

# MAPS System Testing and Verification

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A Major Qualifying Project

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by

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Veselin Iliev

Approved by:

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Prof. Wanli Zhao

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## Abstract

The purpose of this project is to test the profit making and risk management attributes of an investment program called Major Analytical Paradigm Shift (MAPS). To achieve this we randomly select 30 stocks from different industries and different growth stages and backtest them with MAPS. To further test the risk attributes, we select 30 of the most and the least volatile stocks for the last 10 years and compare their MAPS performance results against the same period SPX, Buy-and-Hold profit and Sharpe Ratios. The testing shows that although MAPS does not universally outperform the Buy-and-Hold strategy, it is superior at handling risk and produces significant results with the increase in volatility.

## Executive Summary

Over generations the stock market has always fed a dream which many have pursued and only a few have achieved – quick riches. The stock market has also been a tool for people to invest in different financial instruments and save for early retirement, security or other purposes. Now there might be a universal way to achieve both desires – MAPS. It is an investment system developed by EMB Investments which promises extraordinary returns with low risk and ease of use.

MAPS claims to have superior performance with relatively low risk has the capability of managing individual stocks, portfolios of stocks, ETF's, funds, as well as the ability to select strong equities. This project is focused on the confirming the abilities of MAPS as stock managing and risk reducing system, while leaving out the portfolio management and stock selection. Testing is done under absolute worst case conditions by observing MAPS performance with 30 random stocks, 30 of the most volatile and 30 of the least volatile as measured by the last 10 years of monthly volatility. This MQP will serve as independent testing for MAPS that will be used to market the system to potential investors and buyers.

To test MAPS, Fidelity Wealth Lab Pro was used, a platform which provides back-testing capabilities over historical data. Except for test data, included are also results and recommendations from EMB Investments done to renowned financial advisors and us in real time, as well as some of the company analysis performed to test MAPS. These recommendations are well documented and are available at EMB Investment.

To compare and prove the results, we test MAPS based on profitability, consistency over different trading periodicities and Sharpe ratio. We compared the results against the buy and hold

return and Sharpe ratio for the same stock over the same period, as well as to the general market as measured by the exchange traded fund representing the S&P500 (SPX).

The results for the randomly selected stocks and the least volatility stocks were not impressive and, on average, were underperforming the capstone measurements with slightly better Sharpe ratios. A real difference was revealed with the high volatility stocks which on average performed much better than the market overall and the buy and hold for the particular stock, while significantly increasing the Sharpe ratios. There was also consistency between the different trading periodicities, as best results were achieved with high volatility stocks and weekly trading, which averaged more than 740% over average holding period around 12 years, or around 19.41% return per year. This is superior performance and can hardly be matched by any widely available financial opportunity.

Another important aspects of the project are EMB Investment recommendations which also proved to be with superior profitability and timing. A small market “correction” with almost perfect timing was indicated and certain stocks were selected which had some considerable gains.

In conclusion we can say that this project was successful at confirming MAPS as stock management system and also indicating some weaker and stronger aspects of it. Confirmed were both MAPS’ risk-handling attributes as well as its managing capabilities and certain area of “expertise” was provided. The results of the testing are shown in detail and can easily be verified.

Our recommendations are that although MAPS is superior at managing certain types of stocks, to fully utilize its capacity for profit the expertise of EMB Investments in selecting stocks is also crucial to MAPS performance. This does not imply that MAPS cannot be used to manage

volatile stocks, but rather than to improve the results further the assistance of EMB Investment may be needed.

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## 1 Introduction

Stock markets have always had an important role in the development of the world economy. Through trading practices money have been distributed from investors, people with extra money, to companies, institution which need capital resources. This enables the companies to expand, enter new markets and develop new products. It also provides good investment opportunities for large institutional investors as well as small individual investors. The most common ways of investing maybe through purchasing long term liabilities, called bonds, or through the purchase of stocks, which are most often common stocks. The difference between the bonds and stocks is in the gains that they can bring for the investors. While bonds are fixed income assets that provide regular payments to the investors and are obligation to the company, the common stocks are ownership of the company. Since the common stocks provide ownership, as the company value goes up over time as it grows, also the value of the stock increases. This provides possibility of higher returns compared to the returns promised by the bonds and this is what makes stocks more appealing to the higher risk seeking investors.

With the advancement of the computing power and the wide availability of internet now it is possible for people to buy stocks from everywhere and almost any time. This technological development and the relatively low cost of purchasing shares have enabled many investors to engage in the market trading in the hopes of quick profits or steady profits over time. This has helped American households to own more equity and at 2005 approximately 56.9 million households out of 113 million owned stocks or mutual funds, which was up 5.2% since 2002 when the number was 54.1 million (Stone, 2005).

Such a profit would come from the quickly rising price of a company stocks over relatively short term, realizing large gains for the investor that acquired it before the raise. Many people try

to predict these relatively quick stock price movements and trade with respect to the anticipation with the hope of gains above the normal market gains that come from the expansion of the economy.

The most popular ways for predicting such upward moves are the fundamental analysis and technical analysis. The fundamental analysis looks at indicators like company balance sheet, income statement and management to evaluate the “true” value of the company and therefore it’s stock. On the other hand technical analysis is the notion that the future fluctuations in the price of stock can be predicted by finding trends from historical price data.

The purpose of this project is to look at a program MAPS that claims to be able to produce abnormal returns which are much higher than the normal stock market returns. If MAPS results are confirmed, it will be significant claim against the Efficient Market Hypothesis and the assumptions underlying asset price theory. The hypothesis states that markets is in semi-efficient form which most American markets are considered to be, due to the activity of many investors and widely available information, the current prices of the stocks represent their fair value by incorporating all publicly available information for a market traded stock. It also stated that all fluctuations of the stock prices are caused by the unexpected surprises and are completely random. This implies that since all information available for a stock is already incorporated, there is no profit that can be made by trying to predict the future stock price based on perfect information and every success is sheer luck.

Therefore MAPS claims something considered hard to achieve under the Market Efficiency Theory and can be used as a strong argument against the efficiency of the markets. We are going to investigate MAPS results on random stocks by taking random initial date and random period length and looking at the profitability factor MAPS generates this period. After obtaining the

results of MPAS we will compare them to buy-and-hold strategy with stock and index. Buy-and-hold strategy is simply buying stock in the beginning of the period and selling it in the end of the period. We intend to look at the results produced by 30 randomly selected stocks and periods of one week, two weeks, a month, two months, three months, six months, one year and two years. This will give sufficient data to be able to make conclusion on the profitability of MAPS.

## **2 Market Efficiency Theory**

### **2.1 Definition**

The Market Efficiency Theory states that at every moment the price of an asset is a reflection of all the information available for that asset and is unbiased estimation of its true value. In the case of stocks this is all the fundamental and technical analysis that analysts have done to determine the true value of the stock. Since the price fluctuations are unbiased and unexpected information is random, the prices are also completely random and changes are independent of the price level before the change has occurred.

From the definition we can conclude that as more and more participants enter the market in search for excess profit and the easier trading can occur, the more efficient the markets are. This is because all market participants have access to the same information the moment it becomes publicly available (availability of information) and can adjust their trading habits according to it (ease of trade) thus making the markets more efficient.

## **2.2 Forms of Market Efficiency**

### **2.2.1 Weak Form**

Under Weak Form Efficiency the current stock prices incorporate all information available from past price data, making technical analysis inefficient and unable to discover undervalued stocks. Technical Analysis (TA) is rule based trading, which explores past price data to find correlations and exploit it for profit. TA has developed further with the improvements in the computers, which now provide fast algorithm calculations as well as quick execution time through internet brokerage (Goetzmann).

### **2.2.2 Semi-Strong Form**

Under Semi-Strong Form Efficiency the current stock prices incorporate all publicly available company data, such as income statements, balance sheets and management decisions. This state of the market makes fundamental analysis unable to point stocks that are undervalued and makes inside trading the only means of which an investor can get an edge and consistently outperform the market. Insider trading is when an investor knows information about a company before it becomes publicly available and is able to take advantage of this knowledge. This practice is currently regarded illegal in the United States and is punishable by law.

### **2.2.3 Strong Form**

Under Strong Form Efficiency the current stock prices incorporate all information publicly or privately available and make it impossible to consistently outperform the market, making even inside trading unable to indicate mis-valued stocks.

#### 2.2.4 US Stock Market Efficiency

Current the US stock market is considered to be in semi-strong form efficiency. This would suggest that the only way to consistently beat the market is by engaging in inside trading. Although the US stock market is widely regarded as efficient, there were few people that were able to consistently outperform the market thus creating basis for a case that the market might be inefficient. This has also been supported by the argument that economic recessions such as the Dot Com bubble in 2001 should not have appeared if financial assets are properly priced. These arguments give rise to the relatively new field of behavioral finance which is trying to explain these phenomena.

### 2.3 Implications (results from definition)

The definition of the Efficient Market Hypothesis leads to several results that have large implications which are well described, tested and documented in the literature. Considering the fact that price movements are completely random and are independent on previous state, we can never be sure if the stock price is undervalued or overvalued depending on the public information. This means that any analysis done on the stock should not be able to detect what the future price of the stock will be. Therefore, since we cannot determine the future price and it is completely random, we have approximately equal chance of performing better or worse than the average. As a consequence we can conclude that at any moment we would expect around half the investors to be performing better than average. Another conclusion that follows from the fact that stock price movements are completely random is that no one can outperform the markets over long periods of time. This would mean that buying a broad portfolio of stocks with minimum amount of trading, which minimizes trading costs, is the best portfolio of stocks to be invested in.

## 2.4 Further Inquiry

Stock price might not be completely accurate, even if investors have the same publicly available information about a publicly traded company. This comes from the fact that stock price may be further influenced by factors such as investors risk aversion, psychology and utility function. In addition Macroeconomic factors can also affect stock price as well as some market frictions existing due to transaction costs and different technologies. This implies that it is possible to “make money” if the previously mentioned factors can be optimally exploited.

## 3 MAPS

MAPS is an abbreviation standing for “Major Analytical Paradigm Shift”. In the following chapter we will introduce the underlying concepts, assumptions, mechanics and attributes of MAPS.

### 3.1 Investment Fallacies and advantages of MAPS

The following are common investment fallacies that good trading strategy can help prevent or lower the impact of. If MAPS can correctly recognize these fallacies and use them as advantages, it could potentially achieve very high performance and consistently outperform the market.

#### 3.1.1 Buy & Hold - Periodic Significant Loss of Value

The buy and hold strategy is basically buying stocks for the long term, since for any given period of time stocks have outperformed any other given asset investment, such as bonds. This strategy is usually suggested with larger diversified portfolio because it lowers the impact of individual company’s risks, like fraud, disaster or any other unsystematic risk. The drawback of



this strategy is that in hard economic times of slowdown or recession the whole market loses value and this might cause the portfolio to lose as much as half of its value as would have happened at the peak of the last recession. This fallacy is one well known to academics and is often discussed by some of the best known figures (Chevreau, 2009).

### **3.1.2 Buy Under**

“Buy Under” is a common philosophy of “fundamental” analysis which advocates that if equity falls below a certain price, it is a bargain and should be bought. The understanding is that at certain point the equity price will return back to the “true” value will therefore bring large profits if being bought “under”. This strategy sometimes proves foolish, because it ignores extremely bad markets and is like “trying to catch a falling knife”. It also does not take into account what large institutions like mutual funds, hedge funds and others are doing which altogether determine the price of an asset and thus can keep it undervalued for very long time or even drive it further downwards.

### **3.1.3 Sell Stops and Missing Huge Profits**

Stops are conditions in which the investor decides to exit the market. They might be either to minimize a loss or to preserve a profit. They are very important in technical trading where the strategy is automated and no specific price value can be determined like it is in fundamental analysis. Sometimes when stops are incorporated in investor’s strategy, a market position might be exited too early and lose large favorable moves of the stock price, which is usually due to over precaution and setting up rules passively or simply for not using the right indicators. This can significantly lower the profit of the portfolio and is highly undesirable effect of the stops.

### **3.1.4 Over Concern for Taxable Purposes**

Taxes are a huge concern when dealing with stocks and the capital gains are heavily taxed (show how much). This can sometimes lead money managers and investors to be afraid to go for some short term profits and thus fall in the buy-and-hold fallacy.

### **3.1.5 Aversion to not Being Fully Invested**

Many managers are averse to being in cash to the point of unnecessarily losing profits and incurring the buy-and-hold mentality. The S.E.C. tends to chastise Money Managers who are charging their significant management fees while managing meaningful amounts of cash rather than equities. This encourages Money Managers to stay essentially fully invested to show the S.E.C. that they are "earning their fees"!

### **3.1.6 Over Diversification**

The standard advice of personal finance consultants as well as large institutional money managers is to diversify. This is one of the most important concepts in finance and has been backed with many research papers and proofs. The concept is that when buying some stocks in an industry or within different industries we create a portfolio of stocks which are protected from the risks of the individual stock. For example if something happens to the CEO of a company and he is unable to perform his functions and does not have a person ready to take his place, this will most likely lead to a huge drop in the company's stock price. The same can happen with an industry when we own a portfolio of similar stocks. An example will be the last recession where the financial stocks were hardly hit and with some companies even going out of business. A portfolio entirely created of financial stocks would have taken large losses and lost a lot of value, compared to a portfolio that also contained some pharmaceutical or other recession proved companies.

Although there are clear advantages to diversification, there might be some drawbacks. Too many equities in a portfolio might not only reduce individual stock attention but encourage mediocrity by ignoring the lagging ones and not focusing only on the strong stocks. Having too many stocks might make the portfolio over diversified and make it perform even less than the established market as a whole as being presented by the major indices. A strong point in MAPS is its stock selection which has the ability to identify strong trending stock and manage them profitably and also exclude the ones that would not bring any further profit (Define Diversification, 2010).

### **3.1.7 Overemphasis on Fundamentals**

Many investors and money managers focus much on the fundamentals and they tend to ignore “real” performance of the stock, which the price movements and its influence on key technical indicators, from which sometimes might ignore the influence of the market in general. In the modern money markets, the power of an equities trend determines their worth as an investment, regardless of their purported intrinsic or fair value, meaning that although the stock might look undervalued it can continue to go down for an undetermined period of time. When looking only at the fundamentals, an investor can then fall into other fallacies and buy-and-hold, buy under, etc. There are also many other issues with fundamental analysis, as reliability of data, validity of assumptions, etc. (Schewe), which can sometimes make it an unattractive method.

### **3.1.8 Overbought & Oversold Focus**

Many good companies can stay fundamentally and technically “overbought” and “oversold” for many years and gain many times in value. These stocks, although seemingly overbought, can be accumulated for large rewards at low risk on traversals while the long term trend remains strong and quote “overbought”. Considering a company “oversold” can also be risky, because

there are many examples when a company has been considered “oversold” and its value has continued to fall. These techniques are sometimes called “Fool’s Gold”.

## **3.2 What is MAPS**

### **3.2.1 MAPS**

MAPS, which stands for “Major Analytical Paradigm Shift” is an investment strategy based on technical indicators. It was developed by EMB Investments over the last 9 years, more than 15,000 hours of work and backed by 40 years of experience. It has developed two versions - Simplex MAPS and Complex MAPS. The name “Major Analytical Paradigm Shift” comes from the very basic concepts behind the strategy – it brings change to the use of some indicators. Through analysis, the company has discovered new ways to utilize common indicators and thus brings a shift in our concept of them.

In this project we will look at the capabilities of simplex MAPS. When a stock is chosen and tracked with Simplex MAPS, it indicates when to buy and sell. Complex MAPS builds on that and using more complex synergy of indicators provides better results. It also has the capabilities of stock selection and portfolio management. It can be adapted to every kind of trading – stocks, commodities, ETF’s, etc. MAPS also tends to focus on the market as a whole maintaining view of the individual stocks. This way it discovers market trends and makes the appropriate recommendations about the stocks.

### **3.2.2 MAPS Concepts**

For its success, Simplex MAPS uses conventional technical indicators in unconventional ways correlating 3 different time frames. Those conventional indicators must agree to initiate a trade. Utilizing these techniques, MAPS plays the odds to catch a trend as soon as it appears with minimizing the false trend buys and thus avoiding significant losses.

### 3.2.3 Assumptions for MAPS

The following are the major assumptions behind the power of MAPS.

- Trends continue until “overtly” changed
- Monthly frequency continue with significant strength and are unlikely to change in a few months . This is a very important assumption and driving force behind long term MAPS, because what MAPS does is to catch the trend as early as possible and take advantage of the market moves as early as they appear.
- Subset trend traversals provide low risk buy if superset in strong trend, therefore low risk to accumulate more on the margin. Since MAPS is timing months long trends it utilizes the small price drops throughout the long trend to accumulate more stock at better prices.
- “Very strong” trending stocks will stay “overbought” for a “very” long time. This is also connected to the fallacies of the intrinsic value of the stock, where a investor is trying to determine an equity price by observing its underlying intrinsic value and ignore the trends and market influence acting on the stock and making the “overbought” trend to continue.
- Phase into and out of position on superset “triggers” will maximize profits with minimal risk.
- Confirmed indicator divergences are powerful prognosticators.

### 3.2.4 MAPS Strategies

The strategy of MAPS is to take full advantage of the market conditions and trends, while avoiding the fallacies as much as possible. In Complex MAPS there is a selection criterion which is able to indicate which stocks are better and must be bought and which should be avoided. This makes it even more powerful tool, but is not in the scope of the project. Except for picking the

right stocks, MAPS takes advantage of the market conditions by timing the market correctly. This is done by MAPS using not only combination of indicators to minimize false starts and thus minimize risk, but also utilizing optimized parameters for the indicators so they can accurately time the market and thus produce significant results. This also involves recognizing trend stops and going out on the reversals.

Another aspect that Complex MAPS has is synergistic portfolio management. It can be used as management tool to optimize results of portfolio of stocks and thus smoothing the profits and minimizing risk even further. This is especially important combined with the ability of Complex MAPS as stock selecting tool and is what transforms it in a complete investing tool.

### **3.2.5 Simplex VS Complex MAPS**

MAPS currently has two versions - Simplex MAPS and Complex MAPS. Although the focus of this project is determining and confirming the power of Simplex MAPS as an investment tool, we will also briefly present the differences between Simplex and Complex MAPS.

Simplex MAPS has the abilities to manage a stock or any kind of equity and perform significantly well. Further, it can show us even if the trend has started and if it is profitable to acquire a position or accumulate further positions of the stock. It recognizes long term strong trends and is very good at timing the market. Simplex MAPS can also sometimes recognize future significant market movements by showing so called “cluster” in its buy and sell signals when managing major indices.

### **3.2.6 MAPS Attributes**

- Applicable to any kind of equity – MAPS can be applied to any kind of equity that is being traded. It uses the same underlying principles of trend following rather than fundamental valuation, making it widely applicable.

- Selection of “strong” equities – MAPS selects strong equities, such that have ongoing or starting strong long term trend and has the ability to take full advantage of it.
- Buy /Sell timing and staging in/out – MAPS provides reliable information when buying and selling should take place and when to accumulate stock.
- Ignore “weak” equities – Complex MAPS identifies which equities are good and ignores the one that do not have a strong trend and thus improves results.
- Accumulate “strong” equities on traversals with low risk – MAPS identifies when an equity traverses and becomes strong and thus allows us to accumulate more for profit.
- Recognizes “meaningful” positive and negative divergences – Following MAPS indicators we can observe when a reverse in the trend is occurring or is being close. This again helps improve the timing of a stock, and in the case of a fund the market in general.
- Risk/Reward Selection/Gradation – MAPS performance can improve significantly the risk adjusted return for investors.
- Significant leverage on “corrections” – By identifying market corrections early on, MAPS allows us to leverage our capital to increase our profits.
- Overall portfolio management and consistency – Complex MAPS can do synergistic portfolio management by selecting "strong" equities and managing them in composite portfolio with low-risk margin as opposed to individual management. Judicious selection and synergistic portfolio management can also be done with so called Simplex MAPS.

By looking in the list we can recognize that MAPS, especially Complex MAPS has all the attributes of powerful investing system. It selects the strong equities and ignores the weak ones,

times the entry and the exit points, when the strategy makes a mistake the losses are relatively small and, most importantly, it has proven results.

## **4 Methodology**

### **4.1 Data and Sample period**

For the purpose of the project we were provided with a program from the creator of MAPS. It uses the platform Fidelity Wealth Lab-Pro 5.6 which gives the user the ability to program his own trading strategies and test them on historical data. The pre-build program that was provided contained all the indicators needed and the complete strategy was already coded. Thus we are able to test MAPS over different periods, time frames and stocks relatively quickly and easily over all data available for each stock. For the purpose of fairness, we compare each stock to the same period B&H results for S&P500 since not all stocks selected might have information available for the same period.

These tests will give MAPS a minor disadvantage of a few month in the beginning of each test where the program does not have enough data to calculate the appropriate indicators and thus for some quickly growing stocks MAPS might be somewhat disadvantaged.

### **4.2 Verification strategy**

For the project we will use the FWLP platform with worst case assumed end-of-period prices because there was insufficient time in the project to verify using much less pessimistic end-of-sub-period prices along with appropriate indicator thresholds! The later has been shown via manual analysis by EMB Investments to provide much better results that more realistically represent those achieved "real time" as opposed to the worst case assumed end-of-period prices.



In it initially was assumed that we would buy in the less pessimistic middle of the opening and closing price of the period the buy signal occurs, but later we changed that assumption to buying the end of the month worst case scenario when the signal is completely confirmed, because we currently don't have a way to confirm the former assumption.

Fidelity Wealth-Lab Pro can produce very detailed report which we are used to compare the selected stocks by certain criteria – against the B&H value for the stock itself, against B&H strategy for the same period of S&P500 as represented by SPX and lastly we are comparing the Sharpe Ratio of the stock traded by MAPS against that of S&P500 and the stocks' own B&H buy and hold strategy Sharpe ratio. These statistics will give us a complete picture of MAPS performance for the stocks as the profit of the stock itself B&H value as well the market in general (which is the standard measure for the fund managers) and the Sharpe ratio which represents the strategy risk adjusted profit. We will also test MAPS for different time periods, namely monthly, weekly and daily.

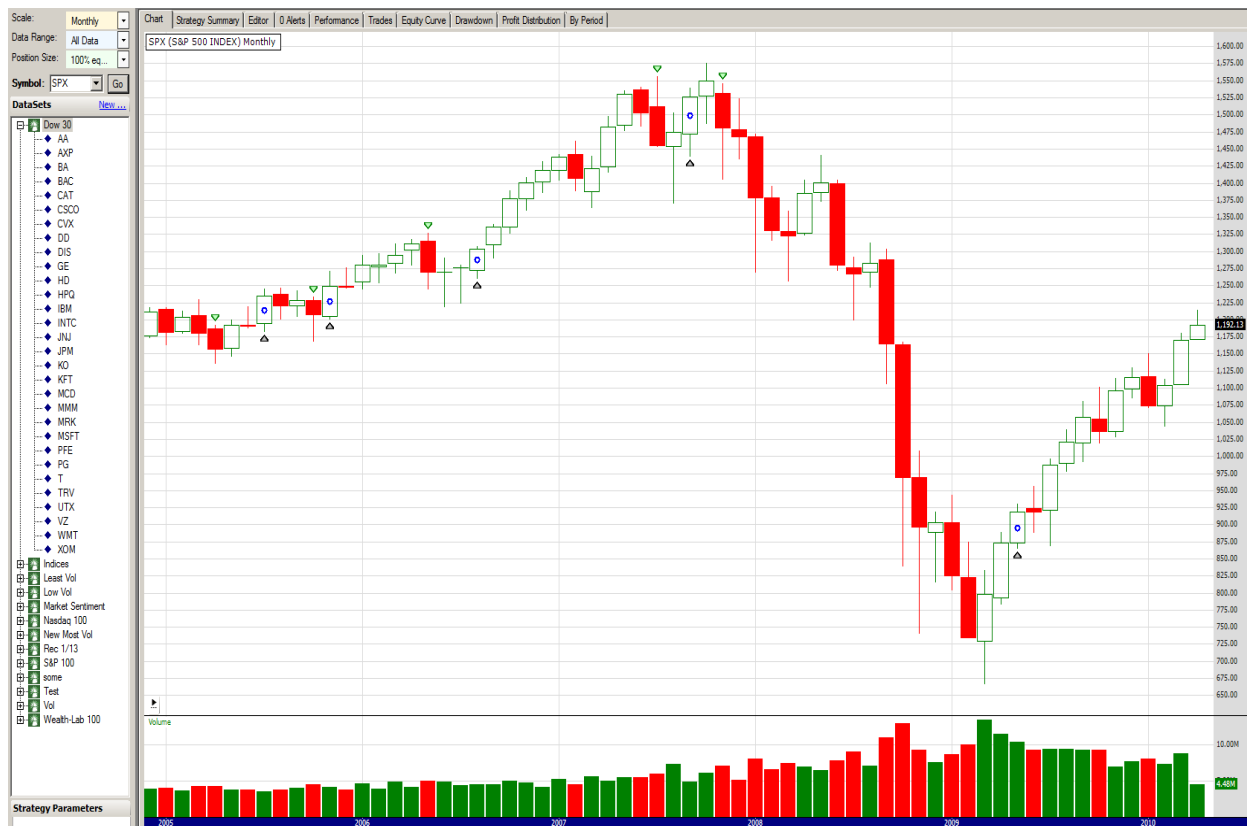


Figure 1: Fidelity Wealth Lab Pro Screen

### 4.2.1 Assumptions for trading

To make the simulation as realistic as possible assumptions were made on: fixed amount of money, trading commission, margin factor (which shows the amount of money borrowed), interest on margin and interest on uninvested cash. The interest on uninvested cash will be applied only for weekly and monthly trading, because we assume for that for shorter time frames provide no such opportunities. The following table represents the numeric assumptions:

|                       |           |
|-----------------------|-----------|
| Starting Amount       | \$100,000 |
| Commission per trade  | \$8       |
| Margin Factor         | 1.05      |
| Interest on Margin    | 8%        |
| Interest from account | 4%        |
| Dividends Applied     | Yes       |

Table 1: Assumptions for Trading

Although some of the presented assumptions vary with time, company and investors ability, we use them as more standardized. For example trading commission of \$8 is standard when using FWLP with automated trading. The starting amount is \$100,000 chosen such that on \$8 per transaction (\$16 for buying and selling the shares) would leave space for profit. For margin we wanted to be as close as possible to 1 (meaning no margin is used), but since FWLP has certain issues and does not generate every trade it is supposed to with margin of 1, we need to use margin factor of 1.05.

### **4.3 Stock Selection**

For the purpose of presenting the power of MAPS we will look at 3 major comparisons and selection - include many of the results that EMB kindly presented to us and the stocks it recommended to us over the course of this MQP; 30 randomly selected stocks from different industries and with different P/E ratios; stocks with high and low volatility since the claim of MAPS is that it can manage stocks by picking the right trend at the right time with minimal risk.

### **4.4 MAPS Testing Issues**

Throughout the course of this project certain issues with testing MAPS became obvious and impaired testing some of the initial assumptions for testing Simplex MAPS. First and foremost the precise timing of when the buy signal occurs. EMB Investments assumes for testing that the buy price for a share occurs in the mid – level price between the opening and the close of the month on a monthly trading periodicity. Although this assumption might be true and close as to the reality as possible, it cannot be explicitly confirmed with a variety of stocks due to the lack of automated process by which this can done and manual testing will greatly reduce the number of stocks that can be tested and thus make the results less reliable.

Another concept that was not confirmed (due to lack of time) and therefore not used is the concept of Superset Gates or buying when the superset trend indicates a "preliminary" buy otherwise known as a "Buy Trigger". In the case of Monthly periodicity, this concept conditions the Monthly "Buy" on the presence of a Quarterly Gate. Also not tested is the concept of a threshold on the indicators for a "Sell" signal which would also negate some "minor" Buy signals and allow the use of much more attractive Buy and Sell prices by for example using end-of-day prices instead of overly pessimistic end-of-month prices. MAPS was also tested without any margin, although EMB Investments insisted that MAPS utilization of margin with composite MAPS Portfolio Management involves low risk and very high synergistic rewards. Using margin is generally not recommended for Buy & Hold because the risks might be high. Although when considering an extensive period markets generally outperform other investments and produce positive results if a portfolio needs to be liquidated during a downturn, as in the case of the ongoing recession, the use of margin might multiply an eventual loss. MAPS does not require the use of margin but the synergistic results with low-risk of using "reasonable" margin with MAPS composite Portfolio Management is a significant attribute of MAPS. Extensive manual testing by EMB Investments has substantiated "all" of these concepts (Superset Gates, End-of Day Pricing with Indicator Sell Thresholds and low-risk use of margin in Portfolio Management) and their significant improvement on the results achieved by worst case automated assumptions.

Another concept that was not confirmed and therefore not used is the "Gates Concept" or buying when the larger indicator trend confirms the buy signal (we want to trade weekly, but before a purchase is made we look at the monthly MAPS indicator trend before making the purchase). Similar is the concept of threshold values on the sell signal. When there is a sell

signal, a minimal value by which the indicator should change is incorporated to indicate a “true” sell signal. These concepts were not confirmed in the project due to technical reasons.

MAPS was tested without any margin, although the EMB Investments suggests that such a superior performance with proven risk handling capabilities should be maximally utilized with the use of margin. Although margin can significantly increase the profits, its use is not common practice by investors and therefore might change their perception of MAPS.

## **4.5 Results from EMB Testing**

Over the years EMB has made numerous MAPS tests, recommendation to famous financial advisors and personal investments through its own Fidelity IRA account and E\*TRADE account. The following is a summary of some of the activity including recommendations to us and to investors regarding analysis of their portfolios with MAPS, its own investing summary and the performance, testing and development. EMB possesses complete documentation with the appropriate email transcripts and excerpts from the accounts performances, which were all made and tracked real time, and can provide it upon request.

There are a few major points EMB has emphasized throughout the progress of the project that are present in Complex MAPS and as such were not in the scope of this study. Each aspect will be emphasized on by showing its own experiences and its recommendations made to us and the leading financial advisors.

### **4.5.1 MAPS Recommendations**

EMB has made many documented recommendations to leading financial advisors including Louie Navellier, Toby Smith and others. EMB has followed their suggested portfolios and via email has made analysis on their stock selection regarding which equities, according to Complex

MAPS, are strong trends and therefore good buys at the moment, which are holds and which should not be bought or be extremely cautious about.

#### *4.5.1.1 Louie Navellier*

Louis Navellier is a star fund manager born 1957 in Berkeley, California and is currently the Chairman and Founder of Navellier & Associates in Reno, Nevada which manages approximately \$5 billion in assets. He has graduated from California State University, with an MBA in finance where he did a project on stock selection using quantitative and fundamental methods, which he is still using today. He is also the creator of the newsletter MPT Review with which he is more famous with and has been ranked #1 by Hulbert Financial Digest – a newsletter that monitors investment newsletters' suggested portfolios over the past 20 years (BRIMELOW, 2006).

EMB has made a few recommendations to Louie Navellier regarding his stocks picks as weather they are in a good trend at the moment and should be owned or if weather it was not the time to take a position at the stock. One such recommendation was done on 10/23/09 when EMB made a complete recommendation on the Louie's 29 Quantum Growth stock picks and indicated that 5 stocks were a strong buy. When checked two months later at 12/24/09 the 5 stocks indicated as buys had gained 22.5% managed with Simplex MAPS compared to the 8 stocks that were indicated as a sell gained only 1.51%. Similar recommendation had been done to Louie Navellier at 5/28/08 for 9 stocks not to be owned which if held over the next 19 months would have lost a total of 46.2%. These are examples emphasizing the selection that can prevent money from loss and bring significant profits over such short periods of time.

Similar is the example of the Navellier 20 which if managed with WMAPS from 12/31/01 thru 9/31/09 with 10% equity and a margin factor of 2 would have produced gains of

25 times that of the Buy & Hold and with much higher Sharpe ratio of more than 3 compared to the one of the Buy & Hold portfolio of 0.65 and compared to the SPX which for the same period had a Sharpe Ratio of -0.13. Important to note is that even with margin the Maximum Drawdown for the WMAPS managing NAV 20 is only -14.9% versus -38.9% for B&H and -49.1% for SPY B&H.

Using margin also can significantly increase the return with the Sharpe Ratios remaining high. Using Wealth-Lab Pro for analysis, increasing the Percent Equity for the NAV 20 from 5% to 25% increases the profit by 6.8X for Monthly and 15.7X for Weekly, but the Sharpe Ratio only decreases from 2.06 to 2.01 for Monthly and actually increases from 2.92 to 3.03 for Weekly. Comparing these to 0.68 and 0.65 respectively for NAV 20 B&H and -0.13 for SPY B&H shows MAPS significant risk adjusted capabilities. The Percent Maximum Drawdown does increase from -3.9 to -15.0% for Monthly and -7.5 to -14.9% for Weekly but is still well below the -35% for B&H and the -45% for SPY B&H. Even the Wealth-Lab score is over 48 versus 2.08 for B&H and only 0.42 for SPX B&H. MAPS not only significantly reduces the Drawdowns versus B&H on individual equities but has even a more pronounced effect on Portfolios and also on the Sharpe Ratios and Wealth-Lab scores!

EMB has also made several recommendations to Toby Smith one of which was on 8/28/07 when EMB has given him the following recommendations and has tracked their performance through 9/30/09.

- The 6 "Strong" selections beat the 12 "Weak" by:

99.8% to 37.0% or 2.7X w MMAPS

156.8% to 90.9% or 1.7X w WMAPS

- The 6 "Strong" beat the 18 "Neutral" by:

99.8% to 32.1% or 3.1X w MMAPS

156.8% to 82.7% or 1.9X w WMAPS

These are significant differences which many money managers would to achieve and improve their own performance by 70% to 210% in 25 months. Also 22 MAPS selections were given to Toby Smith on 1/5/07, bettering the SPX B&H by more than 10 times on selection only in fewer 33 months. These are again significant results which show the power of MAPS as a money management system.

#### *4.5.1.2 Project Recommendations*

Over the course of this project EMB made certain recommendation regarding stocks and indexes as well as the market as a whole. The following is a summary of these recommendations.

On 01/13/2010 EMB indicated a cluster of MAPS Buy and Sell signals for the Weekly SPY and QQQQ as well as several other equities, particularly ETFs. This consolidation according to EMB indicated, with a high probability, that a resultant significant move can be expected. Since no clusters for MMAPS with the SPY and QQQQ or any other market indicator were indicated, no long term top was eminent but a short term dip was expected, which EMB Investments indicated to be an opportunity to sell weaker MAPS stocks and accumulate stronger ones since the overall long term uptrend was still strong. EMB also indicated that clustering is not a foolproof indicator, but appears that most of the time it has been very good at predicting small market adjustments. EMB indicated that for the near future they expect a five to ten percent market correction with no eminent market top. We can observe that around a month later after EMB's warnings the market reached a local minimum, with around 5<sup>th</sup> of February being the lowest and SPX lost around 10% and after that continued to raising again reaching new



highs. These recommendations with their accuracy in predicting the market are remarkable and show an aspect of MAPS can be further explored.



Figure 2: SPX Performance from 1/13/2010

EMB also suggested that for the near term THLD and CAGC managed with WMAPS seemed to be in a good position for buys and that CAGC is in a very powerful uptrend and should be accumulated as well as CORT, RXII and ZHNE on the then upcoming market correction. These recommendations, according to EMB, have subsequently gained as of 4/9/10 around one hundred and forty percent. If we were to consider the highs up that date, the return would have been around seven 770%.

#### 4.5.2 Personal Portfolios

Except for recommending through the course of this project the stocks CORT, RXII, PVX, CAGC, PCYC and ZHNE, EMB has also purchased them using their own accounts with an average annualized gain for the purchases EMB made of these stocks timed with long term MAPS buy signals of 323% up to 3/11/10. This compared to the SPY gain over the same period which performance is less than 30% annualized is very a large improvement because it represents more than 10 times the performance of the SPY. Overall, EMB Investments have purchased these 6 stocks a total of 42 more times while their trends have been still strong and the results were that 22 of the 48 purchases have actual gains of 51% to 244% with 7 over 150%.

The vast majority of these purchases were made within the last fifteen months finishing 3/11/15 months.

Another example of the capabilities of MAPS and its real time utilization is the portfolio of EMB Investments over 2009 which has gained an overall of 128% or 4.72 times that of the SPY for the same year. These results were achieved with real time MAPS with relatively infrequent management and are somewhat conservative.

#### **4.5.3 MAPS Analysis**

The following are analysis of MAPS performance done by EMB Investments presenting its capabilities in a variety of ways. It shows the end of the month performance compared to the mid-price performance. These results are produced with 100% equity, including no dividend and margin(except for column number 8 which is with 175% equity). The last column also represents large profitable moves realize by MAPS that present its trend catching capabilities and are most likely to be executed by the educated MAPS trader.

| [MAPS]<br>(START)<br>EQUITY | QUARTERLY           |                    | MONTHLY          |                    | WEEKLY           |                    | [DAILY]          | [DURATION]                      |
|-----------------------------|---------------------|--------------------|------------------|--------------------|------------------|--------------------|------------------|---------------------------------|
|                             | (B+H)<br>END-PR     | (TRADES)<br>MID-PR | (B+H)<br>END-PR  | (TRADES)<br>MID-PR | (B+H)<br>END-PR  | (TRADES)<br>MID-PR | 175%ER<br>END-PR | *(START)<br># POS. DIV.         |
| [218]<br>(12/91)<br>FBIOX   | (96.0)<br>41.1      | (10)<br>328.4      | (96.0)<br>97.2   | (19)<br>748.5      | (117.2)<br>511.7 | (69)<br>4,804      | [1,221]          | [27mo]<br>(3098)<br>42.9+96.5   |
| [218]<br>(12/91)<br>FSAGX   | (306.1)<br>61.9     | (8)<br>448.9       | (305.7)<br>53.7  | (23)<br>1,464      | (294.1)<br>124.9 | (95)<br>10,227     | [49,489]         | [36mo]<br>(2601)<br>66.4+108.8  |
| [199]<br>(7/93)<br>FSEAX    | (155.9)<br>275.3    | (4)<br>611.7       | (155.9)<br>690.2 | (14)<br>1,805      | (157.1)<br>796.9 | (67)<br>4,906      | [7,058]          | [51mo]<br>(2903)<br>199.6+261.2 |
| [199]<br>(7/93)<br>FLATX    | (329.9)<br>258.7    | (6)<br>895.4       | (379.7)<br>863.3 | (14)<br>2,597      | (402.3)<br>1,879 | (66)<br>17,201     | [1,258]          | [63mo]<br>(2903)<br>284.8+477.5 |
| [168]<br>(3/96)<br>FHKCX    | (205.5)<br>242.4    | (3)<br>385.6       | (197.6)<br>314.2 | (12)<br>1,193      | (196.1)<br>863.4 | (60)<br>4,222      | [2,560]          | [57mo]<br>(2003)<br>129.7+160.7 |
| [199]<br>(7/93)<br>FSNGX    | (332.4)<br>234.7    | (5)<br>621.8       | (331.9)<br>269.9 | (18)<br>1,528      | (337.0)<br>190.3 | (88)<br>3,857      | [798.8]          | [39mo]<br>(2903)<br>91.5+114.5  |
| [218]<br>(12/91)<br>FSENX   | (276.8)<br>354.2    | (3)<br>688.9       | (276.5)<br>367.8 | (18)<br>1,152      | (286.3)<br>153.5 | (94)<br>3,126      | [199.5]          | [63mo]<br>(2903)<br>112.0+187.0 |
| [218]<br>(12/91)<br>FDGRX   | (189.7)<br>367.8    | (6)<br>725.2       | (189.4)<br>338.7 | (20)<br>1,134      | (198.0)<br>362.1 | (93)<br>3,421      | [204.9]          | [60mo]<br>(1903)<br>107.6+116.2 |
| [218]<br>(12/91)<br>KAUFX   | (304.9)<br>146.0    | (6)<br>419.9       | (303.6)<br>290.2 | (22)<br>1,262      | (344.4)<br>731.0 | (67)<br>4,928      | [4,228]          | [42mo]<br>(2903)<br>35.4+52.4   |
| [218]<br>(12/91)<br>SPHIX   | (2.2)<br>118.9      | (5)<br>155.0       | (48.7)<br>149.2  | (16)<br>270.6      | (54.5)<br>358.3  | (53)<br>587.9      | [7,586]          | [21mo]<br>(802)<br>*17.5+20.1   |
| [218]<br>(12/91)<br>FSHCX   | (148.1)<br>206.7    | (6)<br>510.7       | (147.9)<br>580.4 | (14)<br>1,423      | (177.9)<br>352.6 | (77)<br>3,971      | [3,972]          | [30mo]<br>(703)<br>113.3+119.5  |
|                             | MAPS VS B+H → 1.65X |                    |                  |                    | 2.42X            |                    |                  |                                 |
| AVG. OF 11                  | (213.4)<br>209.8    | (5.6)<br>526.5     | (221.1)<br>365.0 | (17.3)<br>1,320.6  | (237.7)<br>579.9 | (75.4)<br>5,565    | [6,144]          | [48.9]<br>118.3+164.4           |

Figure 3: Table of Performance I

Repetitive trading of the same equities over and over has not been particularly successful for FSAGX, FSNGX or FSENX but there were periods where large profits were made as evidenced by the gains shown in the column to the extreme right. This column represents gains achieved after Positive Divergences which averaged 90.3 to 136.9% for those 3 over an average of 46 months and an average of 118.3 to 164.4% for the total 11 funds over an average of 48.9 months. Positive Divergences can be identified via MAPS Indicators on FWLP and are a powerful tool for "real" MAPS "real-time" and identify periods where additional positions can be

safely accumulated for large gains. Using the words of EMB: "It is foolish to swim against the current when you can swim with it using MAPS tools like Positive Divergences that put the odds significantly in your favor". The second column from the right shows that the gain with WMAPS can be safely doubled from an average of 574.9 to 1169% by the use of 175% Equity. In brackets, it also shows that the average gain of 574.9% with WMAPS can be increased 10.68x to 6,144% with DMAPS (Daily MAPS).

The following are analysis provided by EMB showing its own testing of MAPS over variety of portfolios, the underlying assumptions and the results.

% PROFIT ON FWLP PORTFOLIOS THRU 3/26/10™

| PORTFOLIO  | # EQ. | % EQ. | MONTHLY: % PROF.     |                 | WEEKLY: % PROFIT      |                 |
|--|-------|-------|----------------------|-----------------|-----------------------|-----------------|
|  |       |       | (B+H)<br>MMAPS       | MMAPS<br>XB+H   | (B+H)<br>WMAPS        | WMAPS<br>XB+H   |
| BLOOM 33   | 34    | 6     | (1,007)<br>11,054    | [2]<br>10.98    | (1,057)<br>>12,866A   | [1]<br>>12.17   |
| MAPS MASTER LIST                                       | 34    | 6     | (586)<br>25,210      | [2]<br>43.12    | —                     | —               |
| MISC.  | 46    | 6     | (318)<br>>14,042A    | [2]<br>>44.15   | (300)<br>>42,856A     | [20]<br>>142.85 |
| MY FUNDS   | 19    | 12    | (258)<br>>775A       | [2]<br>>3.00    | (271)<br>>1,190A      | [24]<br>>4.39   |
| (MID-PRICES)<br>MY FUNDS                               | ↓     | ↓     | (258)<br>>7,419A     | [2]<br>>28.76   | (271)<br>>83,880A     | [19]<br>>309.52 |
| MY STOCKS  | 41    | 8     | (326)<br>>2,649A     | [10]<br>>8.13   | (237)<br>>8,644A      | [66]<br>>36.47  |
| SMALL CAP MOVERS                                       | 11    | 21    | (34)<br>>2,278A      | [1]<br>>67.00   | —                     | —               |
| AVG. FOR 6 (4WEEKLY)<br>PORTFOLIOS W<br>E.O.P. PRICING |       |       | (4245)<br>^ >9,3447A | [2.5]<br>>22.17 | (466.3)<br>>16,389.0A | >35.15          |

Figure 4: Table of Performance II

It can be identified that the performances are very good and the portfolios are highly profitable, bringing with those presented here having profit of more than 55 times that of buy and hold.

% PROFIT ON FWLP PORTFOLIOS THRU 3/26/10

| PORTFOLIO                                 | #<br>EQ. | %<br>EQ. | MONTHLY % PROF.           |                | WEEKLY % PROFIT          |                  |
|---|----------|----------|---------------------------|----------------|--------------------------|------------------|
|   |          |          | (B+H)<br>MMAPS            | MMAPS<br>XB+H  | (B+H)<br>WMAPS           | WMAPS<br>XB+H    |
| BLIDNER GROWERS                           | 44       | 5        | (816)<br>4,110            | 5.04           | >4,608A                  | [6]<br>>5.58     |
| IBD 100 (6-29-09)                         | 96       | 2.3      | (1,376)<br>7,088          | 5.15           | —                        | —                |
| NASDAQ 100                                | 100      | 2.5      | (1,934)<br>>45,126A       | [20]<br>>23.33 | —                        | —                |
| (MID-PRICES)<br>NASDAQ 100                | ↓        | ↓        | (1,934)<br>>4,834,852A    | [9]<br>>2,500  | (2,062)<br>>728,779,696A | [96]<br>>353.4K  |
| NAV QUANTUM PICKS                         | 29       | 6.5      | (899)<br>4,138            | 4.60           | —                        | —                |
| (MID-PRICES)<br>NAV QUANTUM PICKS         | ↓        | ↓        | (899)<br>58,405           | 64.97          | (759)<br>1,150,137       | 1,515.3          |
| NAVELLIER 20                              | 20       | 11       | (3,071)<br>>8,595A        | [4]<br>>2.80   | —                        | —                |
| (MID-PRICES)<br>NAVELLIER 20              | ↓        | ↓        | (3,071)<br>>340,122A      | [3]<br>>110.75 | (3,071)<br>710,058,936A  | [19]<br>>3,275.4 |
| WEALTH-LAB 100                            | 100      | 2.2      | (1,129)<br>>13,519A       | [4]<br>>11.97  | —                        | —                |
| (MID-PRICES)<br>WEALTH-LAB 100            | ↓        | ↓        | (1,129)<br>822,378        | 728.4          | (1,203)<br>>115,377,314A | [27]<br>>95.9K   |
| AVG. FOR 6 PORTFOLIOS<br>w E.O.P. PRICING |          |          | (1,539.5)<br>a >13,762.7A | [4.7]<br>8.95  |                          |                  |

a > 77.3X SPX B+H  
 \* BACKTESTING w END OF PERIOD PRICES, SIMPLE MAPS,  
 4% INTEREST, 8% MARGIN, NO COMMISSION BUT w DIVIDENDS!  
 A - AVERAGE [ ] TRADES NOT INCLUDED

Figure 5: Table of Performance III

| PORTFOLIO                                      | # EQ. | % EQ. | MONTHLY: % PROF.     |              | WEEKLY: % PROFIT  |                |
|--|-------|-------|----------------------|--------------|-------------------|----------------|
|  |       |       | (B+H) MMAPS          | MMAPS X B+H  | (B+H) WMAPS       | WMAPS X B+H    |
| BLOOM ETFs                                     | 28    | 8     | (157)<br>>343A       | [3]<br>>3.46 | —                 | —              |
| BLOOM FINANCIAL                                | 8     | 23    | (82)<br>454          | 5.54         | —                 | —              |
| S&P 100  | 100   | 2.2   | (992)<br>>3,541A     | [2]<br>>3.57 | —                 | —              |
| (MID-PRICES)                                   | ↓     | ↓     | (992)                | [2]          | (974)             | [18]           |
| S&P 100  | ↓     | ↓     | >115,600A            | >32.65       | >23,353,263A      | >3,442.8       |
| SOLD IN 2009                                   | 23    | 12    | (357)<br>>1,796A     | [7]<br>>5.03 | (358)<br>>25,996A | [34]<br>>68.77 |
| (MID-PRICES)                                   | ↓     | ↓     | (357)                | [2]          | (358)             | [36]           |
| SOLD IN 2009                                   | ↓     | ↓     | >304,728A            | >853.6       | >584,028,871A     | >1,631K        |
| AVG. FOR 4 PORTFOLIOS<br>w F.O.P. PRICING      |       |       | (397.0)<br>>1,583.5A | >3.99        |                   |                |
| AVG. FOR ALL 16 PORTFOLIOS<br>w F.O.P. PRICING |       |       | (883.7)<br>>9,061.1A | >10.25       |                   |                |
| DOW 30   | 30    | 7     | (669)<br>>748A       | [7]<br>>1.12 | —                 | —              |
| (MID PRICES)                                   | ↓     | ↓     | (669)                | [9]          | (771)             | [9]            |
| DOW 30   | ↓     | ↓     | 24,979               | 37.38        | >898,043A         | >1,164.8       |

\* > 50.9X SPX B+H!  
 \* BACKTESTING w END OF PERIOD PRICES, SIMPLE MAPS,  
 4% INTEREST, 8% MARGIN, NO COMMISSION BUT w DIVIDENDS!  
 A-AVERAGE [ ] TRADES NOT INCLUDED

Figure 6: Table of Performance IV

EMB Investments assures us that although it cannot generate the trades automatically and has to be manually tracked real time, FWLP provides all the necessary tools to enable tracking and applying Complex MAPS. Analyzing the NASDAQ 100 portfolio using MMAPS, the percent profit is 4,834,852% average compared to the 45,126% average for worst case end-of-month pricing or over 100 times greater. For the Navellier 20, even though MMAPS beats B & H by 2.80 X with worst case Simplex MAPS, this is 48.3X the SPX gain and the mid-price results are 1910.8X the SPX gain. The portfolio of 19 mutual funds (My Funds) also beats the SPX and it's by 4.35X worst case and the mid-price beats it by 45.2X.

