 2010 the Company issued 200,000 share purchase warrants, expiring on May 12, 2012 exercisable at $1.00 in connection with a debt financing. The warrants expired in 2012.

On September 30, 2010 the Company issued 200,000 share purchase warrants expiring on October 1, 2014 exercisable at $0.20 to the President of Avant Diagnostics, Inc. The 200,000 warrants were exercised in September 2013.

On October 14, 2010 the Company issued 300,000 share purchase warrants expiring on February 15, 2013 exercisable at $0.22 in connection with a debt financing.

During 2010, 200,000 warrants were cancelled.

During 2012, 75,000 warrants were issued and 350,000 warrants expired.

On January 19, 2013 1,250,000 warrants issued in 2008 expired. The warrants holders are disputing the expiry and have launched legal action to compel the Company to issue shares underlying these warrants. The Company disagrees and is defending its action in court. An additional 15,000 warrants also expired in 2013.

On June 30, 2013 the Company issued 673,077 share purchase warrants exercisable at $0.15 expiring on June 30, 2016

On June 30, 2013 the Company issued 673,077 share purchase warrants exercisable at $0.18 expiring on June 30, 2016

On December 18, 2013 the Company issued 3,610,000 share purchase warrants exercisable at $0.45 expiring on December 18, 2016

Options

On October 1, 2009, the Company granted 450,000 options to the President of Avant Diagnostics, Inc. at an exercise price of $0.32. The $189,000 intrinsic value of these options was recorded as an expense on that date. The 450,000 options were exercised in September 2013.

On June 30, 2010, 160,000 share purchase options were exercised upon payment of $51,200.

The following table summarizes options and warrants outstanding at December 31, 2013:

	Number of Options and Warrants	Weighted Average Exercise Price Per Share
Outstanding at December 31, 2011	2,190,000	$0.23
Granted	75,000	$0.19
Cancelled/forfeited	-	-
Expired	350,000	$1.00
Exercised	-	-
Outstanding at December 31, 2012		
	1,915,000	$0.08
Granted	4,956,154	$0.37
Cancelled/forfeited	-	-
Expired	1,265,000	$0.05
Exercised	650,000	$0.30
Outstanding at December 31, 2013	4,956,154	$0.37

NOTE 10 – ROYALTY OBLIGATIONS

The Parkinson’s Institute – ARRAYIT SCIENTIFIC SOLUTIONS, INC.

Pursuant to an agreement dated February 9, 2009 between the Company, and The Parkinson's Institute, a California Corporation, Arrayit Scientific Solutions, Inc. is obligated to make payments, of 5% of gross earnings generated from Research derived from the biological specimens from Parkinson's disease patients and control patients provided by the Parkinson's Institute.

There were no revenues generated during the fiscal years ended December 31 2013 and 2012, hence no obligation to pay any royalties to the Parkinson’s Institute.

NOTE 11 – STOCK-BASED COMPENSATION

The Company adopted ASC 718 and ASC 505, "Share-Based Payment", to account for its stock options and similar equity instruments issued. Accordingly, compensation costs attributable to stock options or similar equity instruments granted are measured at the fair value at the grant date, and expensed over the expected vesting period. ASC 718 and ASC 505 requires excess tax benefits be reported as a financing cash inflow rather than as a reduction of taxes paid.

Operations for the years ended December 31, 2013 and 2012 include $Nil and $100,450 of stock-based compensation, arising from the granting of 0 and 480,575 unregistered common shares, respectively. Restricted shares were issued in exchange for services related to website consulting and investor relations. The Company relied upon the exemption under Section 4(2) of the Securities Act.

NOTE 12 – CONVERTIBLE PREFERRED STOCK

Convertible Preferred Stock

The Series A Preferred Stock has no stated dividend rate and has a liquidation preference of $.001 per share. The Series A Preferred Stock also has voting rights that entitle the preferred shareholders to vote with the common shareholders as if the preferred stock had converted to common. Both the conversion ratio of the preferred into common (9.6:1) and the number of shares outstanding is subject to revision upon reverse stock dividends or splits that reduce the total shares outstanding.

The Series C Preferred Stock has no stated dividend rate. The Series C Preferred Stock also has voting rights that entitle the preferred shareholders to vote with the common shareholders as if the preferred stock had converted to common. The conversion ratio of the preferred into common is not subject to revision upon reverse stock dividends or splits that reduce the total shares outstanding. The 103,143 Series C Preferred Stock was issued on February 21, 2008. These Series C Preferred shares are convertible into 36,100,000 common shares at the rate of 350:1. On August 15, 2008 the articles of designation for the Series C Preferred Stock were amended to limit the conversion to common shares to 10% of the holders’ original holdings in any quarter. During the fiscal years ended December 31, 2013 and 2012, respectively, 1,743 and 2,057 Series C Preferred Stock shares were converted into 610,015 and 720,020 shares of common stock, respectively.