Over the timeframe of available data starting mostly in Dec. 1991 through Mar. 26, 2010, the percent profitability ranges from more than 2.80 times B & H for the Navellier 20 to more than 67.0 times for the Small Cap Movers portfolio. The next lowest ratios were for My Funds close to 3.00 times, Bloom ETFs more than 3.46 times and the S&P 100 more than 3.57 times. Incidentally, the B & H for the Navellier 20 was so exceptional that the MAPS results while being just 2.80 times B & H were more than 48.3 times the B & H for the SPX. The NASDAQ 100 MMAPS results were 23.3 times its B & H. The results for all 16 are shown and the overall average for the 16 is 10.25 times B & H. Note that the SPX gain is 178% since 12/91 whereas the performance of the worst MMAPS portfolio of the 16 (Bloom Financial) was 454% or 2.55 times the SPX gain and the average of the 16 was 9,057.6% or 39 times that of the SPX.

These results just presented were provided by EMB Investments, which assures that the representations are an absolute worst case application for MAPS in its simplest form using the most pessimistic prices possible. These along with the actual results achieved in "real-life" in "real-time" by the creator are a proof of the capabilities, power and potential of MAPS.

Another important analysis that EMB Investments provided us with is how MAPS would have performed against the top fund managers of the decade as chosen by Morning Star. The following results are the funds presented with different percent equity and also show the corresponding Sharpe ratios for each.



## DECADES TOP FUND MANAGERS: ANNUAL RETURN

| FUND        | ANN. RETURN | FWLP B+H          | [SHARPE RATIO]     |                  |                  | MAPS PERIOD.     |   |                  |
|-------------|-------------|-------------------|--------------------|------------------|------------------|------------------|---|------------------|
|             |             |                   | ANNUAL 100% EQ     | ANNUAL 175% EQ   | ANNUAL 199% EQ   |                  |   |                  |
| STOCK FUNDS | FAIRX       | 13.2              | * (0.51)<br>>17.3% | (1.20)<br>723.6% | (1.13)<br>740.7% | (1.12)<br>747.1% | MO.<br><br><br><br><br><br><br><br><br><br><br>WK |                  |
|             | INT'L FUNDS | OAKEX             | 10                 | (0.28)<br>10.0%  | (1.39)<br>47.3%  | (1.31)<br>95.1%  |   | (1.30)<br>114.1% |
|             |             | OAKIX             | 8                  | (0.23)<br>8.7%   | (1.28)<br>36.5%  | (1.23)<br>73.8%  |   | (1.22)<br>89.5%  |
| BOND FUNDS  | PTTRX       | 7.7               | (0.65)<br>8.3%     | (0.90)<br>8.4%   | (0.63)<br>9.0%   | (0.59)<br>9.2%   |   |                  |
|             | MBDFX       | 7.5               | ** (0.36)<br>6.1%  | (1.16)<br>8.3%   | (0.96)<br>10.0%  | (0.93)<br>10.5%  |   |                  |
|             | HAIDX       | 7.5               | (0.63)<br>8.0%     | (1.24)<br>10.4%  | (1.00)<br>12.8%  | (0.95)<br>13.6%  |   |                  |
|             | SPY         | -                 | (-0.22)<br>-0.24%  | (0.86)<br>16.4%  | (0.77)<br>23.5%  | (0.75)<br>25.8%  |   |                  |
| FAIRX       | 13.2        | * (0.50)<br>17.3% | (1.52)<br>>49.3%   | (1.48)<br>122.9% | (1.48)<br>159.4% |                  |   |                  |
| OAKEX       | 10          | (0.23)<br>8.8%    | (1.37)<br>74.2%    | (1.31)<br>204.3% | (1.30)<br>270.6% |                  |   |                  |
| OAKIX       | 8           | (0.18)<br>7.5%    | (1.34)<br>69.8%    | (1.30)<br>194.8% | (1.29)<br>260.0% |                  |   |                  |
| PTTRX       | 7.7         | (0.71)<br>8.7%    | (1.77)<br>13.7%    | (1.49)<br>18.9%  | (1.45)<br>20.6%  |                  |   |                  |
| MBDFX       | 7.5         | ** (0.35)<br>6.1% | (1.22)<br>11.0%    | (1.06)<br>14.6%  | (1.03)<br>15.7%  |                  |   |                  |
| HAIDX       | 7.5         | (0.62)<br>8.0%    | (1.63)<br>13.3%    | (1.39)<br>18.1%  | (1.35)<br>19.8%  |                  |   |                  |
| SPY         | -           | (-0.22)<br>-0.7%  | (1.18)<br>34.6%    | (1.10)<br>71.0%  | (1.09)<br>86.8%  |                  |   |                  |

NOTE: AVERAGE LARGE CAP VALUE FUND = +2.5%/YR  
 " " " GROWTH " = -2.1%/YR

\* 1<sup>ST</sup> FWLP BAR 8/25/00

\*\* 1<sup>ST</sup> " " 1/21/05

Figure 7: Table of Performance V

Overall the results for MAPS Management of the 3 stock funds significantly outperformed the actual Buy and Hold results. For the 3 bond funds, MAPS management did not increase the performance as much as for the stock funds, which is normal considering the fact that bonds are much more stable securities and do not provide such large opportunities for further gains. What



can be observed is the change of the Sharpe ratios for them which more than doubled compared to the funds' buy and hold returns. The following observations can also be made:

- Just by managing the SPY with MMAPS gives over 2 times the performance of any of the bond funds and a Sharpe Ratio more than 30% better. WMAPS Management of the SPY yields 4.4 times more than the bond funds and a Sharpe Ratio higher by 1.8 times.

- Managing the PTTRX fund with WMAPS and no margin yields more than 1.7 times the performance with a Sharpe Ratio more than 2.4 times larger. With 175% Equity this improves to more than 2.4 times with a Sharpe Ratio preserved larger than 2.

- The performance of OAKEX with WMAPS and 175% Equity yields more than 20 times the profit of B&H and a Sharpe Ratio more than 5 larger; similar improvements are achieved with OAKIX.

These results suggest that MMAPS can therefore reduce the risk of funds like OAKIX to that of a conservative bond fund like PTTRX. Using WMAPS and 175% Equity gives more than 25 times the performance with a Sharpe Ratio of more than 2 times larger. This is a significant risk- return relationship that should not be present in efficient markets and is not achieved by investors and traders.

#### **4.5.4 MAPS Investing Wisdom**

The following are principles conveyed by EMB throughout the project that are connected to MAPS strategy and help to fully utilize its capabilities. Most of the recommendations were not in the scope of the project but are important for investors to fully utilize the power of MAPS to catch trends, identify strong stocks and accumulate profits.

A major point that we were not able to fully explore “real-time” MAPS capabilities is connected to the timing of the purchases and the selling of the shares. For the purpose of this

project we are considering end of period prices, meaning that we buy at the end of the period the buy signal occurs and sell at the end of the period the sell signal occurs. This is considered overly pessimistic by EMB, because it has done extensive manual confirmation with certain stocks and indexes like AAPL, SPX and other, and is convinced that this is usually not the case, especially when we are dealing with monthly and weekly trading periodicities and the average of the price between open and close is a much better general approximation when done with FWLP. This is crucial to MAPS as gains change substantially and trading these periodicities (monthly and weekly) becomes more and more profitable. Since the nature of the project is to confirm Simplex MAPS with variety of stocks and different periodicities, doing the work manually would have made the completion of the project within this time frame impossible and thus we are using the worse end of month price when we are sure that the signal has occurred. We also had no automated way to indicate the exact moment when the indicators would have shown a clear buy or sell signal which is the major restraint.

Another major capability of MAPS that was not explored in this project was the stock selection process. According to EMB trading the same equity over and over again, especially if it is not indicated as a good MAPS "buy and manage" stock, which are also called "MAPS thoroughbred", is foolish and should not be done as it minimizes the profits and diminishes some of the performance of MAPS. Although over the course of the project we were able to track recommendations done by EMB and confirm that selection is crucial to MAPS as in Complex MAPS, we were not able to test it because we are testing only Simplex MAPS which does not involve the selection of stocks. Further, EMB states that sometimes even MAPS thoroughbreds shouldn't be traded repetitively and new stocks which are in stronger trends at the moment should be used to maximize results.

The last aspect that is crucial to MAPS is the so called “portfolio synergy” – it involves picking the right stocks and managing them as a portfolio with FWLP. While managed as synergistic portfolio we can see that, depending on the parameters, results can be significantly improved with the advantage of minimizing the risk which is typical for a portfolio. Such synergies were already shown when we presented the analysis that EMB has provided.

MAPS is further improved with some additional concepts as thresholds, which minimize the effects of “spurious signal” by minimizing the false sales as the threshold puts minimum values on the indicator’s change so that it has to be met before action is taken. Thus an overly small change in the MAPS main indicator would not lead to a sell signal and indicate a buy signal. Another concept that can be utilized is the “gates”, or looking at one step larger trend before initiating the buy. For example, when buying with MMAPS we should look if such a signal is also viable at the QMAPS indicators and only then initiate a buy. This is consistent with MAPS philosophy to take the sure way out and not risk when not sure and thus minimize and even avoid potential losses.

Due to the utilization of all those techniques and the results EMB has achieved it believes MAPS minimizes the risk significantly and thus is foolish to not use higher margin factors. We did not use it as an option in the project because although we can verify that significant rewards can be achieved with low-risk when managing portfolios with MAPS as illustrated by the standard portfolios available on FWLP such as NASDAQ 100, S&P 100, etc.

Overall, MAPS and especially Complex MAPS, as presented to us by EMB, is a complete trading system that indicates strong stocks, optimally catches the trends and manages the stock individually as well synergistically in a portfolio. It also counts on the utilization of larger

margin factors because of the relative small risk that it provides. To emphasize the power of MAPS coming from its creator, here is a passage from one of the emails from EMB to us:

“MAPS is not a specific algorithm but a correlation of concepts and strategies with explicit parameters and rules to play the odds to maximize gain and minimize risk. Only a few of MAPS many capabilities were evaluated and applied in this MQP which significantly reduced the extraordinary power of "real" MAPS to an analysis of "worst case" conditions! The actual "real time" results achieved by the actual portfolios of the inventor of MAPS and the results of the many actual recommendations made, definitely substantiate that position! MAPS can also do much more than select and manage equities! Also additional capabilities such as the extraordinary power of MAPS Indicator Positive Divergences and the low risk accumulation of more of that equity during the ensuing powerful uptrend is just one example of the many additional capabilities that make MAPS power, consistency and pervasiveness much greater than evidenced by the results of this MQP which themselves are very impressive even with the worst case assessment! With full blown "real" MAPS properly applied comprehensively, the results should definitely beat those obtained on FWLP using 100% equity and mid-range pricing assumptions!”

## 4.6 Random Selection

In the following sections all results presented are with end date 4/14/10.

The following are the 30 stocks we randomly selected (except RXII):

| <b>Tick</b> | <b>Industry</b>  | <b>CAPS</b> | <b>P/E</b> |
|-------------|------------------|-------------|------------|
| AGU         | Basic Materials  | 9.940B      | 21.47      |
| AZO         | Services         | 7.915B      | 12.93      |
| BAP         | Financial        | 6.023B      | 16.58      |
| BR          | Technology       | 3.144B      | 15.06      |
| BZ          | Consumer Goods   | 428.4M      | 5.20       |
| CAE         | Industrial Goods | 2.115B      | 13.16      |
| CHD         | Consumer Goods   | 4.351B      | 18.80      |
| CHE         | Healthcare       | 1.090B      | 14.17      |
| CMP         | Basic Materials  | 2.209B      | 12.83      |
| CR          | Conglomerates    | 1.884B      | 23.80      |
| CVD         | Healthcare       | 3.735B      | 19.18      |
| DHR         | Conglomerates    | 24.446B     | 21.12      |
| DLX         | Services         | 779.3M      | 7.97       |
| DOX         | Technology       | 5.938B      | 17.95      |
| GD          | Industrial Goods | 26.36B      | 11.06      |
| GLF         | Basic Materials  | 734.8M      | 5.85       |
| GY          | Conglomerates    | 404.8M      | 10.29      |
| KOP         | Industrial Goods | 604.2M      | 5.67       |
| MIG         | Financial        | 422.3M      | 9.69       |
| PKG         | Consumer Goods   | 2.451B      | 10.19      |
| RXII        |                  |             |            |
| SFG         | Financial        | 2.001B      | 11.44      |
| SUG         | Utilities        | 2.810B      | 11.67      |
| TTM         | Consumer Goods   | 7.73B       |            |
| TMP         | Financial        | 404.88M     | 12.76      |
| UAM         | Healthcare       | 908.4M      | 8.45       |
| UNS         | Utilities        | 1.157B      | 10.72      |
| VIT         | Technology       | 786.9M      | 40.30      |
| WTW         | Services         | 2.246B      | 10.90      |
| XEL         | Utilities        | 9.864B      | 14.51      |

Table 2: 30 Random Stocks' Details

The companies that do not have included P/E ratio are companies that have not distributed dividend yet and therefore have no basis for such calculation.

In the following chart the results for all 30 stocks summarized as compared to our capstone performance measurements.

| Tick     | Period   | MAPS  | MAPS Sharpe | B&H TICK | B&H Sharpe | SPX  | SPX Sharpe |
|----------|----------|-------|-------------|----------|------------|------|------------|
| AGU      | 5/31/95  | 420%  | 0.40        | 654%     | 0.45       | 123% | 0.17       |
| AZO      | 12/31/91 | 109%  | 0.11        | 979%     | 0.44       | 188% | 0.19       |
| BAP      | 10/31/95 | 1284% | 0.79        | 1030%    | 0.51       | 104% | 0.14       |
| BR       | 3/30/07  | 11%   | 0.06        | 16%      | 0.20       | -17% | -0.35      |
| BZ       | 6/29/07  | 1101% | 1.32        | -27%     | -0.67      | -22% | -0.45      |
| CAE      | 7/31/02  | 297%  | 0.71        | 65%      | 0.29       | 30%  | 0.05       |
| CHD      | 12/31/91 | 252%  | 0.27        | 637%     | 0.42       | 188% | 0.19       |
| CHE      | 12/31/91 | 261%  | 0.25        | 322%     | 0.28       | 188% | 0.19       |
| CMP      | 12/31/03 | 117%  | 0.49        | 541%     | 1.10       | 6%   | -0.11      |
| CR       | 12/31/91 | 190%  | 0.19        | 319%     | 0.28       | 188% | 0.19       |
| CVD      | 12/31/96 | 254%  | 0.34        | 186%     | 0.33       | 60%  | 0.06       |
| DHR      | 12/31/91 | 617%  | 0.46        | 3205%    | 0.71       | 188% | 0.19       |
| DLX      | 12/31/91 | 35%   | 0.00        | -17%     | -0.04      | 188% | 0.19       |
| DOX      | 6/30/98  | 571%  | 0.51        | 100%     | 0.32       | -1%  | -0.13      |
| GD       | 12/31/91 | 547%  | 0.45        | 1254%    | 0.54       | 188% | 0.19       |
| GLF      | 12/31/91 | 138%  | 0.19        | 720%     | 0.40       | 188% | 0.19       |
| GY       | 12/31/91 | 457%  | 0.31        | -54%     | 0.08       | 188% | 0.19       |
| KOP      | 2/28/06  | 93%   | 0.58        | 65%      | 0.41       | -7%  | -0.21      |
| MIG      | 11/30/95 | 76%   | 0.19        | -86%     | 0.04       | 94%  | 0.12       |
| PKG      | 1/31/00  | 46%   | 0.08        | 161%     | 0.33       | -19% | -0.25      |
| RXII     | 3/31/08  | -3%   | -0.22       | -60%     | 0.01       | -10% | -0.23      |
| SFG      | 4/30/99  | 85%   | 0.19        | 378%     | 0.50       | -15% | -0.22      |
| SUG      | 12/31/91 | 660%  | 0.41        | 1173%    | 0.43       | 188% | 0.19       |
| TTM      | 9/30/04  | 182%  | 0.64        | 139%     | 0.47       | 6%   | -0.09      |
| TMP      | 12/31/91 | 547%  | 0.46        | 881%     | 0.40       | 188% | 0.19       |
| UAM      | 12/31/91 | 144%  | 0.19        | 3848%    | 0.55       | 188% | 0.19       |
| UNS      | 12/31/91 | 27%   | -0.07       | -40%     | 0.27       | 188% | 0.19       |
| VIT      | 12/31/07 | 90%   | 0.68        | 189%     | 0.89       | -19% | -0.42      |
| WTW      | 11/30/01 | -4%   | -0.18       | -13%     | -0.03      | 2%   | -0.14      |
| XEL      | 12/31/91 | 275%  | 0.32        | 52%      | 0.06       | 188% | 0.19       |
|          |          |       |             |          |            |      |            |
| Averages | 5/6/1997 | 296%  | 0.34        | 554%     | .33        | 98%  | 0.02       |

Table 3: Random Stocks Monthly Performance

What can be observed is that MAPS does not show consistent results and outperforms the stocks'

B&H and the SPX B&H only 11 out of 30 times and also the average performance is worse than

that of the overall for the portfolio. What we can identify is there are some winners like BZ by MAPS that outperform their own B&H values and SPX significantly. What is interesting to notice is that even though MAPS might underperform compared to the stocks Buy&Hold, we can observe that it is not losing money on profitable stocks. This is significant because it shows some significant risk handling abilities of MAPS.

## 4.7 Volatility results

### 4.7.1 Most Volatile

In this section a closer look at MAPS at risk management tool will be taken. The most volatile stocks are picked by their volatility index generated over the last 5 years of monthly variation and compare them to the least volatile and stable stocks by the same criteria we compared our first selection of 30 stocks – their own B&H with Sharpe ratio and against SPX with Sharpe ratio. If Sharpe ratios and performance is increased by using more volatile stocks this will be an indicator of the MAPS risk managing capabilities.

| Tick | Vol. Index | Period   | MAPS  | MAPS Sharpe | B&H TICK | B&H Sharpe | SPX  | SPX Sharpe |
|------|------------|----------|-------|-------------|----------|------------|------|------------|
| AKAM | 1.14       | 10/29/99 | 377%  | 0.46        | -85%     | 0.34       | -18% | -0.24      |
| MSTR | 1.30       | 6/30/98  | 2334% | 0.67        | -48%     | -0.05      | -1%  | -0.13      |
| VPHM | 1.16       | 11/29/96 | 2015% | 0.58        | 101%     | 0.49       | 56%  | 0.05       |
| BCSI | 1.13       | 11/30/99 | 280%  | 0.51        | -99%     | -0.62      | -19% | -0.25      |
| EXTR | 1.12       | 4/30/99  | -75%  | -0.06       | -100%    | -0.29      | -15% | -0.22      |
| PCLN | 1.12       | 3/31/99  | 790%  | 0.54        | -82%     | -0.01      | -13% | -0.21      |
| NSOL | 1.09       | 3/28/01  | 10%   | 0.32        | -100%    | 0.06       | 0%   | -0.15      |
| DRIV | 1.09       | 8/31/98  | -81%  | -0.03       | 513%     | 0.50       | 19%  | -0.06      |
| AXTI | 1.09       | 5/29/98  | 363%  | 0.39        | -82%     | -0.33      | 5%   | -0.11      |
| ARBA | 1.08       | 6/30/99  | -87%  | -0.09       | -102%    | -0.32      | -18% | -0.24      |
| TIBX | 1.07       | 7/30/99  | -46%  | -0.06       | 16%      | 0.34       | -16% | -0.22      |
| PALM | 1.05       | 3/31/00  | -54%  | 0.13        | -108%    | -0.45      | -26% | -0.30      |
| CNQR | 1.04       | 12/31/98 | 928%  | 0.51        | 44%      | -0.27      | -10% | -0.19      |
| INSP | 1.03       | 12/31/98 | 335%  | 0.42        | -48%     | 0.38       | -10% | -0.19      |
| FFIV | 1.02       | 6/30/99  | 153%  | 0.33        | 216%     | -0.26      | -18% | -0.24      |

|          |      |          |       |      |       |       |      |       |
|----------|------|----------|-------|------|-------|-------|------|-------|
| HLIT     | 1.02 | 5/31/95  | 1902% | 0.54 | -4%   | 0.42  | 123% | 0.17  |
| JNPR     | 0.99 | 6/30/99  | 326%  | 0.41 | 9%    | 0.46  | -18% | -0.24 |
| ELOY     | 0.99 | 2/29/00  | 19%   | 0.22 | -114% | 0.31  | -16% | -0.24 |
| ELX      | 0.98 | 12/31/91 | 99%   | 0.30 | 961%  | 0.51  | 188% | 0.19  |
| RMBS     | 0.97 | 5/30/97  | -57%  | 0.10 | 191%  | 0.44  | 37%  | 0.00  |
| RRI      | 0.95 | 5/31/01  | 309%  | 0.49 | -97%  | 0.40  | -8%  | -0.20 |
| WFR      | 0.95 | 7/31/95  | 335%  | 0.35 | -64%  | 0.02  | 112% | 0.15  |
| BBCD     | 0.95 | 5/28/99  | 104%  | 0.27 | -31%  | 0.33  | -11% | -0.21 |
| ARQL     | 0.95 | 10/31/96 | 29%   | 0.21 | -49%  | 0.30  | 66%  | 0.08  |
| CIEN     | 0.94 | 2/28/97  | 167%  | 0.34 | -98%  | -0.26 | 45%  | 0.03  |
| BRCM     | 0.94 | 4/30/98  | 1087% | 0.56 | 358%  | 0.49  | 2%   | -0.13 |
| TTMI     | 0.93 | 9/29/00  | 43%   | 0.21 | -63%  | 0.26  | -22% | -0.28 |
| MIPS     | 0.92 | 6/30/98  | -23%  | 0.16 | -78%  | 0.01  | -1%  | -0.13 |
| MTEX     | 0.92 | 2/26/99  | 81%   | 0.30 | -68%  | 0.31  | -6%  | -0.18 |
|          |      |          |       |      |       |       |      |       |
| Averages |      |          | 402%  | 0.31 | 31%   | .12   | 14%  | -.13  |

Table 4: High Volatility Stocks Monthly Performance

There are a few important things that have to be recognized from the following chart and taken into account. Profits are overall significantly increased with the twenty seven out of the 30 stocks performing better than their own Buy&Hold and twenty performing better than both their own Buy&Hold as well as the market overall. Out of the stocks that underperform most it can be observed that the largest losing trade is -87% represented by ARBA, while the largest winning is 2334% represented by MSTR. Further, the average profit per stock is 402% while the average return for the stocks buy and hold is 34% which is a significant difference of approximately 7 times.

On average Sharpe ratios have increased from 0.12 to 0.31, which is a large improvement in risk reduction considering the much higher overall profits and is a strong indicator about MAPS risk handling abilities. It can be observed that some of the Sharpe ratios decrease by a little, which is a tolerable compared to the return MAPS has produced for the same stocks. A good example is MTEX where the ratio decreases from Buy&Hold to MAPS performance accordingly 0.31 to 0.30 while the profit increases from -68% to 81% which is a difference of 149%.



Such performance is also shown in the different trading periodicities with MMAPS providing the smallest overall profit. We can observe that the profits significantly increase with WMAPS where 9 stocks underperform, but the average has increased from 402% for monthly trading to 743%. This is almost doubled and with an average hold time of approximately 12 years is return of 19.44%. This is very high return, especially considering the performance over the same period of the market which lost significant value during the ongoing recession.

Analyzing the daily performance with the volatile stocks, we can observe that the number of winning stocks has decreased with respect to both monthly trading and weekly trading, but the average percent is higher than for the monthly trading averaging 639%. This is mostly caused by DRIV which has gained 9335% and compensates for some of the underperforming stocks.

#### 4.7.2 Least Volatile

| Tick  | Vol. Index | Period   | MAPS  | MAPS Sharpe | B&H TICK | B&H Sharpe | SPX  | SPX Sharpe |
|-------|------------|----------|-------|-------------|----------|------------|------|------------|
| KRG   | 0.13       | 8/31/04  | 122%  | 0.58        | -40%     | -0.17      | 8%   | -0.07      |
| IPW.1 | 0.15       | 7/28/08  | 17%   | 0.42        | -4%      | -0.06      | -5%  | -0.14      |
| AN.   | 0.15       | 13/31/91 | 1053% | 0.31        | 54%      | 0.22       | 188% | 0.19       |
| AMB   | 0.15       | 11/28/97 | 196%  | 0.42        | 95%      | 0.18       | 19%  | -0.05      |
| HME   | 0.15       | 7/29/94  | 213%  | 0.30        | 382%     | 0.39       | 160% | 0.21       |
| NJR   | 0.15       | 12/31/91 | 127%  | 0.10        | 459%     | 0.44       | 188% | 0.19       |
| KIM   | 0.15       | 12/31/91 | 259%  | 0.28        | 546%     | 0.40       | 188% | 0.19       |
| MAA   | 0.15       | 1/31/94  | 273%  | 0.40        | 286%     | 0.34       | 147% | 0.18       |
| WRI   | 0.15       | 12/31/91 | 125%  | 0.12        | 185%     | 0.19       | 188% | 0.19       |
| XOM   | 0.15       | 12/31/91 | 164%  | 0.17        | 461%     | 0.41       | 188% | 0.19       |
| GNW   | 0.15       | 5/28/04  | 960%  | 0.74        | 3%       | 0.32       | 6%   | -0.10      |
| HE    | 0.15       | 12/31/91 | 88%   | 0.01        | 103%     | 0.08       | 188% | 0.19       |
| ATE.2 | 0.15       | 9/28/01  | 34%   | 0.11        | 34%      | 0.20       | -16% | -0.25      |
| ENH   | 0.16       | 2/28/03  | 100%  | 0.57        | 102%     | 0.40       | 41%  | 0.13       |
| PRU   | 0.16       | 12/31/01 | 512%  | 0.97        | 122%     | 0.36       | 2%   | -0.14      |
| CHG   | 0.16       | 12/31/91 | 114%  | 0.07        | 139%     | 0.13       | 188% | 0.19       |
| ENA.1 | 0.16       | 12/31/91 | -62%  | 0.21        | 102%     | 0.20       | 188% | 0.19       |
| PTP   | 0.16       | 10/31/02 | -7%   | -0.31       | 58%      | 0.21       | 35%  | 0.08       |
| SJI   | 0.16       | 12/31/91 | 253%  | 0.31        | 460%     | 0.30       | 188% | 0.19       |
| O     | 0.16       | 10/31/94 | 246%  | 0.39        | 508%     | 0.54       | 153% | 0.21       |

|          |      |            |      |       |       |      |      |       |
|----------|------|------------|------|-------|-------|------|------|-------|
| CLP      | 0.16 | 9/30/93    | 294% | 0.38  | 121%  | 0.13 | 159% | 0.19  |
| CPT      | 0.16 | 7/30/93    | 193% | 0.24  | 223%  | 0.25 | 165% | 0.20  |
| WEC      | 0.16 | 12/31/91   | 105% | 0.05  | 138%  | 0.13 | 188% | 0.19  |
| AIZ      | 0.16 | 2/27/04    | 157% | 0.75  | 51%   | 0.29 | 3%   | -0.13 |
| SNG.1    | 0.16 | 9/30/02    | -45% | -0.06 | -41%  | 0.28 | 47%  | 0.15  |
| WGL      | 0.16 | 12/31/91   | 6%   | -0.25 | 200%  | 0.20 | 188% | 0.19  |
| ARE      | 0.16 | 5/30/97    | 29%  | -0.03 | 362%  | 0.45 | 37%  | 0.00  |
| CSR.1    | 0.16 | 6/24/05    | 286% | 0.68  | 3228% | 0.58 | -1%  | -0.14 |
| REG      | 0.16 | 10/29/93   | 152% | 0.19  | 241%  | 0.27 | 154% | 0.19  |
| WTR.2    | 0.17 | 12/31/91   | 377% | 0.33  | 681%  | 0.41 | 188% | 0.19  |
| Averages |      | 12/14/1996 | 211% | 0.28  | 309%  | 0.27 | 116% | 0.10  |

Table 5: Low Volatility Stocks Monthly Performance

What can be observed is that with the least volatile stocks MAPS results are not as good as high volatile and the average MAPS performance is 211% which is less than the average buy and hold 309%. The number of winning stocks has also fell to 8 out of 30, which is significantly less than the result for the 30 most volatile stocks. It can be observed that there are some better performing stocks with much higher profits, like AN., but compared to the most volatile stocks the percent of these extremely well performing stocks has fell significantly as well as their average performance. This relatively worse performance is consistent through the trading periodicities and also decreases with the decrease in trading periodicity. Average profits fall to 109% with WMAPS and 29% with DMAPS which is a reverse trend compared to the high volatility stocks.

Although stock performance is significantly lower, what can be observed is that in these relatively riskless (due to the lower volatility) the average Sharpe ratio has still increased from 0.28 to 0.27. This is not a large increase, but it demonstrates MAPS has persistently superior skills at managing risk on monthly basis. Although this is true, the same is not true for WMAPS and DMAPS for low volatility stocks and the 30 random stocks.

## 4.8 Results Summary

|         | Random   |          | Most Vol. |          | Least Vol. |                   |
|---------|----------|----------|-----------|----------|------------|-------------------|
|         | Avg. All | Avg. B&H | Avg. All  | Avg. B&H | Avg. All   | Avg. B&H          |
| Monthly | 294%     | 554%     | 402%      | 31%      | 213%       | 309%              |
| Weekly  | 183%     | 553%     | 743%      | 40%      | 109%       | 313%              |
| Daily   | 133%     | 527%     | 639%      | 40%      | 26%        | 722% <sup>1</sup> |

|         | Random      |                 | Most Vol.   |                 | Least Vol.  |                 |
|---------|-------------|-----------------|-------------|-----------------|-------------|-----------------|
|         | Avg. Sharpe | Avg. B&H Sharpe | Avg. Sharpe | Avg. B&H Sharpe | Avg. Sharpe | Avg. B&H Sharpe |
| Monthly | 0.34        | 0.33            | 0.31        | 0.12            | 0.28        | 0.27            |
| Weekly  | 0.23        | 0.33            | 0.31        | 0.23            | 0.10        | 0.28            |
| Daily   | 0.09        | 0.33            | 0.25        | 0.19            | -0.12       | 0.28            |

In the summary results several very important things can be observed – high volatility stocks perform much better managed by MAPS and outperform in all possible trading periodicities; the least volatile stocks and the random stocks overall have the similar pattern of decreasing performance with respect to the trading periodicity (as time between allowed trades shortens, so does the profit).

When we consider the most volatile stocks, we can observe that with weekly periodicity the profit increases without increase in the risk (Sharpe ratio) which is uncharacteristic. This is a improvement in the risk-reward correlation, since we take the same risk and achieve much higher profit. The same correlation is not present when we look at the daily trading periodicity; although the profit has increased, the Sharpe ratio has significantly dropped. From the table showing the daily results it can be observed that most of the profit comes from four stocks DRIV (9335%),

<sup>1</sup> Sometimes results like that occurs where for the same stocks and for the same time frames the results of B&H portfolio are different due to the trading platform. To show the data, it always uses the end of the period price. As is the case with this portfolio, one of the stocks (CSR.1) has incurred large growth during the first month significantly changing the profit for this individual stock and thus changing the whole portfolio performance.

ELX (2642%), MSTR (1900%) and RMBS (1668%), which explains the overall much lower Sharpe ratio.

## **5 Conclusions**

### **5.1 Risk Attributes**

Although MAPS is does not provide consistent profit, when used with monthly trading periodicities it shows consistent results of risk reducing. It increases the Sharpe ratios and reduces the number of losing trades for all groups tested, with largest difference occurring in the high volatility stocks. From this we can conclude that when selecting stocks and trading with monthly periodicities MAPS is superior at risk handling.

When we look at weekly and daily trading, respectively with WMAPS and DMAPS, we see that these results hold true only for the most volatile stocks; weekly and daily for both the random and least volatile stocks are worse than the B&H strategy with respect to Sharpe ratio and the number of losing trades, which increases, and thus indicate that in this more risky trading MAPS may lose its ability to reduce risk.

### **5.2 Profits**

Overall, it can be observed that there is a large variation in the profits resulting from trading with MAPS. When considering the random stocks and the least volatile stocks, it can be observed that with the decrease in time frame of trading from monthly to weekly and daily, we see that the profit results worsen. The results for these groups and periodicities against the stocks own B&H and SPX are overall underperforming.

While this is true, the results for the high volatility stocks are behaving in the completely opposite way. The overall performance is much better than that of the stocks own B&H and SPX for large percent of the stocks; results are consistent and improving over with monthly being the worst (and still outperforming) and weekly being the best with daily being close. This is a significant change from the previous groups which indicates that there are attributes to MAPS that can be exploited to gain significant profits.

Since MAPS performs exceptionally well with high volatility stocks, which in the case is defined as the intra month variation over the last 10 years, means MAPS is very good at catching trends.

### 5.3 Overall

Overall, we can conclude that Simplex MAPS is a superior investing program that can reduce risk and bring significant profits. Although it is not consistent over all groups tested, it outperforms all cornerstones for the most volatile group of stocks and produces an average compounded of 19.44% return per year for weekly trading over the last 12 years. This is very high return considering that SPX has actually lost value over the same period. This is a return many investors would want to achieve and thus MAPS can be a very good tool at achieving this goal.

There are also some conditions to achieving such good results and the help of EMB Investments is advised. The stock selection is one very important element to achieving such results; from the examples in this project we can conclude that there are two separate methodologies which can be utilized to produce these results:

- Creating a portfolio of high volatility stocks
- Using the stocks advised by EMB Investments

Through the testing it was shown that volatility plays an important role in the stock performance and that the higher it is the better the performance.

The second methodology of following EMB Investments advice has also proven to be very profitable as measured by the real time suggestions and also considering the documentation that EMB Investments have provided us showing numerous examples to leading financial advisors.

## **5.4 Ease of Use**

Currently Simplex MAPS is programmed in FWLB and is simple to use, providing information about historic trades and in the case of existent account with Fidelity it can automatically initiate trades. These trades can be executed with end of the month price only and will produce results comparable with the one shown in this project. To utilize the mid-point price requires manual work and at this point is not automated.

The stock selection process is contained in Complex MAPS and is not in the scope of this project. It was explored only by the performance of few suggestions that were made real time to us. There are many other examples that EMB Investments have documented and can provide upon request.

## **5.5 Theoretical Implications**

An implication from the confirmation of MAPS as system able to outperform the market overall as well as the stocks buy and hold performance for certain type of stocks while maintaining better Sharpe ratio is an indication that the markets might not be completely efficient.

Maintaining such performance over significant periods of time is considered highly improbable by the Efficient Market Hypothesis. An exception to the theory might be a case where MAPS utilizes most of the investment fallacies and thus can achieve much better results. Theoretically,

if such an imperfection exists and becomes widely known it will quickly disappear since everybody will try to explore the opportunity and it as such will disappear. The same can hold true for MAPS – if many people start trading the same pattern it will disappear over time.

## **6 Future Research**

This study of the capabilities of Simplex and Complex MAPS can be further extended in many directions all of which come from the ideas and concepts EMB has developed. One of the major research perspectives is the precise timing of MAPS, taking it to the optimal time frame the signal occurs depending on the periodicity being traded. These further investigations can be combined with the ideas of EMB for “gates” which require looking more at the long term stock trends before making the trade, also implementing some threshold values on the indicators to avoid “spurious signals”; which may occur when we try to time MAPS as precisely as possible. These are just few of the ideas EMB has for improving Simplex MAPS and can be implemented, tested and researched.

Complex MAPS was not in the scope of this project but can be very important and interesting to investors if topics like stock selection are further researched and confirmed.

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## 8 Appendices

### 8.1 Random Stock Picks

#### 8.1.1 Monthly Performance

| Tick     | Period     | MAPS  | MAPS Sharpe | B&H TICK | B&H Sharpe | SPX  | SPX Sharpe |
|----------|------------|-------|-------------|----------|------------|------|------------|
| AGU      | 5/31/1995  | 420%  | 0.40        | 654%     | 0.45       | 123% | 0.17       |
| AZO      | 12/31/1991 | 109%  | 0.11        | 979%     | 0.44       | 188% | 0.19       |
| BAP      | 10/31/1995 | 1284% | 0.79        | 1030%    | 0.51       | 104% | 0.14       |
| BR       | 3/30/2007  | 11%   | 0.06        | 16%      | 0.20       | -17% | -0.35      |
| BZ       | 6/29/2007  | 1101% | 1.32        | -27%     | -0.67      | -22% | -0.45      |
| CAE      | 7/31/2002  | 297%  | 0.71        | 65%      | 0.29       | 30%  | 0.05       |
| CHD      | 12/31/1991 | 252%  | 0.27        | 637%     | 0.42       | 188% | 0.19       |
| CHE      | 12/31/1991 | 261%  | 0.25        | 322%     | 0.28       | 188% | 0.19       |
| CMP      | 12/31/2003 | 117%  | 0.49        | 541%     | 1.10       | 6%   | -0.11      |
| CR       | 12/31/1991 | 190%  | 0.19        | 319%     | 0.28       | 188% | 0.19       |
| CVD      | 12/31/1996 | 254%  | 0.34        | 186%     | 0.33       | 60%  | 0.06       |
| DHR      | 12/31/1991 | 617%  | 0.46        | 3205%    | 0.71       | 188% | 0.19       |
| DLX      | 12/31/1991 | 35%   | 0.00        | -17%     | -0.04      | 188% | 0.19       |
| DOX      | 6/30/1998  | 571%  | 0.51        | 100%     | 0.32       | -1%  | -0.13      |
| GD       | 12/31/1991 | 547%  | 0.45        | 1254%    | 0.54       | 188% | 0.19       |
| GLF      | 12/31/1991 | 138%  | 0.19        | 720%     | 0.40       | 188% | 0.19       |
| GY       | 12/31/1991 | 457%  | 0.31        | -54%     | 0.08       | 188% | 0.19       |
| KOP      | 2/28/2006  | 93%   | 0.58        | 65%      | 0.41       | -7%  | -0.21      |
| MIG      | 11/30/1995 | 76%   | 0.19        | -86%     | 0.04       | 94%  | 0.12       |
| PKG      | 1/31/2000  | 46%   | 0.08        | 161%     | 0.33       | -19% | -0.25      |
| RXII     | 3/31/2008  | -3%   | -0.22       | -60%     | 0.01       | -10% | -0.23      |
| SFG      | 4/30/1999  | 85%   | 0.19        | 378%     | 0.50       | -15% | -0.22      |
| SUG      | 12/31/1991 | 660%  | 0.41        | 1173%    | 0.43       | 188% | 0.19       |
| TTM      | 9/30/2004  | 182%  | 0.64        | 139%     | 0.47       | 6%   | -0.09      |
| TMP      | 12/31/1991 | 547%  | 0.46        | 881%     | 0.40       | 188% | 0.19       |
| UAM      | 12/31/1991 | 144%  | 0.19        | 3848%    | 0.55       | 188% | 0.19       |
| UNS      | 12/31/1991 | 27%   | -0.07       | -40%     | 0.27       | 188% | 0.19       |
| VIT      | 12/31/2007 | 90%   | 0.68        | 189%     | 0.89       | -19% | -0.42      |
| WTW      | 11/30/2001 | -4%   | -0.18       | -13%     | -0.03      | 2%   | -0.14      |
| XEL      | 12/31/1991 | 275%  | 0.32        | 52%      | 0.06       | 188% | 0.19       |
|          |            |       |             |          |            |      |            |
| Averages |            | 296%  | 0.34        | 554%     | 0.33       | 98%  | 0.02       |

## 8.1.2 Weekly Performance

| Tick     | Period     | MAPS | MAPS Sharpe | B&H TICK | B&H Sharpe | SPX  | SPX Sharpe |
|----------|------------|------|-------------|----------|------------|------|------------|
| AGU      | 5/5/1995   | 518% | 0.44        | 572%     | 0.42       | 129% | 0.18       |
| AZO      | 1/3/1992   | 348% | 0.30        | 1005%    | 0.45       | 184% | 0.19       |
| BAP      | 10/27/1995 | 784% | 0.56        | 886%     | 0.50       | 103% | 0.14       |
| BR       | 3/23/2007  | 80%  | 0.71        | 16%      | 0.20       | -18% | -0.35      |
| BZ       | 6/29/2007  | 360% | 0.30        | -24%     | -0.69      | -22% | -0.45      |
| CAE      | 8/2/2002   | 100% | 0.71        | 70%      | 0.29       | 38%  | 0.10       |
| CHD      | 1/3/1992   | 170% | 0.17        | 652%     | 0.42       | 184% | 0.19       |
| CHE      | 1/3/1992   | 139% | 0.13        | 326%     | 0.28       | 184% | 0.19       |
| CMP      | 1/3/2002   | 25%  | 0.10        | 561%     | 1.08       | -1%  | -0.14      |
| CR       | 1/3/1992   | 446% | 0.36        | 309%     | 0.28       | 184% | 0.19       |
| CVD      | 12/20/1996 | 469% | 0.46        | 167%     | 0.33       | 56%  | 0.05       |
| DHR      | 1/3/1992   | 140% | 0.13        | 3298%    | 0.71       | 184% | 0.19       |
| DLX      | 1/3/1992   | 351% | 0.29        | -13%     | -0.04      | 184% | 0.19       |
| DOX      | 6/19/1998  | 438% | 0.44        | 121%     | 0.33       | 4%   | -0.11      |
| GD       | 1/3/1992   | 295% | 0.29        | 1232%    | 0.55       | 184% | 0.19       |
| GLF      | 1/3/1992   | -82% | -0.18       | 803%     | 0.40       | 184% | 0.19       |
| GY       | 1/3/1992   | 163% | 0.19        | -49%     | 0.07       | 184% | 0.19       |
| KOP      | 2/3/2006   | 18%  | 0.16        | 89%      | 0.48       | -6%  | -0.19      |
| MIG      | 11/24/1995 | -67% | -0.14       | -77%     | 0.27       | 95%  | 0.12       |
| PKG      | 1/28/2000  | 7%   | -0.07       | 166%     | 0.34       | -17% | -0.22      |
| RXII     | 3/14/2008  | -16% | 0.18        | 58%      | -0.12      | -7%  | -0.17      |
| SFG      | 4/16/1999  | 279% | 0.49        | 374%     | 0.50       | -15% | -0.20      |
| SUG      | 1/3/1992   | 210% | 0.20        | 968%     | 0.44       | 184% | 0.19       |
| TTM      | 10/1/2004  | 162% | 0.51        | 132%     | 0.46       | 4%   | -0.09      |
| TMP      | 1/3/1992   | -64% | -0.46       | 663%     | 0.43       | 184% | 0.19       |
| UAM      | 1/3/1992   | -20% | 0.06        | 3599%    | 0.55       | 184% | 0.19       |
| UNS      | 1/3/1992   | 53%  | 0.02        | 53%      | 0.13       | 184% | 0.19       |
| VIT      | 12/14/2007 | -11% | 0.22        | 151%     | 0.79       | -19% | -0.40      |
| WTW      | 11/16/2001 | 38%  | 0.08        | -2%      | 0.01       | 2%   | -0.12      |
| XEL      | 1/3/1992   | 158% | 0.15        | 54%      | 0.05       | 184% | 0.19       |
|          |            |      |             |          |            |      |            |
| Averages |            | 183% | 0.23        | 539%     | 0.33       | 97%  | 0.03       |

### 8.1.3 Daily Performance

| Tick     | Period     | MAPS  | MAPS Sharpe | B&H TICK | B&H Sharpe | SPX  | SPX Sharpe |
|----------|------------|-------|-------------|----------|------------|------|------------|
| AGU      | 5/5/1995   | 968%  | 0.59        | 80%      | 0.42       | 129% | 0.18       |
| AZO      | 12/2/1991  | 544%  | 0.39        | 1321%    | 0.48       | 214% | 0.22       |
| BAP      | 10/25/1995 | 1237% | 0.64        | 775%     | 0.47       | 103% | 0.14       |
| BR       | 3/22/2007  | -15%  | -0.28       | 18%      | 0.21       | -18% | -0.37      |
| BZ       | 6/28/2007  | 16%   | 1.32        | -24%     | 0.25       | -22% | -0.46      |
| CAE      | 7/29/2002  | 35%   | 0.14        | 58%      | 0.28       | 33%  | 0.06       |
| CHD      | 12/2/1991  | 26%   | -0.07       | 696%     | 0.43       | 214% | 0.22       |
| CHE      | 12/2/1991  | 230%  | 0.22        | 374%     | 0.30       | 214% | 0.22       |
| CMP      | 12/12/2003 | 34%   | -0.05       | 561%     | 1.10       | 11%  | -0.07      |
| CR       | 12/2/1991  | 151%  | 0.15        | 379%     | 0.31       | 214% | 0.22       |
| CVD      | 12/17/1996 | 27%   | 0.07        | 159%     | 0.31       | 60%  | 0.06       |
| DHR      | 12/2/1991  | 609%  | 0.44        | 3573%    | 0.73       | 214% | 0.22       |
| DLX      | 12/2/1991  | -74%  | -0.36       | -10%     | -0.02      | 214% | 0.22       |
| DOX      | 6/19/1998  | 274%  | 0.36        | 121%     | 0.34       | 4%   | -0.12      |
| GD       | 12/2/1991  | 37%   | -0.03       | 1388%    | 0.56       | 214% | 0.22       |
| GLF      | 12/2/1991  | -85%  | -0.20       | 702%     | 0.40       | 214% | 0.22       |
| GY       | 12/2/1991  | -43%  | -0.05       | -55%     | 0.12       | 214% | 0.22       |
| KOP      | 2/1/2006   | 4%    | 0.07        | 104%     | 0.52       | -7%  | -0.21      |
| MIG      | 11/21/1995 | -82%  | -0.15       | -74%     | 0.18       | 97%  | 0.13       |
| PKG      | 1/28/2000  | -16%  | -0.10       | 166%     | 0.33       | -17% | -0.24      |
| RXII     | 3/12/2008  | 198%  | 0.86        | -117%    | 0.50       | -7%  | -0.19      |
| SFG      | 4/16/1999  | -30%  | -0.14       | 374%     | 0.50       | -15% | -0.23      |
| SUG      | 12/2/1991  | 109%  | 0.12        | 968%     | 0.44       | 214% | 0.22       |
| TTM      | 9/27/2004  | 60%   | 0.30        | 142%     | 0.47       | 7%   | -0.08      |
| TMP      | 1/2/1991   | -76%  | -0.56       | 683%     | 0.44       | 214% | 0.22       |
| UAM      | 12/2/1991  | -100% | -0.99       | 3153%    | 0.53       | 214% | 0.22       |
| UNS      | 12/2/1991  | -73%  | -0.29       | 77%      | 0.15       | 214% | 0.22       |
| VIT      | 12/12/2007 | 32%   | 0.45        | 164%     | 0.83       | -19% | -0.44      |
| WTW      | 11/15/2001 | 0%    | -0.10       | 1%       | 0.03       | 3%   | -0.14      |
| XEL      | 12/2/1991  | -14%  | -0.16       | 57%      | 0.07       | 214% | 0.22       |
|          |            |       |             |          |            |      |            |
| Averages |            | 133%  | 0.09        | 527%     | 0.39       | 111% | 0.04       |

## 8.2 Volatility Stocks

### 8.2.1 Most Volatile

#### 8.2.1.1 Monthly Results

| Tick     | Vol. Index | Period     | MAPS  | MAPS Sharpe | B&H TICK | B&H Sharpe | SPX  | SPX Sharpe |
|----------|------------|------------|-------|-------------|----------|------------|------|------------|
| MSTR     | 1.30       | 6/30/1998  | 2334% | 0.67        | -48%     | -0.05      | -1%  | -0.13      |
| AKAM     | 1.14       | 10/29/1999 | 377%  | 0.46        | -85%     | 0.34       | -18% | -0.24      |
| VPHM     | 1.16       | 11/29/1996 | 2015% | 0.58        | 101%     | 0.49       | 56%  | 0.05       |
| BCSI     | 1.13       | 11/30/1999 | 280%  | 0.51        | -99%     | -0.62      | -19% | -0.25      |
| EXTR     | 1.12       | 4/30/1999  | -75%  | -0.06       | -100%    | -0.29      | -15% | -0.22      |
| PCLN     | 1.12       | 3/31/1999  | 790%  | 0.54        | -82%     | -0.01      | -13% | -0.21      |
| NSOL     | 1.09       | 3/28/2001  | 10%   | 0.32        | -100%    | 0.06       | 0%   | -0.15      |
| DRIV     | 1.09       | 8/31/1998  | -81%  | -0.03       | 513%     | 0.50       | 19%  | -0.06      |
| AXTI     | 1.09       | 5/29/1998  | 363%  | 0.39        | -82%     | -0.33      | 5%   | -0.11      |
| ARBA     | 1.08       | 6/30/1999  | -87%  | -0.09       | -102%    | -0.32      | -18% | -0.24      |
| TIBX     | 1.07       | 7/30/1999  | -46%  | -0.06       | 16%      | 0.34       | -16% | -0.22      |
| PALM     | 1.05       | 3/31/2000  | -54%  | 0.13        | -108%    | -0.45      | -26% | -0.30      |
| CNQR     | 1.04       | 12/31/1998 | 928%  | 0.51        | 44%      | -0.27      | -10% | -0.19      |
| INSP     | 1.03       | 12/31/1998 | 335%  | 0.42        | -48%     | 0.38       | -10% | -0.19      |
| FFIV     | 1.02       | 6/30/1999  | 153%  | 0.33        | 216%     | -0.26      | -18% | -0.24      |
| HLIT     | 1.02       | 5/31/1995  | 1902% | 0.54        | -4%      | 0.42       | 123% | 0.17       |
| JNPR     | 0.99       | 6/30/1999  | 326%  | 0.41        | 9%       | 0.46       | -18% | -0.24      |
| ELOY     | 0.99       | 2/29/2000  | 19%   | 0.22        | -114%    | 0.31       | -16% | -0.24      |
| ELX      | 0.98       | 12/31/1991 | 99%   | 0.30        | 961%     | 0.51       | 188% | 0.19       |
| RMBS     | 0.97       | 5/30/1997  | -57%  | 0.10        | 191%     | 0.44       | 37%  | 0.00       |
| RRI      | 0.95       | 5/31/2001  | 309%  | 0.49        | -97%     | 0.40       | -8%  | -0.20      |
| WFR      | 0.95       | 7/31/1995  | 335%  | 0.35        | -64%     | 0.02       | 112% | 0.15       |
| BRCD     | 0.95       | 5/28/1999  | 104%  | 0.27        | -31%     | 0.33       | -11% | -0.21      |
| ARQL     | 0.95       | 10/31/1996 | 29%   | 0.21        | -49%     | 0.30       | 66%  | 0.08       |
| CIEN     | 0.94       | 2/28/1997  | 167%  | 0.34        | -98%     | -0.26      | 45%  | 0.03       |
| BRCM     | 0.94       | 4/30/1998  | 1087% | 0.56        | 358%     | 0.49       | 2%   | -0.13      |
| TTMI     | 0.93       | 9/29/2000  | 43%   | 0.21        | -63%     | 0.26       | -22% | -0.28      |
| MIPS     | 0.92       | 6/30/1998  | -23%  | 0.16        | -78%     | 0.01       | -1%  | -0.13      |
| MTEX     | 0.92       | 2/26/1999  | 81%   | 0.30        | -68%     | 0.31       | -6%  | -0.18      |
|          |            |            |       |             |          |            |      |            |
| Averages |            |            | 402%  | 0.31        | 31%      | 0.12       | 14%  | -0.13      |

### 8.2.1.2 Weekly Results

| Tick     | Vol. Index | Period     | MAPS  | MAPS Sharpe | B&H TICK | B&H Sharpe | SPX  | SPX Sharpe |
|----------|------------|------------|-------|-------------|----------|------------|------|------------|
| MSTR     | 1.30       | 6/12/1998  | 418%  | 0.48        | -22%     | 0.36       | 6%   | -0.11      |
| VPHM     | 1.16       | 11/22/1996 | 6828% | 0.65        | 98%      | 0.52       | 56%  | 0.05       |
| AKAM     | 1.14       | 10/29/1999 | -78%  | 0.08        | -85%     | 0.35       | -18% | -0.24      |
| BCSI     | 1.13       | 11/19/1999 | 459%  | 0.51        | -93%     | -0.30      | -19% | -0.26      |
| EXTR     | 1.12       | 4/9/1999   | 66%   | 0.21        | -88%     | 0.16       | -14% | -0.23      |
| PCLN     | 1.12       | 4/1/1999   | 334%  | 0.42        | -63%     | -0.29      | -15% | -0.22      |
| NSOL     | 1.09       | 4/12/2001  | -100% | -0.48       | -140%    | -0.09      | -2%  | -0.16      |
| DRIV     | 1.09       | 8/14/1998  | 249%  | 0.38        | 219%     | 0.45       | 9%   | -0.10      |
| AXTI     | 1.09       | 5/22/1998  | 19%   | 0.26        | -77%     | 0.00       | 2%   | -0.12      |
| ARBA     | 1.08       | 6/25/1999  | 378%  | 0.43        | -103%    | -0.24      | -15% | -0.23      |
| TIBX     | 1.07       | 7/16/1999  | 1023% | 0.49        | -26%     | 0.32       | -21% | -0.26      |
| PALM     | 1.05       | 3/3/2000   | 399%  | 0.47        | -96%     | -0.36      | -20% | -0.27      |
| CNQR     | 1.04       | 12/18/1998 | 19%   | 0.35        | 82%      | 0.32       | -7%  | -0.17      |
| INSP     | 1.03       | 12/18/1998 | -53%  | 0.19        | -64%     | 0.30       | -7%  | -0.17      |
| FFIV     | 1.02       | 6/4/1999   | 15%   | 0.22        | 824%     | 0.62       | -16% | -0.23      |
| HLIT     | 1.02       | 5/26/1995  | 511%  | 0.41        | -4%      | 0.43       | 126% | 0.17       |
| JNPR     | 0.99       | 6/25/1999  | -55%  | 0.14        | 94%      | 0.42       | -15% | -0.23      |
| ELOY     | 0.99       | 2/11/2000  | -97%  | -0.31       | -112%    | 0.35       | -18% | -0.25      |
| ELX      | 0.98       | 12/6/1991  | 5830% | 0.56        | 858%     | 0.50       | 214% | 0.22       |
| RMBS     | 0.97       | 5/16/1997  | 1946% | 0.53        | 207%     | 0.45       | 40%  | 0.01       |
| RRI      | 0.95       | 5/4/2001   | 79%   | 0.30        | -96%     | 0.33       | -8%  | -0.21      |
| WFR      | 0.95       | 7/14/1995  | 356%  | 0.38        | -57%     | -0.05      | 112% | 0.15       |
| BRCO     | 0.95       | 5/28/1999  | 136%  | 0.31        | -29%     | 0.34       | -11% | -0.21      |
| ARQL     | 0.95       | 10/18/1996 | 354%  | 0.38        | -64%     | 0.35       | 65%  | 0.07       |
| CIEN     | 0.94       | 2/7/1997   | 71%   | 0.29        | -98%     | 0.21       | 47%  | 0.03       |
| BRCM     | 0.94       | 4/17/1998  | 2427% | 0.69        | 305%     | 0.47       | 1%   | -0.13      |
| TTMI     | 0.93       | 9/22/2000  | 129%  | 0.33        | -58%     | 0.24       | -22% | -0.29      |
| MIPS     | 0.92       | 7/2/1998   | -35%  | 0.14        | -75%     | 0.40       | -1%  | -0.14      |
| MTEX     | 0.92       | 2/19/1999  | -72%  | 0.09        | -75%     | 0.06       | -9%  | -0.19      |
| Averages |            |            | 743%  | 0.31        | 40%      | 0.23       | 15%  | -0.13      |

### 8.2.1.3 Daily Results

| Tick     | Vol. Index | Period     | MAPS  | MAPS Sharpe | B&H TICK | B&H Sharpe | SPX  | SPX Sharpe |
|----------|------------|------------|-------|-------------|----------|------------|------|------------|
| MSTR     | 1.30       | 6/11/1998  | 1900% | 0.60        | -56%     | 0.41       | 6%   | -0.11      |
| VPHM     | 1.16       | 11/19/1996 | 570%  | 0.48        | 82%      | 0.33       | 56%  | 0.05       |
| AKAM     | 1.14       | 10/29/1999 | -70%  | 0.03        | -85%     | 0.34       | -18% | -0.24      |
| BCSI     | 1.13       | 11/19/1999 | 328%  | 0.47        | -93%     | -0.39      | -19% | -0.26      |
| EXTR     | 1.12       | 4/9/1999   | 88%   | 0.29        | -88%     | 0.18       | -14% | -0.23      |
| PCLN     | 1.12       | 3/30/1999  | -28%  | 0.23        | -66%     | 0.28       | -15% | -0.22      |
| NSOL     | 1.09       | 3/28/2001  | -100% | -0.34       | -100%    | 0.05       | -2%  | -0.16      |
| DRIV     | 1.09       | 8/11/1998  | 9335% | 0.69        | 163%     | -0.07      | 9%   | -0.10      |
| AXTI     | 1.09       | 5/21/1998  | 191%  | 0.38        | -79%     | 0.41       | 2%   | -0.12      |
| ARBA     | 1.08       | 6/23/1999  | -82%  | 0.03        | -92%     | 0.22       | -15% | -0.23      |
| TIBX     | 1.07       | 7/14/1999  | 70%   | 0.28        | -10%     | 0.35       | -21% | -0.26      |
| PALM     | 1.05       | 3/2/2000   | -4%   | 0.26        | -113%    | -0.18      | -20% | -0.27      |
| CNQR     | 1.04       | 12/16/1998 | -88%  | 0.00        | 120%     | 0.28       | -7%  | -0.17      |
| INSP     | 1.03       | 12/15/1998 | 17%   | 0.27        | -14%     | -0.31      | -7%  | -0.17      |
| FFIV     | 1.02       | 6/4/1999   | 370%  | 0.43        | 824%     | 0.62       | -16% | -0.23      |
| HLIT     | 1.02       | 5/23/1995  | 456%  | 0.43        | -1%      | 0.40       | 126% | 0.17       |
| JNPR     | 0.99       | 6/25/1999  | 7%    | 0.21        | 94%      | 0.41       | -15% | -0.23      |
| ELOY     | 0.99       | 2/10/2000  | -100% | -0.79       | -117%    | -0.05      | -18% | -0.25      |
| ELX      | 0.98       | 12/2/1991  | 2642% | 0.47        | 893%     | 0.51       | 214% | 0.22       |
| RMBS     | 0.97       | 5/14/1997  | 1668% | 0.49        | 195%     | 0.45       | 40%  | 0.01       |
| RRI      | 0.95       | 5/1/2001   | 110%  | 0.31        | -98%     | 0.28       | -8%  | -0.21      |
| WFR      | 0.95       | 7/13/1995  | -85%  | 0.00        | -50%     | 0.23       | 112% | 0.15       |
| BBCD     | 0.95       | 5/25/1999  | 22%   | 0.22        | 16%      | 0.36       | -11% | -0.21      |
| ARQL     | 0.95       | 10/16/1996 | 12%   | 0.21        | -81%     | -0.10      | 65%  | 0.07       |
| CIEN     | 0.94       | 2/7/1997   | -73%  | 0.07        | -98%     | -0.24      | 47%  | 0.03       |
| BRCM     | 0.94       | 4/17/1998  | 242%  | 0.36        | 305%     | 0.48       | 1%   | -0.13      |
| TTMI     | 0.93       | 9/21/2000  | 481%  | 0.51        | -50%     | 0.19       | -22% | -0.29      |
| MIPS     | 0.92       | 6/30/1998  | 582%  | 0.47        | -78%     | 0.01       | -1%  | -0.14      |
| MTEX     | 0.92       | 2/16/1999  | 63%   | 0.20        | -167%    | 0.01       | -9%  | -0.19      |
| Averages |            |            | 639%  | 0.25        | 40%      | 0.19       | 15%  | -0.13      |

## 8.2.2 Least Volatile

### 8.2.2.1 Monthly Results

| Tick     | Vol. Index | Period     | MAPS  | MAPS Sharpe | B&H TICK | B&H Sharpe | SPX  | SPX Sharpe |
|----------|------------|------------|-------|-------------|----------|------------|------|------------|
| KRG      | 0.13       | 8/31/2004  | 122%  | 0.58        | -40%     | -0.17      | 8%   | -0.07      |
| IPW.1    | 0.15       | 7/28/2008  | 17%   | 0.42        | -4%      | -0.06      | -5%  | -0.14      |
| AN.      | 0.15       | 13/31/1991 | 1053% | 0.31        | 54%      | 0.22       | 188% | 0.19       |
| AMB      | 0.15       | 11/28/1997 | 196%  | 0.42        | 95%      | 0.18       | 19%  | -0.05      |
| HME      | 0.15       | 7/29/1994  | 213%  | 0.30        | 382%     | 0.39       | 160% | 0.21       |
| NJR      | 0.15       | 12/31/1991 | 127%  | 0.10        | 459%     | 0.44       | 188% | 0.19       |
| KIM      | 0.15       | 12/31/1991 | 259%  | 0.28        | 546%     | 0.40       | 188% | 0.19       |
| MAA      | 0.15       | 1/31/1994  | 273%  | 0.40        | 286%     | 0.34       | 147% | 0.18       |
| WRI      | 0.15       | 12/31/1991 | 125%  | 0.12        | 185%     | 0.19       | 188% | 0.19       |
| XOM      | 0.15       | 12/31/1991 | 164%  | 0.17        | 461%     | 0.41       | 188% | 0.19       |
| GNW      | 0.15       | 5/28/2004  | 960%  | 0.74        | 3%       | 0.32       | 6%   | -0.10      |
| HE       | 0.15       | 12/31/1991 | 88%   | 0.01        | 103%     | 0.08       | 188% | 0.19       |
| ATE.2    | 0.15       | 9/28/2001  | 34%   | 0.11        | 34%      | 0.20       | -16% | -0.25      |
| ENH      | 0.16       | 2/28/2003  | 100%  | 0.57        | 102%     | 0.40       | 41%  | 0.13       |
| PRU      | 0.16       | 12/31/2001 | 512%  | 0.97        | 122%     | 0.36       | 2%   | -0.14      |
| CHG      | 0.16       | 12/31/1991 | 114%  | 0.07        | 139%     | 0.13       | 188% | 0.19       |
| ENA.1    | 0.16       | 12/31/1991 | -62%  | 0.21        | 102%     | 0.20       | 188% | 0.19       |
| PTP      | 0.16       | 10/31/2002 | -7%   | -0.31       | 58%      | 0.21       | 35%  | 0.08       |
| SJI      | 0.16       | 12/31/1991 | 253%  | 0.31        | 460%     | 0.30       | 188% | 0.19       |
| O        | 0.16       | 10/31/1994 | 246%  | 0.39        | 508%     | 0.54       | 153% | 0.21       |
| CLP      | 0.16       | 9/30/1993  | 294%  | 0.38        | 121%     | 0.13       | 159% | 0.19       |
| CPT      | 0.16       | 7/30/1993  | 193%  | 0.24        | 223%     | 0.25       | 165% | 0.20       |
| WEC      | 0.16       | 12/31/1991 | 105%  | 0.05        | 138%     | 0.13       | 188% | 0.19       |
| AIZ      | 0.16       | 2/27/2004  | 157%  | 0.75        | 51%      | 0.29       | 3%   | -0.13      |
| SNG.1    | 0.16       | 9/30/2002  | -45%  | -0.06       | -41%     | 0.28       | 47%  | 0.15       |
| WGL      | 0.16       | 12/31/1991 | 6%    | -0.25       | 200%     | 0.20       | 188% | 0.19       |
| ARE      | 0.16       | 5/30/1997  | 29%   | -0.03       | 362%     | 0.45       | 37%  | 0.00       |
| CSR.1    | 0.16       | 6/24/2005  | 286%  | 0.68        | 3228%    | 0.58       | -1%  | -0.14      |
| REG      | 0.16       | 10/29/1993 | 152%  | 0.19        | 241%     | 0.27       | 154% | 0.19       |
| WTR.2    | 0.17       | 12/31/1991 | 377%  | 0.33        | 681%     | 0.41       | 188% | 0.19       |
|          |            |            |       |             |          |            |      |            |
| Averages |            |            | 211%  | 0.28        | 309%     | 0.27       | 116% | 0.10       |

### 8.2.2.2 Weekly Results

| Tick     | Vol. Index | Period     | MAPS  | MAPS Sharpe | B&H TICK | B&H Sharpe | SPX  | SPX Sharpe |
|----------|------------|------------|-------|-------------|----------|------------|------|------------|
| KRG      | 0.13       | 8/13/2004  | 27%   | 0.15        | -31%     | -0.14      | 11%  | -0.05      |
| AN.      | 0.15       | 12/6/1991  | 904%  | 0.33        | 74%      | 0.25       | 214% | 0.22       |
| IPW.1    | 0.15       | 7/25/2008  | -1%   | -0.12       | -12%     | -0.16      | -5%  | -0.13      |
| AMB      | 0.15       | 11/21/1997 | 94%   | 0.16        | 102%     | 0.19       | 20%  | -0.06      |
| HME      | 0.15       | 7/29/1994  | 22%   | -0.08       | 331%     | 0.38       | 161% | 0.21       |
| NJR      | 0.15       | 12/6/1991  | -5%   | -0.28       | 439%     | 0.41       | 214% | 0.22       |
| KIM      | 0.15       | 12/6/1991  | 235%  | 0.22        | 590%     | 0.41       | 214% | 0.22       |
| WRI      | 0.15       | 12/6/1991  | 353%  | 0.28        | 229%     | 0.22       | 214% | 0.22       |
| XOM      | 0.15       | 12/6/1991  | 21%   | -0.14       | 499%     | 0.42       | 214% | 0.22       |
| MAA      | 0.15       | 1/28/1994  | 79%   | 0.05        | 287%     | 0.34       | 147% | 0.18       |
| GNW      | 0.15       | 5/28/2004  | 113%  | 0.40        | 4%       | 0.33       | 7%   | -0.10      |
| HE       | 0.15       | 12/6/1991  | 136%  | 0.12        | 111%     | 0.09       | 214% | 0.22       |
| ATE.2    | 0.15       | 9/21/2001  | 79%   | 0.24        | 12%      | 0.18       | 14%  | -0.07      |
| ENH      | 0.16       | 2/28/2003  | 51%   | 0.18        | 103%     | 0.39       | 41%  | 0.13       |
| PRU      | 0.16       | 12/14/2001 | 180%  | 0.44        | 147%     | 0.40       | 5%   | -0.12      |
| CHG      | 0.16       | 12/6/1991  | 10%   | -0.19       | 151%     | 0.14       | 214% | 0.22       |
| ENA.1    | 0.16       | 12/18/1992 | -100% | -0.15       | 102%     | 0.20       | 175% | 0.20       |
| PTP      | 0.16       | 11/1/2002  | 19%   | -0.04       | 63%      | 0.23       | 35%  | 0.08       |
| SJI      | 0.16       | 12/6/1991  | 89%   | 0.03        | 492%     | 0.42       | 214% | 0.22       |
| O        | 0.16       | 10/21/1994 | 297%  | 0.39        | 493%     | 0.52       | 156% | 0.21       |
| CLP      | 0.16       | 9/24/1993  | 169%  | 0.18        | 120%     | 0.13       | 160% | 0.20       |
| CPT      | 0.16       | 7/23/1993  | 87%   | 0.06        | 225%     | 0.25       | 166% | 0.20       |
| WEC      | 0.16       | 12/6/1991  | 59%   | -0.07       | 152%     | 0.15       | 214% | 0.22       |
| AIZ      | 0.16       | 2/6/2004   | 126%  | 0.53        | 54%      | 0.29       | 5%   | -0.12      |
| SNG.1    | 0.16       | 9/6/2002   | -54%  | -0.03       | -59%     | 0.31       | 36%  | 0.08       |
| WGL      | 0.16       | 12/6/1991  | 16%   | -0.20       | 215%     | 0.22       | 214% | 0.22       |
| ARE      | 0.16       | 5/30/1997  | 30%   | 0.00        | 373%     | 0.46       | 38%  | 0.00       |
| CSR.1    | 0.16       | 6/24/2005  | 155%  | 0.54        | 3157%    | 0.58       | -1%  | -0.15      |
| REG      | 0.16       | 10/29/1993 | 38%   | -0.01       | 246%     | 0.28       | 154% | 0.18       |
| WTR.2    | 0.17       | 12/6/1991  | 39%   | -0.01       | 720%     | 0.43       | 214% | 0.22       |
| Averages |            |            | 109%  | 0.10        | 313%     | 0.28       | 123% | 0.11       |



### 8.2.2.3 Daily Results

| Tick     | Vol. Index | Period     | MAPS  | MAPS Sharpe | B&H TICK | B&H Sharpe | SPX  | SPX Sharpe |
|----------|------------|------------|-------|-------------|----------|------------|------|------------|
| KRG      | 0.13       | 8/11/2004  | -49%  | -0.32       | -32%     | -0.14      | 11%  | -0.05      |
| AN.      | 0.15       | 12/2/1991  | -16%  | 0.05        | 54%      | 0.24       | 214% | 0.22       |
| IPW.1    | 0.15       | 7/25/2008  | -32%  | -0.64       | -13%     | -0.19      | -5%  | -0.13      |
| AMB      | 0.15       | 11/21/1997 | -67%  | -0.50       | 102%     | 0.19       | 20%  | -0.06      |
| HME      | 0.15       | 7/28/1994  | -6%   | -0.15       | 332%     | 0.39       | 161% | 0.21       |
| NJR      | 0.15       | 12/2/1991  | -26%  | -0.40       | 451%     | 0.43       | 214% | 0.22       |
| KIM      | 0.15       | 12/2/1991  | 85%   | 0.10        | 585%     | 0.41       | 214% | 0.22       |
| WRI      | 0.15       | 12/2/1991  | 261%  | 0.24        | 222%     | 0.22       | 214% | 0.22       |
| XOM      | 0.15       | 12/2/1991  | -92%  | -1.00       | 477%     | 0.42       | 214% | 0.22       |
| MAA      | 0.15       | 1/28/1994  | -67%  | -0.46       | 287%     | 0.34       | 147% | 0.18       |
| GNW      | 0.15       | 5/25/2004  | 59%   | 0.31        | 4%       | 0.33       | 7%   | -0.10      |
| HE       | 0.15       | 12/2/1991  | 281%  | 0.32        | 114%     | 0.09       | 214% | 0.22       |
| ATE.2    | 0.15       | 9/18/2001  | 69%   | 0.22        | 17%      | 0.19       | 14%  | -0.07      |
| ENH      | 0.16       | 2/28/2003  | 165%  | 0.56        | 103%     | 0.40       | 41%  | 0.13       |
| PRU      | 0.16       | 12/13/2001 | -27%  | -0.17       | 148%     | 0.40       | 5%   | -0.12      |
| CHG      | 0.16       | 12/2/1991  | 238%  | 0.27        | 153%     | 0.15       | 214% | 0.22       |
| ENA.1    | 0.16       | 12/16/1992 | -100% | 0.00        | 103%     | 0.20       | 175% | 0.20       |
| PTP      | 0.16       | 10/29/2002 | -39%  | -0.54       | -64%     | 0.23       | 35%  | 0.08       |
| SJI      | 0.16       | 12/2/1991  | 98%   | 0.05        | 465%     | 0.40       | 214% | 0.22       |
| O        | 0.16       | 10/18/1994 | -75%  | -0.64       | 538%     | 0.56       | 156% | 0.21       |
| CLP      | 0.16       | 9/23/1993  | 43%   | 0.02        | 134%     | 0.15       | 160% | 0.20       |
| CPT      | 0.16       | 7/22/1993  | 61%   | 0.03        | 228%     | 0.25       | 166% | 0.20       |
| WEC      | 0.16       | 12/2/1991  | 125%  | 0.10        | 154%     | 0.15       | 214% | 0.22       |
| AIZ      | 0.16       | 2/5/2004   | -31%  | -0.18       | 54%      | 0.29       | 5%   | -0.12      |
| SNG.1    | 0.16       | 9/3/2002   | 18%   | 0.19        | -60%     | 0.20       | 36%  | 0.08       |
| WGL      | 0.16       | 12/2/1991  | -61%  | -0.60       | 209%     | 0.29       | 214% | 0.22       |
| ARE      | 0.16       | 5/28/1997  | -42%  | -0.24       | 397%     | 0.47       | 38%  | 0.00       |
| CSR.1    | 0.16       | 6/23/2005  | -71%  | -0.05       | 15538%   | 0.69       | -1%  | -0.15      |
| REG      | 0.16       | 10/29/1993 | -60%  | -0.36       | 246%     | 0.28       | 154% | 0.18       |
| WTR.2    | 0.17       | 12/2/1991  | 123%  | 0.10        | 704%     | 0.41       | 214% | 0.22       |
|          |            |            |       |             |          |            |      |            |
| Averages |            |            | 26%   | -0.12       | 722%     | 0.28       | 123% | 0.11       |

## 8.2.3 Individual Performances

### 8.2.3.1 AGU

#### 8.2.3.1.1 Daily

| a                       | All Trades       | Long Trades      | Short Trades | Buy & Hold     |
|-------------------------|------------------|------------------|--------------|----------------|
| Starting Capital        | \$100,000.00     | \$100,000.00     | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$1,069,463.42   | \$1,069,463.42   | \$179,867.27 | \$651,482.52   |
| Net Profit              | \$969,463.42     | \$969,463.42     | \$79,867.27  | \$551,482.52   |
| Net Profit %            | 969.46%          | 969.46%          | 79.87%       | 551.48%        |
| Annualized Gain %       | 17.15%           | 17.15%           | 4.00%        | 13.34%         |
| Exposure                | 50.46%           | 50.46%           | 0.00%        | 102.57%        |
| Total Commission        | (\$5,040.00)     | (\$5,040.00)     | \$0.00       | (\$8.00)       |
| Return on Cash          | \$144,957.78     | \$144,957.78     | \$79,867.27  | \$0.00         |
| Margin Interest Paid    | (\$1.39)         | (\$1.39)         | \$0.00       | (\$6,784.77)   |
| Dividends Received      | \$7,618.33       | \$7,618.33       | \$0.00       | \$11,454.30    |
|                         |                  |                  |              |                |
| Number of Trades        | 315              | 315              | 0            | 1              |
| Average Profit          | \$3,077.66       | \$3,077.66       | \$0.00       | \$551,482.52   |
| Average Profit %        | 0.84%            | 0.84%            | 0.00%        | 516.52%        |
| Average Bars Held       | 7.02             | 7.02             | 0            | 3,768.00       |
|                         |                  |                  |              |                |
| Winning Trades          | 129              | 129              | 0            | 1              |
| Win Rate                | 40.95%           | 40.95%           | 0.00%        | 100.00%        |
| Gross Profit            | \$3,874,281.01   | \$3,874,281.01   | \$0.00       | \$546,812.99   |
| Average Profit          | \$30,033.19      | \$30,033.19      | \$0.00       | \$546,812.99   |
| Average Profit %        | 6.10%            | 6.10%            | 0.00%        | 516.52%        |
| Average Bars Held       | 11.22            | 11.22            | 0            | 3,768.00       |
| Max Consecutive Winners | 6                | 6                | 0            | 1              |
|                         |                  |                  |              |                |
| Losing Trades           | 186              | 186              | 0            | 0              |
| Loss Rate               | 59.05%           | 59.05%           | 0.00%        | 0.00%          |
| Gross Loss              | (\$3,057,392.31) | (\$3,057,392.31) | \$0.00       | \$0.00         |
| Average Loss            | (\$16,437.59)    | (\$16,437.59)    | \$0.00       | \$0.00         |
| Average Loss %          | -2.80%           | -2.80%           | 0.00%        | 0.00%          |
| Average Bars Held       | 4.11             | 4.11             | 0            | 0              |
| Max Consecutive Losses  | 10               | 10               | 0            | 0              |
|                         |                  |                  |              |                |
| Maximum Drawdown        | (\$1,009,327.34) | (\$1,009,327.34) | \$0.00       | (\$928,299.57) |
| Maximum Drawdown Date   | 12/2/2008        | 12/2/2008        | 5/5/1995     | 11/20/2008     |
| Maximum Drawdown %      | -64.75%          | -64.75%          | 0.00%        | -79.46%        |
| Maximum Drawdown % Date | 12/2/2008        | 12/2/2008        | 4/24/2010    | 11/20/2008     |
|                         |                  |                  |              |                |
| Wealth-Lab Score        | 11.98            | 11.98            | 0            | 2.67           |
| Sharpe Ratio            | 0.59             | 0.59             | 0            | 0.42           |
| Profit Factor           | 1.27             | 1.27             | 0            | Infinity       |
| Recovery Factor         | 0.96             | 0.96             | Infinity     | 0.59           |
| Payoff Ratio            | 2.18             | 2.18             | 0            | 0              |

## 8.2.3.1.2 Weekly

|                            | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|----------------------------|----------------|----------------|--------------|----------------|
| Starting Capital           | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital             | \$618,664.76   | \$618,664.76   | \$179,867.27 | \$651,491.40   |
| Net Profit                 | \$518,664.76   | \$518,664.76   | \$79,867.27  | \$551,491.40   |
| Net Profit %               | 518.66%        | 518.66%        | 79.87%       | 551.49%        |
| Annualized Gain %          | 12.95%         | 12.95%         | 4.00%        | 13.34%         |
| Exposure                   | 58.96%         | 58.96%         | 0.00%        | 102.51%        |
| Total Commission           | (\$976.00)     | (\$976.00)     | \$0.00       | (\$8.00)       |
| Return on Cash             | \$51,689.71    | \$51,689.71    | \$79,867.27  | \$0.00         |
| Margin Interest Paid       | (\$0.95)       | (\$0.95)       | \$0.00       | (\$6,775.89)   |
| Dividends Received         | \$7,442.93     | \$7,442.93     | \$0.00       | \$11,454.30    |
|                            |                |                |              |                |
| Number of Trades           | 61             | 61             | 0            | 1              |
| Average Profit             | \$8,502.70     | \$8,502.70     | \$0.00       | \$551,491.40   |
| Average Profit %           | 3.16%          | 3.16%          | 0.00%        | 516.52%        |
| Average Bars Held          | 8.11           | 8.11           | 0            | 780            |
|                            |                |                |              |                |
| Winning Trades             | 25             | 25             | 0            | 1              |
| Win Rate                   | 40.98%         | 40.98%         | 0.00%        | 100.00%        |
| Gross Profit               | \$826,715.38   | \$826,715.38   | \$0.00       | \$546,812.99   |
| Average Profit             | \$33,068.62    | \$33,068.62    | \$0.00       | \$546,812.99   |
| Average Profit %           | 14.40%         | 14.40%         | 0.00%        | 516.52%        |
| Average Bars Held          | 13.16          | 13.16          | 0            | 780            |
| Max Consecutive Winners    | 4              | 4              | 0            | 1              |
|                            |                |                |              |                |
| Losing Trades              | 36             | 36             | 0            | 0              |
| Loss Rate                  | 59.02%         | 59.02%         | 0.00%        | 0.00%          |
| Gross Loss                 | (\$367,182.30) | (\$367,182.30) | \$0.00       | \$0.00         |
| Average Loss               | (\$10,199.51)  | (\$10,199.51)  | \$0.00       | \$0.00         |
| Average Loss %             | -4.65%         | -4.65%         | 0.00%        | 0.00%          |
| Average Bars Held          | 4.61           | 4.61           | 0            | 0              |
| Max Consecutive Losses     | 5              | 5              | 0            | 0              |
|                            |                |                |              |                |
| Maximum Drawdown           | (\$109,794.85) | (\$109,794.85) | \$0.00       | (\$877,181.80) |
| Maximum Drawdown Date      | 10/30/2009     | 10/30/2009     | 5/5/1995     | 12/5/2008      |
| Maximum Drawdown %         | -43.79%        | -43.79%        | 0.00%        | -77.69%        |
| Maximum Drawdown %<br>Date | 9/27/2002      | 9/27/2002      | 4/24/2010    | 12/5/2008      |
|                            |                |                |              |                |
| Wealth-Lab Score           | 12.34          | 12.34          | 0            | 2.9            |
| Sharpe Ratio               | 0.44           | 0.44           | 0            | 0.42           |
| Profit Factor              | 2.25           | 2.25           | 0            | Infinity       |
| Recovery Factor            | 4.72           | 4.72           | Infinity     | 0.63           |
| Payoff Ratio               | 3.09           | 3.09           | 0            | 0              |

## 8.2.3.1.3 Monthly

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$484,968.84   | \$484,968.84   | \$179,365.80 | \$702,588.01   |
| Net Profit              | \$384,968.84   | \$384,968.84   | \$79,365.80  | \$602,588.01   |
| Net Profit %            | 384.97%        | 384.97%        | 79.37%       | 602.59%        |
| Annualized Gain %       | 11.18%         | 11.18%         | 4.00%        | 13.98%         |
| Exposure                | 60.30%         | 60.30%         | 0.00%        | 101.46%        |
| Total Commission        | (\$280.00)     | (\$280.00)     | \$0.00       | (\$8.00)       |
| Return on Cash          | \$37,069.42    | \$37,069.42    | \$79,365.80  | \$82.75        |
| Margin Interest Paid    | (\$0.63)       | (\$0.63)       | \$0.00       | (\$4,996.63)   |
| Dividends Received      | \$4,980.03     | \$4,980.03     | \$0.00       | \$12,292.50    |
|                         |                |                |              |                |
| Number of Trades        | 18             | 18             | 0            | 1              |
| Average Profit          | \$21,387.16    | \$21,387.16    | \$0.00       | \$602,588.01   |
| Average Profit %        | 10.22%         | 10.22%         | 0.00%        | 565.62%        |
| Average Bars Held       | 6.06           | 6.06           | 0            | 179            |
|                         |                |                |              |                |
| Winning Trades          | 10             | 10             | 0            | 1              |
| Win Rate                | 55.56%         | 55.56%         | 0.00%        | 100.00%        |
| Gross Profit            | \$396,012.71   | \$396,012.71   | \$0.00       | \$595,209.38   |
| Average Profit          | \$39,601.27    | \$39,601.27    | \$0.00       | \$595,209.38   |
| Average Profit %        | 24.17%         | 24.17%         | 0.00%        | 565.62%        |
| Average Bars Held       | 8.3            | 8.3            | 0            | 179            |
| Max Consecutive Winners | 5              | 5              | 0            | 1              |
|                         |                |                |              |                |
| Losing Trades           | 8              | 8              | 0            | 0              |
| Loss Rate               | 44.44%         | 44.44%         | 0.00%        | 0.00%          |
| Gross Loss              | (\$53,092.69)  | (\$53,092.69)  | \$0.00       | \$0.00         |
| Average Loss            | (\$6,636.59)   | (\$6,636.59)   | \$0.00       | \$0.00         |
| Average Loss %          | -7.23%         | -7.23%         | 0.00%        | 0.00%          |
| Average Bars Held       | 3.25           | 3.25           | 0            | 0              |
| Max Consecutive Losses  | 3              | 3              | 0            | 0              |
|                         |                |                |              |                |
| Maximum Drawdown        | (\$162,360.16) | (\$162,360.16) | \$0.00       | (\$850,637.52) |
| Maximum Drawdown Date   | 6/30/2009      | 6/30/2009      | 5/31/1995    | 11/28/2008     |
| Maximum Drawdown %      | -38.31%        | -38.31%        | 0.00%        | -70.77%        |
| Maximum Drawdown % Date | 6/30/2000      | 6/30/2000      | 4/24/2010    | 11/28/2008     |
|                         |                |                |              |                |
| Wealth-Lab Score        | 11.44          | 11.44          | 0            | 4.03           |
| Sharpe Ratio            | 0.38           | 0.38           | 0            | 0.43           |
| Profit Factor           | 7.46           | 7.46           | 0            | Infinity       |
| Recovery Factor         | 2.37           | 2.37           | Infinity     | 0.71           |
| Payoff Ratio            | 3.35           | 3.35           | 0            | 0              |

### 8.2.3.2 AZO

#### 8.2.3.2.1 Daily

|                         | All Trades       | Long Trades      | Short Trades | Buy & Hold     |
|-------------------------|------------------|------------------|--------------|----------------|
| Starting Capital        | \$100,000.00     | \$100,000.00     | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$654,957.43     | \$654,957.43     | \$205,705.34 | \$1,455,278.26 |
| Net Profit              | \$554,957.43     | \$554,957.43     | \$105,705.34 | \$1,355,278.26 |
| Net Profit %            | 554.96%          | 554.96%          | 105.71%      | 1355.28%       |
| Annualized Gain %       | 10.76%           | 10.76%           | 4.00%        | 15.67%         |
| Exposure                | 48.86%           | 48.86%           | 0.00%        | 102.24%        |
| Total Commission        | (\$6,536.00)     | (\$6,536.00)     | \$0.00       | (\$8.00)       |
| Return on Cash          | \$127,345.97     | \$127,345.97     | \$105,705.34 | \$0.00         |
| Margin Interest Paid    | (\$0.67)         | (\$0.67)         | \$0.00       | (\$15,611.51)  |
| Dividends Received      | \$0.00           | \$0.00           | \$0.00       | \$0.00         |
|                         |                  |                  |              |                |
| Number of Trades        | 409              | 409              | 0            | 1              |
| Average Profit          | \$1,356.86       | \$1,356.86       | \$0.00       | \$1,355,278.26 |
| Average Profit %        | 0.48%            | 0.48%            | 0.00%        | 1305.62%       |
| Average Bars Held       | 6.55             | 6.55             | 0            | 4,634.00       |
|                         |                  |                  |              |                |
| Winning Trades          | 150              | 150              | 0            | 1              |
| Win Rate                | 36.67%           | 36.67%           | 0.00%        | 100.00%        |
| Gross Profit            | \$2,113,832.59   | \$2,113,832.59   | \$0.00       | \$1,370,889.77 |
| Average Profit          | \$14,092.22      | \$14,092.22      | \$0.00       | \$1,370,889.77 |
| Average Profit %        | 4.81%            | 4.81%            | 0.00%        | 1305.62%       |
| Average Bars Held       | 11.07            | 11.07            | 0            | 4,634.00       |
| Max Consecutive Winners | 4                | 4                | 0            | 1              |
|                         |                  |                  |              |                |
| Losing Trades           | 259              | 259              | 0            | 0              |
| Loss Rate               | 63.33%           | 63.33%           | 0.00%        | 0.00%          |
| Gross Loss              | (\$1,686,220.46) | (\$1,686,220.46) | \$0.00       | \$0.00         |
| Average Loss            | (\$6,510.50)     | (\$6,510.50)     | \$0.00       | \$0.00         |
| Average Loss %          | -2.03%           | -2.03%           | 0.00%        | 0.00%          |
| Average Bars Held       | 3.92             | 3.92             | 0            | 0              |
| Max Consecutive Losses  | 13               | 13               | 0            | 0              |
|                         |                  |                  |              |                |
| Maximum Drawdown        | (\$275,729.56)   | (\$275,729.56)   | \$0.00       | (\$417,610.05) |
| Maximum Drawdown Date   | 10/30/2009       | 10/30/2009       | 12/2/1991    | 11/20/2008     |
| Maximum Drawdown %      | -32.81%          | -32.81%          | 0.00%        | -47.57%        |
| Maximum Drawdown % Date | 10/30/2009       | 10/30/2009       | 4/24/2010    | 1/6/1997       |
|                         |                  |                  |              |                |
| Wealth-Lab Score        | 14.8             | 14.8             | 0            | 8.04           |
| Sharpe Ratio            | 0.39             | 0.39             | 0            | 0.48           |
| Profit Factor           | 1.25             | 1.25             | 0            | Infinity       |
| Recovery Factor         | 2.01             | 2.01             | Infinity     | 3.25           |
| Payoff Ratio            | 2.37             | 2.37             | 0            | 0              |

## 8.2.3.2.2 Weekly

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$519,853.71   | \$519,853.71   | \$205,617.00 | \$1,331,603.13 |
| Net Profit              | \$419,853.71   | \$419,853.71   | \$105,617.00 | \$1,231,603.13 |
| Net Profit %            | 419.85%        | 419.85%        | 105.62%      | 1231.60%       |
| Annualized Gain %       | 9.38%          | 9.38%          | 4.00%        | 15.13%         |
| Exposure                | 54.66%         | 54.66%         | 0.00%        | 102.54%        |
| Total Commission        | (\$1,256.00)   | (\$1,256.00)   | \$0.00       | (\$8.00)       |
| Return on Cash          | \$76,111.13    | \$76,111.13    | \$105,617.00 | \$0.00         |
| Margin Interest Paid    | (\$0.71)       | (\$0.71)       | \$0.00       | (\$16,298.97)  |
| Dividends Received      | \$0.00         | \$0.00         | \$0.00       | \$0.00         |
| Number of Trades        | 79             | 79             | 0            | 1              |
| Average Profit          | \$5,314.60     | \$5,314.60     | \$0.00       | \$1,231,603.13 |
| Average Profit %        | 2.47%          | 2.47%          | 0.00%        | 1185.93%       |
| Average Bars Held       | 7.41           | 7.41           | 0            | 958            |
| Winning Trades          | 32             | 32             | 0            | 1              |
| Win Rate                | 40.51%         | 40.51%         | 0.00%        | 100.00%        |
| Gross Profit            | \$922,503.00   | \$922,503.00   | \$0.00       | \$1,247,902.10 |
| Average Profit          | \$28,828.22    | \$28,828.22    | \$0.00       | \$1,247,902.10 |
| Average Profit %        | 14.40%         | 14.40%         | 0.00%        | 1185.93%       |
| Average Bars Held       | 12.81          | 12.81          | 0            | 958            |
| Max Consecutive Winners | 3              | 3              | 0            | 1              |
| Losing Trades           | 47             | 47             | 0            | 0              |
| Loss Rate               | 59.49%         | 59.49%         | 0.00%        | 0.00%          |
| Gross Loss              | (\$578,759.71) | (\$578,759.71) | \$0.00       | \$0.00         |
| Average Loss            | (\$12,314.04)  | (\$12,314.04)  | \$0.00       | \$0.00         |
| Average Loss %          | -5.66%         | -5.66%         | 0.00%        | 0.00%          |
| Average Bars Held       | 3.72           | 3.72           | 0            | 0              |
| Max Consecutive Losses  | 11             | 11             | 0            | 0              |
| Maximum Drawdown        | (\$180,418.58) | (\$180,418.58) | \$0.00       | (\$351,238.64) |
| Maximum Drawdown Date   | 11/14/2008     | 11/14/2008     | 12/6/1991    | 11/21/2008     |
| Maximum Drawdown %      | -57.25%        | -57.25%        | 0.00%        | -45.82%        |
| Maximum Drawdown % Date | 6/27/1997      | 6/27/1997      | 4/24/2010    | 1/10/1997      |
| Wealth-Lab Score        | 7.34           | 7.34           | 0            | 7.99           |
| Sharpe Ratio            | 0.33           | 0.33           | 0            | 0.48           |
| Profit Factor           | 1.59           | 1.59           | 0            | Infinity       |
| Recovery Factor         | 2.33           | 2.33           | Infinity     | 3.51           |
| Payoff Ratio            | 2.55           | 2.55           | 0            | 0              |

### 8.2.3.2.3 Monthly

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$218,759.29   | \$218,759.29   | \$205,065.76 | \$1,132,702.50 |
| Net Profit              | \$118,759.29   | \$118,759.29   | \$105,065.76 | \$1,032,702.50 |
| Net Profit %            | 118.76%        | 118.76%        | 105.07%      | 1032.70%       |
| Annualized Gain %       | 4.37%          | 4.37%          | 4.00%        | 14.17%         |
| Exposure                | 53.63%         | 53.63%         | 0.00%        | 102.52%        |
| Total Commission        | (\$344.00)     | (\$344.00)     | \$0.00       | (\$8.00)       |
| Return on Cash          | \$45,815.80    | \$45,815.80    | \$105,065.76 | \$0.00         |
| Margin Interest Paid    | (\$0.09)       | (\$0.09)       | \$0.00       | (\$14,280.81)  |
| Dividends Received      | \$0.00         | \$0.00         | \$0.00       | \$0.00         |
| Number of Trades        | 22             | 22             | 0            | 1              |
| Average Profit          | \$5,398.15     | \$5,398.15     | \$0.00       | \$1,032,702.50 |
| Average Profit %        | 6.69%          | 6.69%          | 0.00%        | 1000.85%       |
| Average Bars Held       | 6.23           | 6.23           | 0            | 220            |
| Winning Trades          | 9              | 9              | 0            | 1              |
| Win Rate                | 40.91%         | 40.91%         | 0.00%        | 100.00%        |
| Gross Profit            | \$237,907.68   | \$237,907.68   | \$0.00       | \$1,046,983.32 |
| Average Profit          | \$26,434.19    | \$26,434.19    | \$0.00       | \$1,046,983.32 |
| Average Profit %        | 31.93%         | 31.93%         | 0.00%        | 1000.85%       |
| Average Bars Held       | 9.67           | 9.67           | 0            | 220            |
| Max Consecutive Winners | 2              | 2              | 0            | 1              |
| Losing Trades           | 13             | 13             | 0            | 0              |
| Loss Rate               | 59.09%         | 59.09%         | 0.00%        | 0.00%          |
| Gross Loss              | (\$164,964.10) | (\$164,964.10) | \$0.00       | \$0.00         |
| Average Loss            | (\$12,689.55)  | (\$12,689.55)  | \$0.00       | \$0.00         |
| Average Loss %          | -10.79%        | -10.79%        | 0.00%        | 0.00%          |
| Average Bars Held       | 3.85           | 3.85           | 0            | 0              |
| Max Consecutive Losses  | 6              | 6              | 0            | 0              |
| Maximum Drawdown        | (\$125,255.81) | (\$125,255.81) | \$0.00       | (\$195,156.52) |
| Maximum Drawdown Date   | 2/28/2001      | 2/28/2001      | 12/31/1991   | 10/30/2009     |
| Maximum Drawdown %      | -71.15%        | -71.15%        | 0.00%        | -42.11%        |
| Maximum Drawdown % Date | 2/28/2001      | 2/28/2001      | 4/24/2010    | 1/31/1997      |
| Wealth-Lab Score        | 2.35           | 2.35           | 0            | 8              |
| Sharpe Ratio            | 0.12           | 0.12           | 0            | 0.44           |
| Profit Factor           | 1.44           | 1.44           | 0            | Infinity       |
| Recovery Factor         | 0.95           | 0.95           | Infinity     | 5.29           |
| Payoff Ratio            | 2.96           | 2.96           | 0            | 0              |