NOTE 13 – INCOME TAXES

The components of the net deferred tax assets are as follows at December 31:

	2013	2012
Operating loss carry forwards	$8,742,401	$8,817,490
Tax depreciation	19,511	19,511
Other temporary differences	219,182	103,696
	8,981,094	8,940,697
Less valuation allowance	(8,981,094)	(8,940,697)
Net deferred tax asset	$-	$-

The primary factors affecting the Company's income tax rates were as follows:

	2013		2012	
Tax benefit at U.S. statutory rates	(34.00	%)	(34.00	%)
State tax benefit	(8.84	%)	(8.84	%)
Expiring state NOL's	0		0	
Changes in valuation allowance	42.84	%	42.84	%
	0.00	%	0.00	%

In assessing the realizability of deferred tax assets, management considers whether it is more likely than not that some portion or all of the deferred tax assets will not be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible. The Company reviews the need for a valuation allowance in each tax jurisdiction on a quarterly basis, analyzing all negative and positive evidence. Operations were in a loss position for the year ended December 31, 2013 and in a cumulative loss position for the thirty-six month period ended December 31, 2013. Accordingly, based on the current year and cumulative loss in the U.S. and other relevant information, the Company concluded it did not meet the more likely than not criteria to justify the reversal of the valuation allowance at December 31, 2013. The valuation allowance for the U.S. operations totaled $8.98 million at December 31, 2013 and had a net increase of $40,397 from the prior year-end mainly due to current year activity.

The Company will continue to monitor the need for a valuation allowance throughout 2014, pursuant to the guidance of U.S. accounting principles. Should the Company demonstrate a favorable and sustainable earnings trend for its historic and projected results for its U.S. operations, a reduction in the valuation allowance and a corresponding income tax benefit may result.

NOTE 14 – DUE TO RELATED PARTY

Pursuant to a previous consulting agreement with Dr. Mark Schena, Director, which ended December 31, 2010, the Company was obligated to pay a royalty of 5% of gross sales to him as a royalty for unfettered use of his patents and knowledge. Amounts outstanding at December 31, 2013 and 2012 of $478,533 and $577,033, respectively, are unsecured, non-interest bearing and due on demand.

NOTE 15 - COMMITMENTS AND CONTINGENCIES

Disclosure regarding lawsuits

The Company accrues interest each quarter on outstanding judgments. The Company records interest expense equal to the court indicated interest rate applied to the outstanding judgment and records an increase in judgment interest payable, which corresponds to the interest expense recognized during the year. During the fourth quarter of 2014 the Company reached settlements with holders of the outstanding judgments, pursuant to which it was not longer required to pay interest on outstanding amounts.

Outstanding amounts due to legal firms with respect to litigation:

Legal Firm	Amount Payable	Description
	At Dec 31, 2013	
Sanders Ortoli Vaughn-Flam Rosenstadt LLP	$69,731	Sanders Ortoli Vaughn-Flam Rosenstadt LLP vs Arrayit Corporation., Case # 653313/13. Sanders Ortoli Vaughn-Flam Rosenstadt LLP vs Arrayit Corporation, a law firm, sued Arrayit for breach of contract regarding payment for services rendered. The parties reached a settlement on February 26, 2014.
Morrison & Foerster LLP	$537,860	Morrison & Foerster LLP vs TeleChem International, Inc., Case # CGC-07-469964 Morrison & Foerster LLP, a law firm, sued TeleChem for breach of contract regarding payment for services rendered, resulting in a judgment against TeleChem plus interest, costs and attorneys fees.
Townsend & Townsend & Crew	$139,704	Townsend & Townsend & Crew, a law firm, represented TeleChem International, Inc. in Oxford Gene Technology Ltd. Vs TeleChem International, Inc. Case# 04-013 KAJ. Oxford Gene Technology, a biotech company, sued TeleChem for patent infringement. The lawsuit was settled in 2005. Accounts payable to Townsend are for services rendered.
Reed Smith LLP	$1,757,541	Reed Smith LLP, a law firm, represented TeleChem International, Inc. in Pediatrix Screening, Inc. vs TeleChem International, Inc., Case #01-2226. The case was settled on October 27, 2011. Accounts payable to Reed Smith LLP are for services rendered.

Outstanding legal actions

On March 13, 2013, Plaintiffs Recap Marketing and Consulting LLP sued Defendants Arrayit Corporation in Fort Bend County Texas Case No. 13-DCV-204747 for breach of contract with regard to warrants to purchase common stock. Recap seeks damages or specific performance, exemplary damages, costs of court and reasonable attorney's fees. On April 16, 2013, the Company's counsel submitted an unopposed motion to transfer venue to Harris County Texas and, subject to the motion to transfer venue, original answer denying the allegations and offered the affirmative defences of failure of condition precedent and expiration of contract, estoppel, failure of consideration and waiver, and in the alternative that the number of shares is incorrect. The parties attended a voluntary mediation conference on September 18, 2013, but were unable to reach a settlement agreement. The case is currently scheduled for trial in July of 2014.