### 8.2.3.3 BAP

#### 8.2.3.3.1 Daily

|                            | All Trades       | Long Trades      | Short Trades | Buy & Hold     |
|----------------------------|------------------|------------------|--------------|----------------|
| Starting Capital           | \$100,000.00     | \$100,000.00     | \$100,000.00 | \$100,000.00   |
| Ending Capital             | \$1,345,682.55   | \$1,345,682.55   | \$176,556.75 | \$898,521.23   |
| Net Profit                 | \$1,245,682.55   | \$1,245,682.55   | \$76,556.75  | \$798,521.23   |
| Net Profit %               | 1245.68%         | 1245.68%         | 76.56%       | 798.52%        |
| Annualized Gain %          | 19.64%           | 19.64%           | 4.00%        | 16.36%         |
| Exposure                   | 51.63%           | 51.63%           | 0.00%        | 96.10%         |
| Total Commission           | (\$4,584.00)     | (\$4,584.00)     | \$0.00       | (\$8.00)       |
| Return on Cash             | \$94,557.18      | \$94,557.18      | \$76,556.75  | \$7,095.81     |
| Margin Interest Paid       | (\$1.13)         | (\$1.13)         | \$0.00       | (\$3,477.61)   |
| Dividends Received         | \$55,156.50      | \$55,156.50      | \$0.00       | \$82,327.70    |
|                            |                  |                  |              |                |
| Number of Trades           | 287              | 287              | 0            | 1              |
| Average Profit             | \$4,340.36       | \$4,340.36       | \$0.00       | \$798,521.23   |
| Average Profit %           | 0.91%            | 0.91%            | 0.00%        | 678.68%        |
| Average Bars Held          | 7.4              | 7.4              | 0            | 3,629.00       |
|                            |                  |                  |              |                |
| Winning Trades             | 118              | 118              | 0            | 1              |
| Win Rate                   | 41.11%           | 41.11%           | 0.00%        | 100.00%        |
| Gross Profit               | \$2,406,717.28   | \$2,406,717.28   | \$0.00       | \$712,575.34   |
| Average Profit             | \$20,395.91      | \$20,395.91      | \$0.00       | \$712,575.34   |
| Average Profit %           | 5.46%            | 5.46%            | 0.00%        | 678.68%        |
| Average Bars Held          | 11.35            | 11.35            | 0            | 3,629.00       |
| Max Consecutive Winners    | 6                | 6                | 0            | 1              |
|                            |                  |                  |              |                |
| Losing Trades              | 169              | 169              | 0            | 0              |
| Loss Rate                  | 58.89%           | 58.89%           | 0.00%        | 0.00%          |
| Gross Loss                 | (\$1,310,747.28) | (\$1,310,747.28) | \$0.00       | \$0.00         |
| Average Loss               | (\$7,755.90)     | (\$7,755.90)     | \$0.00       | \$0.00         |
| Average Loss %             | -2.26%           | -2.26%           | 0.00%        | 0.00%          |
| Average Bars Held          | 4.64             | 4.64             | 0            | 0              |
| Max Consecutive Losses     | 18               | 18               | 0            | 0              |
|                            |                  |                  |              |                |
| Maximum Drawdown           | (\$513,262.02)   | (\$513,262.02)   | \$0.00       | (\$505,582.25) |
| Maximum Drawdown Date      | 10/23/2008       | 10/23/2008       | 10/25/1995   | 10/27/2008     |
| Maximum Drawdown %         | -49.40%          | -49.40%          | 0.00%        | -78.04%        |
| Maximum Drawdown %<br>Date | 10/23/2008       | 10/23/2008       | 4/24/2010    | 12/15/2000     |
|                            |                  |                  |              |                |
| Wealth-Lab Score           | 19.25            | 19.25            | 0            | 3.74           |
| Sharpe Ratio               | 0.64             | 0.64             | 0            | 0.48           |
| Profit Factor              | 1.84             | 1.84             | 0            | Infinity       |
| Recovery Factor            | 2.43             | 2.43             | Infinity     | 1.58           |
| Payoff Ratio               | 2.41             | 2.41             | 0            | 0              |



## 8.2.3.3.2 Weekly

|                            | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|----------------------------|----------------|----------------|--------------|----------------|
| Starting Capital           | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital             | \$866,412.74   | \$866,412.74   | \$176,518.83 | \$1,012,408.42 |
| Net Profit                 | \$766,412.74   | \$766,412.74   | \$76,518.83  | \$912,408.42   |
| Net Profit %               | 766.41%        | 766.41%        | 76.52%       | 912.41%        |
| Annualized Gain %          | 16.07%         | 16.07%         | 4.00%        | 17.32%         |
| Exposure                   | 52.44%         | 52.44%         | 0.00%        | 95.68%         |
| Total Commission           | (\$952.00)     | (\$952.00)     | \$0.00       | (\$8.00)       |
| Return on Cash             | \$88,604.53    | \$88,604.53    | \$76,518.83  | \$8,336.05     |
| Margin Interest Paid       | (\$1.03)       | (\$1.03)       | \$0.00       | (\$3,330.06)   |
| Dividends Received         | \$71,896.70    | \$71,896.70    | \$0.00       | \$92,619.80    |
| Number of Trades           | 60             | 60             | 0            | 1              |
| Average Profit             | \$12,773.55    | \$12,773.55    | \$0.00       | \$912,408.42   |
| Average Profit %           | 3.73%          | 3.73%          | 0.00%        | 776.02%        |
| Average Bars Held          | 7.43           | 7.43           | 0            | 755            |
| Winning Trades             | 28             | 28             | 0            | 1              |
| Win Rate                   | 46.67%         | 46.67%         | 0.00%        | 100.00%        |
| Gross Profit               | \$1,136,747.12 | \$1,136,747.12 | \$0.00       | \$814,782.63   |
| Average Profit             | \$40,598.11    | \$40,598.11    | \$0.00       | \$814,782.63   |
| Average Profit %           | 13.82%         | 13.82%         | 0.00%        | 776.02%        |
| Average Bars Held          | 11.89          | 11.89          | 0            | 755            |
| Max Consecutive Winners    | 4              | 4              | 0            | 1              |
| Losing Trades              | 32             | 32             | 0            | 0              |
| Loss Rate                  | 53.33%         | 53.33%         | 0.00%        | 0.00%          |
| Gross Loss                 | (\$530,834.58) | (\$530,834.58) | \$0.00       | \$0.00         |
| Average Loss               | (\$16,588.58)  | (\$16,588.58)  | \$0.00       | \$0.00         |
| Average Loss %             | -5.09%         | -5.09%         | 0.00%        | 0.00%          |
| Average Bars Held          | 3.53           | 3.53           | 0            | 0              |
| Max Consecutive Losses     | 6              | 6              | 0            | 0              |
| Maximum Drawdown           | (\$162,428.53) | (\$162,428.53) | \$0.00       | (\$505,764.82) |
| Maximum Drawdown Date      | 2/20/2009      | 2/20/2009      | 10/27/1995   | 10/24/2008     |
| Maximum Drawdown %         | -33.41%        | -33.41%        | 0.00%        | -77.32%        |
| Maximum Drawdown %<br>Date | 8/7/1998       | 8/7/1998       | 4/24/2010    | 12/15/2000     |
| Wealth-Lab Score           | 20.41          | 20.41          | 0            | 4.11           |
| Sharpe Ratio               | 0.55           | 0.55           | 0            | 0.5            |
| Profit Factor              | 2.14           | 2.14           | 0            | Infinity       |
| Recovery Factor            | 4.72           | 4.72           | Infinity     | 1.8            |
| Payoff Ratio               | 2.71           | 2.71           | 0            | 0              |

### 8.2.3.3.3 Monthly

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$1,445,777.68 | \$1,445,777.68 | \$176,443.03 | \$1,169,117.60 |
| Net Profit              | \$1,345,777.68 | \$1,345,777.68 | \$76,443.03  | \$1,069,117.60 |
| Net Profit %            | 1345.78%       | 1345.78%       | 76.44%       | 1069.12%       |
| Annualized Gain %       | 20.26%         | 20.26%         | 4.00%        | 18.51%         |
| Exposure                | 69.12%         | 69.12%         | 0.00%        | 62.27%         |
| Total Commission        | (\$168.00)     | (\$168.00)     | \$0.00       | (\$52.35)      |
| Return on Cash          | \$65,752.31    | \$65,752.31    | \$76,443.03  | \$87,500.52    |
| Margin Interest Paid    | (\$1.09)       | (\$1.09)       | \$0.00       | \$0.00         |
| Dividends Received      | \$81,308.40    | \$81,308.40    | \$0.00       | \$89,807.90    |
| Number of Trades        | 11             | 11             | 0            | 1              |
| Average Profit          | \$122,343.43   | \$122,343.43   | \$0.00       | \$1,069,117.60 |
| Average Profit %        | 28.61%         | 28.61%         | 0.00%        | 0.00%          |
| Average Bars Held       | 10.82          | 10.82          | 0            | 174            |
| Winning Trades          | 8              | 8              | 0            | 1              |
| Win Rate                | 72.73%         | 72.73%         | 0.00%        | 100.00%        |
| Gross Profit            | \$1,340,978.28 | \$1,340,978.28 | \$0.00       | \$891,809.19   |
| Average Profit          | \$167,622.29   | \$167,622.29   | \$0.00       | \$891,809.19   |
| Average Profit %        | 43.38%         | 43.38%         | 0.00%        | 0.00%          |
| Average Bars Held       | 13.25          | 13.25          | 0            | 174            |
| Max Consecutive Winners | 6              | 6              | 0            | 1              |
| Losing Trades           | 3              | 3              | 0            | 0              |
| Loss Rate               | 27.27%         | 27.27%         | 0.00%        | 0.00%          |
| Gross Loss              | (\$142,260.22) | (\$142,260.22) | \$0.00       | \$0.00         |
| Average Loss            | (\$47,420.07)  | (\$47,420.07)  | \$0.00       | \$0.00         |
| Average Loss %          | -10.78%        | -10.78%        | 0.00%        | 0.00%          |
| Average Bars Held       | 4.33           | 4.33           | 0            | 0              |
| Max Consecutive Losses  | 1              | 1              | 0            | 0              |
| Maximum Drawdown        | (\$156,990.20) | (\$156,990.20) | \$0.00       | (\$456,583.67) |
| Maximum Drawdown Date   | 3/31/2006      | 3/31/2006      | 10/31/1995   | 2/27/2009      |
| Maximum Drawdown %      | -28.14%        | -28.14%        | 0.00%        | -43.44%        |
| Maximum Drawdown % Date | 3/31/2006      | 3/31/2006      | 4/24/2010    | 2/27/2009      |
| Wealth-Lab Score        | 21.07          | 21.07          | 0            | 16.81          |
| Sharpe Ratio            | 0.8            | 0.8            | 0            | 0.52           |
| Profit Factor           | 9.43           | 9.43           | 0            | Infinity       |
| Recovery Factor         | 8.57           | 8.57           | Infinity     | 2.34           |
| Payoff Ratio            | 4.02           | 4.02           | 0            | 0              |

### 8.2.3.4 BR

#### 8.2.3.4.1 Daily

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold    |
|-------------------------|----------------|----------------|--------------|---------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00  |
| Ending Capital          | \$87,882.65    | \$87,882.65    | \$112,876.62 | \$121,165.37  |
| Net Profit              | (\$12,117.35)  | (\$12,117.35)  | \$12,876.62  | \$21,165.37   |
| Net Profit %            | -12.12%        | -12.12%        | 12.88%       | 21.17%        |
| Annualized Gain %       | -4.10%         | -4.10%         | 4.00%        | 6.41%         |
| Exposure                | 47.02%         | 47.02%         | 0.00%        | 103.43%       |
| Total Commission        | (\$1,096.00)   | (\$1,096.00)   | \$0.00       | (\$8.00)      |
| Return on Cash          | \$5,374.15     | \$5,374.15     | \$12,876.62  | \$0.00        |
| Margin Interest Paid    | (\$0.17)       | (\$0.17)       | \$0.00       | (\$815.46)    |
| Dividends Received      | \$2,947.68     | \$2,947.68     | \$0.00       | \$5,223.00    |
|                         |                |                |              |               |
| Number of Trades        | 69             | 69             | 0            | 1             |
| Average Profit          | (\$175.61)     | (\$175.61)     | \$0.00       | \$21,165.37   |
| Average Profit %        | -0.21%         | -0.21%         | 0.00%        | 15.96%        |
| Average Bars Held       | 6.32           | 6.32           | 0            | 778           |
|                         |                |                |              |               |
| Winning Trades          | 25             | 25             | 0            | 1             |
| Win Rate                | 36.23%         | 36.23%         | 0.00%        | 100.00%       |
| Gross Profit            | \$83,689.55    | \$83,689.55    | \$0.00       | \$16,757.83   |
| Average Profit          | \$3,347.58     | \$3,347.58     | \$0.00       | \$16,757.83   |
| Average Profit %        | 4.59%          | 4.59%          | 0.00%        | 15.96%        |
| Average Bars Held       | 9.84           | 9.84           | 0            | 778           |
| Max Consecutive Winners | 6              | 6              | 0            | 1             |
|                         |                |                |              |               |
| Losing Trades           | 44             | 44             | 0            | 0             |
| Loss Rate               | 63.77%         | 63.77%         | 0.00%        | 0.00%         |
| Gross Loss              | (\$104,128.55) | (\$104,128.55) | \$0.00       | \$0.00        |
| Average Loss            | (\$2,366.56)   | (\$2,366.56)   | \$0.00       | \$0.00        |
| Average Loss %          | -2.93%         | -2.93%         | 0.00%        | 0.00%         |
| Average Bars Held       | 4.32           | 4.32           | 0            | 0             |
| Max Consecutive Losses  | 9              | 9              | 0            | 0             |
|                         |                |                |              |               |
| Maximum Drawdown        | (\$58,753.18)  | (\$58,753.18)  | \$0.00       | (\$73,621.01) |
| Maximum Drawdown Date   | 12/4/2008      | 12/4/2008      | 3/22/2007    | 11/20/2008    |
| Maximum Drawdown %      | -52.60%        | -52.60%        | 0.00%        | -60.96%       |
| Maximum Drawdown % Date | 12/4/2008      | 12/4/2008      | 4/24/2010    | 11/20/2008    |
|                         |                |                |              |               |
| Wealth-Lab Score        | -13.3          | -13.3          | 0            | 2.42          |
| Sharpe Ratio            | -0.24          | -0.24          | 0            | 0.24          |
| Profit Factor           | 0.8            | 0.8            | 0            | Infinity      |
| Recovery Factor         | 0              | 0              | Infinity     | 0.29          |
| Payoff Ratio            | 1.57           | 1.57           | 0            | 0             |

## 8.2.3.4.2 Weekly

|                         | All Trades    | Long Trades   | Short Trades | Buy & Hold    |
|-------------------------|---------------|---------------|--------------|---------------|
| Starting Capital        | \$100,000.00  | \$100,000.00  | \$100,000.00 | \$100,000.00  |
| Ending Capital          | \$185,923.98  | \$185,923.98  | \$112,864.50 | \$119,729.41  |
| Net Profit              | \$85,923.98   | \$85,923.98   | \$12,864.50  | \$19,729.41   |
| Net Profit %            | 85.92%        | 85.92%        | 12.86%       | 19.73%        |
| Annualized Gain %       | 22.26%        | 22.26%        | 4.00%        | 6.01%         |
| Exposure                | 47.33%        | 47.33%        | 0.00%        | 102.93%       |
| Total Commission        | (\$184.00)    | (\$184.00)    | \$0.00       | (\$8.00)      |
| Return on Cash          | \$8,538.36    | \$8,538.36    | \$12,864.50  | \$0.00        |
| Margin Interest Paid    | (\$0.04)      | (\$0.04)      | \$0.00       | (\$815.31)    |
| Dividends Received      | \$5,602.74    | \$5,602.74    | \$0.00       | \$5,164.00    |
|                         |               |               |              |               |
| Number of Trades        | 12            | 12            | 0            | 1             |
| Average Profit          | \$7,160.33    | \$7,160.33    | \$0.00       | \$19,729.41   |
| Average Profit %        | 5.68%         | 5.68%         | 0.00%        | 14.65%        |
| Average Bars Held       | 7             | 7             | 0            | 161           |
|                         |               |               |              |               |
| Winning Trades          | 5             | 5             | 0            | 1             |
| Win Rate                | 41.67%        | 41.67%        | 0.00%        | 100.00%       |
| Gross Profit            | \$118,424.40  | \$118,424.40  | \$0.00       | \$15,380.72   |
| Average Profit          | \$23,684.88   | \$23,684.88   | \$0.00       | \$15,380.72   |
| Average Profit %        | 20.68%        | 20.68%        | 0.00%        | 14.65%        |
| Average Bars Held       | 12.4          | 12.4          | 0            | 161           |
| Max Consecutive Winners | 4             | 4             | 0            | 1             |
|                         |               |               |              |               |
| Losing Trades           | 7             | 7             | 0            | 0             |
| Loss Rate               | 58.33%        | 58.33%        | 0.00%        | 0.00%         |
| Gross Loss              | (\$46,641.48) | (\$46,641.48) | \$0.00       | \$0.00        |
| Average Loss            | (\$6,663.07)  | (\$6,663.07)  | \$0.00       | \$0.00        |
| Average Loss %          | -5.03%        | -5.03%        | 0.00%        | 0.00%         |
| Average Bars Held       | 3.14          | 3.14          | 0            | 0             |
| Max Consecutive Losses  | 5             | 5             | 0            | 0             |
|                         |               |               |              |               |
| Maximum Drawdown        | (\$33,827.41) | (\$33,827.41) | \$0.00       | (\$69,487.74) |
| Maximum Drawdown Date   | 3/26/2010     | 3/26/2010     | 3/23/2007    | 11/21/2008    |
| Maximum Drawdown %      | -21.53%       | -21.53%       | 0.00%        | -58.81%       |
| Maximum Drawdown % Date | 9/14/2007     | 9/14/2007     | 4/24/2010    | 11/21/2008    |
|                         |               |               |              |               |
| Wealth-Lab Score        | 36.91         | 36.91         | 0            | 2.4           |
| Sharpe Ratio            | 0.75          | 0.75          | 0            | 0.23          |
| Profit Factor           | 2.54          | 2.54          | 0            | Infinity      |
| Recovery Factor         | 2.54          | 2.54          | Infinity     | 0.28          |
| Payoff Ratio            | 4.11          | 4.11          | 0            | 0             |

### 8.2.3.4.3 Monthly

|                         | All Trades    | Long Trades   | Short Trades | Buy & Hold    |
|-------------------------|---------------|---------------|--------------|---------------|
| Starting Capital        | \$100,000.00  | \$100,000.00  | \$100,000.00 | \$100,000.00  |
| Ending Capital          | \$117,905.08  | \$117,905.08  | \$112,779.69 | \$123,779.04  |
| Net Profit              | \$17,905.08   | \$17,905.08   | \$12,779.69  | \$23,779.04   |
| Net Profit %            | 17.91%        | 17.91%        | 12.78%       | 23.78%        |
| Annualized Gain %       | 5.52%         | 5.52%         | 4.00%        | 7.20%         |
| Exposure                | 56.44%        | 56.44%        | 0.00%        | 100.59%       |
| Total Commission        | (\$40.00)     | (\$40.00)     | \$0.00       | (\$8.00)      |
| Return on Cash          | \$4,773.03    | \$4,773.03    | \$12,779.69  | \$0.00        |
| Margin Interest Paid    | (\$0.02)      | (\$0.02)      | \$0.00       | (\$779.65)    |
| Dividends Received      | \$3,266.20    | \$3,266.20    | \$0.00       | \$5,329.00    |
| Number of Trades        | 3             | 3             | 0            | 1             |
| Average Profit          | \$5,968.36    | \$5,968.36    | \$0.00       | \$23,779.04   |
| Average Profit %        | 6.15%         | 6.15%         | 0.00%        | 18.32%        |
| Average Bars Held       | 7.67          | 7.67          | 0            | 37            |
| Winning Trades          | 1             | 1             | 0            | 1             |
| Win Rate                | 33.33%        | 33.33%        | 0.00%        | 100.00%       |
| Gross Profit            | \$36,180.21   | \$36,180.21   | \$0.00       | \$19,229.69   |
| Average Profit          | \$36,180.21   | \$36,180.21   | \$0.00       | \$19,229.69   |
| Average Profit %        | 45.86%        | 45.86%        | 0.00%        | 18.32%        |
| Average Bars Held       | 15            | 15            | 0            | 37            |
| Max Consecutive Winners | 1             | 1             | 0            | 1             |
| Losing Trades           | 2             | 2             | 0            | 0             |
| Loss Rate               | 66.67%        | 66.67%        | 0.00%        | 0.00%         |
| Gross Loss              | (\$26,314.34) | (\$26,314.34) | \$0.00       | \$0.00        |
| Average Loss            | (\$13,157.17) | (\$13,157.17) | \$0.00       | \$0.00        |
| Average Loss %          | -13.71%       | -13.71%       | 0.00%        | 0.00%         |
| Average Bars Held       | 4             | 4             | 0            | 0             |
| Max Consecutive Losses  | 2             | 2             | 0            | 0             |
| Maximum Drawdown        | (\$24,730.25) | (\$24,730.25) | \$0.00       | (\$59,560.66) |
| Maximum Drawdown Date   | 8/29/2008     | 8/29/2008     | 3/30/2007    | 11/28/2008    |
| Maximum Drawdown %      | -24.17%       | -24.17%       | 0.00%        | -51.02%       |
| Maximum Drawdown % Date | 8/29/2008     | 8/29/2008     | 4/24/2010    | 11/28/2008    |
| Wealth-Lab Score        | 7.42          | 7.42          | 0            | 3.51          |
| Sharpe Ratio            | 0.17          | 0.17          | 0            | 0.26          |
| Profit Factor           | 1.37          | 1.37          | 0            | Infinity      |
| Recovery Factor         | 0.72          | 0.72          | Infinity     | 0.4           |
| Payoff Ratio            | 3.34          | 3.34          | 0            | 0             |

### 8.2.3.5 BZ

#### 8.2.3.5.1 Daily

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$114,896.38   | \$114,896.38   | \$111,695.01 | \$75,457.01    |
| Net Profit              | \$14,896.38    | \$14,896.38    | \$11,695.01  | (\$24,542.99)  |
| Net Profit %            | 14.90%         | 14.90%         | 11.70%       | -24.54%        |
| Annualized Gain %       | 5.05%          | 5.05%          | 4.00%        | -9.50%         |
| Exposure                | 47.38%         | 47.38%         | 0.00%        | 111.57%        |
| Total Commission        | (\$4,354.08)   | (\$4,354.08)   | \$0.00       | (\$8.00)       |
| Return on Cash          | \$4,012.00     | \$4,012.00     | \$11,695.01  | \$0.00         |
| Margin Interest Paid    | (\$5.23)       | (\$5.23)       | \$0.00       | (\$1,240.74)   |
| Dividends Received      | \$0.00         | \$0.00         | \$0.00       | \$0.00         |
|                         |                |                |              |                |
| Number of Trades        | 63             | 63             | 0            | 1              |
| Average Profit          | \$236.45       | \$236.45       | \$0.00       | (\$24,542.99)  |
| Average Profit %        | 2.95%          | 2.95%          | 0.00%        | -22.17%        |
| Average Bars Held       | 6.54           | 6.54           | 0            | 707            |
|                         |                |                |              |                |
| Winning Trades          | 15             | 15             | 0            | 0              |
| Win Rate                | 23.81%         | 23.81%         | 0.00%        | 0.00%          |
| Gross Profit            | \$141,624.08   | \$141,624.08   | \$0.00       | \$0.00         |
| Average Profit          | \$9,441.61     | \$9,441.61     | \$0.00       | \$0.00         |
| Average Profit %        | 31.19%         | 31.19%         | 0.00%        | 0.00%          |
| Average Bars Held       | 11.73          | 11.73          | 0            | 0              |
| Max Consecutive Winners | 6              | 6              | 0            | 0              |
|                         |                |                |              |                |
| Losing Trades           | 48             | 48             | 0            | 1              |
| Loss Rate               | 76.19%         | 76.19%         | 0.00%        | 100.00%        |
| Gross Loss              | (\$130,734.47) | (\$130,734.47) | \$0.00       | (\$23,302.25)  |
| Average Loss            | (\$2,723.63)   | (\$2,723.63)   | \$0.00       | (\$23,302.25)  |
| Average Loss %          | -5.88%         | -5.88%         | 0.00%        | -22.17%        |
| Average Bars Held       | 4.92           | 4.92           | 0            | 707            |
| Max Consecutive Losses  | 11             | 11             | 0            | 1              |
|                         |                |                |              |                |
| Maximum Drawdown        | (\$95,798.71)  | (\$95,798.71)  | \$0.00       | (\$111,021.88) |
| Maximum Drawdown Date   | 3/9/2009       | 3/9/2009       | 6/28/2007    | 3/9/2009       |
| Maximum Drawdown %      | -93.30%        | -93.30%        | 0.00%        | -102.85%       |
| Maximum Drawdown % Date | 3/9/2009       | 3/9/2009       | 4/24/2010    | 3/9/2009       |
|                         |                |                |              |                |
| Wealth-Lab Score        | 0.71           | 0.71           | 0            | -17.28         |
| Sharpe Ratio            | 0.45           | 0.45           | 0            | 0.25           |
| Profit Factor           | 1.08           | 1.08           | 0            | 0              |
| Recovery Factor         | 0.16           | 0.16           | Infinity     | 0              |
| Payoff Ratio            | 5.31           | 5.31           | 0            | 0              |

## 8.2.3.5.2 Weekly

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$456,387.28   | \$456,387.28   | \$111,683.02 | \$75,600.88    |
| Net Profit              | \$356,387.28   | \$356,387.28   | \$11,683.02  | (\$24,399.12)  |
| Net Profit %            | 356.39%        | 356.39%        | 11.68%       | -24.40%        |
| Annualized Gain %       | 71.41%         | 71.41%         | 4.00%        | -9.45%         |
| Exposure                | 55.79%         | 55.79%         | 0.00%        | 110.00%        |
| Total Commission        | (\$509.58)     | (\$509.58)     | \$0.00       | (\$8.00)       |
| Return on Cash          | \$7,843.63     | \$7,843.63     | \$11,683.02  | \$0.00         |
| Margin Interest Paid    | (\$21.59)      | (\$21.59)      | \$0.00       | (\$1,211.62)   |
| Dividends Received      | \$0.00         | \$0.00         | \$0.00       | \$0.00         |
| Number of Trades        | 7              | 7              | 0            | 1              |
| Average Profit          | \$50,912.47    | \$50,912.47    | \$0.00       | (\$24,399.12)  |
| Average Profit %        | 37.91%         | 37.91%         | 0.00%        | -22.08%        |
| Average Bars Held       | 13.29          | 13.29          | 0            | 147            |
| Winning Trades          | 4              | 4              | 0            | 0              |
| Win Rate                | 57.14%         | 57.14%         | 0.00%        | 0.00%          |
| Gross Profit            | \$400,489.94   | \$400,489.94   | \$0.00       | \$0.00         |
| Average Profit          | \$100,122.48   | \$100,122.48   | \$0.00       | \$0.00         |
| Average Profit %        | 78.97%         | 78.97%         | 0.00%        | 0.00%          |
| Average Bars Held       | 19             | 19             | 0            | 0              |
| Max Consecutive Winners | 2              | 2              | 0            | 0              |
| Losing Trades           | 3              | 3              | 0            | 1              |
| Loss Rate               | 42.86%         | 42.86%         | 0.00%        | 100.00%        |
| Gross Loss              | (\$51,924.69)  | (\$51,924.69)  | \$0.00       | (\$23,187.50)  |
| Average Loss            | (\$17,308.23)  | (\$17,308.23)  | \$0.00       | (\$23,187.50)  |
| Average Loss %          | -16.84%        | -16.84%        | 0.00%        | -22.08%        |
| Average Bars Held       | 5.67           | 5.67           | 0            | 147            |
| Max Consecutive Losses  | 2              | 2              | 0            | 1              |
| Maximum Drawdown        | (\$111,227.52) | (\$111,227.52) | \$0.00       | (\$110,780.35) |
| Maximum Drawdown Date   | 1/15/2010      | 1/15/2010      | 6/29/2007    | 3/6/2009       |
| Maximum Drawdown %      | -81.33%        | -81.33%        | 0.00%        | -102.62%       |
| Maximum Drawdown % Date | 3/6/2009       | 3/6/2009       | 4/24/2010    | 3/6/2009       |
| Wealth-Lab Score        | 23.9           | 23.9           | 0            | -17.41         |
| Sharpe Ratio            | 0.78           | 0.78           | 0            | -0.69          |
| Profit Factor           | 7.71           | 7.71           | 0            | 0              |
| Recovery Factor         | 3.2            | 3.2            | Infinity     | 0              |
| Payoff Ratio            | 4.69           | 4.69           | 0            | 0              |

## 8.2.3.5.3 Monthly

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$1,246,883.49 | \$1,246,883.49 | \$111,683.02 | \$75,600.88    |
| Net Profit              | \$1,146,883.49 | \$1,146,883.49 | \$11,683.02  | (\$24,399.12)  |
| Net Profit %            | 1146.88%       | 1146.88%       | 11.68%       | -24.40%        |
| Annualized Gain %       | 144.89%        | 144.89%        | 4.00%        | -9.45%         |
| Exposure                | 81.72%         | 81.72%         | 0.00%        | 105.26%        |
| Total Commission        | (\$878.07)     | (\$878.07)     | \$0.00       | (\$8.00)       |
| Return on Cash          | \$6,758.03     | \$6,758.03     | \$11,683.02  | \$0.00         |
| Margin Interest Paid    | (\$81.24)      | (\$81.24)      | \$0.00       | (\$1,211.62)   |
| Dividends Received      | \$0.00         | \$0.00         | \$0.00       | \$0.00         |
| Number of Trades        | 1              | 1              | 0            | 1              |
| Average Profit          | \$1,146,883.49 | \$1,146,883.49 | \$0.00       | (\$24,399.12)  |
| Average Profit %        | 1068.03%       | 1068.03%       | 0.00%        | -22.08%        |
| Average Bars Held       | 14             | 14             | 0            | 34             |
| Winning Trades          | 1              | 1              | 0            | 0              |
| Win Rate                | 100.00%        | 100.00%        | 0.00%        | 0.00%          |
| Gross Profit            | \$1,140,206.70 | \$1,140,206.70 | \$0.00       | \$0.00         |
| Average Profit          | \$1,140,206.70 | \$1,140,206.70 | \$0.00       | \$0.00         |
| Average Profit %        | 1068.03%       | 1068.03%       | 0.00%        | 0.00%          |
| Average Bars Held       | 14             | 14             | 0            | 0              |
| Max Consecutive Winners | 1              | 1              | 0            | 0              |
| Losing Trades           | 0              | 0              | 0            | 1              |
| Loss Rate               | 0.00%          | 0.00%          | 0.00%        | 100.00%        |
| Gross Loss              | \$0.00         | \$0.00         | \$0.00       | (\$23,187.50)  |
| Average Loss            | \$0.00         | \$0.00         | \$0.00       | (\$23,187.50)  |
| Average Loss %          | 0.00%          | 0.00%          | 0.00%        | -22.08%        |
| Average Bars Held       | 0              | 0              | 0            | 34             |
| Max Consecutive Losses  | 0              | 0              | 0            | 1              |
| Maximum Drawdown        | (\$98,018.60)  | (\$98,018.60)  | \$0.00       | (\$109,384.00) |
| Maximum Drawdown Date   | 2/26/2010      | 2/26/2010      | 6/29/2007    | 2/27/2009      |
| Maximum Drawdown %      | -10.56%        | -10.56%        | 0.00%        | -102.65%       |
| Maximum Drawdown % Date | 2/26/2010      | 2/26/2010      | 4/24/2010    | 2/27/2009      |
| Wealth-Lab Score        | 158.59         | 158.59         | 0            | -18.19         |
| Sharpe Ratio            | 1.33           | 1.33           | 0            | -0.67          |
| Profit Factor           | Infinity       | Infinity       | 0            | 0              |
| Recovery Factor         | 11.7           | 11.7           | Infinity     | 0              |
| Payoff Ratio            | 0              | 0              | 0            | 0              |



### 8.2.3.6 CAE

#### 8.2.3.6.1 Daily

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$134,985.55   | \$134,985.55   | \$135,438.81 | \$156,755.84   |
| Net Profit              | \$34,985.55    | \$34,985.55    | \$35,438.81  | \$56,755.84    |
| Net Profit %            | 34.99%         | 34.99%         | 35.44%       | 56.76%         |
| Annualized Gain %       | 3.95%          | 3.95%          | 4.00%        | 5.98%          |
| Exposure                | 50.13%         | 50.13%         | 0.00%        | 100.73%        |
| Total Commission        | (\$2,864.00)   | (\$2,864.00)   | \$0.00       | (\$8.00)       |
| Return on Cash          | \$21,486.08    | \$21,486.08    | \$35,438.81  | \$141.72       |
| Margin Interest Paid    | (\$1.29)       | (\$1.29)       | \$0.00       | (\$793.41)     |
| Dividends Received      | \$6,149.47     | \$6,149.47     | \$0.00       | \$8,656.38     |
|                         |                |                |              |                |
| Number of Trades        | 179            | 179            | 0            | 1              |
| Average Profit          | \$195.45       | \$195.45       | \$0.00       | \$56,755.84    |
| Average Profit %        | 0.32%          | 0.32%          | 0.00%        | 46.71%         |
| Average Bars Held       | 6.46           | 6.46           | 0            | 1,946.00       |
|                         |                |                |              |                |
| Winning Trades          | 60             | 60             | 0            | 1              |
| Win Rate                | 33.52%         | 33.52%         | 0.00%        | 100.00%        |
| Gross Profit            | \$470,420.15   | \$470,420.15   | \$0.00       | \$48,751.14    |
| Average Profit          | \$7,840.34     | \$7,840.34     | \$0.00       | \$48,751.14    |
| Average Profit %        | 6.57%          | 6.57%          | 0.00%        | 46.71%         |
| Average Bars Held       | 11.18          | 11.18          | 0            | 1,946.00       |
| Max Consecutive Winners | 4              | 4              | 0            | 1              |
|                         |                |                |              |                |
| Losing Trades           | 119            | 119            | 0            | 0              |
| Loss Rate               | 66.48%         | 66.48%         | 0.00%        | 0.00%          |
| Gross Loss              | (\$463,068.86) | (\$463,068.86) | \$0.00       | \$0.00         |
| Average Loss            | (\$3,891.33)   | (\$3,891.33)   | \$0.00       | \$0.00         |
| Average Loss %          | -2.83%         | -2.83%         | 0.00%        | 0.00%          |
| Average Bars Held       | 4.08           | 4.08           | 0            | 0              |
| Max Consecutive Losses  | 14             | 14             | 0            | 0              |
|                         |                |                |              |                |
| Maximum Drawdown        | (\$122,203.75) | (\$122,203.75) | \$0.00       | (\$155,803.92) |
| Maximum Drawdown Date   | 12/5/2008      | 12/5/2008      | 7/29/2002    | 10/27/2008     |
| Maximum Drawdown %      | -59.68%        | -59.68%        | 0.00%        | -72.99%        |
| Maximum Drawdown % Date | 12/5/2008      | 12/5/2008      | 4/24/2010    | 3/28/2003      |
|                         |                |                |              |                |
| Wealth-Lab Score        | 3.18           | 3.18           | 0            | 1.6            |
| Sharpe Ratio            | 0.14           | 0.14           | 0            | 0.27           |
| Profit Factor           | 1.02           | 1.02           | 0            | Infinity       |
| Recovery Factor         | 0.29           | 0.29           | Infinity     | 0.36           |
| Payoff Ratio            | 2.32           | 2.32           | 0            | 0              |

## 8.2.3.6.2 Weekly

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$198,499.61   | \$198,499.61   | \$135,380.65 | \$168,547.84   |
| Net Profit              | \$98,499.61    | \$98,499.61    | \$35,380.65  | \$68,547.84    |
| Net Profit %            | 98.50%         | 98.50%         | 35.38%       | 68.55%         |
| Annualized Gain %       | 9.28%          | 9.28%          | 4.00%        | 6.99%          |
| Exposure                | 52.73%         | 52.73%         | 0.00%        | 99.79%         |
| Total Commission        | (\$648.00)     | (\$648.00)     | \$0.00       | (\$8.00)       |
| Return on Cash          | \$21,855.74    | \$21,855.74    | \$35,380.65  | \$271.43       |
| Margin Interest Paid    | (\$1.25)       | (\$1.25)       | \$0.00       | (\$533.30)     |
| Dividends Received      | \$6,674.42     | \$6,674.42     | \$0.00       | \$9,246.52     |
|                         |                |                |              |                |
| Number of Trades        | 41             | 41             | 0            | 1              |
| Average Profit          | \$2,402.43     | \$2,402.43     | \$0.00       | \$68,547.84    |
| Average Profit %        | 1.88%          | 1.88%          | 0.00%        | 57.27%         |
| Average Bars Held       | 6.12           | 6.12           | 0            | 403            |
|                         |                |                |              |                |
| Winning Trades          | 16             | 16             | 0            | 1              |
| Win Rate                | 39.02%         | 39.02%         | 0.00%        | 100.00%        |
| Gross Profit            | \$233,976.61   | \$233,976.61   | \$0.00       | \$59,563.20    |
| Average Profit          | \$14,623.54    | \$14,623.54    | \$0.00       | \$59,563.20    |
| Average Profit %        | 11.71%         | 11.71%         | 0.00%        | 57.27%         |
| Average Bars Held       | 9.25           | 9.25           | 0            | 403            |
| Max Consecutive Winners | 2              | 2              | 0            | 1              |
|                         |                |                |              |                |
| Losing Trades           | 25             | 25             | 0            | 0              |
| Loss Rate               | 60.98%         | 60.98%         | 0.00%        | 0.00%          |
| Gross Loss              | (\$164,005.91) | (\$164,005.91) | \$0.00       | \$0.00         |
| Average Loss            | (\$6,560.24)   | (\$6,560.24)   | \$0.00       | \$0.00         |
| Average Loss %          | -4.41%         | -4.41%         | 0.00%        | 0.00%          |
| Average Bars Held       | 4.12           | 4.12           | 0            | 0              |
| Max Consecutive Losses  | 5              | 5              | 0            | 0              |
|                         |                |                |              |                |
| Maximum Drawdown        | (\$69,050.55)  | (\$69,050.55)  | \$0.00       | (\$159,037.29) |
| Maximum Drawdown Date   | 2/20/2009      | 2/20/2009      | 8/2/2002     | 12/5/2008      |
| Maximum Drawdown %      | -38.21%        | -38.21%        | 0.00%        | -70.44%        |
| Maximum Drawdown % Date | 4/25/2003      | 4/25/2003      | 4/24/2010    | 3/28/2003      |
|                         |                |                |              |                |
| Wealth-Lab Score        | 10.88          | 10.88          | 0            | 2.07           |
| Sharpe Ratio            | 0.29           | 0.29           | 0            | 0.29           |
| Profit Factor           | 1.43           | 1.43           | 0            | Infinity       |
| Recovery Factor         | 1.43           | 1.43           | Infinity     | 0.43           |
| Payoff Ratio            | 2.66           | 2.66           | 0            | 0              |

## 8.2.3.6.3 Monthly

|                         | All Trades    | Long Trades   | Short Trades | Buy & Hold     |
|-------------------------|---------------|---------------|--------------|----------------|
| Starting Capital        | \$100,000.00  | \$100,000.00  | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$392,368.85  | \$392,368.85  | \$135,409.73 | \$163,136.43   |
| Net Profit              | \$292,368.85  | \$292,368.85  | \$35,409.73  | \$63,136.43    |
| Net Profit %            | 292.37%       | 292.37%       | 35.41%       | 63.14%         |
| Annualized Gain %       | 19.35%        | 19.35%        | 4.00%        | 6.54%          |
| Exposure                | 67.26%        | 67.26%        | 0.00%        | 99.23%         |
| Total Commission        | (\$88.00)     | (\$88.00)     | \$0.00       | (\$8.00)       |
| Return on Cash          | \$20,741.90   | \$20,741.90   | \$35,409.73  | \$235.60       |
| Margin Interest Paid    | (\$0.18)      | (\$0.18)      | \$0.00       | (\$569.76)     |
| Dividends Received      | \$11,683.05   | \$11,683.05   | \$0.00       | \$8,962.56     |
|                         |               |               |              |                |
| Number of Trades        | 6             | 6             | 0            | 1              |
| Average Profit          | \$48,728.14   | \$48,728.14   | \$0.00       | \$63,136.43    |
| Average Profit %        | 25.73%        | 25.73%        | 0.00%        | 52.40%         |
| Average Bars Held       | 11.17         | 11.17         | 0            | 93             |
|                         |               |               |              |                |
| Winning Trades          | 4             | 4             | 0            | 1              |
| Win Rate                | 66.67%        | 66.67%        | 0.00%        | 100.00%        |
| Gross Profit            | \$310,071.84  | \$310,071.84  | \$0.00       | \$54,508.02    |
| Average Profit          | \$77,517.96   | \$77,517.96   | \$0.00       | \$54,508.02    |
| Average Profit %        | 43.55%        | 43.55%        | 0.00%        | 52.40%         |
| Average Bars Held       | 15.75         | 15.75         | 0            | 93             |
| Max Consecutive Winners | 2             | 2             | 0            | 1              |
|                         |               |               |              |                |
| Losing Trades           | 2             | 2             | 0            | 0              |
| Loss Rate               | 33.33%        | 33.33%        | 0.00%        | 0.00%          |
| Gross Loss              | (\$50,127.76) | (\$50,127.76) | \$0.00       | \$0.00         |
| Average Loss            | (\$25,063.88) | (\$25,063.88) | \$0.00       | \$0.00         |
| Average Loss %          | -9.91%        | -9.91%        | 0.00%        | 0.00%          |
| Average Bars Held       | 2             | 2             | 0            | 0              |
| Max Consecutive Losses  | 1             | 1             | 0            | 0              |
|                         |               |               |              |                |
| Maximum Drawdown        | (\$93,094.99) | (\$93,094.99) | \$0.00       | (\$135,623.68) |
| Maximum Drawdown Date   | 6/30/2009     | 6/30/2009     | 7/31/2002    | 11/28/2008     |
| Maximum Drawdown %      | -28.44%       | -28.44%       | 0.00%        | -69.74%        |
| Maximum Drawdown % Date | 6/30/2009     | 6/30/2009     | 4/24/2010    | 3/31/2003      |
|                         |               |               |              |                |
| Wealth-Lab Score        | 20.59         | 20.59         | 0            | 1.99           |
| Sharpe Ratio            | 0.7           | 0.7           | 0            | 0.28           |
| Profit Factor           | 6.19          | 6.19          | 0            | Infinity       |
| Recovery Factor         | 3.14          | 3.14          | Infinity     | 0.47           |
| Payoff Ratio            | 4.4           | 4.4           | 0            | 0              |

### 8.2.3.7 CHD

#### 8.2.3.7.1 Daily

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$125,830.00   | \$125,830.00   | \$205,705.34 | \$793,916.48   |
| Net Profit              | \$25,830.00    | \$25,830.00    | \$105,705.34 | \$693,916.48   |
| Net Profit %            | 25.83%         | 25.83%         | 105.71%      | 693.92%        |
| Annualized Gain %       | 1.26%          | 1.26%          | 4.00%        | 11.92%         |
| Exposure                | 48.73%         | 48.73%         | 0.00%        | 100.09%        |
| Total Commission        | (\$6,368.00)   | (\$6,368.00)   | \$0.00       | (\$8.00)       |
| Return on Cash          | \$31,553.04    | \$31,553.04    | \$105,705.34 | \$2,326.45     |
| Margin Interest Paid    | (\$1.49)       | (\$1.49)       | \$0.00       | (\$4,915.52)   |
| Dividends Received      | \$4,894.10     | \$4,894.10     | \$0.00       | \$30,359.33    |
|                         |                |                |              |                |
| Number of Trades        | 398            | 398            | 0            | 1              |
| Average Profit          | \$64.90        | \$64.90        | \$0.00       | \$693,916.48   |
| Average Profit %        | 0.03%          | 0.03%          | 0.00%        | 640.19%        |
| Average Bars Held       | 6.67           | 6.67           | 0            | 4,634.00       |
|                         |                |                |              |                |
| Winning Trades          | 141            | 141            | 0            | 1              |
| Win Rate                | 35.43%         | 35.43%         | 0.00%        | 100.00%        |
| Gross Profit            | \$418,788.28   | \$418,788.28   | \$0.00       | \$666,146.21   |
| Average Profit          | \$2,970.13     | \$2,970.13     | \$0.00       | \$666,146.21   |
| Average Profit %        | 3.66%          | 3.66%          | 0.00%        | 640.19%        |
| Average Bars Held       | 10.77          | 10.77          | 0            | 4,634.00       |
| Max Consecutive Winners | 4              | 4              | 0            | 1              |
|                         |                |                |              |                |
| Losing Trades           | 257            | 257            | 0            | 0              |
| Loss Rate               | 64.57%         | 64.57%         | 0.00%        | 0.00%          |
| Gross Loss              | (\$429,403.92) | (\$429,403.92) | \$0.00       | \$0.00         |
| Average Loss            | (\$1,670.83)   | (\$1,670.83)   | \$0.00       | \$0.00         |
| Average Loss %          | -1.96%         | -1.96%         | 0.00%        | 0.00%          |
| Average Bars Held       | 4.43           | 4.43           | 0            | 0              |
| Max Consecutive Losses  | 11             | 11             | 0            | 0              |
|                         |                |                |              |                |
| Maximum Drawdown        | (\$42,956.31)  | (\$42,956.31)  | \$0.00       | (\$202,081.75) |
| Maximum Drawdown Date   | 10/5/1998      | 10/5/1998      | 12/2/1991    | 3/9/2009       |
| Maximum Drawdown %      | -40.87%        | -40.87%        | 0.00%        | -55.51%        |
| Maximum Drawdown % Date | 10/5/1998      | 10/5/1998      | 4/24/2010    | 12/13/1994     |
|                         |                |                |              |                |
| Wealth-Lab Score        | 1.53           | 1.53           | 0            | 5.3            |
| Sharpe Ratio            | -0.07          | -0.07          | 0            | 0.43           |
| Profit Factor           | 0.98           | 0.98           | 0            | Infinity       |
| Recovery Factor         | 0.6            | 0.6            | Infinity     | 3.43           |
| Payoff Ratio            | 1.86           | 1.86           | 0            | 0              |

## 8.2.3.7.2 Weekly

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$253,826.27   | \$253,826.27   | \$205,617.00 | \$786,761.84   |
| Net Profit              | \$153,826.27   | \$153,826.27   | \$105,617.00 | \$686,761.84   |
| Net Profit %            | 153.83%        | 153.83%        | 105.62%      | 686.76%        |
| Annualized Gain %       | 5.20%          | 5.20%          | 4.00%        | 11.88%         |
| Exposure                | 53.45%         | 53.45%         | 0.00%        | 100.08%        |
| Total Commission        | (\$1,360.00)   | (\$1,360.00)   | \$0.00       | (\$8.00)       |
| Return on Cash          | \$58,600.75    | \$58,600.75    | \$105,617.00 | \$2,287.45     |
| Margin Interest Paid    | (\$1.79)       | (\$1.79)       | \$0.00       | (\$4,933.24)   |
| Dividends Received      | \$10,032.61    | \$10,032.61    | \$0.00       | \$30,090.67    |
|                         |                |                |              |                |
| Number of Trades        | 85             | 85             | 0            | 1              |
| Average Profit          | \$1,809.72     | \$1,809.72     | \$0.00       | \$686,761.84   |
| Average Profit %        | 0.84%          | 0.84%          | 0.00%        | 633.55%        |
| Average Bars Held       | 6.99           | 6.99           | 0            | 958            |
|                         |                |                |              |                |
| Winning Trades          | 36             | 36             | 0            | 1              |
| Win Rate                | 42.35%         | 42.35%         | 0.00%        | 100.00%        |
| Gross Profit            | \$403,587.12   | \$403,587.12   | \$0.00       | \$659,316.96   |
| Average Profit          | \$11,210.75    | \$11,210.75    | \$0.00       | \$659,316.96   |
| Average Profit %        | 6.94%          | 6.94%          | 0.00%        | 633.55%        |
| Average Bars Held       | 11.22          | 11.22          | 0            | 958            |
| Max Consecutive Winners | 8              | 8              | 0            | 1              |
|                         |                |                |              |                |
| Losing Trades           | 49             | 49             | 0            | 0              |
| Loss Rate               | 57.65%         | 57.65%         | 0.00%        | 0.00%          |
| Gross Loss              | (\$318,392.42) | (\$318,392.42) | \$0.00       | \$0.00         |
| Average Loss            | (\$6,497.80)   | (\$6,497.80)   | \$0.00       | \$0.00         |
| Average Loss %          | -3.64%         | -3.64%         | 0.00%        | 0.00%          |
| Average Bars Held       | 3.88           | 3.88           | 0            | 0              |
| Max Consecutive Losses  | 5              | 5              | 0            | 0              |
|                         |                |                |              |                |
| Maximum Drawdown        | (\$77,882.88)  | (\$77,882.88)  | \$0.00       | (\$193,804.12) |
| Maximum Drawdown Date   | 1/23/2009      | 1/23/2009      | 12/6/1991    | 3/6/2009       |
| Maximum Drawdown %      | -33.56%        | -33.56%        | 0.00%        | -55.53%        |
| Maximum Drawdown % Date | 10/15/1999     | 10/15/1999     | 4/24/2010    | 12/9/1994      |
|                         |                |                |              |                |
| Wealth-Lab Score        | 6.46           | 6.46           | 0            | 5.28           |
| Sharpe Ratio            | 0.15           | 0.15           | 0            | 0.43           |
| Profit Factor           | 1.27           | 1.27           | 0            | Infinity       |
| Recovery Factor         | 1.98           | 1.98           | Infinity     | 3.54           |

## 8.2.3.7.3 Monthly

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$353,550.41   | \$353,550.41   | \$205,065.76 | \$739,758.74   |
| Net Profit              | \$253,550.41   | \$253,550.41   | \$105,065.76 | \$639,758.74   |
| Net Profit %            | 253.55%        | 253.55%        | 105.07%      | 639.76%        |
| Annualized Gain %       | 7.14%          | 7.14%          | 4.00%        | 11.55%         |
| Exposure                | 58.18%         | 58.18%         | 0.00%        | 100.14%        |
| Total Commission        | (\$328.00)     | (\$328.00)     | \$0.00       | (\$8.00)       |
| Return on Cash          | \$55,998.48    | \$55,998.48    | \$105,065.76 | \$1,983.42     |
| Margin Interest Paid    | (\$2.09)       | (\$2.09)       | \$0.00       | (\$5,040.96)   |
| Dividends Received      | \$10,479.99    | \$10,479.99    | \$0.00       | \$28,325.53    |
| Number of Trades        | 21             | 21             | 0            | 1              |
| Average Profit          | \$12,073.83    | \$12,073.83    | \$0.00       | \$639,758.74   |
| Average Profit %        | 5.60%          | 5.60%          | 0.00%        | 590.22%        |
| Average Bars Held       | 7              | 7              | 0            | 220            |
| Winning Trades          | 10             | 10             | 0            | 1              |
| Win Rate                | 47.62%         | 47.62%         | 0.00%        | 100.00%        |
| Gross Profit            | \$325,035.60   | \$325,035.60   | \$0.00       | \$614,490.76   |
| Average Profit          | \$32,503.56    | \$32,503.56    | \$0.00       | \$614,490.76   |
| Average Profit %        | 18.98%         | 18.98%         | 0.00%        | 590.22%        |
| Average Bars Held       | 10.8           | 10.8           | 0            | 220            |
| Max Consecutive Winners | 5              | 5              | 0            | 1              |
| Losing Trades           | 11             | 11             | 0            | 0              |
| Loss Rate               | 52.38%         | 52.38%         | 0.00%        | 0.00%          |
| Gross Loss              | (\$137,961.56) | (\$137,961.56) | \$0.00       | \$0.00         |
| Average Loss            | (\$12,541.96)  | (\$12,541.96)  | \$0.00       | \$0.00         |
| Average Loss %          | -6.56%         | -6.56%         | 0.00%        | 0.00%          |
| Average Bars Held       | 3.55           | 3.55           | 0            | 0              |
| Max Consecutive Losses  | 4              | 4              | 0            | 0              |
| Maximum Drawdown        | (\$74,906.84)  | (\$74,906.84)  | \$0.00       | (\$141,008.64) |
| Maximum Drawdown Date   | 11/29/2002     | 11/29/2002     | 12/31/1991   | 2/27/2009      |
| Maximum Drawdown %      | -32.04%        | -32.04%        | 0.00%        | -51.45%        |
| Maximum Drawdown % Date | 11/30/1995     | 11/30/1995     | 4/24/2010    | 2/28/1995      |
| Wealth-Lab Score        | 8.34           | 8.34           | 0            | 5.6            |
| Sharpe Ratio            | 0.27           | 0.27           | 0            | 0.42           |
| Profit Factor           | 2.36           | 2.36           | 0            | Infinity       |
| Recovery Factor         | 3.38           | 3.38           | Infinity     | 4.54           |
| Payoff Ratio            | 2.89           | 2.89           | 0            | 0              |

### 8.2.3.8 CHE

#### 8.2.3.8.1 Daily

|                         | All Trades       | Long Trades      | Short Trades | Buy & Hold     |
|-------------------------|------------------|------------------|--------------|----------------|
| Starting Capital        | \$100,000.00     | \$100,000.00     | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$321,438.31     | \$321,438.31     | \$205,705.34 | \$460,838.61   |
| Net Profit              | \$221,438.31     | \$221,438.31     | \$105,705.34 | \$360,838.61   |
| Net Profit %            | 221.44%          | 221.44%          | 105.71%      | 360.84%        |
| Annualized Gain %       | 6.56%            | 6.56%            | 4.00%        | 8.66%          |
| Exposure                | 47.95%           | 47.95%           | 0.00%        | 103.13%        |
| Total Commission        | (\$5,984.00)     | (\$5,984.00)     | \$0.00       | (\$8.00)       |
| Return on Cash          | \$78,556.63      | \$78,556.63      | \$105,705.34 | \$178.86       |
| Margin Interest Paid    | (\$1.01)         | (\$1.01)         | \$0.00       | (\$9,493.69)   |
| Dividends Received      | \$12,017.66      | \$12,017.66      | \$0.00       | \$20,811.63    |
|                         |                  |                  |              |                |
| Number of Trades        | 374              | 374              | 0            | 1              |
| Average Profit          | \$592.08         | \$592.08         | \$0.00       | \$360,838.61   |
| Average Profit %        | 0.31%            | 0.31%            | 0.00%        | 329.49%        |
| Average Bars Held       | 6.92             | 6.92             | 0            | 4,634.00       |
|                         |                  |                  |              |                |
| Winning Trades          | 124              | 124              | 0            | 1              |
| Win Rate                | 33.16%           | 33.16%           | 0.00%        | 100.00%        |
| Gross Profit            | \$1,310,831.69   | \$1,310,831.69   | \$0.00       | \$349,341.81   |
| Average Profit          | \$10,571.22      | \$10,571.22      | \$0.00       | \$349,341.81   |
| Average Profit %        | 5.04%            | 5.04%            | 0.00%        | 329.49%        |
| Average Bars Held       | 11.87            | 11.87            | 0            | 4,634.00       |
| Max Consecutive Winners | 6                | 6                | 0            | 1              |
|                         |                  |                  |              |                |
| Losing Trades           | 250              | 250              | 0            | 0              |
| Loss Rate               | 66.84%           | 66.84%           | 0.00%        | 0.00%          |
| Gross Loss              | (\$1,179,966.66) | (\$1,179,966.66) | \$0.00       | \$0.00         |
| Average Loss            | (\$4,719.87)     | (\$4,719.87)     | \$0.00       | \$0.00         |
| Average Loss %          | -2.03%           | -2.03%           | 0.00%        | 0.00%          |
| Average Bars Held       | 4.46             | 4.46             | 0            | 0              |
| Max Consecutive Losses  | 11               | 11               | 0            | 0              |
|                         |                  |                  |              |                |
| Maximum Drawdown        | (\$224,266.36)   | (\$224,266.36)   | \$0.00       | (\$316,065.92) |
| Maximum Drawdown Date   | 10/15/2008       | 10/15/2008       | 12/2/1991    | 10/10/2008     |
| Maximum Drawdown %      | -52.41%          | -52.41%          | 0.00%        | -54.30%        |
| Maximum Drawdown % Date | 10/15/2008       | 10/15/2008       | 4/24/2010    | 10/10/2008     |
|                         |                  |                  |              |                |
| Wealth-Lab Score        | 6.51             | 6.51             | 0            | 3.84           |
| Sharpe Ratio            | 0.22             | 0.22             | 0            | 0.29           |
| Profit Factor           | 1.11             | 1.11             | 0            | Infinity       |
| Recovery Factor         | 0.99             | 0.99             | Infinity     | 1.14           |
| Payoff Ratio            | 2.48             | 2.48             | 0            | 0              |

## 8.2.3.8.2 Weekly

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$261,471.23   | \$261,471.23   | \$205,617.00 | \$460,464.25   |
| Net Profit              | \$161,471.23   | \$161,471.23   | \$105,617.00 | \$360,464.25   |
| Net Profit %            | 161.47%        | 161.47%        | 105.62%      | 360.46%        |
| Annualized Gain %       | 5.37%          | 5.37%          | 4.00%        | 8.66%          |
| Exposure                | 52.32%         | 52.32%         | 0.00%        | 102.54%        |
| Total Commission        | (\$1,504.00)   | (\$1,504.00)   | \$0.00       | (\$8.00)       |
| Return on Cash          | \$52,623.89    | \$52,623.89    | \$105,617.00 | \$345.81       |
| Margin Interest Paid    | (\$0.72)       | (\$0.72)       | \$0.00       | (\$8,245.70)   |
| Dividends Received      | \$9,054.81     | \$9,054.81     | \$0.00       | \$20,711.03    |
|                         |                |                |              |                |
| Number of Trades        | 94             | 94             | 0            | 1              |
| Average Profit          | \$1,717.78     | \$1,717.78     | \$0.00       | \$360,464.25   |
| Average Profit %        | 1.15%          | 1.15%          | 0.00%        | 329.49%        |
| Average Bars Held       | 6.31           | 6.31           | 0            | 958            |
|                         |                |                |              |                |
| Winning Trades          | 32             | 32             | 0            | 1              |
| Win Rate                | 34.04%         | 34.04%         | 0.00%        | 100.00%        |
| Gross Profit            | \$482,288.56   | \$482,288.56   | \$0.00       | \$347,653.11   |
| Average Profit          | \$15,071.52    | \$15,071.52    | \$0.00       | \$347,653.11   |
| Average Profit %        | 10.76%         | 10.76%         | 0.00%        | 329.49%        |
| Average Bars Held       | 11.88          | 11.88          | 0            | 958            |
| Max Consecutive Winners | 4              | 4              | 0            | 1              |
|                         |                |                |              |                |
| Losing Trades           | 62             | 62             | 0            | 0              |
| Loss Rate               | 65.96%         | 65.96%         | 0.00%        | 0.00%          |
| Gross Loss              | (\$382,495.30) | (\$382,495.30) | \$0.00       | \$0.00         |
| Average Loss            | (\$6,169.28)   | (\$6,169.28)   | \$0.00       | \$0.00         |
| Average Loss %          | -3.81%         | -3.81%         | 0.00%        | 0.00%          |
| Average Bars Held       | 3.44           | 3.44           | 0            | 0              |
| Max Consecutive Losses  | 6              | 6              | 0            | 0              |
|                         |                |                |              |                |
| Maximum Drawdown        | (\$79,205.66)  | (\$79,205.66)  | \$0.00       | (\$300,841.62) |
| Maximum Drawdown Date   | 6/26/2009      | 6/26/2009      | 12/6/1991    | 10/10/2008     |
| Maximum Drawdown %      | -43.34%        | -43.34%        | 0.00%        | -53.03%        |
| Maximum Drawdown % Date | 12/5/2003      | 12/5/2003      | 4/24/2010    | 10/10/2008     |
|                         |                |                |              |                |
| Wealth-Lab Score        | 5.81           | 5.81           | 0            | 3.97           |
| Sharpe Ratio            | 0.16           | 0.16           | 0            | 0.29           |
| Profit Factor           | 1.26           | 1.26           | 0            | Infinity       |
| Recovery Factor         | 2.04           | 2.04           | Infinity     | 1.2            |
| Payoff Ratio            | 2.83           | 2.83           | 0            | 0              |



## 8.2.3.8.3 Monthly

|                         | All Trades    | Long Trades   | Short Trades | Buy & Hold     |
|-------------------------|---------------|---------------|--------------|----------------|
| Starting Capital        | \$100,000.00  | \$100,000.00  | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$358,993.09  | \$358,993.09  | \$205,065.76 | \$419,605.03   |
| Net Profit              | \$258,993.09  | \$258,993.09  | \$105,065.76 | \$319,605.03   |
| Net Profit %            | 258.99%       | 258.99%       | 105.07%      | 319.61%        |
| Annualized Gain %       | 7.23%         | 7.23%         | 4.00%        | 8.15%          |
| Exposure                | 54.27%        | 54.27%        | 0.00%        | 102.25%        |
| Total Commission        | (\$312.00)    | (\$312.00)    | \$0.00       | (\$8.00)       |
| Return on Cash          | \$52,716.17   | \$52,716.17   | \$105,065.76 | \$350.64       |
| Margin Interest Paid    | (\$0.40)      | (\$0.40)      | \$0.00       | (\$7,325.10)   |
| Dividends Received      | \$9,234.31    | \$9,234.31    | \$0.00       | \$18,862.50    |
| Number of Trades        | 20            | 20            | 0            | 1              |
| Average Profit          | \$12,949.65   | \$12,949.65   | \$0.00       | \$319,605.03   |
| Average Profit %        | 5.53%         | 5.53%         | 0.00%        | 293.06%        |
| Average Bars Held       | 6.9           | 6.9           | 0            | 220            |
| Winning Trades          | 12            | 12            | 0            | 1              |
| Win Rate                | 60.00%        | 60.00%        | 0.00%        | 100.00%        |
| Gross Profit            | \$288,069.04  | \$288,069.04  | \$0.00       | \$307,717.00   |
| Average Profit          | \$24,005.75   | \$24,005.75   | \$0.00       | \$307,717.00   |
| Average Profit %        | 13.59%        | 13.59%        | 0.00%        | 293.06%        |
| Average Bars Held       | 8.33          | 8.33          | 0            | 220            |
| Max Consecutive Winners | 7             | 7             | 0            | 1              |
| Losing Trades           | 8             | 8             | 0            | 0              |
| Loss Rate               | 40.00%        | 40.00%        | 0.00%        | 0.00%          |
| Gross Loss              | (\$91,026.03) | (\$91,026.03) | \$0.00       | \$0.00         |
| Average Loss            | (\$11,378.25) | (\$11,378.25) | \$0.00       | \$0.00         |
| Average Loss %          | -6.54%        | -6.54%        | 0.00%        | 0.00%          |
| Average Bars Held       | 4.75          | 4.75          | 0            | 0              |
| Max Consecutive Losses  | 4             | 4             | 0            | 0              |
| Maximum Drawdown        | (\$78,452.36) | (\$78,452.36) | \$0.00       | (\$245,364.88) |
| Maximum Drawdown Date   | 6/30/2009     | 6/30/2009     | 12/31/1991   | 4/30/2008      |
| Maximum Drawdown %      | -25.46%       | -25.46%       | 0.00%        | -48.81%        |
| Maximum Drawdown % Date | 7/31/2001     | 7/31/2001     | 4/24/2010    | 4/30/2008      |
| Wealth-Lab Score        | 9.93          | 9.93          | 0            | 4.08           |
| Sharpe Ratio            | 0.25          | 0.25          | 0            | 0.28           |
| Profit Factor           | 3.16          | 3.16          | 0            | Infinity       |
| Recovery Factor         | 3.3           | 3.3           | Infinity     | 1.3            |
| Payoff Ratio            | 2.08          | 2.08          | 0            | 0              |

### 8.2.3.9 CMP

#### 8.2.3.9.1 Daily

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$100,855.13   | \$100,855.13   | \$128,345.05 | \$663,125.53   |
| Net Profit              | \$855.13       | \$855.13       | \$28,345.05  | \$563,125.53   |
| Net Profit %            | 0.86%          | 0.86%          | 28.35%       | 563.13%        |
| Annualized Gain %       | 0.13%          | 0.13%          | 4.00%        | 34.62%         |
| Exposure                | 50.45%         | 50.45%         | 0.00%        | 92.67%         |
| Total Commission        | (\$2,664.00)   | (\$2,664.00)   | \$0.00       | (\$8.00)       |
| Return on Cash          | \$14,104.95    | \$14,104.95    | \$28,345.05  | \$5,910.86     |
| Margin Interest Paid    | (\$0.22)       | (\$0.22)       | \$0.00       | (\$186.24)     |
| Dividends Received      | \$12,652.83    | \$12,652.83    | \$0.00       | \$58,701.75    |
|                         |                |                |              |                |
| Number of Trades        | 167            | 167            | 0            | 1              |
| Average Profit          | \$5.12         | \$5.12         | \$0.00       | \$563,125.53   |
| Average Profit %        | -0.01%         | -0.01%         | 0.00%        | 474.97%        |
| Average Bars Held       | 5.83           | 5.83           | 0            | 1,600.00       |
|                         |                |                |              |                |
| Winning Trades          | 57             | 57             | 0            | 1              |
| Win Rate                | 34.13%         | 34.13%         | 0.00%        | 100.00%        |
| Gross Profit            | \$267,854.96   | \$267,854.96   | \$0.00       | \$498,699.16   |
| Average Profit          | \$4,699.21     | \$4,699.21     | \$0.00       | \$498,699.16   |
| Average Profit %        | 4.61%          | 4.61%          | 0.00%        | 474.97%        |
| Average Bars Held       | 9.79           | 9.79           | 0            | 1,600.00       |
| Max Consecutive Winners | 5              | 5              | 0            | 1              |
|                         |                |                |              |                |
| Losing Trades           | 110            | 110            | 0            | 0              |
| Loss Rate               | 65.87%         | 65.87%         | 0.00%        | 0.00%          |
| Gross Loss              | (\$293,757.39) | (\$293,757.39) | \$0.00       | \$0.00         |
| Average Loss            | (\$2,670.52)   | (\$2,670.52)   | \$0.00       | \$0.00         |
| Average Loss %          | -2.41%         | -2.41%         | 0.00%        | 0.00%          |
| Average Bars Held       | 3.77           | 3.77           | 0            | 0              |
| Max Consecutive Losses  | 9              | 9              | 0            | 0              |
|                         |                |                |              |                |
| Maximum Drawdown        | (\$70,496.62)  | (\$70,496.62)  | \$0.00       | (\$346,022.13) |
| Maximum Drawdown Date   | 10/22/2008     | 10/22/2008     | 12/12/2003   | 10/27/2008     |
| Maximum Drawdown %      | -48.07%        | -48.07%        | 0.00%        | -50.09%        |
| Maximum Drawdown % Date | 10/22/2008     | 10/22/2008     | 4/24/2010    | 10/27/2008     |
|                         |                |                |              |                |
| Wealth-Lab Score        | 0.14           | 0.14           | 0            | 18.65          |
| Sharpe Ratio            | -0.05          | -0.05          | 0            | 1.11           |
| Profit Factor           | 0.91           | 0.91           | 0            | Infinity       |
| Recovery Factor         | 0.01           | 0.01           | Infinity     | 1.63           |
| Payoff Ratio            | 1.92           | 1.92           | 0            | 0              |

## 8.2.3.9.2 Weekly

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$125,419.80   | \$125,419.80   | \$128,345.05 | \$663,153.97   |
| Net Profit              | \$25,419.80    | \$25,419.80    | \$28,345.05  | \$563,153.97   |
| Net Profit %            | 25.42%         | 25.42%         | 28.35%       | 563.15%        |
| Annualized Gain %       | 3.62%          | 3.62%          | 4.00%        | 34.63%         |
| Exposure                | 55.17%         | 55.17%         | 0.00%        | 92.58%         |
| Total Commission        | (\$688.00)     | (\$688.00)     | \$0.00       | (\$8.00)       |
| Return on Cash          | \$13,427.39    | \$13,427.39    | \$28,345.05  | \$5,935.68     |
| Margin Interest Paid    | (\$0.24)       | (\$0.24)       | \$0.00       | (\$182.62)     |
| Dividends Received      | \$14,536.04    | \$14,536.04    | \$0.00       | \$58,701.75    |
|                         |                |                |              |                |
| Number of Trades        | 43             | 43             | 0            | 1              |
| Average Profit          | \$591.16       | \$591.16       | \$0.00       | \$563,153.97   |
| Average Profit %        | 0.49%          | 0.49%          | 0.00%        | 474.97%        |
| Average Bars Held       | 5.3            | 5.3            | 0            | 332            |
|                         |                |                |              |                |
| Winning Trades          | 15             | 15             | 0            | 1              |
| Win Rate                | 34.88%         | 34.88%         | 0.00%        | 100.00%        |
| Gross Profit            | \$157,832.66   | \$157,832.66   | \$0.00       | \$498,699.16   |
| Average Profit          | \$10,522.18    | \$10,522.18    | \$0.00       | \$498,699.16   |
| Average Profit %        | 9.72%          | 9.72%          | 0.00%        | 474.97%        |
| Average Bars Held       | 9.53           | 9.53           | 0            | 332            |
| Max Consecutive Winners | 4              | 4              | 0            | 1              |
|                         |                |                |              |                |
| Losing Trades           | 28             | 28             | 0            | 0              |
| Loss Rate               | 65.12%         | 65.12%         | 0.00%        | 0.00%          |
| Gross Loss              | (\$160,376.05) | (\$160,376.05) | \$0.00       | \$0.00         |
| Average Loss            | (\$5,727.72)   | (\$5,727.72)   | \$0.00       | \$0.00         |
| Average Loss %          | -4.45%         | -4.45%         | 0.00%        | 0.00%          |
| Average Bars Held       | 3.04           | 3.04           | 0            | 0              |
| Max Consecutive Losses  | 7              | 7              | 0            | 0              |
|                         |                |                |              |                |
| Maximum Drawdown        | (\$94,701.01)  | (\$94,701.01)  | \$0.00       | (\$322,518.82) |
| Maximum Drawdown Date   | 8/21/2009      | 8/21/2009      | 12/12/2003   | 10/24/2008     |
| Maximum Drawdown %      | -48.49%        | -48.49%        | 0.00%        | -47.78%        |
| Maximum Drawdown % Date | 8/21/2009      | 8/21/2009      | 4/24/2010    | 10/24/2008     |
|                         |                |                |              |                |
| Wealth-Lab Score        | 3.38           | 3.38           | 0            | 19.53          |
| Sharpe Ratio            | 0.1            | 0.1            | 0            | 1.08           |
| Profit Factor           | 0.98           | 0.98           | 0            | Infinity       |
| Recovery Factor         | 0.27           | 0.27           | Infinity     | 1.75           |

## 8.2.3.9.3 Monthly

|                         | All Trades    | Long Trades   | Short Trades | Buy & Hold     |
|-------------------------|---------------|---------------|--------------|----------------|
| Starting Capital        | \$100,000.00  | \$100,000.00  | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$216,226.74  | \$216,226.74  | \$128,083.47 | \$638,260.99   |
| Net Profit              | \$116,226.74  | \$116,226.74  | \$28,083.47  | \$538,260.99   |
| Net Profit %            | 116.23%       | 116.23%       | 28.08%       | 538.26%        |
| Annualized Gain %       | 13.00%        | 13.00%        | 4.00%        | 34.14%         |
| Exposure                | 53.82%        | 53.82%        | 0.00%        | 92.20%         |
| Total Commission        | (\$120.00)    | (\$120.00)    | \$0.00       | (\$8.00)       |
| Return on Cash          | \$16,920.82   | \$16,920.82   | \$28,083.47  | \$5,784.88     |
| Margin Interest Paid    | (\$0.04)      | (\$0.04)      | \$0.00       | (\$149.91)     |
| Dividends Received      | \$14,208.81   | \$14,208.81   | \$0.00       | \$56,518.50    |
| Number of Trades        | 8             | 8             | 0            | 1              |
| Average Profit          | \$14,528.34   | \$14,528.34   | \$0.00       | \$538,260.99   |
| Average Profit %        | 8.02%         | 8.02%         | 0.00%        | 452.86%        |
| Average Bars Held       | 5.75          | 5.75          | 0            | 76             |
| Winning Trades          | 5             | 5             | 0            | 1              |
| Win Rate                | 62.50%        | 62.50%        | 0.00%        | 100.00%        |
| Gross Profit            | \$95,531.40   | \$95,531.40   | \$0.00       | \$476,107.52   |
| Average Profit          | \$19,106.28   | \$19,106.28   | \$0.00       | \$476,107.52   |
| Average Profit %        | 14.83%        | 14.83%        | 0.00%        | 452.86%        |
| Average Bars Held       | 7.8           | 7.8           | 0            | 76             |
| Max Consecutive Winners | 4             | 4             | 0            | 1              |
| Losing Trades           | 3             | 3             | 0            | 0              |
| Loss Rate               | 37.50%        | 37.50%        | 0.00%        | 0.00%          |
| Gross Loss              | (\$10,434.25) | (\$10,434.25) | \$0.00       | \$0.00         |
| Average Loss            | (\$3,478.08)  | (\$3,478.08)  | \$0.00       | \$0.00         |
| Average Loss %          | -3.32%        | -3.32%        | 0.00%        | 0.00%          |
| Average Bars Held       | 2.33          | 2.33          | 0            | 0              |
| Max Consecutive Losses  | 3             | 3             | 0            | 0              |
| Maximum Drawdown        | (\$98,995.60) | (\$98,995.60) | \$0.00       | (\$228,904.13) |
| Maximum Drawdown Date   | 9/30/2008     | 9/30/2008     | 12/31/2003   | 4/30/2009      |
| Maximum Drawdown %      | -33.89%       | -33.89%       | 0.00%        | -36.46%        |
| Maximum Drawdown % Date | 9/30/2008     | 9/30/2008     | 4/24/2010    | 4/30/2009      |
| Wealth-Lab Score        | 15.96         | 15.96         | 0            | 23.53          |
| Sharpe Ratio            | 0.49          | 0.49          | 0            | 1.09           |
| Profit Factor           | 9.16          | 9.16          | 0            | Infinity       |
| Recovery Factor         | 1.17          | 1.17          | Infinity     | 2.35           |
| Payoff Ratio            | 4.46          | 4.46          | 0            | 0              |

### 8.2.3.10 CR

#### 8.2.3.10.1 Daily

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$247,745.67   | \$247,745.67   | \$205,705.34 | \$491,328.40   |
| Net Profit              | \$147,745.67   | \$147,745.67   | \$105,705.34 | \$391,328.40   |
| Net Profit %            | 147.75%        | 147.75%        | 105.71%      | 391.33%        |
| Annualized Gain %       | 5.06%          | 5.06%          | 4.00%        | 9.04%          |
| Exposure                | 50.29%         | 50.29%         | 0.00%        | 97.11%         |
| Total Commission        | (\$6,280.00)   | (\$6,280.00)   | \$0.00       | (\$8.00)       |
| Return on Cash          | \$60,018.29    | \$60,018.29    | \$105,705.34 | \$7,926.05     |
| Margin Interest Paid    | (\$1.00)       | (\$1.00)       | \$0.00       | (\$3,881.54)   |
| Dividends Received      | \$21,446.71    | \$21,446.71    | \$0.00       | \$59,493.56    |
|                         |                |                |              |                |
| Number of Trades        | 393            | 393            | 0            | 1              |
| Average Profit          | \$375.94       | \$375.94       | \$0.00       | \$391,328.40   |
| Average Profit %        | 0.24%          | 0.24%          | 0.00%        | 315.93%        |
| Average Bars Held       | 6.89           | 6.89           | 0            | 4,634.00       |
|                         |                |                |              |                |
| Winning Trades          | 144            | 144            | 0            | 1              |
| Win Rate                | 36.64%         | 36.64%         | 0.00%        | 100.00%        |
| Gross Profit            | \$1,064,078.04 | \$1,064,078.04 | \$0.00       | \$327,790.33   |
| Average Profit          | \$7,389.43     | \$7,389.43     | \$0.00       | \$327,790.33   |
| Average Profit %        | 4.50%          | 4.50%          | 0.00%        | 315.93%        |
| Average Bars Held       | 11.33          | 11.33          | 0            | 4,634.00       |
| Max Consecutive Winners | 4              | 4              | 0            | 1              |
|                         |                |                |              |                |
| Losing Trades           | 249            | 249            | 0            | 0              |
| Loss Rate               | 63.36%         | 63.36%         | 0.00%        | 0.00%          |
| Gross Loss              | (\$997,796.37) | (\$997,796.37) | \$0.00       | \$0.00         |
| Average Loss            | (\$4,007.21)   | (\$4,007.21)   | \$0.00       | \$0.00         |
| Average Loss %          | -2.22%         | -2.22%         | 0.00%        | 0.00%          |
| Average Bars Held       | 4.32           | 4.32           | 0            | 0              |
| Max Consecutive Losses  | 12             | 12             | 0            | 0              |
|                         |                |                |              |                |
| Maximum Drawdown        | (\$180,799.45) | (\$180,799.45) | \$0.00       | (\$420,458.27) |
| Maximum Drawdown Date   | 11/19/2008     | 11/19/2008     | 12/2/1991    | 11/20/2008     |
| Maximum Drawdown %      | -55.39%        | -55.39%        | 0.00%        | -71.60%        |
| Maximum Drawdown % Date | 11/19/2008     | 11/19/2008     | 4/24/2010    | 11/20/2008     |
|                         |                |                |              |                |
| Wealth-Lab Score        | 4.49           | 4.49           | 0            | 2.64           |
| Sharpe Ratio            | 0.14           | 0.14           | 0            | 0.31           |
| Profit Factor           | 1.07           | 1.07           | 0            | Infinity       |
| Recovery Factor         | 0.82           | 0.82           | Infinity     | 0.93           |
| Payoff Ratio            | 2.02           | 2.02           | 0            | 0              |

## 8.2.3.10.2 Weekly

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$616,809.02   | \$616,809.02   | \$205,617.00 | \$498,609.38   |
| Net Profit              | \$516,809.02   | \$516,809.02   | \$105,617.00 | \$398,609.38   |
| Net Profit %            | 516.81%        | 516.81%        | 105.62%      | 398.61%        |
| Annualized Gain %       | 10.41%         | 10.41%         | 4.00%        | 9.14%          |
| Exposure                | 55.26%         | 55.26%         | 0.00%        | 97.42%         |
| Total Commission        | (\$1,288.00)   | (\$1,288.00)   | \$0.00       | (\$8.00)       |
| Return on Cash          | \$83,583.50    | \$83,583.50    | \$105,617.00 | \$7,646.19     |
| Margin Interest Paid    | (\$0.47)       | (\$0.47)       | \$0.00       | (\$4,581.28)   |
| Dividends Received      | \$51,331.11    | \$51,331.11    | \$0.00       | \$60,568.20    |
|                         |                |                |              |                |
| Number of Trades        | 81             | 81             | 0            | 1              |
| Average Profit          | \$6,380.36     | \$6,380.36     | \$0.00       | \$398,609.38   |
| Average Profit %        | 2.28%          | 2.28%          | 0.00%        | 320.97%        |
| Average Bars Held       | 7.17           | 7.17           | 0            | 958            |
|                         |                |                |              |                |
| Winning Trades          | 32             | 32             | 0            | 1              |
| Win Rate                | 39.51%         | 39.51%         | 0.00%        | 100.00%        |
| Gross Profit            | \$965,453.20   | \$965,453.20   | \$0.00       | \$334,976.27   |
| Average Profit          | \$30,170.41    | \$30,170.41    | \$0.00       | \$334,976.27   |
| Average Profit %        | 12.47%         | 12.47%         | 0.00%        | 320.97%        |
| Average Bars Held       | 11.97          | 11.97          | 0            | 958            |
| Max Consecutive Winners | 3              | 3              | 0            | 1              |
|                         |                |                |              |                |
| Losing Trades           | 49             | 49             | 0            | 0              |
| Loss Rate               | 60.49%         | 60.49%         | 0.00%        | 0.00%          |
| Gross Loss              | (\$583,558.32) | (\$583,558.32) | \$0.00       | \$0.00         |
| Average Loss            | (\$11,909.35)  | (\$11,909.35)  | \$0.00       | \$0.00         |
| Average Loss %          | -4.37%         | -4.37%         | 0.00%        | 0.00%          |
| Average Bars Held       | 4.04           | 4.04           | 0            | 0              |
| Max Consecutive Losses  | 4              | 4              | 0            | 0              |
|                         |                |                |              |                |
| Maximum Drawdown        | (\$190,207.28) | (\$190,207.28) | \$0.00       | (\$409,314.19) |
| Maximum Drawdown Date   | 3/6/2009       | 3/6/2009       | 12/6/1991    | 11/21/2008     |
| Maximum Drawdown %      | -33.25%        | -33.25%        | 0.00%        | -69.61%        |
| Maximum Drawdown % Date | 3/6/2009       | 3/6/2009       | 4/24/2010    | 11/21/2008     |
|                         |                |                |              |                |
| Wealth-Lab Score        | 12.57          | 12.57          | 0            | 2.85           |
| Sharpe Ratio            | 0.39           | 0.39           | 0            | 0.32           |
| Profit Factor           | 1.65           | 1.65           | 0            | Infinity       |
| Recovery Factor         | 2.72           | 2.72           | Infinity     | 0.97           |
| Payoff Ratio            | 2.85           | 2.85           | 0            | 0              |

## 8.2.3.10.3 Monthly

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$301,456.51   | \$301,456.51   | \$205,065.76 | \$434,633.12   |
| Net Profit              | \$201,456.51   | \$201,456.51   | \$105,065.76 | \$334,633.12   |
| Net Profit %            | 201.46%        | 201.46%        | 105.07%      | 334.63%        |
| Annualized Gain %       | 6.21%          | 6.21%          | 4.00%        | 8.36%          |
| Exposure                | 53.48%         | 53.48%         | 0.00%        | 98.06%         |
| Total Commission        | (\$344.00)     | (\$344.00)     | \$0.00       | (\$8.00)       |
| Return on Cash          | \$46,745.51    | \$46,745.51    | \$105,065.76 | \$5,927.32     |
| Margin Interest Paid    | (\$0.53)       | (\$0.53)       | \$0.00       | (\$5,386.19)   |
| Dividends Received      | \$15,363.50    | \$15,363.50    | \$0.00       | \$53,200.00    |
| Number of Trades        | 22             | 22             | 0            | 1              |
| Average Profit          | \$9,157.11     | \$9,157.11     | \$0.00       | \$334,633.12   |
| Average Profit %        | 4.74%          | 4.74%          | 0.00%        | 267.52%        |
| Average Bars Held       | 6.09           | 6.09           | 0            | 220            |
| Winning Trades          | 9              | 9              | 0            | 1              |
| Win Rate                | 40.91%         | 40.91%         | 0.00%        | 100.00%        |
| Gross Profit            | \$286,197.16   | \$286,197.16   | \$0.00       | \$280,892.00   |
| Average Profit          | \$31,799.68    | \$31,799.68    | \$0.00       | \$280,892.00   |
| Average Profit %        | 23.50%         | 23.50%         | 0.00%        | 267.52%        |
| Average Bars Held       | 10.56          | 10.56          | 0            | 220            |
| Max Consecutive Winners | 2              | 2              | 0            | 1              |
| Losing Trades           | 13             | 13             | 0            | 0              |
| Loss Rate               | 59.09%         | 59.09%         | 0.00%        | 0.00%          |
| Gross Loss              | (\$146,849.13) | (\$146,849.13) | \$0.00       | \$0.00         |
| Average Loss            | (\$11,296.09)  | (\$11,296.09)  | \$0.00       | \$0.00         |
| Average Loss %          | -8.25%         | -8.25%         | 0.00%        | 0.00%          |
| Average Bars Held       | 3              | 3              | 0            | 0              |
| Max Consecutive Losses  | 5              | 5              | 0            | 0              |
| Maximum Drawdown        | (\$75,071.60)  | (\$75,071.60)  | \$0.00       | (\$320,689.34) |
| Maximum Drawdown Date   | 6/28/2002      | 6/28/2002      | 12/31/1991   | 11/28/2008     |
| Maximum Drawdown %      | -44.57%        | -44.57%        | 0.00%        | -63.47%        |
| Maximum Drawdown % Date | 6/28/2002      | 6/28/2002      | 4/24/2010    | 11/28/2008     |
| Wealth-Lab Score        | 6.44           | 6.44           | 0            | 3.11           |
| Sharpe Ratio            | 0.2            | 0.2            | 0            | 0.29           |
| Profit Factor           | 1.95           | 1.95           | 0            | Infinity       |
| Recovery Factor         | 2.68           | 2.68           | Infinity     | 1.04           |
| Payoff Ratio            | 2.85           | 2.85           | 0            | 0              |

### 8.2.3.11 CVD

#### 8.2.3.11.1 Daily

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$128,625.27   | \$128,625.27   | \$168,789.09 | \$261,266.43   |
| Net Profit              | \$28,625.27    | \$28,625.27    | \$68,789.09  | \$161,266.43   |
| Net Profit %            | 28.63%         | 28.63%         | 68.79%       | 161.27%        |
| Annualized Gain %       | 1.90%          | 1.90%          | 4.00%        | 7.46%          |
| Exposure                | 49.56%         | 49.56%         | 0.00%        | 105.70%        |
| Total Commission        | (\$5,040.00)   | (\$5,040.00)   | \$0.00       | (\$8.00)       |
| Return on Cash          | \$29,373.46    | \$29,373.46    | \$68,789.09  | \$0.00         |
| Margin Interest Paid    | (\$0.76)       | (\$0.76)       | \$0.00       | (\$8,978.28)   |
| Dividends Received      | \$0.00         | \$0.00         | \$0.00       | \$0.00         |
|                         |                |                |              |                |
| Number of Trades        | 315            | 315            | 0            | 1              |
| Average Profit          | \$90.87        | \$90.87        | \$0.00       | \$161,266.43   |
| Average Profit %        | 0.19%          | 0.19%          | 0.00%        | 162.14%        |
| Average Bars Held       | 6.3            | 6.3            | 0            | 3,358.00       |
|                         |                |                |              |                |
| Winning Trades          | 113            | 113            | 0            | 1              |
| Win Rate                | 35.87%         | 35.87%         | 0.00%        | 100.00%        |
| Gross Profit            | \$613,066.28   | \$613,066.28   | \$0.00       | \$170,244.71   |
| Average Profit          | \$5,425.37     | \$5,425.37     | \$0.00       | \$170,244.71   |
| Average Profit %        | 5.64%          | 5.64%          | 0.00%        | 162.14%        |
| Average Bars Held       | 10.27          | 10.27          | 0            | 3,358.00       |
| Max Consecutive Winners | 5              | 5              | 0            | 1              |
|                         |                |                |              |                |
| Losing Trades           | 202            | 202            | 0            | 0              |
| Loss Rate               | 64.13%         | 64.13%         | 0.00%        | 0.00%          |
| Gross Loss              | (\$613,813.71) | (\$613,813.71) | \$0.00       | \$0.00         |
| Average Loss            | (\$3,038.68)   | (\$3,038.68)   | \$0.00       | \$0.00         |
| Average Loss %          | -2.87%         | -2.87%         | 0.00%        | 0.00%          |
| Average Bars Held       | 4.07           | 4.07           | 0            | 0              |
| Max Consecutive Losses  | 9              | 9              | 0            | 0              |
|                         |                |                |              |                |
| Maximum Drawdown        | (\$81,105.38)  | (\$81,105.38)  | \$0.00       | (\$286,612.14) |
| Maximum Drawdown Date   | 11/14/2008     | 11/14/2008     | 12/17/1996   | 11/20/2008     |
| Maximum Drawdown %      | -60.34%        | -60.34%        | 0.00%        | -83.03%        |
| Maximum Drawdown % Date | 6/20/2000      | 6/20/2000      | 4/24/2010    | 10/18/2000     |
|                         |                |                |              |                |
| Wealth-Lab Score        | 1.52           | 1.52           | 0            | 1.2            |
| Sharpe Ratio            | 0.07           | 0.07           | 0            | 0.31           |
| Profit Factor           | 1              | 1              | 0            | Infinity       |
| Recovery Factor         | 0.35           | 0.35           | Infinity     | 0.56           |



## 8.2.3.11.2 Weekly

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$573,757.73   | \$573,757.73   | \$168,734.72 | \$268,715.61   |
| Net Profit              | \$473,757.73   | \$473,757.73   | \$68,734.72  | \$168,715.61   |
| Net Profit %            | 473.76%        | 473.76%        | 68.73%       | 168.72%        |
| Annualized Gain %       | 13.99%         | 13.99%         | 4.00%        | 7.69%          |
| Exposure                | 55.84%         | 55.84%         | 0.00%        | 105.45%        |
| Total Commission        | (\$984.00)     | (\$984.00)     | \$0.00       | (\$8.00)       |
| Return on Cash          | \$63,395.37    | \$63,395.37    | \$68,734.72  | \$0.00         |
| Margin Interest Paid    | (\$0.79)       | (\$0.79)       | \$0.00       | (\$8,949.29)   |
| Dividends Received      | \$0.00         | \$0.00         | \$0.00       | \$0.00         |
|                         |                |                |              |                |
| Number of Trades        | 62             | 62             | 0            | 1              |
| Average Profit          | \$7,641.25     | \$7,641.25     | \$0.00       | \$168,715.61   |
| Average Profit %        | 3.47%          | 3.47%          | 0.00%        | 169.22%        |
| Average Bars Held       | 6.94           | 6.94           | 0            | 695            |
|                         |                |                |              |                |
| Winning Trades          | 28             | 28             | 0            | 1              |
| Win Rate                | 45.16%         | 45.16%         | 0.00%        | 100.00%        |
| Gross Profit            | \$820,558.28   | \$820,558.28   | \$0.00       | \$177,664.90   |
| Average Profit          | \$29,305.65    | \$29,305.65    | \$0.00       | \$177,664.90   |
| Average Profit %        | 14.18%         | 14.18%         | 0.00%        | 169.22%        |
| Average Bars Held       | 11.29          | 11.29          | 0            | 695            |
| Max Consecutive Winners | 4              | 4              | 0            | 1              |
|                         |                |                |              |                |
| Losing Trades           | 34             | 34             | 0            | 0              |
| Loss Rate               | 54.84%         | 54.84%         | 0.00%        | 0.00%          |
| Gross Loss              | (\$410,195.13) | (\$410,195.13) | \$0.00       | \$0.00         |
| Average Loss            | (\$12,064.56)  | (\$12,064.56)  | \$0.00       | \$0.00         |
| Average Loss %          | -5.35%         | -5.35%         | 0.00%        | 0.00%          |
| Average Bars Held       | 3.35           | 3.35           | 0            | 0              |
| Max Consecutive Losses  | 4              | 4              | 0            | 0              |
|                         |                |                |              |                |
| Maximum Drawdown        | (\$166,696.50) | (\$166,696.50) | \$0.00       | (\$286,391.68) |
| Maximum Drawdown Date   | 3/6/2009       | 3/6/2009       | 12/20/1996   | 3/6/2009       |
| Maximum Drawdown %      | -47.21%        | -47.21%        | 0.00%        | -81.92%        |
| Maximum Drawdown % Date | 12/23/1999     | 12/23/1999     | 4/24/2010    | 10/13/2000     |
|                         |                |                |              |                |
| Wealth-Lab Score        | 13.23          | 13.23          | 0            | 1.32           |
| Sharpe Ratio            | 0.46           | 0.46           | 0            | 0.33           |
| Profit Factor           | 2              | 2              | 0            | Infinity       |
| Recovery Factor         | 2.84           | 2.84           | Infinity     | 0.59           |
| Payoff Ratio            | 2.65           | 2.65           | 0            | 0              |

## 8.2.3.11.3 Monthly

|                         | All Trades    | Long Trades   | Short Trades | Buy & Hold     |
|-------------------------|---------------|---------------|--------------|----------------|
| Starting Capital        | \$100,000.00  | \$100,000.00  | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$365,291.53  | \$365,291.53  | \$168,535.53 | \$295,612.05   |
| Net Profit              | \$265,291.53  | \$265,291.53  | \$68,535.53  | \$195,612.05   |
| Net Profit %            | 265.29%       | 265.29%       | 68.54%       | 195.61%        |
| Annualized Gain %       | 10.22%        | 10.22%        | 4.00%        | 8.48%          |
| Exposure                | 62.18%        | 62.18%        | 0.00%        | 105.29%        |
| Total Commission        | (\$200.00)    | (\$200.00)    | \$0.00       | (\$8.00)       |
| Return on Cash          | \$34,607.81   | \$34,607.81   | \$68,535.53  | \$0.00         |
| Margin Interest Paid    | (\$0.67)      | (\$0.67)      | \$0.00       | (\$10,054.95)  |
| Dividends Received      | \$0.00        | \$0.00        | \$0.00       | \$0.00         |
| Number of Trades        | 13            | 13            | 0            | 1              |
| Average Profit          | \$20,407.04   | \$20,407.04   | \$0.00       | \$195,612.05   |
| Average Profit %        | 12.30%        | 12.30%        | 0.00%        | 194.71%        |
| Average Bars Held       | 8.38          | 8.38          | 0            | 160            |
| Winning Trades          | 8             | 8             | 0            | 1              |
| Win Rate                | 61.54%        | 61.54%        | 0.00%        | 100.00%        |
| Gross Profit            | \$317,136.17  | \$317,136.17  | \$0.00       | \$205,667.00   |
| Average Profit          | \$39,642.02   | \$39,642.02   | \$0.00       | \$205,667.00   |
| Average Profit %        | 28.76%        | 28.76%        | 0.00%        | 194.71%        |
| Average Bars Held       | 12            | 12            | 0            | 160            |
| Max Consecutive Winners | 3             | 3             | 0            | 1              |
| Losing Trades           | 5             | 5             | 0            | 0              |
| Loss Rate               | 38.46%        | 38.46%        | 0.00%        | 0.00%          |
| Gross Loss              | (\$86,451.78) | (\$86,451.78) | \$0.00       | \$0.00         |
| Average Loss            | (\$17,290.36) | (\$17,290.36) | \$0.00       | \$0.00         |
| Average Loss %          | -14.05%       | -14.05%       | 0.00%        | 0.00%          |
| Average Bars Held       | 2.6           | 2.6           | 0            | 0              |
| Max Consecutive Losses  | 1             | 1             | 0            | 0              |
| Maximum Drawdown        | (\$82,439.07) | (\$82,439.07) | \$0.00       | (\$294,187.38) |
| Maximum Drawdown Date   | 9/29/2000     | 9/29/2000     | 12/31/1996   | 3/31/2009      |
| Maximum Drawdown %      | -61.65%       | -61.65%       | 0.00%        | -81.66%        |
| Maximum Drawdown % Date | 9/29/2000     | 9/29/2000     | 4/24/2010    | 5/31/2000      |
| Wealth-Lab Score        | 6.31          | 6.31          | 0            | 1.48           |
| Sharpe Ratio            | 0.35          | 0.35          | 0            | 0.33           |
| Profit Factor           | 3.67          | 3.67          | 0            | Infinity       |
| Recovery Factor         | 3.22          | 3.22          | Infinity     | 0.66           |
| Payoff Ratio            | 2.05          | 2.05          | 0            | 0              |