Long Term Lease Commitments

The Company leases its office facility in Sunnyvale, California under operating leases that expire December 31, 2020.

Future minimum lease payments are as follows

2014	$195,000
2015	241,020
2016	227,568
2017	234,388
2018	263,364
2019	271,272
2020	279,408
	$1,712,020

Rent expense was approximately $150,044 and $182,657 for the years ended December 31, 2013 and 2012, respectively.

Note 16 - Stockholders' Equity (Deficit)

Conversion of Debt to Common Stock

During 2013 and 2012, trade creditors converted no accounts payable into shares of common stock.

Common Shares Issued for Service

No shares were issued for services during 2013.

During 2012, the Company issued 480,575 common shares to consultants under consulting agreements. The associated expense was $100,450.

Common Shares Issued for Compensation

No shares were issued as compensation during 2013 and 2012.

Common Shares Issued for Cash

During 2013 8,666,155 common shares were issued for a cash consideration of $2,359,000

No shares were issued for cash during 2012.

Common Shares Issued on Exercise of Options

During 2013, 184,350 shares were issued on the exercise of options.

No shares were issued for options during 2012.

Issuance of Warrants for Services and as Part of Debt

During 2012, 75,000 warrants issued for debt.

Series “A” Convertible Preferred Stock

The Series “A” Preferred Stock, $0.001 par value, has no stated dividend rate and has a liquidation preference of $.001 per share. The Series “A” Preferred Stock also has voting rights that entitle the preferred shareholders to vote with the common shareholders as if the preferred stock had converted to common. There are 166,667 authorized and 22,034 (2012 – 22,034) issued and outstanding shares.

Series “C” Convertible Preferred Stock

The Series “C” Preferred Stock, $0.001, has no stated dividend rate. There are 103,143 authorized shares. The Series “C” Preferred Stock also has voting rights that entitle the preferred shareholders to vote with the common shareholders as if the preferred stock had converted to common. The conversion ratio of the preferred into common is not subject to revision upon reverse stock dividends or splits that reduce the total shares outstanding.

The 103,143 Series “C” Preferred Stock was issued on February 21, 2008 as part of the merger with TeleChem, and at December 31, 2013 there were 87,145 (2012 – 88,888) issued and outstanding shares.. These Series “C” Preferred shares are convertible into 36,100,000 common shares at the rate of 350:1.

On August 15, 2008 the articles of designation for the Series C Preferred Stock were amended to limit the conversion to common to shares to 10% of the holders’ original holdings in any quarter.

Options and warrants

The following table summarizes information about outstanding warrants and options for common stock at December 31, 2013:

Range of Exercise	Number Outstanding	Weighted Average Remaining Contractual Life (years)	Weighted Average Exercise Price	Number Exercised	Average Exercise Price
$0.15	673,077	2.5	n/a	0	n/a
$0.18	673,077	2.5	n/a	0	n/a
$0.45	3,610,000	2.98	n/a	0	n/a

NOTE 17 – SUBSEQUENT EVENTS

Legal actions

On January 13, 2014, Plaintiff Tamarin Lindenberg sued Arrayit Corporation, Arrayit Diagnostics, Inc, Avant Diagnostics, Inc, John Howell, Steven Scott and Gregg Linn in Civil Action No. L7698-13. Plaintiff alleges violations of the New Jersey Conscientious Employee Protection Act NJSA 34:19-1 to NJSA 34:19-8 ("CEPA"), breach of contract, breach of covenant of good faith and fair dealing, economic duress and intentional infliction of emotional distress. On February 10, 2014, Arrayit Corporation requested the removal of the State Action from the Superior Court of New Jersey, Law Division, Essex County to the United States District Court for the District of New Jersey. Arrayit Corporation's counsel requested that Plaintiff's counsel dismiss Arrayit Corporation as a defendant in this matter stating there is no basis against Arrayit Corporation for the purported claim under CEPA just as there is no viable CEPA claim against any of the other non-controlling, minority shareholders (e.g. Plaintiff); Plaintiff and Arrayit Corporation are not parties to any contractual agreements; there is no viable legal theory for 'indirect breach'; Arrayit Corporation did not engage in any conduct, actions, communications or dealings with Plaintiff giving rise the purported claims against AC for alleged "economic duress," "intentional infliction of emotional distress" or "tortious interference"; there is no good faith basis in law or fact for any of the claims attempted against Arrayit Corporation. Arrayit Corporation reserves all rights and specifically reserves all of its rights under FRCP Rule 11.