### 8.2.3.12 DHR

#### 8.2.3.12.1 Daily

|                         | All Trades       | Long Trades      | Short Trades | Buy & Hold       |
|-------------------------|------------------|------------------|--------------|------------------|
| Starting Capital        | \$100,000.00     | \$100,000.00     | \$100,000.00 | \$100,000.00     |
| Ending Capital          | \$733,569.87     | \$733,569.87     | \$205,705.34 | \$3,876,626.23   |
| Net Profit              | \$633,569.87     | \$633,569.87     | \$105,705.34 | \$3,776,626.23   |
| Net Profit %            | 633.57%          | 633.57%          | 105.71%      | 3776.63%         |
| Annualized Gain %       | 11.44%           | 11.44%           | 4.00%        | 22.00%           |
| Exposure                | 49.36%           | 49.36%           | 0.00%        | 100.16%          |
| Total Commission        | (\$6,280.00)     | (\$6,280.00)     | \$0.00       | (\$8.00)         |
| Return on Cash          | \$200,739.12     | \$200,739.12     | \$105,705.34 | \$1,845.36       |
| Margin Interest Paid    | (\$1.37)         | (\$1.37)         | \$0.00       | (\$7,015.67)     |
| Dividends Received      | \$5,030.54       | \$5,030.54       | \$0.00       | \$34,727.77      |
|                         |                  |                  |              |                  |
| Number of Trades        | 393              | 393              | 0            | 1                |
| Average Profit          | \$1,612.14       | \$1,612.14       | \$0.00       | \$3,776,626.23   |
| Average Profit %        | 0.51%            | 0.51%            | 0.00%        | 3568.65%         |
| Average Bars Held       | 6.75             | 6.75             | 0            | 4,634.00         |
|                         |                  |                  |              |                  |
| Winning Trades          | 154              | 154              | 0            | 1                |
| Win Rate                | 39.19%           | 39.19%           | 0.00%        | 100.00%          |
| Gross Profit            | \$3,195,817.58   | \$3,195,817.58   | \$0.00       | \$3,747,068.77   |
| Average Profit          | \$20,752.06      | \$20,752.06      | \$0.00       | \$3,747,068.77   |
| Average Profit %        | 4.28%            | 4.28%            | 0.00%        | 3568.65%         |
| Average Bars Held       | 10.76            | 10.76            | 0            | 4,634.00         |
| Max Consecutive Winners | 5                | 5                | 0            | 1                |
|                         |                  |                  |              |                  |
| Losing Trades           | 239              | 239              | 0            | 0                |
| Loss Rate               | 60.81%           | 60.81%           | 0.00%        | 0.00%            |
| Gross Loss              | (\$2,768,015.99) | (\$2,768,015.99) | \$0.00       | \$0.00           |
| Average Loss            | (\$11,581.66)    | (\$11,581.66)    | \$0.00       | \$0.00           |
| Average Loss %          | -1.93%           | -1.93%           | 0.00%        | 0.00%            |
| Average Bars Held       | 4.16             | 4.16             | 0            | 0                |
| Max Consecutive Losses  | 12               | 12               | 0            | 0                |
|                         |                  |                  |              |                  |
| Maximum Drawdown        | (\$422,494.40)   | (\$422,494.40)   | \$0.00       | (\$1,823,275.48) |
| Maximum Drawdown Date   | 4/20/2009        | 4/20/2009        | 12/2/1991    | 3/9/2009         |
| Maximum Drawdown %      | -45.21%          | -45.21%          | 0.00%        | -46.16%          |
| Maximum Drawdown % Date | 4/20/2009        | 4/20/2009        | 4/24/2010    | 3/8/2000         |
|                         |                  |                  |              |                  |
| Wealth-Lab Score        | 12.71            | 12.71            | 0            | 11.83            |
| Sharpe Ratio            | 0.45             | 0.45             | 0            | 0.74             |
| Profit Factor           | 1.15             | 1.15             | 0            | Infinity         |
| Recovery Factor         | 1.5              | 1.5              | Infinity     | 2.07             |
| Payoff Ratio            | 2.22             | 2.22             | 0            | 0                |

## 8.2.3.12.2 Weekly

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold       |
|-------------------------|----------------|----------------|--------------|------------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00     |
| Ending Capital          | \$273,504.85   | \$273,504.85   | \$205,617.00 | \$3,927,014.11   |
| Net Profit              | \$173,504.85   | \$173,504.85   | \$105,617.00 | \$3,827,014.11   |
| Net Profit %            | 173.50%        | 173.50%        | 105.62%      | 3827.01%         |
| Annualized Gain %       | 5.63%          | 5.63%          | 4.00%        | 22.10%           |
| Exposure                | 52.68%         | 52.68%         | 0.00%        | 100.24%          |
| Total Commission        | (\$1,576.00)   | (\$1,576.00)   | \$0.00       | (\$8.00)         |
| Return on Cash          | \$63,444.34    | \$63,444.34    | \$105,617.00 | \$1,539.72       |
| Margin Interest Paid    | (\$1.32)       | (\$1.32)       | \$0.00       | (\$8,352.64)     |
| Dividends Received      | \$2,250.16     | \$2,250.16     | \$0.00       | \$35,199.01      |
| Number of Trades        | 99             | 99             | 0            | 1                |
| Average Profit          | \$1,752.57     | \$1,752.57     | \$0.00       | \$3,827,014.11   |
| Average Profit %        | 0.92%          | 0.92%          | 0.00%        | 3593.40%         |
| Average Bars Held       | 6.01           | 6.01           | 0            | 958              |
| Winning Trades          | 40             | 40             | 0            | 1                |
| Win Rate                | 40.40%         | 40.40%         | 0.00%        | 100.00%          |
| Gross Profit            | \$466,423.85   | \$466,423.85   | \$0.00       | \$3,798,628.02   |
| Average Profit          | \$11,660.60    | \$11,660.60    | \$0.00       | \$3,798,628.02   |
| Average Profit %        | 7.11%          | 7.11%          | 0.00%        | 3593.40%         |
| Average Bars Held       | 9.1            | 9.1            | 0            | 958              |
| Max Consecutive Winners | 5              | 5              | 0            | 1                |
| Losing Trades           | 59             | 59             | 0            | 0                |
| Loss Rate               | 59.60%         | 59.60%         | 0.00%        | 0.00%            |
| Gross Loss              | (\$358,612.17) | (\$358,612.17) | \$0.00       | \$0.00           |
| Average Loss            | (\$6,078.17)   | (\$6,078.17)   | \$0.00       | \$0.00           |
| Average Loss %          | -3.27%         | -3.27%         | 0.00%        | 0.00%            |
| Average Bars Held       | 3.92           | 3.92           | 0            | 0                |
| Max Consecutive Losses  | 5              | 5              | 0            | 0                |
| Maximum Drawdown        | (\$76,011.35)  | (\$76,011.35)  | \$0.00       | (\$1,774,065.09) |
| Maximum Drawdown Date   | 3/24/2000      | 3/24/2000      | 12/6/1991    | 3/6/2009         |
| Maximum Drawdown %      | -37.41%        | -37.41%        | 0.00%        | -43.89%          |
| Maximum Drawdown % Date | 3/24/2000      | 3/24/2000      | 4/24/2010    | 3/6/2009         |
| Wealth-Lab Score        | 6.69           | 6.69           | 0            | 12.37            |
| Sharpe Ratio            | 0.17           | 0.17           | 0            | 0.74             |
| Profit Factor           | 1.3            | 1.3            | 0            | Infinity         |
| Recovery Factor         | 2.28           | 2.28           | Infinity     | 2.16             |
| Payoff Ratio            | 2.17           | 2.17           | 0            | 0                |

## 8.2.3.12.3 Monthly

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold       |
|-------------------------|----------------|----------------|--------------|------------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00     |
| Ending Capital          | \$772,455.18   | \$772,455.18   | \$205,065.76 | \$3,562,115.05   |
| Net Profit              | \$672,455.18   | \$672,455.18   | \$105,065.76 | \$3,462,115.05   |
| Net Profit %            | 672.46%        | 672.46%        | 105.07%      | 3462.12%         |
| Annualized Gain %       | 11.81%         | 11.81%         | 4.00%        | 21.55%           |
| Exposure                | 59.36%         | 59.36%         | 0.00%        | 100.27%          |
| Total Commission        | (\$296.00)     | (\$296.00)     | \$0.00       | (\$8.00)         |
| Return on Cash          | \$97,179.63    | \$97,179.63    | \$105,065.76 | \$1,237.48       |
| Margin Interest Paid    | (\$2.11)       | (\$2.11)       | \$0.00       | (\$8,382.68)     |
| Dividends Received      | \$3,749.93     | \$3,749.93     | \$0.00       | \$31,941.14      |
| Number of Trades        | 19             | 19             | 0            | 1                |
| Average Profit          | \$35,392.38    | \$35,392.38    | \$0.00       | \$3,462,115.05   |
| Average Profit %        | 12.21%         | 12.21%         | 0.00%        | 3253.48%         |
| Average Bars Held       | 7.95           | 7.95           | 0            | 220              |
| Winning Trades          | 9              | 9              | 0            | 1                |
| Win Rate                | 47.37%         | 47.37%         | 0.00%        | 100.00%          |
| Gross Profit            | \$815,496.92   | \$815,496.92   | \$0.00       | \$3,437,319.11   |
| Average Profit          | \$90,610.77    | \$90,610.77    | \$0.00       | \$3,437,319.11   |
| Average Profit %        | 34.66%         | 34.66%         | 0.00%        | 3253.48%         |
| Average Bars Held       | 13.44          | 13.44          | 0            | 220              |
| Max Consecutive Winners | 3              | 3              | 0            | 1                |
| Losing Trades           | 10             | 10             | 0            | 0                |
| Loss Rate               | 52.63%         | 52.63%         | 0.00%        | 0.00%            |
| Gross Loss              | (\$243,969.20) | (\$243,969.20) | \$0.00       | \$0.00           |
| Average Loss            | (\$24,396.92)  | (\$24,396.92)  | \$0.00       | \$0.00           |
| Average Loss %          | -7.99%         | -7.99%         | 0.00%        | 0.00%            |
| Average Bars Held       | 3              | 3              | 0            | 0                |
| Max Consecutive Losses  | 4              | 4              | 0            | 0                |
| Maximum Drawdown        | (\$227,740.30) | (\$227,740.30) | \$0.00       | (\$1,528,623.20) |
| Maximum Drawdown Date   | 6/29/2001      | 6/29/2001      | 12/31/1991   | 2/27/2009        |
| Maximum Drawdown %      | -49.51%        | -49.51%        | 0.00%        | -41.93%          |
| Maximum Drawdown % Date | 6/29/2001      | 6/29/2001      | 4/24/2010    | 2/27/2009        |
| Wealth-Lab Score        | 10.05          | 10.05          | 0            | 12.48            |
| Sharpe Ratio            | 0.48           | 0.48           | 0            | 0.72             |
| Profit Factor           | 3.34           | 3.34           | 0            | Infinity         |
| Recovery Factor         | 2.95           | 2.95           | Infinity     | 2.26             |
| Payoff Ratio            | 4.34           | 4.34           | 0            | 0                |

### 8.2.3.13 DLX

#### 8.2.3.13.1 Daily

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$28,960.90    | \$28,960.90    | \$205,705.34 | \$96,673.78    |
| Net Profit              | (\$71,039.10)  | (\$71,039.10)  | \$105,705.34 | (\$3,326.22)   |
| Net Profit %            | -71.04%        | -71.04%        | 105.71%      | -3.33%         |
| Annualized Gain %       | -6.52%         | -6.52%         | 4.00%        | -0.18%         |
| Exposure                | 50.15%         | 50.15%         | 0.00%        | 96.78%         |
| Total Commission        | (\$6,744.00)   | (\$6,744.00)   | \$0.00       | (\$8.00)       |
| Return on Cash          | \$31,648.31    | \$31,648.31    | \$105,705.34 | \$4,946.13     |
| Margin Interest Paid    | (\$0.84)       | (\$0.84)       | \$0.00       | (\$5,398.98)   |
| Dividends Received      | \$23,156.88    | \$23,156.88    | \$0.00       | \$37,391.66    |
|                         |                |                |              |                |
| Number of Trades        | 422            | 422            | 0            | 1              |
| Average Profit          | (\$168.34)     | (\$168.34)     | \$0.00       | (\$3,326.22)   |
| Average Profit %        | -0.31%         | -0.31%         | 0.00%        | -38.36%        |
| Average Bars Held       | 6.59           | 6.59           | 0            | 4,634.00       |
|                         |                |                |              |                |
| Winning Trades          | 121            | 121            | 0            | 0              |
| Win Rate                | 28.67%         | 28.67%         | 0.00%        | 0.00%          |
| Gross Profit            | \$436,597.81   | \$436,597.81   | \$0.00       | \$0.00         |
| Average Profit          | \$3,608.25     | \$3,608.25     | \$0.00       | \$0.00         |
| Average Profit %        | 5.07%          | 5.07%          | 0.00%        | 0.00%          |
| Average Bars Held       | 11.8           | 11.8           | 0            | 0              |
| Max Consecutive Winners | 4              | 4              | 0            | 0              |
|                         |                |                |              |                |
| Losing Trades           | 301            | 301            | 0            | 1              |
| Loss Rate               | 71.33%         | 71.33%         | 0.00%        | 100.00%        |
| Gross Loss              | (\$562,441.26) | (\$562,441.26) | \$0.00       | (\$40,265.03)  |
| Average Loss            | (\$1,868.58)   | (\$1,868.58)   | \$0.00       | (\$40,265.03)  |
| Average Loss %          | -2.47%         | -2.47%         | 0.00%        | -38.36%        |
| Average Bars Held       | 4.49           | 4.49           | 0            | 4,634.00       |
| Max Consecutive Losses  | 15             | 15             | 0            | 1              |
|                         |                |                |              |                |
| Maximum Drawdown        | (\$111,747.97) | (\$111,747.97) | \$0.00       | (\$102,404.15) |
| Maximum Drawdown Date   | 3/11/2009      | 3/11/2009      | 12/2/1991    | 3/9/2009       |
| Maximum Drawdown %      | -84.78%        | -84.78%        | 0.00%        | -69.24%        |
| Maximum Drawdown % Date | 3/11/2009      | 3/11/2009      | 4/24/2010    | 3/9/2009       |
|                         |                |                |              |                |
| Wealth-Lab Score        | -24.01         | -24.01         | 0            | -0.32          |
| Sharpe Ratio            | -0.33          | -0.33          | 0            | 0              |
| Profit Factor           | 0.78           | 0.78           | 0            | 0              |
| Recovery Factor         | 0              | 0              | Infinity     | 0              |
| Payoff Ratio            | 2.05           | 2.05           | 0            | 0              |

## 8.2.3.13.2 Weekly

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$523,283.80   | \$523,283.80   | \$205,617.00 | \$97,896.19    |
| Net Profit              | \$423,283.80   | \$423,283.80   | \$105,617.00 | (\$2,103.81)   |
| Net Profit %            | 423.28%        | 423.28%        | 105.62%      | -2.10%         |
| Annualized Gain %       | 9.42%          | 9.42%          | 4.00%        | -0.12%         |
| Exposure                | 53.99%         | 53.99%         | 0.00%        | 97.17%         |
| Total Commission        | (\$1,080.00)   | (\$1,080.00)   | \$0.00       | (\$8.00)       |
| Return on Cash          | \$68,898.68    | \$68,898.68    | \$105,617.00 | \$4,860.87     |
| Margin Interest Paid    | (\$0.74)       | (\$0.74)       | \$0.00       | (\$5,841.72)   |
| Dividends Received      | \$71,784.03    | \$71,784.03    | \$0.00       | \$38,169.28    |
| Number of Trades        | 68             | 68             | 0            | 1              |
| Average Profit          | \$6,224.76     | \$6,224.76     | \$0.00       | (\$2,103.81)   |
| Average Profit %        | 2.75%          | 2.75%          | 0.00%        | -37.30%        |
| Average Bars Held       | 8.54           | 8.54           | 0            | 958            |
| Winning Trades          | 28             | 28             | 0            | 0              |
| Win Rate                | 41.18%         | 41.18%         | 0.00%        | 0.00%          |
| Gross Profit            | \$867,244.05   | \$867,244.05   | \$0.00       | \$0.00         |
| Average Profit          | \$30,973.00    | \$30,973.00    | \$0.00       | \$0.00         |
| Average Profit %        | 15.47%         | 15.47%         | 0.00%        | 0.00%          |
| Average Bars Held       | 13.96          | 13.96          | 0            | 0              |
| Max Consecutive Winners | 3              | 3              | 0            | 0              |
| Losing Trades           | 40             | 40             | 0            | 1              |
| Loss Rate               | 58.82%         | 58.82%         | 0.00%        | 100.00%        |
| Gross Loss              | (\$584,642.21) | (\$584,642.21) | \$0.00       | (\$39,292.24)  |
| Average Loss            | (\$14,616.06)  | (\$14,616.06)  | \$0.00       | (\$39,292.24)  |
| Average Loss %          | -6.15%         | -6.15%         | 0.00%        | -37.30%        |
| Average Bars Held       | 4.75           | 4.75           | 0            | 958            |
| Max Consecutive Losses  | 5              | 5              | 0            | 1              |
| Maximum Drawdown        | (\$276,512.70) | (\$276,512.70) | \$0.00       | (\$103,895.90) |
| Maximum Drawdown Date   | 12/5/2008      | 12/5/2008      | 12/6/1991    | 3/6/2009       |
| Maximum Drawdown %      | -60.53%        | -60.53%        | 0.00%        | -69.15%        |
| Maximum Drawdown % Date | 12/5/2008      | 12/5/2008      | 4/24/2010    | 3/6/2009       |
| Wealth-Lab Score        | 6.89           | 6.89           | 0            | -0.2           |
| Sharpe Ratio            | 0.32           | 0.32           | 0            | 0              |
| Profit Factor           | 1.48           | 1.48           | 0            | 0              |
| Recovery Factor         | 1.53           | 1.53           | Infinity     | 0              |
| Payoff Ratio            | 2.52           | 2.52           | 0            | 0              |

## 8.2.3.13.3 Monthly

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold    |
|-------------------------|----------------|----------------|--------------|---------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00  |
| Ending Capital          | \$157,041.54   | \$157,041.54   | \$205,065.76 | \$91,471.75   |
| Net Profit              | \$57,041.54    | \$57,041.54    | \$105,065.76 | (\$8,528.25)  |
| Net Profit %            | 57.04%         | 57.04%         | 105.07%      | -8.53%        |
| Annualized Gain %       | 2.50%          | 2.50%          | 4.00%        | -0.49%        |
| Exposure                | 48.38%         | 48.38%         | 0.00%        | 95.30%        |
| Total Commission        | (\$328.00)     | (\$328.00)     | \$0.00       | (\$8.00)      |
| Return on Cash          | \$40,554.47    | \$40,554.47    | \$105,065.76 | \$4,968.58    |
| Margin Interest Paid    | (\$0.46)       | (\$0.46)       | \$0.00       | (\$4,521.96)  |
| Dividends Received      | \$28,936.51    | \$28,936.51    | \$0.00       | \$34,913.82   |
| Number of Trades        | 21             | 21             | 0            | 1             |
| Average Profit          | \$2,716.26     | \$2,716.26     | \$0.00       | (\$8,528.25)  |
| Average Profit %        | 1.86%          | 1.86%          | 0.00%        | -42.08%       |
| Average Bars Held       | 6              | 6              | 0            | 220           |
| Winning Trades          | 8              | 8              | 0            | 0             |
| Win Rate                | 38.10%         | 38.10%         | 0.00%        | 0.00%         |
| Gross Profit            | \$154,598.39   | \$154,598.39   | \$0.00       | \$0.00        |
| Average Profit          | \$19,324.80    | \$19,324.80    | \$0.00       | \$0.00        |
| Average Profit %        | 20.91%         | 20.91%         | 0.00%        | 0.00%         |
| Average Bars Held       | 9.88           | 9.88           | 0            | 0             |
| Max Consecutive Winners | 3              | 3              | 0            | 0             |
| Losing Trades           | 13             | 13             | 0            | 1             |
| Loss Rate               | 61.90%         | 61.90%         | 0.00%        | 100.00%       |
| Gross Loss              | (\$167,047.37) | (\$167,047.37) | \$0.00       | (\$43,888.69) |
| Average Loss            | (\$12,849.80)  | (\$12,849.80)  | \$0.00       | (\$43,888.69) |
| Average Loss %          | -9.87%         | -9.87%         | 0.00%        | -42.08%       |
| Average Bars Held       | 3.62           | 3.62           | 0            | 220           |
| Max Consecutive Losses  | 3              | 3              | 0            | 1             |
| Maximum Drawdown        | (\$144,899.01) | (\$144,899.01) | \$0.00       | (\$88,965.60) |
| Maximum Drawdown Date   | 6/30/2009      | 6/30/2009      | 12/31/1991   | 2/27/2009     |
| Maximum Drawdown %      | -62.74%        | -62.74%        | 0.00%        | -65.18%       |
| Maximum Drawdown % Date | 6/30/2009      | 6/30/2009      | 4/24/2010    | 2/27/2009     |
| Wealth-Lab Score        | 1.92           | 1.92           | 0            | -0.84         |
| Sharpe Ratio            | 0.04           | 0.04           | 0            | -0.02         |
| Profit Factor           | 0.93           | 0.93           | 0            | 0             |
| Recovery Factor         | 0.39           | 0.39           | Infinity     | 0             |
| Payoff Ratio            | 2.12           | 2.12           | 0            | 0             |



### 8.2.3.14 DOX

#### 8.2.3.14.1 Daily

|                         | All Trades       | Long Trades      | Short Trades | Buy & Hold     |
|-------------------------|------------------|------------------|--------------|----------------|
| Starting Capital        | \$100,000.00     | \$100,000.00     | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$372,316.45     | \$372,316.45     | \$159,126.27 | \$222,773.26   |
| Net Profit              | \$272,316.45     | \$272,316.45     | \$59,126.27  | \$122,773.26   |
| Net Profit %            | 272.32%          | 272.32%          | 59.13%       | 122.77%        |
| Annualized Gain %       | 11.74%           | 11.74%           | 4.00%        | 7.00%          |
| Exposure                | 48.35%           | 48.35%           | 0.00%        | 103.99%        |
| Total Commission        | (\$4,152.00)     | (\$4,152.00)     | \$0.00       | (\$8.00)       |
| Return on Cash          | \$120,036.05     | \$120,036.05     | \$59,126.27  | \$0.00         |
| Margin Interest Paid    | (\$0.65)         | (\$0.65)         | \$0.00       | (\$8,149.99)   |
| Dividends Received      | \$0.00           | \$0.00           | \$0.00       | \$0.00         |
|                         |                  |                  |              |                |
| Number of Trades        | 260              | 260              | 0            | 1              |
| Average Profit          | \$1,047.37       | \$1,047.37       | \$0.00       | \$122,773.26   |
| Average Profit %        | 0.70%            | 0.70%            | 0.00%        | 124.13%        |
| Average Bars Held       | 6.59             | 6.59             | 0            | 2,979.00       |
|                         |                  |                  |              |                |
| Winning Trades          | 82               | 82               | 0            | 1              |
| Win Rate                | 31.54%           | 31.54%           | 0.00%        | 100.00%        |
| Gross Profit            | \$2,583,450.54   | \$2,583,450.54   | \$0.00       | \$130,923.25   |
| Average Profit          | \$31,505.49      | \$31,505.49      | \$0.00       | \$130,923.25   |
| Average Profit %        | 8.65%            | 8.65%            | 0.00%        | 124.13%        |
| Average Bars Held       | 11.55            | 11.55            | 0            | 2,979.00       |
| Max Consecutive Winners | 4                | 4                | 0            | 1              |
|                         |                  |                  |              |                |
| Losing Trades           | 178              | 178              | 0            | 0              |
| Loss Rate               | 68.46%           | 68.46%           | 0.00%        | 0.00%          |
| Gross Loss              | (\$2,431,169.49) | (\$2,431,169.49) | \$0.00       | \$0.00         |
| Average Loss            | (\$13,658.26)    | (\$13,658.26)    | \$0.00       | \$0.00         |
| Average Loss %          | -2.96%           | -2.96%           | 0.00%        | 0.00%          |
| Average Bars Held       | 4.3              | 4.3              | 0            | 0              |
| Max Consecutive Losses  | 11               | 11               | 0            | 0              |
|                         |                  |                  |              |                |
| Maximum Drawdown        | (\$623,411.06)   | (\$623,411.06)   | \$0.00       | (\$629,854.39) |
| Maximum Drawdown Date   | 12/5/2008        | 12/5/2008        | 6/19/1998    | 10/7/2002      |
| Maximum Drawdown %      | -67.22%          | -67.22%          | 0.00%        | -94.45%        |
| Maximum Drawdown % Date | 12/5/2008        | 12/5/2008        | 4/24/2010    | 10/7/2002      |
|                         |                  |                  |              |                |
| Wealth-Lab Score        | 7.96             | 7.96             | 0            | 0.37           |
| Sharpe Ratio            | 0.36             | 0.36             | 0            | 0.34           |
| Profit Factor           | 1.06             | 1.06             | 0            | Infinity       |
| Recovery Factor         | 0.44             | 0.44             | Infinity     | 0.19           |
| Payoff Ratio            | 2.92             | 2.92             | 0            | 0              |

## 8.2.3.14.2 Weekly

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$526,585.34   | \$526,585.34   | \$159,126.27 | \$222,773.26   |
| Net Profit              | \$426,585.34   | \$426,585.34   | \$59,126.27  | \$122,773.26   |
| Net Profit %            | 426.59%        | 426.59%        | 59.13%       | 122.77%        |
| Annualized Gain %       | 15.06%         | 15.06%         | 4.00%        | 7.00%          |
| Exposure                | 51.36%         | 51.36%         | 0.00%        | 103.93%        |
| Total Commission        | (\$824.00)     | (\$824.00)     | \$0.00       | (\$8.00)       |
| Return on Cash          | \$89,993.98    | \$89,993.98    | \$59,126.27  | \$0.00         |
| Margin Interest Paid    | (\$0.51)       | (\$0.51)       | \$0.00       | (\$8,149.99)   |
| Dividends Received      | \$0.00         | \$0.00         | \$0.00       | \$0.00         |
| Number of Trades        | 52             | 52             | 0            | 1              |
| Average Profit          | \$8,203.56     | \$8,203.56     | \$0.00       | \$122,773.26   |
| Average Profit %        | 5.97%          | 5.97%          | 0.00%        | 124.13%        |
| Average Bars Held       | 7.08           | 7.08           | 0            | 617            |
| Winning Trades          | 21             | 21             | 0            | 1              |
| Win Rate                | 40.38%         | 40.38%         | 0.00%        | 100.00%        |
| Gross Profit            | \$1,048,500.22 | \$1,048,500.22 | \$0.00       | \$130,923.25   |
| Average Profit          | \$49,928.58    | \$49,928.58    | \$0.00       | \$130,923.25   |
| Average Profit %        | 24.04%         | 24.04%         | 0.00%        | 124.13%        |
| Average Bars Held       | 12.29          | 12.29          | 0            | 617            |
| Max Consecutive Winners | 3              | 3              | 0            | 1              |
| Losing Trades           | 31             | 31             | 0            | 0              |
| Loss Rate               | 59.62%         | 59.62%         | 0.00%        | 0.00%          |
| Gross Loss              | (\$711,908.35) | (\$711,908.35) | \$0.00       | \$0.00         |
| Average Loss            | (\$22,964.79)  | (\$22,964.79)  | \$0.00       | \$0.00         |
| Average Loss %          | -6.27%         | -6.27%         | 0.00%        | 0.00%          |
| Average Bars Held       | 3.55           | 3.55           | 0            | 0              |
| Max Consecutive Losses  | 8              | 8              | 0            | 0              |
| Maximum Drawdown        | (\$313,141.67) | (\$313,141.67) | \$0.00       | (\$627,298.25) |
| Maximum Drawdown Date   | 3/20/2009      | 3/20/2009      | 6/19/1998    | 10/4/2002      |
| Maximum Drawdown %      | -65.28%        | -65.28%        | 0.00%        | -94.07%        |
| Maximum Drawdown % Date | 10/4/2002      | 10/4/2002      | 4/24/2010    | 10/4/2002      |
| Wealth-Lab Score        | 10.18          | 10.18          | 0            | 0.4            |
| Sharpe Ratio            | 0.44           | 0.44           | 0            | 0.33           |
| Profit Factor           | 1.47           | 1.47           | 0            | Infinity       |
| Recovery Factor         | 1.36           | 1.36           | Infinity     | 0.2            |
| Payoff Ratio            | 3.83           | 3.83           | 0            | 0              |

## 8.2.3.14.3 Monthly

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$683,534.44   | \$683,534.44   | \$158,938.43 | \$204,231.78   |
| Net Profit              | \$583,534.44   | \$583,534.44   | \$58,938.43  | \$104,231.78   |
| Net Profit %            | 583.53%        | 583.53%        | 58.94%       | 104.23%        |
| Annualized Gain %       | 17.67%         | 17.67%         | 4.00%        | 6.23%          |
| Exposure                | 53.56%         | 53.56%         | 0.00%        | 104.31%        |
| Total Commission        | (\$136.00)     | (\$136.00)     | \$0.00       | (\$8.00)       |
| Return on Cash          | \$69,456.29    | \$69,456.29    | \$58,938.43  | \$0.00         |
| Margin Interest Paid    | (\$1.19)       | (\$1.19)       | \$0.00       | (\$8,706.56)   |
| Dividends Received      | \$0.00         | \$0.00         | \$0.00       | \$0.00         |
| Number of Trades        | 9              | 9              | 0            | 1              |
| Average Profit          | \$64,837.16    | \$64,837.16    | \$0.00       | \$104,231.78   |
| Average Profit %        | 28.83%         | 28.83%         | 0.00%        | 106.68%        |
| Average Bars Held       | 8.78           | 8.78           | 0            | 142            |
| Winning Trades          | 5              | 5              | 0            | 1              |
| Win Rate                | 55.56%         | 55.56%         | 0.00%        | 100.00%        |
| Gross Profit            | \$619,861.38   | \$619,861.38   | \$0.00       | \$112,938.34   |
| Average Profit          | \$123,972.28   | \$123,972.28   | \$0.00       | \$112,938.34   |
| Average Profit %        | 60.78%         | 60.78%         | 0.00%        | 106.68%        |
| Average Bars Held       | 12.6           | 12.6           | 0            | 142            |
| Max Consecutive Winners | 2              | 2              | 0            | 1              |
| Losing Trades           | 4              | 4              | 0            | 0              |
| Loss Rate               | 44.44%         | 44.44%         | 0.00%        | 0.00%          |
| Gross Loss              | (\$105,782.05) | (\$105,782.05) | \$0.00       | \$0.00         |
| Average Loss            | (\$26,445.51)  | (\$26,445.51)  | \$0.00       | \$0.00         |
| Average Loss %          | -11.10%        | -11.10%        | 0.00%        | 0.00%          |
| Average Bars Held       | 4              | 4              | 0            | 0              |
| Max Consecutive Losses  | 1              | 1              | 0            | 0              |
| Maximum Drawdown        | (\$91,280.79)  | (\$91,280.79)  | \$0.00       | (\$500,177.36) |
| Maximum Drawdown Date   | 12/31/2002     | 12/31/2002     | 6/30/1998    | 9/30/2002      |
| Maximum Drawdown %      | -37.52%        | -37.52%        | 0.00%        | -93.24%        |
| Maximum Drawdown % Date | 12/31/2002     | 12/31/2002     | 4/24/2010    | 9/30/2002      |
| Wealth-Lab Score        | 20.61          | 20.61          | 0            | 0.4            |
| Sharpe Ratio            | 0.51           | 0.51           | 0            | 0.33           |
| Profit Factor           | 5.86           | 5.86           | 0            | Infinity       |
| Recovery Factor         | 6.39           | 6.39           | Infinity     | 0.21           |
| Payoff Ratio            | 5.48           | 5.48           | 0            | 0              |

### 8.2.3.15 GD

#### 8.2.3.15.1 Daily

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$137,739.37   | \$137,739.37   | \$205,705.34 | \$1,520,717.90 |
| Net Profit              | \$37,739.37    | \$37,739.37    | \$105,705.34 | \$1,420,717.90 |
| Net Profit %            | 37.74%         | 37.74%         | 105.71%      | 1420.72%       |
| Annualized Gain %       | 1.76%          | 1.76%          | 4.00%        | 15.95%         |
| Exposure                | 50.81%         | 50.81%         | 0.00%        | 95.89%         |
| Total Commission        | (\$6,872.00)   | (\$6,872.00)   | \$0.00       | (\$8.00)       |
| Return on Cash          | \$42,561.85    | \$42,561.85    | \$105,705.34 | \$22,463.37    |
| Margin Interest Paid    | (\$1.00)       | (\$1.00)       | \$0.00       | (\$4,737.20)   |
| Dividends Received      | \$9,648.82     | \$9,648.82     | \$0.00       | \$156,908.18   |
|                         |                |                |              |                |
| Number of Trades        | 430            | 430            | 0            | 1              |
| Average Profit          | \$87.77        | \$87.77        | \$0.00       | \$1,420,717.90 |
| Average Profit %        | 0.06%          | 0.06%          | 0.00%        | 1189.83%       |
| Average Bars Held       | 6.48           | 6.48           | 0            | 4,634.00       |
|                         |                |                |              |                |
| Winning Trades          | 143            | 143            | 0            | 1              |
| Win Rate                | 33.26%         | 33.26%         | 0.00%        | 100.00%        |
| Gross Profit            | \$604,212.56   | \$604,212.56   | \$0.00       | \$1,246,083.55 |
| Average Profit          | \$4,225.26     | \$4,225.26     | \$0.00       | \$1,246,083.55 |
| Average Profit %        | 3.76%          | 3.76%          | 0.00%        | 1189.83%       |
| Average Bars Held       | 10.86          | 10.86          | 0            | 4,634.00       |
| Max Consecutive Winners | 4              | 4              | 0            | 1              |
|                         |                |                |              |                |
| Losing Trades           | 287            | 287            | 0            | 0              |
| Loss Rate               | 66.74%         | 66.74%         | 0.00%        | 0.00%          |
| Gross Loss              | (\$618,682.86) | (\$618,682.86) | \$0.00       | \$0.00         |
| Average Loss            | (\$2,155.69)   | (\$2,155.69)   | \$0.00       | \$0.00         |
| Average Loss %          | -1.79%         | -1.79%         | 0.00%        | 0.00%          |
| Average Bars Held       | 4.29           | 4.29           | 0            | 0              |
| Max Consecutive Losses  | 21             | 21             | 0            | 0              |
|                         |                |                |              |                |
| Maximum Drawdown        | (\$106,155.49) | (\$106,155.49) | \$0.00       | (\$980,976.43) |
| Maximum Drawdown Date   | 12/4/2008      | 12/4/2008      | 12/2/1991    | 3/9/2009       |
| Maximum Drawdown %      | -58.43%        | -58.43%        | 0.00%        | -56.54%        |
| Maximum Drawdown % Date | 12/4/2008      | 12/4/2008      | 4/24/2010    | 3/9/2009       |
|                         |                |                |              |                |
| Wealth-Lab Score        | 1.44           | 1.44           | 0            | 7.23           |
| Sharpe Ratio            | -0.03          | -0.03          | 0            | 0.57           |
| Profit Factor           | 0.98           | 0.98           | 0            | Infinity       |
| Recovery Factor         | 0.36           | 0.36           | Infinity     | 1.45           |
| Payoff Ratio            | 2.1            | 2.1            | 0            | 0              |

## 8.2.3.15.2 Weekly

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$396,859.61   | \$396,859.61   | \$205,617.00 | \$1,482,424.57 |
| Net Profit              | \$296,859.61   | \$296,859.61   | \$105,617.00 | \$1,382,424.57 |
| Net Profit %            | 296.86%        | 296.86%        | 105.62%      | 1382.42%       |
| Annualized Gain %       | 7.79%          | 7.79%          | 4.00%        | 15.80%         |
| Exposure                | 53.25%         | 53.25%         | 0.00%        | 96.27%         |
| Total Commission        | (\$1,624.00)   | (\$1,624.00)   | \$0.00       | (\$8.00)       |
| Return on Cash          | \$71,011.35    | \$71,011.35    | \$105,617.00 | \$20,808.76    |
| Margin Interest Paid    | (\$0.96)       | (\$0.96)       | \$0.00       | (\$6,190.20)   |
| Dividends Received      | \$27,672.76    | \$27,672.76    | \$0.00       | \$153,384.00   |
|                         |                |                |              |                |
| Number of Trades        | 102            | 102            | 0            | 1              |
| Average Profit          | \$2,910.39     | \$2,910.39     | \$0.00       | \$1,382,424.57 |
| Average Profit %        | 1.16%          | 1.16%          | 0.00%        | 1145.14%       |
| Average Bars Held       | 5.89           | 5.89           | 0            | 958            |
|                         |                |                |              |                |
| Winning Trades          | 38             | 38             | 0            | 1              |
| Win Rate                | 37.25%         | 37.25%         | 0.00%        | 100.00%        |
| Gross Profit            | \$578,890.32   | \$578,890.32   | \$0.00       | \$1,214,422.00 |
| Average Profit          | \$15,233.96    | \$15,233.96    | \$0.00       | \$1,214,422.00 |
| Average Profit %        | 7.89%          | 7.89%          | 0.00%        | 1145.14%       |
| Average Bars Held       | 9.71           | 9.71           | 0            | 958            |
| Max Consecutive Winners | 3              | 3              | 0            | 1              |
|                         |                |                |              |                |
| Losing Trades           | 64             | 64             | 0            | 0              |
| Loss Rate               | 62.75%         | 62.75%         | 0.00%        | 0.00%          |
| Gross Loss              | (\$380,713.87) | (\$380,713.87) | \$0.00       | \$0.00         |
| Average Loss            | (\$5,948.65)   | (\$5,948.65)   | \$0.00       | \$0.00         |
| Average Loss %          | -2.84%         | -2.84%         | 0.00%        | 0.00%          |
| Average Bars Held       | 3.63           | 3.63           | 0            | 0              |
| Max Consecutive Losses  | 12             | 12             | 0            | 0              |
|                         |                |                |              |                |
| Maximum Drawdown        | (\$54,012.03)  | (\$54,012.03)  | \$0.00       | (\$941,965.41) |
| Maximum Drawdown Date   | 1/17/2003      | 1/17/2003      | 12/6/1991    | 3/6/2009       |
| Maximum Drawdown %      | -29.51%        | -29.51%        | 0.00%        | -56.13%        |
| Maximum Drawdown % Date | 7/22/1994      | 7/22/1994      | 4/24/2010    | 3/6/2009       |
|                         |                |                |              |                |
| Wealth-Lab Score        | 10.31          | 10.31          | 0            | 7.2            |
| Sharpe Ratio            | 0.29           | 0.29           | 0            | 0.57           |
| Profit Factor           | 1.52           | 1.52           | 0            | Infinity       |
| Recovery Factor         | 5.5            | 5.5            | Infinity     | 1.47           |
| Payoff Ratio            | 2.78           | 2.78           | 0            | 0              |

## 8.2.3.15.3 Monthly

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$661,081.96   | \$661,081.96   | \$205,065.76 | \$1,380,993.73 |
| Net Profit              | \$561,081.96   | \$561,081.96   | \$105,065.76 | \$1,280,993.73 |
| Net Profit %            | 561.08%        | 561.08%        | 105.07%      | 1280.99%       |
| Annualized Gain %       | 10.87%         | 10.87%         | 4.00%        | 15.42%         |
| Exposure                | 62.90%         | 62.90%         | 0.00%        | 95.97%         |
| Total Commission        | (\$296.00)     | (\$296.00)     | \$0.00       | (\$8.00)       |
| Return on Cash          | \$83,746.99    | \$83,746.99    | \$105,065.76 | \$20,021.63    |
| Margin Interest Paid    | (\$0.71)       | (\$0.71)       | \$0.00       | (\$4,981.92)   |
| Dividends Received      | \$44,161.34    | \$44,161.34    | \$0.00       | \$142,674.51   |
| Number of Trades        | 19             | 19             | 0            | 1              |
| Average Profit          | \$29,530.63    | \$29,530.63    | \$0.00       | \$1,280,993.73 |
| Average Profit %        | 9.98%          | 9.98%          | 0.00%        | 1069.84%       |
| Average Bars Held       | 7.84           | 7.84           | 0            | 220            |
| Winning Trades          | 12             | 12             | 0            | 1              |
| Win Rate                | 63.16%         | 63.16%         | 0.00%        | 100.00%        |
| Gross Profit            | \$681,252.96   | \$681,252.96   | \$0.00       | \$1,123,279.51 |
| Average Profit          | \$56,771.08    | \$56,771.08    | \$0.00       | \$1,123,279.51 |
| Average Profit %        | 20.91%         | 20.91%         | 0.00%        | 1069.84%       |
| Average Bars Held       | 10.42          | 10.42          | 0            | 220            |
| Max Consecutive Winners | 3              | 3              | 0            | 1              |
| Losing Trades           | 7              | 7              | 0            | 0              |
| Loss Rate               | 36.84%         | 36.84%         | 0.00%        | 0.00%          |
| Gross Loss              | (\$248,078.61) | (\$248,078.61) | \$0.00       | \$0.00         |
| Average Loss            | (\$35,439.80)  | (\$35,439.80)  | \$0.00       | \$0.00         |
| Average Loss %          | -8.76%         | -8.76%         | 0.00%        | 0.00%          |
| Average Bars Held       | 3.43           | 3.43           | 0            | 0              |
| Max Consecutive Losses  | 2              | 2              | 0            | 0              |
| Maximum Drawdown        | (\$190,357.38) | (\$190,357.38) | \$0.00       | (\$778,945.31) |
| Maximum Drawdown Date   | 9/30/2008      | 9/30/2008      | 12/31/1991   | 3/31/2009      |
| Maximum Drawdown %      | -29.34%        | -29.34%        | 0.00%        | -50.40%        |
| Maximum Drawdown % Date | 9/30/2008      | 9/30/2008      | 4/24/2010    | 3/31/2009      |
| Wealth-Lab Score        | 12.21          | 12.21          | 0            | 7.97           |
| Sharpe Ratio            | 0.46           | 0.46           | 0            | 0.55           |
| Profit Factor           | 2.75           | 2.75           | 0            | Infinity       |
| Recovery Factor         | 2.95           | 2.95           | Infinity     | 1.64           |
| Payoff Ratio            | 2.39           | 2.39           | 0            | 0              |

### 8.2.3.16 GLF

#### 8.2.3.16.1 Daily

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold       |
|-------------------------|----------------|----------------|--------------|------------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00     |
| Ending Capital          | \$16,980.77    | \$16,980.77    | \$205,705.34 | \$912,494.25     |
| Net Profit              | (\$83,019.23)  | (\$83,019.23)  | \$105,705.34 | \$812,494.25     |
| Net Profit %            | -83.02%        | -83.02%        | 105.71%      | 812.49%          |
| Annualized Gain %       | -9.19%         | -9.19%         | 4.00%        | 12.78%           |
| Exposure                | 48.41%         | 48.41%         | 0.00%        | 101.88%          |
| Total Commission        | (\$6,456.00)   | (\$6,456.00)   | \$0.00       | (\$8.00)         |
| Return on Cash          | \$14,329.19    | \$14,329.19    | \$105,705.34 | \$0.00           |
| Margin Interest Paid    | (\$2.09)       | (\$2.09)       | \$0.00       | (\$12,848.16)    |
| Dividends Received      | \$0.00         | \$0.00         | \$0.00       | \$0.00           |
|                         |                |                |              |                  |
| Number of Trades        | 404            | 404            | 0            | 1                |
| Average Profit          | (\$205.49)     | (\$205.49)     | \$0.00       | \$812,494.25     |
| Average Profit %        | -0.17%         | -0.17%         | 0.00%        | 792.74%          |
| Average Bars Held       | 6.61           | 6.61           | 0            | 4,630.00         |
|                         |                |                |              |                  |
| Winning Trades          | 117            | 117            | 0            | 1                |
| Win Rate                | 28.96%         | 28.96%         | 0.00%        | 100.00%          |
| Gross Profit            | \$270,195.63   | \$270,195.63   | \$0.00       | \$825,342.41     |
| Average Profit          | \$2,309.36     | \$2,309.36     | \$0.00       | \$825,342.41     |
| Average Profit %        | 8.45%          | 8.45%          | 0.00%        | 792.74%          |
| Average Bars Held       | 11.97          | 11.97          | 0            | 4,630.00         |
| Max Consecutive Winners | 3              | 3              | 0            | 1                |
|                         |                |                |              |                  |
| Losing Trades           | 287            | 287            | 0            | 0                |
| Loss Rate               | 71.04%         | 71.04%         | 0.00%        | 0.00%            |
| Gross Loss              | (\$367,541.97) | (\$367,541.97) | \$0.00       | \$0.00           |
| Average Loss            | (\$1,280.63)   | (\$1,280.63)   | \$0.00       | \$0.00           |
| Average Loss %          | -3.69%         | -3.69%         | 0.00%        | 0.00%            |
| Average Bars Held       | 4.43           | 4.43           | 0            | 0                |
| Max Consecutive Losses  | 24             | 24             | 0            | 0                |
|                         |                |                |              |                  |
| Maximum Drawdown        | (\$97,065.13)  | (\$97,065.13)  | \$0.00       | (\$1,465,649.98) |
| Maximum Drawdown Date   | 5/28/2009      | 5/28/2009      | 12/2/1991    | 3/9/2009         |
| Maximum Drawdown %      | -90.49%        | -90.49%        | 0.00%        | -77.07%          |
| Maximum Drawdown % Date | 5/28/2009      | 5/28/2009      | 4/24/2010    | 3/9/2009         |
|                         |                |                |              |                  |
| Wealth-Lab Score        | -36.16         | -36.16         | 0            | 2.88             |
| Sharpe Ratio            | -0.18          | -0.18          | 0            | 0.41             |
| Profit Factor           | 0.74           | 0.74           | 0            | Infinity         |
| Recovery Factor         | 0              | 0              | Infinity     | 0.55             |
| Payoff Ratio            | 2.29           | 2.29           | 0            | 0                |

## 8.2.3.16.2 Weekly

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold       |
|-------------------------|----------------|----------------|--------------|------------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00     |
| Ending Capital          | \$20,907.80    | \$20,907.80    | \$205,617.00 | \$935,868.23     |
| Net Profit              | (\$79,092.20)  | (\$79,092.20)  | \$105,617.00 | \$835,868.23     |
| Net Profit %            | -79.09%        | -79.09%        | 105.62%      | 835.87%          |
| Annualized Gain %       | -8.16%         | -8.16%         | 4.00%        | 12.94%           |
| Exposure                | 53.09%         | 53.09%         | 0.00%        | 101.01%          |
| Total Commission        | (\$1,416.00)   | (\$1,416.00)   | \$0.00       | (\$8.00)         |
| Return on Cash          | \$26,861.55    | \$26,861.55    | \$105,617.00 | \$0.00           |
| Margin Interest Paid    | (\$2.05)       | (\$2.05)       | \$0.00       | (\$7,212.45)     |
| Dividends Received      | \$0.00         | \$0.00         | \$0.00       | \$0.00           |
| Number of Trades        | 89             | 89             | 0            | 1                |
| Average Profit          | (\$888.68)     | (\$888.68)     | \$0.00       | \$835,868.23     |
| Average Profit %        | -0.63%         | -0.63%         | 0.00%        | 824.06%          |
| Average Bars Held       | 6.73           | 6.73           | 0            | 958              |
| Winning Trades          | 31             | 31             | 0            | 1                |
| Win Rate                | 34.83%         | 34.83%         | 0.00%        | 100.00%          |
| Gross Profit            | \$363,758.15   | \$363,758.15   | \$0.00       | \$843,080.69     |
| Average Profit          | \$11,734.13    | \$11,734.13    | \$0.00       | \$843,080.69     |
| Average Profit %        | 16.11%         | 16.11%         | 0.00%        | 824.06%          |
| Average Bars Held       | 11.52          | 11.52          | 0            | 958              |
| Max Consecutive Winners | 3              | 3              | 0            | 1                |
| Losing Trades           | 58             | 58             | 0            | 0                |
| Loss Rate               | 65.17%         | 65.17%         | 0.00%        | 0.00%            |
| Gross Loss              | (\$469,709.84) | (\$469,709.84) | \$0.00       | \$0.00           |
| Average Loss            | (\$8,098.45)   | (\$8,098.45)   | \$0.00       | \$0.00           |
| Average Loss %          | -9.59%         | -9.59%         | 0.00%        | 0.00%            |
| Average Bars Held       | 4.17           | 4.17           | 0            | 0                |
| Max Consecutive Losses  | 7              | 7              | 0            | 0                |
| Maximum Drawdown        | (\$284,924.83) | (\$284,924.83) | \$0.00       | (\$1,470,562.66) |
| Maximum Drawdown Date   | 3/26/2010      | 3/26/2010      | 12/6/1991    | 3/6/2009         |
| Maximum Drawdown %      | -94.41%        | -94.41%        | 0.00%        | -76.16%          |
| Maximum Drawdown % Date | 3/26/2010      | 3/26/2010      | 4/24/2010    | 3/6/2009         |
| Wealth-Lab Score        | -29.89         | -29.89         | 0            | 3.05             |
| Sharpe Ratio            | -0.15          | -0.15          | 0            | 0.41             |
| Profit Factor           | 0.77           | 0.77           | 0            | Infinity         |
| Recovery Factor         | 0              | 0              | Infinity     | 0.57             |
| Payoff Ratio            | 1.68           | 1.68           | 0            | 0                |