On February 26, 2014, the Company reached a settlement with Sanders Ortoli Vaughn-Flam Rosenstadt LLP, a law firm, who had sued Arrayit for breach of contract regarding payment for services rendered. The terms of settlement provided inter allia;

(1) a cash payment of $10,000

(2) issuance of 90,000 common shares of Arrayit

(3) issuance of 110,000 cashless warrants at $0.65 expiring on February 26, 2019

The Company will record an expense of approximately $5,000 in the first quarter of 2014 in connection with the settlement of this suit.

On March 31, 2014, Avant Diagnostics, Inc. sued Arrayit Corporation and Crucible Capital Group, Inc. in The Superior Court of the State of Arizona in and for the County of Maricopa, Case No. CV2014-092882. Avant alleges breach of contract, fraud, negligent misrepresentation, tortious interference with business expectancy, breach of duty

of good faith and fair dealing, declaratory judgment, conversion, unjust enrichment, promissory estoppel. Arrayit Corporation denies all allegations and intends to counter sue for causes of action that could include breach of contract, fraud, negligent misrepresentation, tortious interference with business expectancy, breach of duty of good faith and fair dealing, declaratory judgment, conversion, unjust enrichment, promissory estoppel, and other causes of action yet to be determined.

Share issuances

(1) On March 5, 2014 the Company issued 90,000 shares in connection with the settlement of the Sanders Ortoli Vaughn-Flam Rosenstadt LLP legal action.

(2) On March 28, 2014 the Company issued 1,000,000 to liquidate a guarantee of Avant debt

(3) On March 28, 2014 the Company issued 136,365 shares for a cash consideration of $60,000.

(4) On March 28, 2014 the Company issued 83,334 shares for accounting services of $12,500.

(5) On March 31, 2014 the Company issued 23,500 shares for engineering services of $3,525.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A(T). CONTROLS AND PROCEDURES

Management’s Annual Report on Internal Control over Financial Reporting

Our management, including our Chief Executive Officer and Chief Financial Officer, is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rule 13a-15(f) under the Securities Exchange Act, as amended. Our management, including our Chief Executive Officer and Chief Financial Officer assessed the effectiveness of our internal control over financial reporting as of December 31, 2012. In making this assessment, our management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (“COSO”) in Internal Control-Integrated Framework. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the company's annual or interim financial statements will not be prevented or detected on a timely basis. In its assessment of the effectiveness of internal control over financial reporting as of December 31, 2013, our management including our Chief Executive Officer and Chief Financial Officer determined that there were control deficiencies that constituted material weaknesses, as described below.

As of the end of the period covered by this report, our management including our Chief Executive Officer and Chief Financial Officer, also carried out an evaluation of our disclosure controls and procedures as defined in Rule 13a-15(e) of the Exchange Act. Based on that evaluation, management including our Chief Executive Officer and Chief Financial Officer determined that our disclosure controls and procedures are ineffective in enabling the Company to record, process, summarize and report, in a timely manner, the information that the Company is required to disclose in its Exchange Act reports. Control deficiencies that constituted material weaknesses, are described below.

Material Weaknesses

Lack of Effective Corporate Governance Policies and Procedures. We do not have effective policies regarding the independence of or directors and do not have independent directors. The lack of independent directors means that there is no effective review, authorization, or oversight of management or management’s actions by persons that were not involved in approving or executing those actions. This has resulted in inconsistent practices. Further, the Board of Directors does not currently have any independent members and no director qualifies as an audit committee financial expert as defined in Item 407(d)(5)(ii) of Regulation S-B. Since these entity level programs have a pervasive effect

across the organization, management has determined that these circumstances constitute a material weakness.

We have no conflicts of interest policies and there is no provision for the review and approval of transactions between the Company and interested members of management.

Lack of Effective Policies Regarding the General Accounting System. We do not have any documented processes for the input, accumulation, or testing of financial data that would provide assurance that all transactions are accurately and timely recorded or that the financial reports will be prepared on a periodic basis.

Lack of Effective Control over Financial Statement Disclosure. We do not maintain effective controls over financial statement disclosure. Specifically, controls were not designed and in place to ensure that all disclosures required were originally addressed in our financial statements. Accordingly, management has determined that this control deficiency constitutes a material weakness.

Because of these material weaknesses, management has concluded that the Company did not maintain effective internal control over financial reporting as of December 31, 2013, based on the criteria established in "Internal Control-Integrated Framework" issued by the COSO.

Management, including our Chief Executive Officer and Chief Financial Officer, has determined that the Company does not have the financial resources or personnel to address any of the material weaknesses identified or to conduct a more robust evaluation of its controls. As resources become available, management will develop and implement remedial actions to address the material weaknesses it has identified.