## 8.2.3.16.3 Monthly

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold       |
|-------------------------|----------------|----------------|--------------|------------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00     |
| Ending Capital          | \$287,075.46   | \$287,075.46   | \$205,065.76 | \$1,010,934.24   |
| Net Profit              | \$187,075.46   | \$187,075.46   | \$105,065.76 | \$910,934.24     |
| Net Profit %            | 187.08%        | 187.08%        | 105.07%      | 910.93%          |
| Annualized Gain %       | 5.93%          | 5.93%          | 4.00%        | 13.47%           |
| Exposure                | 55.34%         | 55.34%         | 0.00%        | 99.21%           |
| Total Commission        | (\$328.00)     | (\$328.00)     | \$0.00       | (\$8.00)         |
| Return on Cash          | \$72,855.28    | \$72,855.28    | \$105,065.76 | \$2,763.03       |
| Margin Interest Paid    | (\$3.06)       | (\$3.06)       | \$0.00       | \$0.00           |
| Dividends Received      | \$0.00         | \$0.00         | \$0.00       | \$0.00           |
|                         |                |                |              |                  |
| Number of Trades        | 21             | 21             | 0            | 1                |
| Average Profit          | \$8,908.36     | \$8,908.36     | \$0.00       | \$910,934.24     |
| Average Profit %        | 7.92%          | 7.92%          | 0.00%        | 932.78%          |
| Average Bars Held       | 6.57           | 6.57           | 0            | 220              |
|                         |                |                |              |                  |
| Winning Trades          | 9              | 9              | 0            | 1                |
| Win Rate                | 42.86%         | 42.86%         | 0.00%        | 100.00%          |
| Gross Profit            | \$453,923.20   | \$453,923.20   | \$0.00       | \$908,171.21     |
| Average Profit          | \$50,435.91    | \$50,435.91    | \$0.00       | \$908,171.21     |
| Average Profit %        | 34.71%         | 34.71%         | 0.00%        | 932.78%          |
| Average Bars Held       | 10.44          | 10.44          | 0            | 220              |
| Max Consecutive Winners | 2              | 2              | 0            | 1                |
|                         |                |                |              |                  |
| Losing Trades           | 12             | 12             | 0            | 0                |
| Loss Rate               | 57.14%         | 57.14%         | 0.00%        | 0.00%            |
| Gross Loss              | (\$339,699.96) | (\$339,699.96) | \$0.00       | \$0.00           |
| Average Loss            | (\$28,308.33)  | (\$28,308.33)  | \$0.00       | \$0.00           |
| Average Loss %          | -12.17%        | -12.17%        | 0.00%        | 0.00%            |
| Average Bars Held       | 3.67           | 3.67           | 0            | 0                |
| Max Consecutive Losses  | 4              | 4              | 0            | 0                |
|                         |                |                |              |                  |
| Maximum Drawdown        | (\$340,639.81) | (\$340,639.81) | \$0.00       | (\$1,412,251.87) |
| Maximum Drawdown Date   | 8/31/2004      | 8/31/2004      | 12/31/1991   | 2/27/2009        |
| Maximum Drawdown %      | -71.36%        | -71.36%        | 0.00%        | -68.71%          |
| Maximum Drawdown % Date | 8/31/2004      | 8/31/2004      | 4/24/2010    | 2/27/2009        |
|                         |                |                |              |                  |
| Wealth-Lab Score        | 3.07           | 3.07           | 0            | 4.25             |
| Sharpe Ratio            | 0.22           | 0.22           | 0            | 0.42             |
| Profit Factor           | 1.34           | 1.34           | 0            | Infinity         |
| Recovery Factor         | 0.55           | 0.55           | Infinity     | 0.65             |
| Payoff Ratio            | 2.85           | 2.85           | 0            | 0                |

### 8.2.3.17 GY

#### 8.2.3.17.1 Daily

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$55,979.52    | \$55,979.52    | \$205,705.34 | \$44,909.53    |
| Net Profit              | (\$44,020.48)  | (\$44,020.48)  | \$105,705.34 | (\$55,090.47)  |
| Net Profit %            | -44.02%        | -44.02%        | 105.71%      | -55.09%        |
| Annualized Gain %       | -3.11%         | -3.11%         | 4.00%        | -4.26%         |
| Exposure                | 49.99%         | 49.99%         | 0.00%        | 106.53%        |
| Total Commission        | (\$6,720.00)   | (\$6,720.00)   | \$0.00       | (\$8.00)       |
| Return on Cash          | \$30,140.86    | \$30,140.86    | \$105,705.34 | \$0.00         |
| Margin Interest Paid    | (\$1.86)       | (\$1.86)       | \$0.00       | (\$11,393.60)  |
| Dividends Received      | \$1,358.25     | \$1,358.25     | \$0.00       | \$4,924.05     |
|                         |                |                |              |                |
| Number of Trades        | 420            | 420            | 0            | 1              |
| Average Profit          | (\$104.81)     | (\$104.81)     | \$0.00       | (\$55,090.47)  |
| Average Profit %        | 0.06%          | 0.06%          | 0.00%        | -46.31%        |
| Average Bars Held       | 6.5            | 6.5            | 0            | 4,634.00       |
|                         |                |                |              |                |
| Winning Trades          | 115            | 115            | 0            | 0              |
| Win Rate                | 27.38%         | 27.38%         | 0.00%        | 0.00%          |
| Gross Profit            | \$638,115.16   | \$638,115.16   | \$0.00       | \$0.00         |
| Average Profit          | \$5,548.83     | \$5,548.83     | \$0.00       | \$0.00         |
| Average Profit %        | 8.01%          | 8.01%          | 0.00%        | 0.00%          |
| Average Bars Held       | 12.6           | 12.6           | 0            | 0              |
| Max Consecutive Winners | 6              | 6              | 0            | 0              |
|                         |                |                |              |                |
| Losing Trades           | 305            | 305            | 0            | 1              |
| Loss Rate               | 72.62%         | 72.62%         | 0.00%        | 100.00%        |
| Gross Loss              | (\$713,632.88) | (\$713,632.88) | \$0.00       | (\$48,620.93)  |
| Average Loss            | (\$2,339.78)   | (\$2,339.78)   | \$0.00       | (\$48,620.93)  |
| Average Loss %          | -2.94%         | -2.94%         | 0.00%        | -46.31%        |
| Average Bars Held       | 4.21           | 4.21           | 0            | 4,634.00       |
| Max Consecutive Losses  | 14             | 14             | 0            | 1              |
|                         |                |                |              |                |
| Maximum Drawdown        | (\$188,084.21) | (\$188,084.21) | \$0.00       | (\$284,763.96) |
| Maximum Drawdown Date   | 7/24/2009      | 7/24/2009      | 12/2/1991    | 7/6/2009       |
| Maximum Drawdown %      | -91.84%        | -91.84%        | 0.00%        | -97.61%        |
| Maximum Drawdown % Date | 7/24/2009      | 7/24/2009      | 4/24/2010    | 7/6/2009       |
|                         |                |                |              |                |
| Wealth-Lab Score        | -11.92         | -11.92         | 0            | -7.9           |
| Sharpe Ratio            | -0.05          | -0.05          | 0            | 0.12           |
| Profit Factor           | 0.89           | 0.89           | 0            | 0              |
| Recovery Factor         | 0              | 0              | Infinity     | 0              |
| Payoff Ratio            | 2.72           | 2.72           | 0            | 0              |

## 8.2.3.17.2 Weekly

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$271,027.97   | \$271,027.97   | \$205,617.00 | \$43,687.22    |
| Net Profit              | \$171,027.97   | \$171,027.97   | \$105,617.00 | (\$56,312.78)  |
| Net Profit %            | 171.03%        | 171.03%        | 105.62%      | -56.31%        |
| Annualized Gain %       | 5.57%          | 5.57%          | 4.00%        | -4.41%         |
| Exposure                | 50.46%         | 50.46%         | 0.00%        | 108.22%        |
| Total Commission        | (\$1,176.00)   | (\$1,176.00)   | \$0.00       | (\$8.00)       |
| Return on Cash          | \$80,141.92    | \$80,141.92    | \$105,617.00 | \$0.00         |
| Margin Interest Paid    | (\$1.89)       | (\$1.89)       | \$0.00       | (\$15,076.71)  |
| Dividends Received      | \$8,838.27     | \$8,838.27     | \$0.00       | \$5,223.93     |
|                         |                |                |              |                |
| Number of Trades        | 74             | 74             | 0            | 1              |
| Average Profit          | \$2,311.19     | \$2,311.19     | \$0.00       | (\$56,312.78)  |
| Average Profit %        | 2.22%          | 2.22%          | 0.00%        | -43.72%        |
| Average Bars Held       | 7.43           | 7.43           | 0            | 958            |
|                         |                |                |              |                |
| Winning Trades          | 30             | 30             | 0            | 0              |
| Win Rate                | 40.54%         | 40.54%         | 0.00%        | 0.00%          |
| Gross Profit            | \$724,504.95   | \$724,504.95   | \$0.00       | \$0.00         |
| Average Profit          | \$24,150.17    | \$24,150.17    | \$0.00       | \$0.00         |
| Average Profit %        | 14.86%         | 14.86%         | 0.00%        | 0.00%          |
| Average Bars Held       | 11.53          | 11.53          | 0            | 0              |
| Max Consecutive Winners | 4              | 4              | 0            | 0              |
|                         |                |                |              |                |
| Losing Trades           | 44             | 44             | 0            | 1              |
| Loss Rate               | 59.46%         | 59.46%         | 0.00%        | 100.00%        |
| Gross Loss              | (\$642,455.28) | (\$642,455.28) | \$0.00       | (\$46,460.01)  |
| Average Loss            | (\$14,601.26)  | (\$14,601.26)  | \$0.00       | (\$46,460.01)  |
| Average Loss %          | -6.40%         | -6.40%         | 0.00%        | -43.72%        |
| Average Bars Held       | 4.64           | 4.64           | 0            | 958            |
| Max Consecutive Losses  | 8              | 8              | 0            | 1              |
|                         |                |                |              |                |
| Maximum Drawdown        | (\$271,528.09) | (\$271,528.09) | \$0.00       | (\$303,659.90) |
| Maximum Drawdown Date   | 7/2/2009       | 7/2/2009       | 12/6/1991    | 7/2/2009       |
| Maximum Drawdown %      | -79.59%        | -79.59%        | 0.00%        | -98.64%        |
| Maximum Drawdown % Date | 7/2/2009       | 7/2/2009       | 4/24/2010    | 7/2/2009       |
|                         |                |                |              |                |
| Wealth-Lab Score        | 2.25           | 2.25           | 0            | -8.09          |
| Sharpe Ratio            | 0.2            | 0.2            | 0            | 0.14           |
| Profit Factor           | 1.13           | 1.13           | 0            | 0              |
| Recovery Factor         | 0.63           | 0.63           | Infinity     | 0              |
| Payoff Ratio            | 2.32           | 2.32           | 0            | 0              |

## 8.2.3.17.3 Monthly

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$557,505.74   | \$557,505.74   | \$205,065.76 | \$47,678.86    |
| Net Profit              | \$457,505.74   | \$457,505.74   | \$105,065.76 | (\$52,321.14)  |
| Net Profit %            | 457.51%        | 457.51%        | 105.07%      | -52.32%        |
| Annualized Gain %       | 9.84%          | 9.84%          | 4.00%        | -3.96%         |
| Exposure                | 50.16%         | 50.16%         | 0.00%        | 104.15%        |
| Total Commission        | (\$240.00)     | (\$240.00)     | \$0.00       | (\$8.00)       |
| Return on Cash          | \$66,586.38    | \$66,586.38    | \$105,065.76 | \$0.00         |
| Margin Interest Paid    | (\$1.43)       | (\$1.43)       | \$0.00       | (\$7,748.06)   |
| Dividends Received      | \$4,780.56     | \$4,780.56     | \$0.00       | \$4,759.83     |
|                         |                |                |              |                |
| Number of Trades        | 15             | 15             | 0            | 1              |
| Average Profit          | \$30,500.38    | \$30,500.38    | \$0.00       | (\$52,321.14)  |
| Average Profit %        | 16.97%         | 16.97%         | 0.00%        | -47.51%        |
| Average Bars Held       | 8.07           | 8.07           | 0            | 220            |
|                         |                |                |              |                |
| Winning Trades          | 6              | 6              | 0            | 0              |
| Win Rate                | 40.00%         | 40.00%         | 0.00%        | 0.00%          |
| Gross Profit            | \$578,406.37   | \$578,406.37   | \$0.00       | \$0.00         |
| Average Profit          | \$96,401.06    | \$96,401.06    | \$0.00       | \$0.00         |
| Average Profit %        | 61.99%         | 61.99%         | 0.00%        | 0.00%          |
| Average Bars Held       | 14.5           | 14.5           | 0            | 0              |
| Max Consecutive Winners | 2              | 2              | 0            | 0              |
|                         |                |                |              |                |
| Losing Trades           | 9              | 9              | 0            | 1              |
| Loss Rate               | 60.00%         | 60.00%         | 0.00%        | 100.00%        |
| Gross Loss              | (\$192,266.14) | (\$192,266.14) | \$0.00       | (\$49,332.91)  |
| Average Loss            | (\$21,362.90)  | (\$21,362.90)  | \$0.00       | (\$49,332.91)  |
| Average Loss %          | -13.04%        | -13.04%        | 0.00%        | -47.51%        |
| Average Bars Held       | 3.78           | 3.78           | 0            | 220            |
| Max Consecutive Losses  | 3              | 3              | 0            | 1              |
|                         |                |                |              |                |
| Maximum Drawdown        | (\$444,704.95) | (\$444,704.95) | \$0.00       | (\$270,535.06) |
| Maximum Drawdown Date   | 2/26/2010      | 2/26/2010      | 12/31/1991   | 6/30/2009      |
| Maximum Drawdown %      | -44.52%        | -44.52%        | 0.00%        | -95.95%        |
| Maximum Drawdown % Date | 2/26/2010      | 2/26/2010      | 4/24/2010    | 6/30/2009      |
|                         |                |                |              |                |
| Wealth-Lab Score        | 10.88          | 10.88          | 0            | -7.46          |
| Sharpe Ratio            | 0.31           | 0.31           | 0            | 0.09           |
| Profit Factor           | 3.01           | 3.01           | 0            | 0              |
| Recovery Factor         | 1.03           | 1.03           | Infinity     | 0              |

### 8.2.3.18 KOP

#### 8.2.3.18.1 Daily

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$109,871.03   | \$109,871.03   | \$118,007.82 | \$214,679.89   |
| Net Profit              | \$9,871.03     | \$9,871.03     | \$18,007.82  | \$114,679.89   |
| Net Profit %            | 9.87%          | 9.87%          | 18.01%       | 114.68%        |
| Annualized Gain %       | 2.25%          | 2.25%          | 4.00%        | 19.84%         |
| Exposure                | 51.08%         | 51.08%         | 0.00%        | 97.22%         |
| Total Commission        | (\$1,480.00)   | (\$1,480.00)   | \$0.00       | (\$8.00)       |
| Return on Cash          | \$7,827.15     | \$7,827.15     | \$18,007.82  | \$1,011.05     |
| Margin Interest Paid    | (\$0.18)       | (\$0.18)       | \$0.00       | (\$245.10)     |
| Dividends Received      | \$5,702.23     | \$5,702.23     | \$0.00       | \$21,797.82    |
|                         |                |                |              |                |
| Number of Trades        | 93             | 93             | 0            | 1              |
| Average Profit          | \$106.14       | \$106.14       | \$0.00       | \$114,679.89   |
| Average Profit %        | 0.23%          | 0.23%          | 0.00%        | 87.74%         |
| Average Bars Held       | 6.84           | 6.84           | 0            | 1,063.00       |
|                         |                |                |              |                |
| Winning Trades          | 39             | 39             | 0            | 1              |
| Win Rate                | 41.94%         | 41.94%         | 0.00%        | 100.00%        |
| Gross Profit            | \$223,450.31   | \$223,450.31   | \$0.00       | \$92,116.12    |
| Average Profit          | \$5,729.50     | \$5,729.50     | \$0.00       | \$92,116.12    |
| Average Profit %        | 6.54%          | 6.54%          | 0.00%        | 87.74%         |
| Average Bars Held       | 10.51          | 10.51          | 0            | 1,063.00       |
| Max Consecutive Winners | 4              | 4              | 0            | 1              |
|                         |                |                |              |                |
| Losing Trades           | 54             | 54             | 0            | 0              |
| Loss Rate               | 58.06%         | 58.06%         | 0.00%        | 0.00%          |
| Gross Loss              | (\$227,108.47) | (\$227,108.47) | \$0.00       | \$0.00         |
| Average Loss            | (\$4,205.71)   | (\$4,205.71)   | \$0.00       | \$0.00         |
| Average Loss %          | -4.33%         | -4.33%         | 0.00%        | 0.00%          |
| Average Bars Held       | 4.19           | 4.19           | 0            | 0              |
| Max Consecutive Losses  | 6              | 6              | 0            | 0              |
|                         |                |                |              |                |
| Maximum Drawdown        | (\$83,805.88)  | (\$83,805.88)  | \$0.00       | (\$265,038.36) |
| Maximum Drawdown Date   | 2/4/2009       | 2/4/2009       | 2/1/2006     | 3/9/2009       |
| Maximum Drawdown %      | -57.84%        | -57.84%        | 0.00%        | -78.22%        |
| Maximum Drawdown % Date | 2/4/2009       | 2/4/2009       | 4/24/2010    | 3/9/2009       |
|                         |                |                |              |                |
| Wealth-Lab Score        | 1.86           | 1.86           | 0            | 4.44           |
| Sharpe Ratio            | 0.11           | 0.11           | 0            | 0.55           |
| Profit Factor           | 0.98           | 0.98           | 0            | Infinity       |
| Recovery Factor         | 0.12           | 0.12           | Infinity     | 0.43           |
| Payoff Ratio            | 1.51           | 1.51           | 0            | 0              |

## 8.2.3.18.2 Weekly

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$117,945.41   | \$117,945.41   | \$117,982.47 | \$198,675.09   |
| Net Profit              | \$17,945.41    | \$17,945.41    | \$17,982.47  | \$98,675.09    |
| Net Profit %            | 17.95%         | 17.95%         | 17.98%       | 98.68%         |
| Annualized Gain %       | 3.99%          | 3.99%          | 4.00%        | 17.68%         |
| Exposure                | 58.15%         | 58.15%         | 0.00%        | 97.39%         |
| Total Commission        | (\$360.00)     | (\$360.00)     | \$0.00       | (\$8.00)       |
| Return on Cash          | \$9,549.17     | \$9,549.17     | \$17,982.47  | \$858.70       |
| Margin Interest Paid    | (\$0.16)       | (\$0.16)       | \$0.00       | (\$288.57)     |
| Dividends Received      | \$9,643.65     | \$9,643.65     | \$0.00       | \$20,254.38    |
|                         |                |                |              |                |
| Number of Trades        | 23             | 23             | 0            | 1              |
| Average Profit          | \$780.24       | \$780.24       | \$0.00       | \$98,675.09    |
| Average Profit %        | 1.99%          | 1.99%          | 0.00%        | 73.93%         |
| Average Bars Held       | 6.39           | 6.39           | 0            | 220            |
|                         |                |                |              |                |
| Winning Trades          | 9              | 9              | 0            | 1              |
| Win Rate                | 39.13%         | 39.13%         | 0.00%        | 100.00%        |
| Gross Profit            | \$170,481.07   | \$170,481.07   | \$0.00       | \$77,850.58    |
| Average Profit          | \$18,942.34    | \$18,942.34    | \$0.00       | \$77,850.58    |
| Average Profit %        | 18.03%         | 18.03%         | 0.00%        | 73.93%         |
| Average Bars Held       | 9.67           | 9.67           | 0            | 220            |
| Max Consecutive Winners | 6              | 6              | 0            | 1              |
|                         |                |                |              |                |
| Losing Trades           | 14             | 14             | 0            | 0              |
| Loss Rate               | 60.87%         | 60.87%         | 0.00%        | 0.00%          |
| Gross Loss              | (\$171,728.33) | (\$171,728.33) | \$0.00       | \$0.00         |
| Average Loss            | (\$12,266.31)  | (\$12,266.31)  | \$0.00       | \$0.00         |
| Average Loss %          | -8.32%         | -8.32%         | 0.00%        | 0.00%          |
| Average Bars Held       | 4.29           | 4.29           | 0            | 0              |
| Max Consecutive Losses  | 7              | 7              | 0            | 0              |
|                         |                |                |              |                |
| Maximum Drawdown        | (\$107,691.19) | (\$107,691.19) | \$0.00       | (\$241,767.47) |
| Maximum Drawdown Date   | 3/20/2009      | 3/20/2009      | 2/3/2006     | 3/6/2009       |
| Maximum Drawdown %      | -54.21%        | -54.21%        | 0.00%        | -76.98%        |
| Maximum Drawdown % Date | 3/20/2009      | 3/20/2009      | 4/24/2010    | 3/6/2009       |
|                         |                |                |              |                |
| Wealth-Lab Score        | 3.14           | 3.14           | 0            | 4.18           |
| Sharpe Ratio            | 0.16           | 0.16           | 0            | 0.5            |
| Profit Factor           | 0.99           | 0.99           | 0            | Infinity       |
| Recovery Factor         | 0.17           | 0.17           | Infinity     | 0.41           |

## 8.2.3.18.3 Monthly

|                         | All Trades    | Long Trades   | Short Trades | Buy & Hold     |
|-------------------------|---------------|---------------|--------------|----------------|
| Starting Capital        | \$100,000.00  | \$100,000.00  | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$208,894.66  | \$208,894.66  | \$117,666.17 | \$177,609.30   |
| Net Profit              | \$108,894.66  | \$108,894.66  | \$17,666.17  | \$77,609.30    |
| Net Profit %            | 108.89%       | 108.89%       | 17.67%       | 77.61%         |
| Annualized Gain %       | 19.43%        | 19.43%        | 4.00%        | 14.85%         |
| Exposure                | 60.49%        | 60.49%        | 0.00%        | 96.60%         |
| Total Commission        | (\$40.00)     | (\$40.00)     | \$0.00       | (\$8.00)       |
| Return on Cash          | \$10,329.00   | \$10,329.00   | \$17,666.17  | \$720.16       |
| Margin Interest Paid    | (\$0.02)      | (\$0.02)      | \$0.00       | (\$261.81)     |
| Dividends Received      | \$9,629.42    | \$9,629.42    | \$0.00       | \$17,609.35    |
|                         |               |               |              |                |
| Number of Trades        | 3             | 3             | 0            | 1              |
| Average Profit          | \$36,298.22   | \$36,298.22   | \$0.00       | \$77,609.30    |
| Average Profit %        | 25.56%        | 25.56%        | 0.00%        | 56.86%         |
| Average Bars Held       | 10.33         | 10.33         | 0            | 50             |
|                         |               |               |              |                |
| Winning Trades          | 2             | 2             | 0            | 1              |
| Win Rate                | 66.67%        | 66.67%        | 0.00%        | 100.00%        |
| Gross Profit            | \$93,325.36   | \$93,325.36   | \$0.00       | \$59,541.60    |
| Average Profit          | \$46,662.68   | \$46,662.68   | \$0.00       | \$59,541.60    |
| Average Profit %        | 39.63%        | 39.63%        | 0.00%        | 56.86%         |
| Average Bars Held       | 14            | 14            | 0            | 50             |
| Max Consecutive Winners | 1             | 1             | 0            | 1              |
|                         |               |               |              |                |
| Losing Trades           | 1             | 1             | 0            | 0              |
| Loss Rate               | 33.33%        | 33.33%        | 0.00%        | 0.00%          |
| Gross Loss              | (\$4,389.10)  | (\$4,389.10)  | \$0.00       | \$0.00         |
| Average Loss            | (\$4,389.10)  | (\$4,389.10)  | \$0.00       | \$0.00         |
| Average Loss %          | -2.56%        | -2.56%        | 0.00%        | 0.00%          |
| Average Bars Held       | 3             | 3             | 0            | 0              |
| Max Consecutive Losses  | 1             | 1             | 0            | 0              |
|                         |               |               |              |                |
| Maximum Drawdown        | (\$57,321.60) | (\$57,321.60) | \$0.00       | (\$189,797.21) |
| Maximum Drawdown Date   | 5/30/2008     | 5/30/2008     | 2/28/2006    | 2/27/2009      |
| Maximum Drawdown %      | -25.38%       | -25.38%       | 0.00%        | -69.78%        |
| Maximum Drawdown % Date | 5/30/2008     | 5/30/2008     | 4/24/2010    | 2/27/2009      |
|                         |               |               |              |                |
| Wealth-Lab Score        | 23.97         | 23.97         | 0            | 4.65           |
| Sharpe Ratio            | 0.65          | 0.65          | 0            | 0.45           |
| Profit Factor           | 21.26         | 21.26         | 0            | Infinity       |
| Recovery Factor         | 1.9           | 1.9           | Infinity     | 0.41           |

### 8.2.3.19 MIG

#### 8.2.3.19.1 Daily

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$18,531.76    | \$18,531.76    | \$176,045.60 | \$27,183.34    |
| Net Profit              | (\$81,468.24)  | (\$81,468.24)  | \$76,045.60  | (\$72,816.66)  |
| Net Profit %            | -81.47%        | -81.47%        | 76.05%       | -72.82%        |
| Annualized Gain %       | -11.03%        | -11.03%        | 4.00%        | -8.64%         |
| Exposure                | 49.20%         | 49.20%         | 0.00%        | 113.65%        |
| Total Commission        | (\$4,816.00)   | (\$4,816.00)   | \$0.00       | (\$8.00)       |
| Return on Cash          | \$20,724.73    | \$20,724.73    | \$76,045.60  | \$0.00         |
| Margin Interest Paid    | (\$2.24)       | (\$2.24)       | \$0.00       | (\$6,135.34)   |
| Dividends Received      | \$1,012.58     | \$1,012.58     | \$0.00       | \$1,492.05     |
|                         |                |                |              |                |
| Number of Trades        | 301            | 301            | 0            | 1              |
| Average Profit          | (\$270.66)     | (\$270.66)     | \$0.00       | (\$72,816.66)  |
| Average Profit %        | -0.30%         | -0.30%         | 0.00%        | -65.95%        |
| Average Bars Held       | 6.9            | 6.9            | 0            | 3,601.00       |
|                         |                |                |              |                |
| Winning Trades          | 92             | 92             | 0            | 0              |
| Win Rate                | 30.56%         | 30.56%         | 0.00%        | 0.00%          |
| Gross Profit            | \$397,540.49   | \$397,540.49   | \$0.00       | \$0.00         |
| Average Profit          | \$4,321.09     | \$4,321.09     | \$0.00       | \$0.00         |
| Average Profit %        | 7.34%          | 7.34%          | 0.00%        | 0.00%          |
| Average Bars Held       | 11.7           | 11.7           | 0            | 0              |
| Max Consecutive Winners | 4              | 4              | 0            | 0              |
|                         |                |                |              |                |
| Losing Trades           | 209            | 209            | 0            | 1              |
| Loss Rate               | 69.44%         | 69.44%         | 0.00%        | 100.00%        |
| Gross Loss              | (\$500,743.79) | (\$500,743.79) | \$0.00       | (\$68,173.37)  |
| Average Loss            | (\$2,395.90)   | (\$2,395.90)   | \$0.00       | (\$68,173.37)  |
| Average Loss %          | -3.67%         | -3.67%         | 0.00%        | -65.95%        |
| Average Bars Held       | 4.79           | 4.79           | 0            | 3,601.00       |
| Max Consecutive Losses  | 11             | 11             | 0            | 1              |
|                         |                |                |              |                |
| Maximum Drawdown        | (\$137,314.67) | (\$137,314.67) | \$0.00       | (\$141,946.46) |
| Maximum Drawdown Date   | 2/2/2010       | 2/2/2010       | 11/21/1995   | 11/8/2002      |
| Maximum Drawdown %      | -90.39%        | -90.39%        | 0.00%        | -98.53%        |
| Maximum Drawdown % Date | 2/2/2010       | 2/2/2010       | 4/24/2010    | 11/8/2002      |
|                         |                |                |              |                |
| Wealth-Lab Score        | -42.69         | -42.69         | 0            | -15.09         |
| Sharpe Ratio            | -0.15          | -0.15          | 0            | 0.18           |
| Profit Factor           | 0.79           | 0.79           | 0            | 0              |
| Recovery Factor         | 0              | 0              | Infinity     | 0              |
| Payoff Ratio            | 2              | 2              | 0            | 0              |



## 8.2.3.19.2 Weekly

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$33,877.80    | \$33,877.80    | \$175,988.90 | \$23,728.25    |
| Net Profit              | (\$66,122.20)  | (\$66,122.20)  | \$75,988.90  | (\$76,271.75)  |
| Net Profit %            | -66.12%        | -66.12%        | 75.99%       | -76.27%        |
| Annualized Gain %       | -7.24%         | -7.24%         | 4.00%        | -9.50%         |
| Exposure                | 51.94%         | 51.94%         | 0.00%        | 119.45%        |
| Total Commission        | (\$1,048.00)   | (\$1,048.00)   | \$0.00       | (\$8.00)       |
| Return on Cash          | \$13,110.54    | \$13,110.54    | \$75,988.90  | \$0.00         |
| Margin Interest Paid    | (\$2.09)       | (\$2.09)       | \$0.00       | (\$8,328.12)   |
| Dividends Received      | \$1,083.60     | \$1,083.60     | \$0.00       | \$1,484.70     |
| Number of Trades        | 66             | 66             | 0            | 1              |
| Average Profit          | (\$1,001.85)   | (\$1,001.85)   | \$0.00       | (\$76,271.75)  |
| Average Profit %        | -0.80%         | -0.80%         | 0.00%        | -66.46%        |
| Average Bars Held       | 6.98           | 6.98           | 0            | 751            |
| Winning Trades          | 22             | 22             | 0            | 0              |
| Win Rate                | 33.33%         | 33.33%         | 0.00%        | 0.00%          |
| Gross Profit            | \$108,527.47   | \$108,527.47   | \$0.00       | \$0.00         |
| Average Profit          | \$4,933.07     | \$4,933.07     | \$0.00       | \$0.00         |
| Average Profit %        | 14.68%         | 14.68%         | 0.00%        | 0.00%          |
| Average Bars Held       | 10.59          | 10.59          | 0            | 0              |
| Max Consecutive Winners | 5              | 5              | 0            | 0              |
| Losing Trades           | 44             | 44             | 0            | 1              |
| Loss Rate               | 66.67%         | 66.67%         | 0.00%        | 100.00%        |
| Gross Loss              | (\$188,841.73) | (\$188,841.73) | \$0.00       | (\$69,428.33)  |
| Average Loss            | (\$4,291.86)   | (\$4,291.86)   | \$0.00       | (\$69,428.33)  |
| Average Loss %          | -8.54%         | -8.54%         | 0.00%        | -66.46%        |
| Average Bars Held       | 5.18           | 5.18           | 0            | 751            |
| Max Consecutive Losses  | 11             | 11             | 0            | 1              |
| Maximum Drawdown        | (\$119,092.88) | (\$119,092.88) | \$0.00       | (\$137,741.23) |
| Maximum Drawdown Date   | 1/18/2002      | 1/18/2002      | 11/24/1995   | 11/8/2002      |
| Maximum Drawdown %      | -88.20%        | -88.20%        | 0.00%        | -99.83%        |
| Maximum Drawdown % Date | 1/18/2002      | 1/18/2002      | 4/24/2010    | 11/8/2002      |
| Wealth-Lab Score        | -26.22         | -26.22         | 0            | -15.89         |
| Sharpe Ratio            | -0.14          | -0.14          | 0            | 0.27           |
| Profit Factor           | 0.57           | 0.57           | 0            | 0              |
| Recovery Factor         | 0              | 0              | Infinity     | 0              |
| Payoff Ratio            | 1.72           | 1.72           | 0            | 0              |

## 8.2.3.19.3 Monthly

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$183,256.81   | \$183,256.81   | \$175,875.55 | \$15,280.64    |
| Net Profit              | \$83,256.81    | \$83,256.81    | \$75,875.55  | (\$84,719.36)  |
| Net Profit %            | 83.26%         | 83.26%         | 75.88%       | -84.72%        |
| Annualized Gain %       | 4.30%          | 4.30%          | 4.00%        | -12.23%        |
| Exposure                | 50.78%         | 50.78%         | 0.00%        | 131.79%        |
| Total Commission        | (\$184.00)     | (\$184.00)     | \$0.00       | (\$8.00)       |
| Return on Cash          | \$33,223.11    | \$33,223.11    | \$75,875.55  | \$0.00         |
| Margin Interest Paid    | (\$0.60)       | (\$0.60)       | \$0.00       | (\$11,358.99)  |
| Dividends Received      | \$5,682.66     | \$5,682.66     | \$0.00       | \$1,324.05     |
| Number of Trades        | 12             | 12             | 0            | 1              |
| Average Profit          | \$6,938.07     | \$6,938.07     | \$0.00       | (\$84,719.36)  |
| Average Profit %        | 3.58%          | 3.58%          | 0.00%        | -70.51%        |
| Average Bars Held       | 8.83           | 8.83           | 0            | 173            |
| Winning Trades          | 4              | 4              | 0            | 0              |
| Win Rate                | 33.33%         | 33.33%         | 0.00%        | 0.00%          |
| Gross Profit            | \$96,943.72    | \$96,943.72    | \$0.00       | \$0.00         |
| Average Profit          | \$24,235.93    | \$24,235.93    | \$0.00       | \$0.00         |
| Average Profit %        | 20.86%         | 20.86%         | 0.00%        | 0.00%          |
| Average Bars Held       | 8              | 8              | 0            | 0              |
| Max Consecutive Winners | 1              | 1              | 0            | 0              |
| Losing Trades           | 8              | 8              | 0            | 1              |
| Loss Rate               | 66.67%         | 66.67%         | 0.00%        | 100.00%        |
| Gross Loss              | (\$52,592.08)  | (\$52,592.08)  | \$0.00       | (\$74,684.42)  |
| Average Loss            | (\$6,574.01)   | (\$6,574.01)   | \$0.00       | (\$74,684.42)  |
| Average Loss %          | -5.05%         | -5.05%         | 0.00%        | -70.51%        |
| Average Bars Held       | 9.25           | 9.25           | 0            | 173            |
| Max Consecutive Losses  | 5              | 5              | 0            | 1              |
| Maximum Drawdown        | (\$144,468.17) | (\$144,468.17) | \$0.00       | (\$122,963.79) |
| Maximum Drawdown Date   | 11/30/2001     | 11/30/2001     | 11/30/1995   | 11/29/2002     |
| Maximum Drawdown %      | -74.98%        | -74.98%        | 0.00%        | -101.82%       |
| Maximum Drawdown % Date | 11/30/2001     | 11/30/2001     | 4/24/2010    | 11/29/2002     |
| Wealth-Lab Score        | 2.12           | 2.12           | 0            | -18.73         |
| Sharpe Ratio            | 0.2            | 0.2            | 0            | 0.04           |
| Profit Factor           | 1.84           | 1.84           | 0            | 0              |
| Recovery Factor         | 0.58           | 0.58           | Infinity     | 0              |
| Payoff Ratio            | 4.13           | 4.13           | 0            | 0              |

### 8.2.3.20 PKG

#### 8.2.3.20.1 Daily

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$86,369.28    | \$86,369.28    | \$149,389.70 | \$277,974.62   |
| Net Profit              | (\$13,630.72)  | (\$13,630.72)  | \$49,389.70  | \$177,974.62   |
| Net Profit %            | -13.63%        | -13.63%        | 49.39%       | 177.97%        |
| Annualized Gain %       | -1.42%         | -1.42%         | 4.00%        | 10.51%         |
| Exposure                | 49.94%         | 49.94%         | 0.00%        | 94.61%         |
| Total Commission        | (\$4,024.00)   | (\$4,024.00)   | \$0.00       | (\$8.00)       |
| Return on Cash          | \$22,064.09    | \$22,064.09    | \$49,389.70  | \$5,006.88     |
| Margin Interest Paid    | (\$0.59)       | (\$0.59)       | \$0.00       | (\$2,024.26)   |
| Dividends Received      | \$11,062.55    | \$11,062.55    | \$0.00       | \$50,312.50    |
| Number of Trades        | 252            | 252            | 0            | 1              |
| Average Profit          | (\$54.09)      | (\$54.09)      | \$0.00       | \$177,974.62   |
| Average Profit %        | -0.08%         | -0.08%         | 0.00%        | 118.74%        |
| Average Bars Held       | 6.11           | 6.11           | 0            | 2,573.00       |
| Winning Trades          | 83             | 83             | 0            | 1              |
| Win Rate                | 32.94%         | 32.94%         | 0.00%        | 100.00%        |
| Gross Profit            | \$350,370.54   | \$350,370.54   | \$0.00       | \$124,679.50   |
| Average Profit          | \$4,221.33     | \$4,221.33     | \$0.00       | \$124,679.50   |
| Average Profit %        | 4.34%          | 4.34%          | 0.00%        | 118.74%        |
| Average Bars Held       | 10.54          | 10.54          | 0            | 2,573.00       |
| Max Consecutive Winners | 3              | 3              | 0            | 1              |
| Losing Trades           | 169            | 169            | 0            | 0              |
| Loss Rate               | 67.06%         | 67.06%         | 0.00%        | 0.00%          |
| Gross Loss              | (\$397,127.32) | (\$397,127.32) | \$0.00       | \$0.00         |
| Average Loss            | (\$2,349.87)   | (\$2,349.87)   | \$0.00       | \$0.00         |
| Average Loss %          | -2.25%         | -2.25%         | 0.00%        | 0.00%          |
| Average Bars Held       | 3.93           | 3.93           | 0            | 0              |
| Max Consecutive Losses  | 16             | 16             | 0            | 0              |
| Maximum Drawdown        | (\$95,537.23)  | (\$95,537.23)  | \$0.00       | (\$177,801.02) |
| Maximum Drawdown Date   | 2/27/2009      | 2/27/2009      | 1/28/2000    | 3/9/2009       |
| Maximum Drawdown %      | -63.36%        | -63.36%        | 0.00%        | -58.58%        |
| Maximum Drawdown % Date | 2/27/2009      | 2/27/2009      | 4/24/2010    | 3/9/2009       |
| Wealth-Lab Score        | -4.65          | -4.65          | 0            | 4.6            |
| Sharpe Ratio            | -0.08          | -0.08          | 0            | 0.35           |
| Profit Factor           | 0.88           | 0.88           | 0            | Infinity       |
| Recovery Factor         | 0              | 0              | Infinity     | 1              |
| Payoff Ratio            | 1.93           | 1.93           | 0            | 0              |

## 8.2.3.20.2 Weekly

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$112,763.33   | \$112,763.33   | \$149,389.70 | \$277,998.35   |
| Net Profit              | \$12,763.33    | \$12,763.33    | \$49,389.70  | \$177,998.35   |
| Net Profit %            | 12.76%         | 12.76%         | 49.39%       | 178.00%        |
| Annualized Gain %       | 1.18%          | 1.18%          | 4.00%        | 10.51%         |
| Exposure                | 53.28%         | 53.28%         | 0.00%        | 94.51%         |
| Total Commission        | (\$984.00)     | (\$984.00)     | \$0.00       | (\$8.00)       |
| Return on Cash          | \$15,784.29    | \$15,784.29    | \$49,389.70  | \$5,027.00     |
| Margin Interest Paid    | (\$0.73)       | (\$0.73)       | \$0.00       | (\$2,020.65)   |
| Dividends Received      | \$11,772.30    | \$11,772.30    | \$0.00       | \$50,312.50    |
|                         |                |                |              |                |
| Number of Trades        | 62             | 62             | 0            | 1              |
| Average Profit          | \$205.86       | \$205.86       | \$0.00       | \$177,998.35   |
| Average Profit %        | -0.12%         | -0.12%         | 0.00%        | 118.74%        |
| Average Bars Held       | 5.5            | 5.5            | 0            | 533            |
|                         |                |                |              |                |
| Winning Trades          | 20             | 20             | 0            | 1              |
| Win Rate                | 32.26%         | 32.26%         | 0.00%        | 100.00%        |
| Gross Profit            | \$111,897.55   | \$111,897.55   | \$0.00       | \$124,679.50   |
| Average Profit          | \$5,594.88     | \$5,594.88     | \$0.00       | \$124,679.50   |
| Average Profit %        | 7.19%          | 7.19%          | 0.00%        | 118.74%        |
| Average Bars Held       | 9.45           | 9.45           | 0            | 533            |
| Max Consecutive Winners | 3              | 3              | 0            | 1              |
|                         |                |                |              |                |
| Losing Trades           | 42             | 42             | 0            | 0              |
| Loss Rate               | 67.74%         | 67.74%         | 0.00%        | 0.00%          |
| Gross Loss              | (\$126,690.08) | (\$126,690.08) | \$0.00       | \$0.00         |
| Average Loss            | (\$3,016.43)   | (\$3,016.43)   | \$0.00       | \$0.00         |
| Average Loss %          | -3.61%         | -3.61%         | 0.00%        | 0.00%          |
| Average Bars Held       | 3.62           | 3.62           | 0            | 0              |
| Max Consecutive Losses  | 8              | 8              | 0            | 0              |
|                         |                |                |              |                |
| Maximum Drawdown        | (\$52,954.20)  | (\$52,954.20)  | \$0.00       | (\$167,087.14) |
| Maximum Drawdown Date   | 2/20/2009      | 2/20/2009      | 1/28/2000    | 3/6/2009       |
| Maximum Drawdown %      | -45.59%        | -45.59%        | 0.00%        | -56.90%        |
| Maximum Drawdown % Date | 2/20/2009      | 2/20/2009      | 4/24/2010    | 3/6/2009       |
|                         |                |                |              |                |
| Wealth-Lab Score        | 1.21           | 1.21           | 0            | 4.79           |
| Sharpe Ratio            | -0.04          | -0.04          | 0            | 0.35           |
| Profit Factor           | 0.88           | 0.88           | 0            | Infinity       |
| Recovery Factor         | 0.24           | 0.24           | Infinity     | 1.07           |
| Payoff Ratio            | 1.99           | 1.99           | 0            | 0              |

## 8.2.3.20.3 Monthly

|                         | All Trades    | Long Trades   | Short Trades | Buy & Hold     |
|-------------------------|---------------|---------------|--------------|----------------|
| Starting Capital        | \$100,000.00  | \$100,000.00  | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$157,142.38  | \$157,142.38  | \$149,341.59 | \$277,546.15   |
| Net Profit              | \$57,142.38   | \$57,142.38   | \$49,341.59  | \$177,546.15   |
| Net Profit %            | 57.14%        | 57.14%        | 49.34%       | 177.55%        |
| Annualized Gain %       | 4.52%         | 4.52%         | 4.00%        | 10.50%         |
| Exposure                | 59.11%        | 59.11%        | 0.00%        | 93.74%         |
| Total Commission        | (\$184.00)    | (\$184.00)    | \$0.00       | (\$8.00)       |
| Return on Cash          | \$17,392.55   | \$17,392.55   | \$49,341.59  | \$5,220.32     |
| Margin Interest Paid    | (\$0.07)      | (\$0.07)      | \$0.00       | (\$1,746.17)   |
| Dividends Received      | \$17,672.65   | \$17,672.65   | \$0.00       | \$50,048.00    |
|                         |               |               |              |                |
| Number of Trades        | 12            | 12            | 0            | 1              |
| Average Profit          | \$4,761.86    | \$4,761.86    | \$0.00       | \$177,546.15   |
| Average Profit %        | 2.81%         | 2.81%         | 0.00%        | 118.74%        |
| Average Bars Held       | 6.83          | 6.83          | 0            | 123            |
|                         |               |               |              |                |
| Winning Trades          | 4             | 4             | 0            | 1              |
| Win Rate                | 33.33%        | 33.33%        | 0.00%        | 100.00%        |
| Gross Profit            | \$92,568.56   | \$92,568.56   | \$0.00       | \$124,024.00   |
| Average Profit          | \$23,142.14   | \$23,142.14   | \$0.00       | \$124,024.00   |
| Average Profit %        | 24.49%        | 24.49%        | 0.00%        | 118.74%        |
| Average Bars Held       | 12.75         | 12.75         | 0            | 123            |
| Max Consecutive Winners | 2             | 2             | 0            | 1              |
|                         |               |               |              |                |
| Losing Trades           | 8             | 8             | 0            | 0              |
| Loss Rate               | 66.67%        | 66.67%        | 0.00%        | 0.00%          |
| Gross Loss              | (\$70,491.31) | (\$70,491.31) | \$0.00       | \$0.00         |
| Average Loss            | (\$8,811.41)  | (\$8,811.41)  | \$0.00       | \$0.00         |
| Average Loss %          | -8.03%        | -8.03%        | 0.00%        | 0.00%          |
| Average Bars Held       | 3.88          | 3.88          | 0            | 0              |
| Max Consecutive Losses  | 4             | 4             | 0            | 0              |
|                         |               |               |              |                |
| Maximum Drawdown        | (\$58,174.64) | (\$58,174.64) | \$0.00       | (\$170,141.35) |
| Maximum Drawdown Date   | 9/30/2008     | 9/30/2008     | 1/31/2000    | 2/27/2009      |
| Maximum Drawdown %      | -38.99%       | -38.99%       | 0.00%        | -56.19%        |
| Maximum Drawdown % Date | 9/30/2008     | 9/30/2008     | 4/24/2010    | 2/27/2009      |
|                         |               |               |              |                |
| Wealth-Lab Score        | 4.67          | 4.67          | 0            | 4.91           |
| Sharpe Ratio            | 0.12          | 0.12          | 0            | 0.35           |
| Profit Factor           | 1.31          | 1.31          | 0            | Infinity       |
| Recovery Factor         | 0.98          | 0.98          | Infinity     | 1.04           |
| Payoff Ratio            | 3.05          | 3.05          | 0            | 0              |