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

Changes in internal control over financial reporting

There were no changes in our internal control over financial reporting during our most recent fiscal quarter that materially affected, or were reasonably likely to materially affect, our internal control over financial reporting.

Limitations on the Effectiveness of Controls

Our management, including our Chief Executive Officer and Chief Financial Officer, does not expect that our Disclosure Controls and internal controls will prevent all errors and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of a simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management or board override of the control.

The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions; over time, controls may become inadequate because of changes in conditions, or the degree of compliance with the policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The following sets forth our officers and Directors as of the date of this filing:

Name	Position	Year of Appointment
Rene Schena Age 50	Chairman, Director, CEO and CFO	2007
Todd J Martinsky Age 48	Vice President and Director	2007
Mark Schena, Ph.D Age 50	President, Chief Technology Officer, Secretary and Treasury	2007

Rene Schena – Chairman, Chief Executive Officer and Chief Financial Officer

Arrayit Corporation was formed from the Biotech Division of TeleChem International Inc., a company Rene co-founded in 1993. Arrayit has emerged as a world leader in microarray technology under Rene's leadership, being distinguished by Inc. Magazine in 2002 and 2003 as on of the nation's Top 500 Fastest Growing privately-held companies; and in 2005 was recognized by the Silicon Valley Business Journal as the 11th largest woman-owned business in Silicon Valley.

Rene holds a degree in Language Studies from the University of California, Santa Cruz. She has earned 25 years experience in international business, including translation, contract documentation and commodities trading. She worked in commodities trading with a subsidiary of ConAgra (1985-1988) and as a chemical import and distribution specialist, department manager, and later President of NuSource Chemical Corporation (1988-1993). Rene co-founded TeleChem International, Inc., which focused on traditional chemical distribution before expanding into the government and biotech sectors. At Arrayit, Rene manages all corporate financial, tax, legal, regulatory and human resource activities. Rene Schena is married to Dr. Mark Schena.

Mark Schena, Ph.D. – President, Chief Science Officer and Director

Dr. Schena graduated first in his class with a PhD in Biochemistry in 1990 from the University of California at San Francisco. In 1995, as a postdoctoral fellow at Stanford University, he published the first paper on microarrays in the premier scientific journal Science, introducing microarrays to the world as a new scientific technology. His work rapidly led to a new field of discovery that uses microarrays to investigate both genes and proteins in research and diagnostics. Today, microarrays are used in more than 100,000 laboratories in 50 countries to help address complicated questions in biology, chemistry, agriculture and medicine. The microarray field to date has produced 550,000 scientific publications. Moreover, the commercial expansion of microarray technologies has created a multi-billion dollar industry with over 200 companies producing ancillary products and services. Acknowledged by his peers for the importance of these accomplishments, in 2003 Dr. Schena was proclaimed the "Father of Microarray Technology" by The Scientist, a broadly read scientific journal. In 2009, Dr. Schena was proclaimed the "Father of Microarrays" by Drug Discovery News, further reinforcing his leadership position in the field.

Dr. Schena has authored five foundational books on the subject of microarrays, including the best selling text, “Microarray Analysis” (J. Wiley and Sons); and has published more than 30 important papers in scientific journals. Dr. Schena has organized symposia and course work, chaired societal meetings and promoted the expansion of microarray technology - accruing over one million travel miles worldwide to speak to audiences of PhDs, MDs and life science professionals. Dr. Schena holds the key microarray diagnostics patent (issued in 2005) that provides for 100,000 patients to be screened for a health condition in a single, simple laboratory test. In 2001, this discovery was featured in the NOVA television documentary “Cracking the Code of Life,”, wherein Dr. Schena introduced the use of microarrays as a diagnostic tool for the first time, and presented his vision for preventative, personalized medicine through pre-symptomatic testing. Mark’s innovation, product development ideas, world-respected credentials and scientific celebrity extend the ultimate scientific credibility to the Arrayit companies and their leading-edge products and services. Dr. Mark Schena is married to Rene Schena.

Todd Martinsky – Senior Vice President and Director

Todd received a Bachelor of Arts degree from San Jose State University, after which he served as Director of Education and Consulting at the Codd and Date Consulting Group, whose founder was famous for creating the relational database. Todd co-founded TeleChem International, Inc. in 1993, and oversaw the Arrayit biotech division beginning in 1996. His computer science consulting experience had measurable impact on the evolution of Arrayit's business, as he led the design, development and implementation of the Company's online presence and related e-commerce platform – the first of its kind in the biotech sector.

Todd is recognized as a leader in the microarray field. He has guided and consulted with microarray professionals since the advent of commercial microarrays. He has presented as a Keynote Speaker for key microarray workshops and scientific meetings and has served on various microarray manufacturing panels. Over the past decade, Todd has served as a guest speaker at events sponsored by the Centers for Disease Control (CDC), The United States Department of Agriculture (USDA), and a number of major universities. Serving as an advisor to the U.S. Pharmacopeia (USP), he authored a chapter for a compendium on nucleic acid test methods for which he received Doctoral-level recognition. In addition, Todd has authored chapters on microarray manufacturing methods for five books, including the new 2009 "Microarray Methods and Protocols" (CRC Press). On the web, he authors and manages a popular microarray blog and is a respected member of the email-based microarray Gene-Arrays List Serve. Todd has been recognized as the "number one most-quoted microarray executive" through Arrayit's educational outreach program, appearing in numerous feature articles and scientific publications. During his tenure at Arrayit, he has established numerous successful and mission critical business alliances that continue today. Todd Martinsky is the brother of Rene Schena.

Independence of Directors

We are not required to have independent members of our Board of Directors, and do not anticipate having independent Directors until such time as we are required to do so.

Corporate Governance

We are a small reporting company, not subject to the reporting requirements of Section 13(a) or 15(d) of the Exchange Act respecting any director. Each of our directors has attended all meetings either in person or via telephone conference. We have no standing committees regarding audit, compensation or other nominating committees.

We strive to promote accountability for adherence to honest and ethical conduct; endeavor to provide full, fair, accurate, timely and understandable disclosure in the reports and documents that we file with the SEC and in other public communications made by us; and we strive to be compliant with applicable governmental laws, rule4s and regulations.

We have adopted a written code of business conduct and ethics.

Our entire Board of Directors is responsible for reviewing and making recommendations concerning the selection of outside auditors, reviewing the scope, results and effectiveness of the annual audit of our financial statements and other services provided by the Company's independent public accountants. The Board of Directors reviews the Company's internal accounting controls, practices and policies. Our Board of Directors has determined that no director qualifies as an audit committee financial expert as defined in Item 407(d) (5) (ii) of Regulation S-K.

Nominating Committee

The Company is not required to have a nominating committee and as such, does not have one.

Audit Committee and Financial Expert

The Company is not required to have an audit committee and as such, does not have one.

Compensation Committee

The Company is not required to have a compensation committee and as such, does not have one.

Code of Ethics for the CEO and CFO

On Feb 21, 2008, the Board of Directors of the Company adopted a Code of Ethics for the Company's senior officers. The Board of Directors believes that these individuals must set an exemplary standard of conduct, particularly in the areas of accounting, internal accounting control, auditing and finance. This code sets forth ethical standards to which the designated officers must adhere and other aspects of accounting, auditing and financial compliance.

A copy of our Code of Ethics, will be provided without fee, upon written request to our Corporate offices.

SECTION 16 (A) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) of the securities Exchange Act of 1934, as amended, requires our directors, executive officers and persons who own more than 10% of a class of our equity securities which are registered under the Exchange Act of 1924, as amended, to file with the Securities and Exchange Commission initial reports of ownership and reports of changes of ownership of such registered securities. Such executive officers, directors and greater than 10% beneficial owners are required by Commission regulation to furnish us with copies of all Section 16(a) forms filed by such reporting persons.

There were no failures to comply with Section 16(a) by any directors, officers, or beneficial owners during this fiscal year.

ITEM 11. EXECUTIVE COMPENSATION

SUMMARY COMPENSATION TABLE

Name and Principal Position	Year	Salary ($)	Bonus ($)	Stock Awards ($)	Options Awards ($)	All Other Compensation ($)	Total ($)
Rene A Schena	2013	$ 0	0	0	0	$ 0	$ 0
Chairman, Director, CEO, CFO	2012	0	0	0	0	0	$ 0
Todd J Martinsky	2013	50,000	0	0	0	50,000	$ 0
Vice President and Director	2012	0	0	0	0	0	$ 0

Mark Schena, Ph.D President, Chief Technology Officer, Secretary & Treasurer, and Director	2013	0	0	0	0	0	$	0
	2012	0	0	0	0	0	$	0

Fair value of stock awards was computed in accordance with FASB ASC Topic 718 (column (e)).

Our compensation and benefits programs are administered by our Board of Directors and intended to retain and motivate individuals with the necessary experience to accomplish our overall business objectives within the limits of our available resources. Consequently, the guiding principles of our compensation programs are:

- simplicity, clarity, and fairness to both the employee and the Company;
- preservation of Company resources, including available cash; and
- opportunity to receive fair compensation if the Company is successful.

Each element of our compensation program contributes to these overall goals in a different way.

- Base Salary and Benefits are designed to provide a minimum threshold to attract and retain employees identified as necessary for our success.
- Cash Bonuses and equity awards are designed to provide supplemental compensation when the Company achieves financial or operational goals within the limits of our available resources.

All compensation payable to the Chief Executive Officer and the other named executive officers is reviewed annually by the Board of Directors and changes or awards require approval by the Board of Directors.

Board Compensation

The following table sets forth summary information concerning the compensation we paid to directors during the year ended December 31, 2013 and 2012:

Name	Fees Earned or Paid in Cash ($)	Stock Awards ($)	Option Awards ($)	All Other Compensation ($)	Total ($)
Rene Schena	-	-	-	-	-
Mark Schena	-	-	-	-	-
Todd Martinsky	-	-	-	-	-

(1) None of the Board members received any additional consideration for their services to the Board of Directors other than what they were paid as officers of the Company, as provided above, and as such, they have not been included in the table above.

INDEMNIFICATION OF DIRECTORS AND OFFICERS.

Pursuant to Section 78.7502 of the Nevada Revised Statutes, the Registrant has the power to indemnify any person made a party to any lawsuit by reason of being a director or officer of the Registrant, or serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by him in connection with such action, suit or proceeding if he acted in good faith and in a

manner he reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful. Our By-laws provide that the Registrant shall indemnify its directors and officers to the fullest extent permitted by Nevada law.

With regard to the foregoing provisions, or otherwise, we have been advised that in the opinion of the Securities and Exchange Commission, such indemnification is against public policy as expressed in the Securities Act of 1933, as amended, and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by us of expenses incurred or paid by a director, officer or controlling person of the Corporation in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, we will, unless in the opinion of our counsel the matter has been settled by a controlling precedent, submit to a court of appropriate jurisdiction the question of whether such indemnification by us is against public policy as expressed in the Securities Act of 1933, as amended, and will be governed by the final adjudication of such case.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Beneficial ownership of the common stock is determined in accordance with the rules of the Securities and Exchange Commission and includes any shares of common stock over which a person exercises sole or shared voting or investment powers, or of which a person has a right to acquire ownership at any time within 60 days of April 15, 2013. Except as otherwise indicated, and subject to applicable community property laws, the persons named in this table have sole voting and investment power with respect to all shares of common stock held by them. Applicable percentage ownership in the following table is based on 38,139,616 shares of common stock equivalents outstanding.

At December 31, 2013 the total Common Share Equivalents was determined as follows:

	Outstanding	Conversion Factor	Common Share Equivalents
Class A	22,034	0.32	7,051
Class C	87,145	350	30,500,750
Common	38,139,616	1	38,139,616
Warrants	4,956,154	1	4,956,154
			73,603,571

The following table sets forth a description of any substantial interest, direct or indirect of each person who has been a director or executive officer of the registrant at any time since the beginning of the last fiscal year. The address of each person, unless otherwise noted, is 927 Thompson Place, Sunnyvale, California 94085. Additionally we have included information about persons more than 5% of the total voting rights.

	Common Stock	Series C Preferred Stock	Series C Preferred Stock Common Share Equivalents	Total Voting Shares Based on All Voting Shares Outstanding	Total %	
Officers and Directors						
Rene A Schena, Chief Executive Officer Chief Financial Officer, Chairman and Director	2,000,000	38,571	13,499,955	15,499,955	21.05	%
Mark Schena, President and Director	1,000,000	12,857	4,500,090	5,500,090	7.47	%
Todd Martinsky, Executive Vice President and Director	1,500,000	25,714	8,999,865	10,499,865	14.27	%
Paul K. Haje, Vice President of Marketing, Consultant		12,857	4,500,090	4,500,090	6.11	%
Greater Than 5% Shareholders						
None						
All of the Officers and Directors as a Group (4 Persons)	5,275,000	89,999	31,500,000	36,775,000	48.9	%

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

Pursuant to a previous consulting agreement with Dr. Mark Schena ended December 31, 2010, the Company was obligated to pay a royalty of 5% of gross sales to him as a royalty for unfettered use of his patents and knowledge. Amounts outstanding at December 31, 2013 and December 31, 2012 of $478,533 and $577,033 respectively are unsecured, non-interest bearing and due on demand.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

Audit Fees

The aggregate fees billed for each of the fiscal years ended December 31, 2013 and December 31, 2012 for professional services rendered by the principal accountants for the audit of the Company's annual financial statements and the review of the Company's quarterly financial statements were $58,190 and $50,441, respectively.

Audit Related Fees

None

Tax Fees

None

All Other Fees

None

We do not have an audit committee and as a result our entire board of directors performs the duties of an audit committee. Our board of directors evaluates the scope and cost of the engagement of an auditor before the auditor renders audit and non-audit services.

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a) Exhibits

The following exhibits are either attached hereto or incorporated herein by reference as indicated.

Exhibit Number	Description	Previously Filed as Exhibit	File Number	Previously Date Filed
2.1	Agreement and Plan of Merger	Exhibit 10.1 to the Registrant's Current Report on Form 8-K	001-16381	10/03/2008
2.2	Amendment and Restated Agreement and Plan of Merger	Exhibit A to the Registrant’s Preliminary Schedule 14C	001-16381	10/03/2008
3.1	Amended and Restated Bylaws	Exhibit 3iii to the Registrant's Report on Form 10K	0001-059016	04/15/2009
3.2	Amendment of Articles of Incorporation	Exhibit 3 to the Registrant's Report on Form 10K	0001-059016	04/15/2009
3.3	Certificate of Designation of the Series “C” Convertible Preferred Stock	Exhibit 10.3 to the Registrant's Current Report on Form 8-K	001-16381	10/03/2008
3.4	Certificate of Correction for the Certificate of Designation of the Series C Convertible Preferred Stock	Exhibit 10.4 to the Registrant's Current Report on Form 8-K	001-16381	10/03/2008
3.5	State if Delaware Certificate if Amendment of Certificate of Designation of Series “A” Convertible Preferred Shares	Exhibit 3.1 to the Registrant's Current Report on Form 8-K	0001-059016	11/25/2008
3.6	Code of Ethics	Exhibit 14 to the Registrant's Report on Form 10K	0001-059016	04/15/2009
4.1	Form of Warrant	Exhibit 4.2 to Registrant's Current Report on Form 8-K	001-16381	2/28/05
4.2	Form of Additional Investment Right "A"	Exhibit 10.2 to Registrant's Current Report on Form 8-K	001-16381	2/28/05
4.3	Form of Additional Investment Right "B"	Exhibit 10.3 to Registrant's Current Report on Form 8-K	001-16381	2/28/05
10.1	2004 Directors, Officers and Consultants Stock Option, Stock Warrant and Stock Award Plan	Exhibit 4.1 to the Registrant's Registration Statement on Form S-8	333-119586	10/07/04
10.2	2002 Directors, Officers and Consultants Stock Option, Stock Warrant and Stock Award Plan	Exhibit 4.1 to the Registrant's Registration Statement on Form S-8	333-99371	9/10/02
10.3	Option to Purchase Common Stock between Registrant and John Howell	Exhibit 99.1 to the Registrant's Current Report on Form 8-K/A	0001-059016	10/26/2009
10.4	Form of Securities Purchase Agreement for 8.0% Senior Secured Convertible Notes	Exhibit 10.1 to Registrant's Current Report on Form 8-K	001-16381	2/28/05

10.5	Form of Security Agreement	Exhibit 10.4 to Registrant's Current Report on Form 8-K	001-16381	2/28/05
10.6	SovCap Equity Partners, Ltd., Notes	Exhibit 10.3 to the Registrant's Report on Form 10K/A	0001-059016	09/17/2009
10.7	Common Stock Purchase Warrant	Exhibit 10.1 to the Registrant's Current Report on Form 8-K	0001-059016	11/26/2008
10.8	License Agreement Between Arrayit Diagnostics, Inc. and Wayne State University	Exhibit 10.1 to the Registrant's Current Report on Form 8-K	0001-059016	12/09/2009
10.9	Sponsored Research Agreement Between Arrayit Diagnostics, Inc. and Wayne State University	Exhibit 10.1 to the Registrant's Current Report on Form 8-K	0001-059016	12/10/2009
10.10	Consulting Agreement dated November 1, 2009 between the Registrant and William L. Sklar	Exhibit 10.1 to the Registrant's Current Report on Form 8-K	0001-059016	12/15/2009
10.11	Consulting Agreement dated January 2, 2010 between the Registrant and Mark Schena, Inc,	Exhibit 99.1 to the Registrant's Current Report on Form 8-K	0001-059016	03/31/2010
16.1	Letter From Berman, Hopkins & Laham, CPAs And Associates, LLP	Exhibit 16.1 to the Registrant's Current Report on Form 8-K	0001-059016	08/17/2010
21.1*	Subsidiaries	Attached hereto		
31.1*	Certificate of the Chief Accounting Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	Attached hereto		
31.2*	Certificate of the Chief Executive Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	Attached hereto		
32.1*	Statement of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	Attached hereto		
32.2*	Certificate of the Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	Attached hereto		

(1) The Company made and delivered to SovCap Equity Partners, Ltd. 13 separate demand promissory notes from August 21, 2003 through September 8, 2004. Each of these demand notes used the form attached. Only the principal amounts varied. These demand notes are discussed in greater detail under Item 12. Certain Relationships and Related Transactions - Other Relationships and Related Transactions.

(b) We did not file any Current Reports on Form 8-K during the period covered by this Annual Report.

* Filed herein.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) 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.

Date: April 15, 2014

Arrayit Corporation
By: /s/ Rene Schena
Rene Schena
Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Rene Schena	Chairman, Director, Chief Executive Officer	April 15, 2014
/s/ Mark Schena	Director, President	April 15, 2014
/s/ Todd Martinsky	Director, Executive Vice President	April 15, 2014