### 8.2.3.21 RXII

#### 8.2.3.21.1 Daily

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$291,039.28   | \$291,039.28   | \$108,643.07 | (\$15,608.22)  |
| Net Profit              | \$191,039.28   | \$191,039.28   | \$8,643.07   | (\$115,608.22) |
| Net Profit %            | 191.04%        | 191.04%        | 8.64%        | -115.61%       |
| Annualized Gain %       | 65.77%         | 65.77%         | 4.00%        | NaN%           |
| Exposure                | 47.44%         | 47.44%         | 0.00%        | 2313.89%       |
| Total Commission        | (\$648.00)     | (\$648.00)     | \$0.00       | (\$8.00)       |
| Return on Cash          | \$7,817.78     | \$7,817.78     | \$8,643.07   | \$0.00         |
| Margin Interest Paid    | (\$0.45)       | (\$0.45)       | \$0.00       | (\$8,807.12)   |
| Dividends Received      | \$0.00         | \$0.00         | \$0.00       | \$0.00         |
|                         |                |                |              |                |
| Number of Trades        | 41             | 41             | 0            | 1              |
| Average Profit          | \$4,659.49     | \$4,659.49     | \$0.00       | (\$115,608.22) |
| Average Profit %        | 3.91%          | 3.91%          | 0.00%        | -71.27%        |
| Average Bars Held       | 7.2            | 7.2            | 0            | 533            |
|                         |                |                |              |                |
| Winning Trades          | 14             | 14             | 0            | 0              |
| Win Rate                | 34.15%         | 34.15%         | 0.00%        | 0.00%          |
| Gross Profit            | \$420,542.57   | \$420,542.57   | \$0.00       | \$0.00         |
| Average Profit          | \$30,038.76    | \$30,038.76    | \$0.00       | \$0.00         |
| Average Profit %        | 20.84%         | 20.84%         | 0.00%        | 0.00%          |
| Average Bars Held       | 12.64          | 12.64          | 0            | 0              |
| Max Consecutive Winners | 2              | 2              | 0            | 0              |
|                         |                |                |              |                |
| Losing Trades           | 27             | 27             | 0            | 1              |
| Loss Rate               | 65.85%         | 65.85%         | 0.00%        | 100.00%        |
| Gross Loss              | (\$237,320.62) | (\$237,320.62) | \$0.00       | (\$106,801.10) |
| Average Loss            | (\$8,789.65)   | (\$8,789.65)   | \$0.00       | (\$106,801.10) |
| Average Loss %          | -4.87%         | -4.87%         | 0.00%        | -71.27%        |
| Average Bars Held       | 4.37           | 4.37           | 0            | 533            |
| Max Consecutive Losses  | 6              | 6              | 0            | 1              |
|                         |                |                |              |                |
| Maximum Drawdown        | (\$156,165.50) | (\$156,165.50) | \$0.00       | (\$140,733.29) |
| Maximum Drawdown Date   | 4/23/2010      | 4/23/2010      | 3/12/2008    | 10/28/2009     |
| Maximum Drawdown %      | -48.74%        | -48.74%        | 0.00%        | -140.73%       |
| Maximum Drawdown % Date | 11/12/2009     | 11/12/2009     | 4/24/2010    | 10/28/2009     |
|                         |                |                |              |                |
| Wealth-Lab Score        | 71.06          | 71.06          | 0            | NaN            |
| Sharpe Ratio            | 0.85           | 0.85           | 0            | 0.49           |
| Profit Factor           | 1.77           | 1.77           | 0            | 0              |
| Recovery Factor         | 1.22           | 1.22           | Infinity     | 0              |
| Payoff Ratio            | 4.28           | 4.28           | 0            | 0              |

## 8.2.3.21.2 Weekly

|                         | All Trades    | Long Trades   | Short Trades | Buy & Hold    |
|-------------------------|---------------|---------------|--------------|---------------|
| Starting Capital        | \$100,000.00  | \$100,000.00  | \$100,000.00 | \$100,000.00  |
| Ending Capital          | \$83,882.71   | \$83,882.71   | \$108,619.74 | \$43,606.16   |
| Net Profit              | (\$16,117.29) | (\$16,117.29) | \$8,619.74   | (\$56,393.84) |
| Net Profit %            | -16.12%       | -16.12%       | 8.62%        | -56.39%       |
| Annualized Gain %       | -8.00%        | -8.00%        | 4.00%        | -32.54%       |
| Exposure                | 53.28%        | 53.28%        | 0.00%        | 96.89%        |
| Total Commission        | (\$160.00)    | (\$160.00)    | \$0.00       | (\$8.00)      |
| Return on Cash          | \$2,435.82    | \$2,435.82    | \$8,619.74   | \$72.66       |
| Margin Interest Paid    | (\$0.57)      | (\$0.57)      | \$0.00       | \$0.00        |
| Dividends Received      | \$0.00        | \$0.00        | \$0.00       | \$0.00        |
|                         |               |               |              |               |
| Number of Trades        | 10            | 10            | 0            | 1             |
| Average Profit          | (\$1,611.73)  | (\$1,611.73)  | \$0.00       | (\$56,393.84) |
| Average Profit %        | 5.11%         | 5.11%         | 0.00%        | -56.95%       |
| Average Bars Held       | 6.8           | 6.8           | 0            | 110           |
|                         |               |               |              |               |
| Winning Trades          | 2             | 2             | 0            | 0             |
| Win Rate                | 20.00%        | 20.00%        | 0.00%        | 0.00%         |
| Gross Profit            | \$64,781.48   | \$64,781.48   | \$0.00       | \$0.00        |
| Average Profit          | \$32,390.74   | \$32,390.74   | \$0.00       | \$0.00        |
| Average Profit %        | 82.67%        | 82.67%        | 0.00%        | 0.00%         |
| Average Bars Held       | 17.5          | 17.5          | 0            | 0             |
| Max Consecutive Winners | 1             | 1             | 0            | 0             |
|                         |               |               |              |               |
| Losing Trades           | 8             | 8             | 0            | 1             |
| Loss Rate               | 80.00%        | 80.00%        | 0.00%        | 100.00%       |
| Gross Loss              | (\$83,334.03) | (\$83,334.03) | \$0.00       | (\$56,466.50) |
| Average Loss            | (\$10,416.75) | (\$10,416.75) | \$0.00       | (\$56,466.50) |
| Average Loss %          | -14.29%       | -14.29%       | 0.00%        | -56.95%       |
| Average Bars Held       | 4.13          | 4.13          | 0            | 110           |
| Max Consecutive Losses  | 4             | 4             | 0            | 1             |
|                         |               |               |              |               |
| Maximum Drawdown        | (\$67,874.11) | (\$67,874.11) | \$0.00       | (\$86,631.68) |
| Maximum Drawdown Date   | 11/6/2009     | 11/6/2009     | 3/14/2008    | 11/6/2009     |
| Maximum Drawdown %      | -67.37%       | -67.37%       | 0.00%        | -80.34%       |
| Maximum Drawdown % Date | 11/6/2009     | 11/6/2009     | 4/24/2010    | 11/6/2009     |
|                         |               |               |              |               |
| Wealth-Lab Score        | -25.13        | -25.13        | 0            | -60.57        |
| Sharpe Ratio            | 0.18          | 0.18          | 0            | -0.1          |
| Profit Factor           | 0.78          | 0.78          | 0            | 0             |
| Recovery Factor         | 0             | 0             | Infinity     | 0             |
| Payoff Ratio            | 5.79          | 5.79          | 0            | 0             |

## 8.2.3.21.3 Monthly

|                         | All Trades    | Long Trades   | Short Trades | Buy & Hold    |
|-------------------------|---------------|---------------|--------------|---------------|
| Starting Capital        | \$100,000.00  | \$100,000.00  | \$100,000.00 | \$100,000.00  |
| Ending Capital          | \$100,456.44  | \$100,456.44  | \$108,421.64 | \$41,772.06   |
| Net Profit              | \$456.44      | \$456.44      | \$8,421.64   | (\$58,227.94) |
| Net Profit %            | 0.46%         | 0.46%         | 8.42%        | -58.23%       |
| Annualized Gain %       | 0.22%         | 0.22%         | 4.00%        | -34.52%       |
| Exposure                | 20.45%        | 20.45%        | 0.00%        | 102.48%       |
| Total Commission        | (\$8.00)      | (\$8.00)      | \$0.00       | (\$8.00)      |
| Return on Cash          | \$6,758.03    | \$6,758.03    | \$8,421.64   | \$0.00        |
| Margin Interest Paid    | (\$0.16)      | (\$0.16)      | \$0.00       | (\$860.06)    |
| Dividends Received      | \$0.00        | \$0.00        | \$0.00       | \$0.00        |
| Number of Trades        | 1             | 1             | 0            | 1             |
| Average Profit          | \$456.44      | \$456.44      | \$0.00       | (\$58,227.94) |
| Average Profit %        | -5.90%        | -5.90%        | 0.00%        | -54.64%       |
| Average Bars Held       | 5             | 5             | 0            | 25            |
| Winning Trades          | 0             | 0             | 0            | 0             |
| Win Rate                | 0.00%         | 0.00%         | 0.00%        | 0.00%         |
| Gross Profit            | \$0.00        | \$0.00        | \$0.00       | \$0.00        |
| Average Profit          | \$0.00        | \$0.00        | \$0.00       | \$0.00        |
| Average Profit %        | 0.00%         | 0.00%         | 0.00%        | 0.00%         |
| Average Bars Held       | 0             | 0             | 0            | 0             |
| Max Consecutive Winners | 0             | 0             | 0            | 0             |
| Losing Trades           | 1             | 1             | 0            | 1             |
| Loss Rate               | 100.00%       | 100.00%       | 0.00%        | 100.00%       |
| Gross Loss              | (\$6,301.43)  | (\$6,301.43)  | \$0.00       | (\$57,367.88) |
| Average Loss            | (\$6,301.43)  | (\$6,301.43)  | \$0.00       | (\$57,367.88) |
| Average Loss %          | -5.90%        | -5.90%        | 0.00%        | -54.64%       |
| Average Bars Held       | 5             | 5             | 0            | 25            |
| Max Consecutive Losses  | 1             | 1             | 0            | 1             |
| Maximum Drawdown        | (\$23,775.27) | (\$23,775.27) | \$0.00       | (\$86,789.80) |
| Maximum Drawdown Date   | 4/23/2010     | 4/23/2010     | 3/31/2008    | 10/30/2009    |
| Maximum Drawdown %      | -19.14%       | -19.14%       | 0.00%        | -83.26%       |
| Maximum Drawdown % Date | 4/23/2010     | 4/23/2010     | 4/24/2010    | 10/30/2009    |
| Wealth-Lab Score        | 0.87          | 0.87          | 0            | -61.73        |
| Sharpe Ratio            | -0.15         | -0.15         | 0            | 0.02          |
| Profit Factor           | 0             | 0             | 0            | 0             |
| Recovery Factor         | 0.02          | 0.02          | Infinity     | 0             |
| Payoff Ratio            | 0             | 0             | 0            | 0             |



### 8.2.3.22 SFG

#### 8.2.3.22.1 Daily

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$66,851.99    | \$66,851.99    | \$154,065.30 | \$454,837.34   |
| Net Profit              | (\$33,148.01)  | (\$33,148.01)  | \$54,065.30  | \$354,837.34   |
| Net Profit %            | -33.15%        | -33.15%        | 54.07%       | 354.84%        |
| Annualized Gain %       | -3.59%         | -3.59%         | 4.00%        | 14.74%         |
| Exposure                | 49.75%         | 49.75%         | 0.00%        | 97.74%         |
| Total Commission        | (\$4,240.00)   | (\$4,240.00)   | \$0.00       | (\$8.00)       |
| Return on Cash          | \$25,443.86    | \$25,443.86    | \$54,065.30  | \$3,837.04     |
| Margin Interest Paid    | (\$0.60)       | (\$0.60)       | \$0.00       | (\$1,849.89)   |
| Dividends Received      | \$3,772.21     | \$3,772.21     | \$0.00       | \$42,107.70    |
|                         |                |                |              |                |
| Number of Trades        | 265            | 265            | 0            | 1              |
| Average Profit          | (\$125.09)     | (\$125.09)     | \$0.00       | \$354,837.34   |
| Average Profit %        | -0.12%         | -0.12%         | 0.00%        | 293.67%        |
| Average Bars Held       | 6.2            | 6.2            | 0            | 2,772.00       |
|                         |                |                |              |                |
| Winning Trades          | 85             | 85             | 0            | 1              |
| Win Rate                | 32.08%         | 32.08%         | 0.00%        | 100.00%        |
| Gross Profit            | \$374,923.62   | \$374,923.62   | \$0.00       | \$310,742.49   |
| Average Profit          | \$4,410.87     | \$4,410.87     | \$0.00       | \$310,742.49   |
| Average Profit %        | 4.43%          | 4.43%          | 0.00%        | 293.67%        |
| Average Bars Held       | 10.84          | 10.84          | 0            | 2,772.00       |
| Max Consecutive Winners | 4              | 4              | 0            | 1              |
|                         |                |                |              |                |
| Losing Trades           | 180            | 180            | 0            | 0              |
| Loss Rate               | 67.92%         | 67.92%         | 0.00%        | 0.00%          |
| Gross Loss              | (\$437,287.10) | (\$437,287.10) | \$0.00       | \$0.00         |
| Average Loss            | (\$2,429.37)   | (\$2,429.37)   | \$0.00       | \$0.00         |
| Average Loss %          | -2.27%         | -2.27%         | 0.00%        | 0.00%          |
| Average Bars Held       | 4.01           | 4.01           | 0            | 0              |
| Max Consecutive Losses  | 14             | 14             | 0            | 0              |
|                         |                |                |              |                |
| Maximum Drawdown        | (\$113,630.03) | (\$113,630.03) | \$0.00       | (\$351,463.68) |
| Maximum Drawdown Date   | 2/27/2009      | 2/27/2009      | 4/16/1999    | 3/9/2009       |
| Maximum Drawdown %      | -72.68%        | -72.68%        | 0.00%        | -69.94%        |
| Maximum Drawdown % Date | 2/27/2009      | 2/27/2009      | 4/24/2010    | 3/9/2009       |
|                         |                |                |              |                |
| Wealth-Lab Score        | -12.46         | -12.46         | 0            | 4.53           |
| Sharpe Ratio            | -0.16          | -0.16          | 0            | 0.48           |
| Profit Factor           | 0.86           | 0.86           | 0            | Infinity       |
| Recovery Factor         | 0              | 0              | Infinity     | 1.01           |
| Payoff Ratio            | 1.95           | 1.95           | 0            | 0              |

## 8.2.3.22.2 Weekly

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$354,025.75   | \$354,025.75   | \$154,065.30 | \$454,862.42   |
| Net Profit              | \$254,025.75   | \$254,025.75   | \$54,065.30  | \$354,862.42   |
| Net Profit %            | 254.03%        | 254.03%        | 54.07%       | 354.86%        |
| Annualized Gain %       | 12.16%         | 12.16%         | 4.00%        | 14.74%         |
| Exposure                | 54.49%         | 54.49%         | 0.00%        | 97.67%         |
| Total Commission        | (\$816.00)     | (\$816.00)     | \$0.00       | (\$8.00)       |
| Return on Cash          | \$37,302.31    | \$37,302.31    | \$54,065.30  | \$3,854.59     |
| Margin Interest Paid    | (\$0.71)       | (\$0.71)       | \$0.00       | (\$1,842.36)   |
| Dividends Received      | \$14,522.37    | \$14,522.37    | \$0.00       | \$42,107.70    |
| Number of Trades        | 51             | 51             | 0            | 1              |
| Average Profit          | \$4,980.90     | \$4,980.90     | \$0.00       | \$354,862.42   |
| Average Profit %        | 2.58%          | 2.58%          | 0.00%        | 293.67%        |
| Average Bars Held       | 6.9            | 6.9            | 0            | 574            |
| Winning Trades          | 24             | 24             | 0            | 1              |
| Win Rate                | 47.06%         | 47.06%         | 0.00%        | 100.00%        |
| Gross Profit            | \$407,108.17   | \$407,108.17   | \$0.00       | \$310,742.49   |
| Average Profit          | \$16,962.84    | \$16,962.84    | \$0.00       | \$310,742.49   |
| Average Profit %        | 9.63%          | 9.63%          | 0.00%        | 293.67%        |
| Average Bars Held       | 10.92          | 10.92          | 0            | 574            |
| Max Consecutive Winners | 4              | 4              | 0            | 1              |
| Losing Trades           | 27             | 27             | 0            | 0              |
| Loss Rate               | 52.94%         | 52.94%         | 0.00%        | 0.00%          |
| Gross Loss              | (\$204,906.39) | (\$204,906.39) | \$0.00       | \$0.00         |
| Average Loss            | (\$7,589.13)   | (\$7,589.13)   | \$0.00       | \$0.00         |
| Average Loss %          | -3.68%         | -3.68%         | 0.00%        | 0.00%          |
| Average Bars Held       | 3.33           | 3.33           | 0            | 0              |
| Max Consecutive Losses  | 3              | 3              | 0            | 0              |
| Maximum Drawdown        | (\$62,593.33)  | (\$62,593.33)  | \$0.00       | (\$342,252.45) |
| Maximum Drawdown Date   | 2/26/2010      | 2/26/2010      | 4/16/1999    | 3/6/2009       |
| Maximum Drawdown %      | -25.61%        | -25.61%        | 0.00%        | -68.45%        |
| Maximum Drawdown % Date | 11/30/2001     | 11/30/2001     | 4/24/2010    | 3/6/2009       |
| Wealth-Lab Score        | 16.59          | 16.59          | 0            | 4.76           |
| Sharpe Ratio            | 0.47           | 0.47           | 0            | 0.49           |
| Profit Factor           | 1.99           | 1.99           | 0            | Infinity       |
| Recovery Factor         | 4.06           | 4.06           | Infinity     | 1.04           |
| Payoff Ratio            | 2.62           | 2.62           | 0            | 0              |

## 8.2.3.22.3 Monthly

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$176,898.97   | \$176,898.97   | \$153,833.86 | \$458,893.01   |
| Net Profit              | \$76,898.97    | \$76,898.97    | \$53,833.86  | \$358,893.01   |
| Net Profit %            | 76.90%         | 76.90%         | 53.83%       | 358.89%        |
| Annualized Gain %       | 5.33%          | 5.33%          | 4.00%        | 14.88%         |
| Exposure                | 50.62%         | 50.62%         | 0.00%        | 97.03%         |
| Total Commission        | (\$216.00)     | (\$216.00)     | \$0.00       | (\$8.00)       |
| Return on Cash          | \$34,517.20    | \$34,517.20    | \$53,833.86  | \$4,261.97     |
| Margin Interest Paid    | (\$0.03)       | (\$0.03)       | \$0.00       | (\$1,412.08)   |
| Dividends Received      | \$13,534.17    | \$13,534.17    | \$0.00       | \$42,325.95    |
|                         |                |                |              |                |
| Number of Trades        | 14             | 14             | 0            | 1              |
| Average Profit          | \$5,492.78     | \$5,492.78     | \$0.00       | \$358,893.01   |
| Average Profit %        | 4.11%          | 4.11%          | 0.00%        | 298.79%        |
| Average Bars Held       | 5.57           | 5.57           | 0            | 132            |
|                         |                |                |              |                |
| Winning Trades          | 6              | 6              | 0            | 1              |
| Win Rate                | 42.86%         | 42.86%         | 0.00%        | 100.00%        |
| Gross Profit            | \$172,369.10   | \$172,369.10   | \$0.00       | \$313,717.18   |
| Average Profit          | \$28,728.18    | \$28,728.18    | \$0.00       | \$313,717.18   |
| Average Profit %        | 23.12%         | 23.12%         | 0.00%        | 298.79%        |
| Average Bars Held       | 9.67           | 9.67           | 0            | 132            |
| Max Consecutive Winners | 3              | 3              | 0            | 1              |
|                         |                |                |              |                |
| Losing Trades           | 8              | 8              | 0            | 0              |
| Loss Rate               | 57.14%         | 57.14%         | 0.00%        | 0.00%          |
| Gross Loss              | (\$143,521.48) | (\$143,521.48) | \$0.00       | \$0.00         |
| Average Loss            | (\$17,940.19)  | (\$17,940.19)  | \$0.00       | \$0.00         |
| Average Loss %          | -10.15%        | -10.15%        | 0.00%        | 0.00%          |
| Average Bars Held       | 2.5            | 2.5            | 0            | 0              |
| Max Consecutive Losses  | 5              | 5              | 0            | 0              |
|                         |                |                |              |                |
| Maximum Drawdown        | (\$122,406.44) | (\$122,406.44) | \$0.00       | (\$315,548.20) |
| Maximum Drawdown Date   | 6/30/2009      | 6/30/2009      | 4/30/1999    | 2/27/2009      |
| Maximum Drawdown %      | -54.07%        | -54.07%        | 0.00%        | -62.59%        |
| Maximum Drawdown % Date | 6/30/2009      | 6/30/2009      | 4/24/2010    | 2/27/2009      |
|                         |                |                |              |                |
| Wealth-Lab Score        | 4.84           | 4.84           | 0            | 5.74           |
| Sharpe Ratio            | 0.17           | 0.17           | 0            | 0.49           |
| Profit Factor           | 1.2            | 1.2            | 0            | Infinity       |
| Recovery Factor         | 0.63           | 0.63           | Infinity     | 1.14           |

### 8.2.3.23 *SUG*

#### 8.2.3.23.1 Daily

|                         | All Trades       | Long Trades      | Short Trades | Buy & Hold     |
|-------------------------|------------------|------------------|--------------|----------------|
| Starting Capital        | \$100,000.00     | \$100,000.00     | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$208,089.74     | \$208,089.74     | \$205,705.34 | \$1,070,956.66 |
| Net Profit              | \$108,089.74     | \$108,089.74     | \$105,705.34 | \$970,956.66   |
| Net Profit %            | 108.09%          | 108.09%          | 105.71%      | 970.96%        |
| Annualized Gain %       | 4.07%            | 4.07%            | 4.00%        | 13.76%         |
| Exposure                | 49.12%           | 49.12%           | 0.00%        | 100.33%        |
| Total Commission        | (\$5,512.00)     | (\$5,512.00)     | \$0.00       | (\$8.00)       |
| Return on Cash          | \$93,571.00      | \$93,571.00      | \$105,705.34 | \$4,033.11     |
| Margin Interest Paid    | (\$2.01)         | (\$2.01)         | \$0.00       | (\$10,522.49)  |
| Dividends Received      | \$15,620.50      | \$15,620.50      | \$0.00       | \$82,946.60    |
|                         |                  |                  |              |                |
| Number of Trades        | 345              | 345              | 0            | 1              |
| Average Profit          | \$313.30         | \$313.30         | \$0.00       | \$970,956.66   |
| Average Profit %        | 0.24%            | 0.24%            | 0.00%        | 851.91%        |
| Average Bars Held       | 7.63             | 7.63             | 0            | 4,634.00       |
|                         |                  |                  |              |                |
| Winning Trades          | 114              | 114              | 0            | 1              |
| Win Rate                | 33.04%           | 33.04%           | 0.00%        | 100.00%        |
| Gross Profit            | \$1,475,552.71   | \$1,475,552.71   | \$0.00       | \$894,499.45   |
| Average Profit          | \$12,943.44      | \$12,943.44      | \$0.00       | \$894,499.45   |
| Average Profit %        | 5.63%            | 5.63%            | 0.00%        | 851.91%        |
| Average Bars Held       | 13.27            | 13.27            | 0            | 4,634.00       |
| Max Consecutive Winners | 6                | 6                | 0            | 1              |
|                         |                  |                  |              |                |
| Losing Trades           | 231              | 231              | 0            | 0              |
| Loss Rate               | 66.96%           | 66.96%           | 0.00%        | 0.00%          |
| Gross Loss              | (\$1,476,652.46) | (\$1,476,652.46) | \$0.00       | \$0.00         |
| Average Loss            | (\$6,392.43)     | (\$6,392.43)     | \$0.00       | \$0.00         |
| Average Loss %          | -2.42%           | -2.42%           | 0.00%        | 0.00%          |
| Average Bars Held       | 4.85             | 4.85             | 0            | 0              |
| Max Consecutive Losses  | 12               | 12               | 0            | 0              |
|                         |                  |                  |              |                |
| Maximum Drawdown        | (\$413,609.42)   | (\$413,609.42)   | \$0.00       | (\$858,938.00) |
| Maximum Drawdown Date   | 3/9/2009         | 3/9/2009         | 12/2/1991    | 11/20/2008     |
| Maximum Drawdown %      | -72.44%          | -72.44%          | 0.00%        | -64.83%        |
| Maximum Drawdown % Date | 3/9/2009         | 3/9/2009         | 4/24/2010    | 11/20/2008     |
|                         |                  |                  |              |                |
| Wealth-Lab Score        | 2.28             | 2.28             | 0            | 4.82           |
| Sharpe Ratio            | 0.12             | 0.12             | 0            | 0.44           |
| Profit Factor           | 1                | 1                | 0            | Infinity       |
| Recovery Factor         | 0.26             | 0.26             | Infinity     | 1.13           |
| Payoff Ratio            | 2.33             | 2.33             | 0            | 0              |

## 8.2.3.23.2 Weekly

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$295,916.29   | \$295,916.29   | \$205,617.00 | \$1,111,870.24 |
| Net Profit              | \$195,916.29   | \$195,916.29   | \$105,617.00 | \$1,011,870.24 |
| Net Profit %            | 195.92%        | 195.92%        | 105.62%      | 1011.87%       |
| Annualized Gain %       | 6.08%          | 6.08%          | 4.00%        | 14.00%         |
| Exposure                | 52.09%         | 52.09%         | 0.00%        | 99.89%         |
| Total Commission        | (\$1,496.00)   | (\$1,496.00)   | \$0.00       | (\$8.00)       |
| Return on Cash          | \$61,941.09    | \$61,941.09    | \$105,617.00 | \$4,683.17     |
| Margin Interest Paid    | (\$1.47)       | (\$1.47)       | \$0.00       | (\$8,489.85)   |
| Dividends Received      | \$16,471.00    | \$16,471.00    | \$0.00       | \$85,806.60    |
| Number of Trades        | 94             | 94             | 0            | 1              |
| Average Profit          | \$2,084.22     | \$2,084.22     | \$0.00       | \$1,011,870.24 |
| Average Profit %        | 1.01%          | 1.01%          | 0.00%        | 893.32%        |
| Average Bars Held       | 6.09           | 6.09           | 0            | 958            |
| Winning Trades          | 32             | 32             | 0            | 1              |
| Win Rate                | 34.04%         | 34.04%         | 0.00%        | 100.00%        |
| Gross Profit            | \$495,729.68   | \$495,729.68   | \$0.00       | \$929,870.32   |
| Average Profit          | \$15,491.55    | \$15,491.55    | \$0.00       | \$929,870.32   |
| Average Profit %        | 9.34%          | 9.34%          | 0.00%        | 893.32%        |
| Average Bars Held       | 10.41          | 10.41          | 0            | 958            |
| Max Consecutive Winners | 3              | 3              | 0            | 1              |
| Losing Trades           | 62             | 62             | 0            | 0              |
| Loss Rate               | 65.96%         | 65.96%         | 0.00%        | 0.00%          |
| Gross Loss              | (\$378,224.01) | (\$378,224.01) | \$0.00       | \$0.00         |
| Average Loss            | (\$6,100.39)   | (\$6,100.39)   | \$0.00       | \$0.00         |
| Average Loss %          | -3.28%         | -3.28%         | 0.00%        | 0.00%          |
| Average Bars Held       | 3.85           | 3.85           | 0            | 0              |
| Max Consecutive Losses  | 9              | 9              | 0            | 0              |
| Maximum Drawdown        | (\$105,800.50) | (\$105,800.50) | \$0.00       | (\$866,095.06) |
| Maximum Drawdown Date   | 9/6/2002       | 9/6/2002       | 12/6/1991    | 11/21/2008     |
| Maximum Drawdown %      | -46.37%        | -46.37%        | 0.00%        | -63.96%        |
| Maximum Drawdown % Date | 9/6/2002       | 9/6/2002       | 4/24/2010    | 11/21/2008     |
| Wealth-Lab Score        | 6.26           | 6.26           | 0            | 5.05           |
| Sharpe Ratio            | 0.19           | 0.19           | 0            | 0.44           |
| Profit Factor           | 1.31           | 1.31           | 0            | Infinity       |
| Recovery Factor         | 1.85           | 1.85           | Infinity     | 1.17           |
| Payoff Ratio            | 2.84           | 2.84           | 0            | 0              |

## 8.2.3.23.3 Monthly

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$761,456.42   | \$761,456.42   | \$205,065.76 | \$1,275,964.65 |
| Net Profit              | \$661,456.42   | \$661,456.42   | \$105,065.76 | \$1,175,964.65 |
| Net Profit %            | 661.46%        | 661.46%        | 105.07%      | 1175.96%       |
| Annualized Gain %       | 11.72%         | 11.72%         | 4.00%        | 14.92%         |
| Exposure                | 50.72%         | 50.72%         | 0.00%        | 77.87%         |
| Total Commission        | (\$328.00)     | (\$328.00)     | \$0.00       | (\$188.43)     |
| Return on Cash          | \$112,882.80   | \$112,882.80   | \$105,065.76 | \$111,442.72   |
| Margin Interest Paid    | (\$1.80)       | (\$1.80)       | \$0.00       | \$0.00         |
| Dividends Received      | \$22,363.30    | \$22,363.30    | \$0.00       | \$81,587.00    |
| Number of Trades        | 21             | 21             | 0            | 1              |
| Average Profit          | \$31,497.92    | \$31,497.92    | \$0.00       | \$1,175,964.65 |
| Average Profit %        | 10.60%         | 10.60%         | 0.00%        | 0.00%          |
| Average Bars Held       | 6              | 6              | 0            | 220            |
| Winning Trades          | 9              | 9              | 0            | 1              |
| Win Rate                | 42.86%         | 42.86%         | 0.00%        | 100.00%        |
| Gross Profit            | \$717,753.01   | \$717,753.01   | \$0.00       | \$982,934.93   |
| Average Profit          | \$79,750.33    | \$79,750.33    | \$0.00       | \$982,934.93   |
| Average Profit %        | 31.47%         | 31.47%         | 0.00%        | 0.00%          |
| Average Bars Held       | 9.67           | 9.67           | 0            | 220            |
| Max Consecutive Winners | 3              | 3              | 0            | 1              |
| Losing Trades           | 12             | 12             | 0            | 0              |
| Loss Rate               | 57.14%         | 57.14%         | 0.00%        | 0.00%          |
| Gross Loss              | (\$191,540.88) | (\$191,540.88) | \$0.00       | \$0.00         |
| Average Loss            | (\$15,961.74)  | (\$15,961.74)  | \$0.00       | \$0.00         |
| Average Loss %          | -5.04%         | -5.04%         | 0.00%        | 0.00%          |
| Average Bars Held       | 3.25           | 3.25           | 0            | 0              |
| Max Consecutive Losses  | 4              | 4              | 0            | 0              |
| Maximum Drawdown        | (\$143,879.43) | (\$143,879.43) | \$0.00       | (\$762,433.70) |
| Maximum Drawdown Date   | 7/31/2003      | 7/31/2003      | 12/31/1991   | 1/30/2009      |
| Maximum Drawdown %      | -33.66%        | -33.66%        | 0.00%        | -51.09%        |
| Maximum Drawdown % Date | 7/31/2003      | 7/31/2003      | 4/24/2010    | 1/30/2009      |
| Wealth-Lab Score        | 15.34          | 15.34          | 0            | 9.37           |
| Sharpe Ratio            | 0.41           | 0.41           | 0            | 0.43           |
| Profit Factor           | 3.75           | 3.75           | 0            | Infinity       |
| Recovery Factor         | 4.6            | 4.6            | Infinity     | 1.54           |
| Payoff Ratio            | 6.24           | 6.24           | 0            | 0              |

### 8.2.3.24 TMP

#### 8.2.3.24.1 Daily

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$25,267.49    | \$25,267.49    | \$205,705.34 | \$818,822.88   |
| Net Profit              | (\$74,732.51)  | (\$74,732.51)  | \$105,705.34 | \$718,822.88   |
| Net Profit %            | -74.73%        | -74.73%        | 105.71%      | 718.82%        |
| Annualized Gain %       | -7.21%         | -7.21%         | 4.00%        | 12.11%         |
| Exposure                | 45.20%         | 45.20%         | 0.00%        | 89.26%         |
| Total Commission        | (\$4,808.00)   | (\$4,808.00)   | \$0.00       | (\$8.00)       |
| Return on Cash          | \$24,496.50    | \$24,496.50    | \$105,705.34 | \$35,719.56    |
| Margin Interest Paid    | (\$0.97)       | (\$0.97)       | \$0.00       | (\$4,751.55)   |
| Dividends Received      | \$11,086.51    | \$11,086.51    | \$0.00       | \$182,944.66   |
|                         |                |                |              |                |
| Number of Trades        | 301            | 301            | 0            | 1              |
| Average Profit          | (\$248.28)     | (\$248.28)     | \$0.00       | \$718,822.88   |
| Average Profit %        | -0.56%         | -0.56%         | 0.00%        | 480.88%        |
| Average Bars Held       | 8.1            | 8.1            | 0            | 4,607.00       |
|                         |                |                |              |                |
| Winning Trades          | 88             | 88             | 0            | 1              |
| Win Rate                | 29.24%         | 29.24%         | 0.00%        | 100.00%        |
| Gross Profit            | \$173,405.66   | \$173,405.66   | \$0.00       | \$504,910.21   |
| Average Profit          | \$1,970.52     | \$1,970.52     | \$0.00       | \$504,910.21   |
| Average Profit %        | 3.82%          | 3.82%          | 0.00%        | 480.88%        |
| Average Bars Held       | 12.42          | 12.42          | 0            | 4,607.00       |
| Max Consecutive Winners | 8              | 8              | 0            | 1              |
|                         |                |                |              |                |
| Losing Trades           | 213            | 213            | 0            | 0              |
| Loss Rate               | 70.76%         | 70.76%         | 0.00%        | 0.00%          |
| Gross Loss              | (\$283,720.21) | (\$283,720.21) | \$0.00       | \$0.00         |
| Average Loss            | (\$1,332.02)   | (\$1,332.02)   | \$0.00       | \$0.00         |
| Average Loss %          | -2.37%         | -2.37%         | 0.00%        | 0.00%          |
| Average Bars Held       | 6.31           | 6.31           | 0            | 0              |
| Max Consecutive Losses  | 18             | 18             | 0            | 0              |
|                         |                |                |              |                |
| Maximum Drawdown        | (\$82,495.90)  | (\$82,495.90)  | \$0.00       | (\$361,074.24) |
| Maximum Drawdown Date   | 3/1/2010       | 3/1/2010       | 12/2/1991    | 3/6/2009       |
| Maximum Drawdown %      | -78.11%        | -78.11%        | 0.00%        | -45.22%        |
| Maximum Drawdown % Date | 3/1/2010       | 3/1/2010       | 4/24/2010    | 3/13/2000      |
|                         |                |                |              |                |
| Wealth-Lab Score        | -28.4          | -28.4          | 0            | 7.43           |
| Sharpe Ratio            | -0.54          | -0.54          | 0            | 0.45           |
| Profit Factor           | 0.61           | 0.61           | 0            | Infinity       |
| Recovery Factor         | 0              | 0              | Infinity     | 1.99           |
| Payoff Ratio            | 1.61           | 1.61           | 0            | 0              |

## 8.2.3.24.2 Weekly

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$38,377.80    | \$38,377.80    | \$205,617.00 | \$796,755.22   |
| Net Profit              | (\$61,622.20)  | (\$61,622.20)  | \$105,617.00 | \$696,755.22   |
| Net Profit %            | -61.62%        | -61.62%        | 105.62%      | 696.76%        |
| Annualized Gain %       | -5.08%         | -5.08%         | 4.00%        | 11.95%         |
| Exposure                | 47.48%         | 47.48%         | 0.00%        | 86.37%         |
| Total Commission        | (\$1,704.00)   | (\$1,704.00)   | \$0.00       | (\$8.00)       |
| Return on Cash          | \$26,090.73    | \$26,090.73    | \$105,617.00 | \$41,509.76    |
| Margin Interest Paid    | (\$0.83)       | (\$0.83)       | \$0.00       | \$0.00         |
| Dividends Received      | \$12,164.93    | \$12,164.93    | \$0.00       | \$173,556.04   |
| Number of Trades        | 107            | 107            | 0            | 1              |
| Average Profit          | (\$575.91)     | (\$575.91)     | \$0.00       | \$696,755.22   |
| Average Profit %        | -1.25%         | -1.25%         | 0.00%        | 497.01%        |
| Average Bars Held       | 5.36           | 5.36           | 0            | 958            |
| Winning Trades          | 27             | 27             | 0            | 1              |
| Win Rate                | 25.23%         | 25.23%         | 0.00%        | 100.00%        |
| Gross Profit            | \$116,054.19   | \$116,054.19   | \$0.00       | \$481,689.42   |
| Average Profit          | \$4,298.30     | \$4,298.30     | \$0.00       | \$481,689.42   |
| Average Profit %        | 6.89%          | 6.89%          | 0.00%        | 497.01%        |
| Average Bars Held       | 10             | 10             | 0            | 958            |
| Max Consecutive Winners | 3              | 3              | 0            | 1              |
| Losing Trades           | 80             | 80             | 0            | 0              |
| Loss Rate               | 74.77%         | 74.77%         | 0.00%        | 0.00%          |
| Gross Loss              | (\$215,931.23) | (\$215,931.23) | \$0.00       | \$0.00         |
| Average Loss            | (\$2,699.14)   | (\$2,699.14)   | \$0.00       | \$0.00         |
| Average Loss %          | -4.00%         | -4.00%         | 0.00%        | 0.00%          |
| Average Bars Held       | 3.79           | 3.79           | 0            | 0              |
| Max Consecutive Losses  | 23             | 23             | 0            | 0              |
| Maximum Drawdown        | (\$103,951.84) | (\$103,951.84) | \$0.00       | (\$302,518.44) |
| Maximum Drawdown Date   | 1/29/2010      | 1/29/2010      | 12/6/1991    | 3/6/2009       |
| Maximum Drawdown %      | -75.03%        | -75.03%        | 0.00%        | -42.63%        |
| Maximum Drawdown % Date | 1/29/2010      | 1/29/2010      | 4/24/2010    | 3/10/2000      |
| Wealth-Lab Score        | -18.72         | -18.72         | 0            | 7.94           |
| Sharpe Ratio            | -0.44          | -0.44          | 0            | 0.44           |
| Profit Factor           | 0.54           | 0.54           | 0            | Infinity       |
| Recovery Factor         | 0              | 0              | Infinity     | 2.3            |
| Payoff Ratio            | 1.72           | 1.72           | 0            | 0              |



## 8.2.3.24.3 Monthly

|                         | All Trades    | Long Trades   | Short Trades | Buy & Hold     |
|-------------------------|---------------|---------------|--------------|----------------|
| Starting Capital        | \$100,000.00  | \$100,000.00  | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$292,027.36  | \$292,027.36  | \$124,369.86 | \$247,469.72   |
| Net Profit              | \$192,027.36  | \$192,027.36  | \$24,369.86  | \$147,469.72   |
| Net Profit %            | 192.03%       | 192.03%       | 24.37%       | 147.47%        |
| Annualized Gain %       | 21.26%        | 21.26%        | 4.00%        | 17.70%         |
| Exposure                | 48.09%        | 48.09%        | 0.00%        | 98.10%         |
| Total Commission        | (\$104.00)    | (\$104.00)    | \$0.00       | (\$8.00)       |
| Return on Cash          | \$13,929.22   | \$13,929.22   | \$24,369.86  | \$744.24       |
| Margin Interest Paid    | (\$0.27)      | (\$0.27)      | \$0.00       | (\$770.45)     |
| Dividends Received      | \$1,444.66    | \$1,444.66    | \$0.00       | \$16,290.88    |
| Number of Trades        | 7             | 7             | 0            | 1              |
| Average Profit          | \$27,432.48   | \$27,432.48   | \$0.00       | \$147,469.72   |
| Average Profit %        | 24.13%        | 24.13%        | 0.00%        | 122.64%        |
| Average Bars Held       | 4.71          | 4.71          | 0            | 67             |
| Winning Trades          | 2             | 2             | 0            | 1              |
| Win Rate                | 28.57%        | 28.57%        | 0.00%        | 100.00%        |
| Gross Profit            | \$213,601.92  | \$213,601.92  | \$0.00       | \$131,205.05   |
| Average Profit          | \$106,800.96  | \$106,800.96  | \$0.00       | \$131,205.05   |
| Average Profit %        | 102.31%       | 102.31%       | 0.00%        | 122.64%        |
| Average Bars Held       | 10            | 10            | 0            | 67             |
| Max Consecutive Winners | 1             | 1             | 0            | 1              |
| Losing Trades           | 5             | 5             | 0            | 0              |
| Loss Rate               | 71.43%        | 71.43%        | 0.00%        | 0.00%          |
| Gross Loss              | (\$36,948.18) | (\$36,948.18) | \$0.00       | \$0.00         |
| Average Loss            | (\$7,389.64)  | (\$7,389.64)  | \$0.00       | \$0.00         |
| Average Loss %          | -7.14%        | -7.14%        | 0.00%        | 0.00%          |
| Average Bars Held       | 2.6           | 2.6           | 0            | 0              |
| Max Consecutive Losses  | 3             | 3             | 0            | 0              |
| Maximum Drawdown        | (\$38,778.58) | (\$38,778.58) | \$0.00       | (\$190,889.52) |
| Maximum Drawdown Date   | 11/30/2007    | 11/30/2007    | 9/30/2004    | 2/27/2009      |
| Maximum Drawdown %      | -27.27%       | -27.27%       | 0.00%        | -79.65%        |
| Maximum Drawdown % Date | 11/30/2007    | 11/30/2007    | 4/24/2010    | 2/27/2009      |
| Wealth-Lab Score        | 32.14         | 32.14         | 0            | 3.67           |
| Sharpe Ratio            | 0.65          | 0.65          | 0            | 0.48           |
| Profit Factor           | 5.78          | 5.78          | 0            | Infinity       |
| Recovery Factor         | 4.95          | 4.95          | Infinity     | 0.77           |
| Payoff Ratio            | 14.33         | 14.33         | 0            | 0              |

### 8.2.3.25 TTM

#### 8.2.3.25.1 Daily

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$161,223.58   | \$161,223.58   | \$124,409.94 | \$249,550.57   |
| Net Profit              | \$61,223.58    | \$61,223.58    | \$24,409.94  | \$149,550.57   |
| Net Profit %            | 61.22%         | 61.22%         | 24.41%       | 149.55%        |
| Annualized Gain %       | 8.96%          | 8.96%          | 4.00%        | 17.85%         |
| Exposure                | 49.52%         | 49.52%         | 0.00%        | 95.33%         |
| Total Commission        | (\$1,944.00)   | (\$1,944.00)   | \$0.00       | (\$8.00)       |
| Return on Cash          | \$16,368.84    | \$16,368.84    | \$24,409.94  | \$1,716.04     |
| Margin Interest Paid    | (\$0.55)       | (\$0.55)       | \$0.00       | (\$90.73)      |
| Dividends Received      | \$16,016.37    | \$16,016.37    | \$0.00       | \$15,970.77    |
|                         |                |                |              |                |
| Number of Trades        | 122            | 122            | 0            | 1              |
| Average Profit          | \$501.83       | \$501.83       | \$0.00       | \$149,550.57   |
| Average Profit %        | 0.50%          | 0.50%          | 0.00%        | 129.94%        |
| Average Bars Held       | 6.69           | 6.69           | 0            | 1,403.00       |
|                         |                |                |              |                |
| Winning Trades          | 42             | 42             | 0            | 1              |
| Win Rate                | 34.43%         | 34.43%         | 0.00%        | 100.00%        |
| Gross Profit            | \$419,526.44   | \$419,526.44   | \$0.00       | \$131,954.50   |
| Average Profit          | \$9,988.72     | \$9,988.72     | \$0.00       | \$131,954.50   |
| Average Profit %        | 7.94%          | 7.94%          | 0.00%        | 129.94%        |
| Average Bars Held       | 11.88          | 11.88          | 0            | 1,403.00       |
| Max Consecutive Winners | 6              | 6              | 0            | 1              |
|                         |                |                |              |                |
| Losing Trades           | 80             | 80             | 0            | 0              |
| Loss Rate               | 65.57%         | 65.57%         | 0.00%        | 0.00%          |
| Gross Loss              | (\$390,687.53) | (\$390,687.53) | \$0.00       | \$0.00         |
| Average Loss            | (\$4,883.59)   | (\$4,883.59)   | \$0.00       | \$0.00         |
| Average Loss %          | -3.40%         | -3.40%         | 0.00%        | 0.00%          |
| Average Bars Held       | 3.96           | 3.96           | 0            | 0              |
| Max Consecutive Losses  | 9              | 9              | 0            | 0              |
|                         |                |                |              |                |
| Maximum Drawdown        | (\$167,756.38) | (\$167,756.38) | \$0.00       | (\$208,405.49) |
| Maximum Drawdown Date   | 3/11/2009      | 3/11/2009      | 9/27/2004    | 3/2/2009       |
| Maximum Drawdown %      | -74.15%        | -74.15%        | 0.00%        | -80.58%        |
| Maximum Drawdown % Date | 3/11/2009      | 3/11/2009      | 4/24/2010    | 3/2/2009       |
|                         |                |                |              |                |
| Wealth-Lab Score        | 4.68           | 4.68           | 0            | 3.64           |
| Sharpe Ratio            | 0.3            | 0.3            | 0            | 0.49           |
| Profit Factor           | 1.07           | 1.07           | 0            | Infinity       |
| Recovery Factor         | 0.36           | 0.36           | Infinity     | 0.72           |
| Payoff Ratio            | 2.33           | 2.33           | 0            | 0              |

## 8.2.3.25.2 Weekly

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$270,820.05   | \$270,820.05   | \$124,356.51 | \$240,361.36   |
| Net Profit              | \$170,820.05   | \$170,820.05   | \$24,356.51  | \$140,361.36   |
| Net Profit %            | 170.82%        | 170.82%        | 24.36%       | 140.36%        |
| Annualized Gain %       | 19.63%         | 19.63%         | 4.00%        | 17.09%         |
| Exposure                | 54.55%         | 54.55%         | 0.00%        | 98.64%         |
| Total Commission        | (\$408.00)     | (\$408.00)     | \$0.00       | (\$8.00)       |
| Return on Cash          | \$16,243.68    | \$16,243.68    | \$24,356.51  | \$753.23       |
| Margin Interest Paid    | (\$0.83)       | (\$0.83)       | \$0.00       | (\$702.52)     |
| Dividends Received      | \$5,713.37     | \$5,713.37     | \$0.00       | \$15,798.19    |
|                         |                |                |              |                |
| Number of Trades        | 26             | 26             | 0            | 1              |
| Average Profit          | \$6,570.00     | \$6,570.00     | \$0.00       | \$140,361.36   |
| Average Profit %        | 5.40%          | 5.40%          | 0.00%        | 116.94%        |
| Average Bars Held       | 7              | 7              | 0            | 290            |
|                         |                |                |              |                |
| Winning Trades          | 12             | 12             | 0            | 1              |
| Win Rate                | 46.15%         | 46.15%         | 0.00%        | 100.00%        |
| Gross Profit            | \$307,730.26   | \$307,730.26   | \$0.00       | \$124,512.47   |
| Average Profit          | \$25,644.19    | \$25,644.19    | \$0.00       | \$124,512.47   |
| Average Profit %        | 19.84%         | 19.84%         | 0.00%        | 116.94%        |
| Average Bars Held       | 10.75          | 10.75          | 0            | 290            |
| Max Consecutive Winners | 3              | 3              | 0            | 1              |
|                         |                |                |              |                |
| Losing Trades           | 14             | 14             | 0            | 0              |
| Loss Rate               | 53.85%         | 53.85%         | 0.00%        | 0.00%          |
| Gross Loss              | (\$158,866.44) | (\$158,866.44) | \$0.00       | \$0.00         |
| Average Loss            | (\$11,347.60)  | (\$11,347.60)  | \$0.00       | \$0.00         |
| Average Loss %          | -6.98%         | -6.98%         | 0.00%        | 0.00%          |
| Average Bars Held       | 3.79           | 3.79           | 0            | 0              |
| Max Consecutive Losses  | 6              | 6              | 0            | 0              |
|                         |                |                |              |                |
| Maximum Drawdown        | (\$142,505.22) | (\$142,505.22) | \$0.00       | (\$200,538.02) |
| Maximum Drawdown Date   | 2/20/2009      | 2/20/2009      | 10/1/2004    | 2/20/2009      |
| Maximum Drawdown %      | -67.01%        | -67.01%        | 0.00%        | -81.47%        |
| Maximum Drawdown % Date | 2/20/2009      | 2/20/2009      | 4/24/2010    | 2/20/2009      |
|                         |                |                |              |                |
| Wealth-Lab Score        | 11.87          | 11.87          | 0            | 3.21           |
| Sharpe Ratio            | 0.53           | 0.53           | 0            | 0.48           |
| Profit Factor           | 1.94           | 1.94           | 0            | Infinity       |
| Recovery Factor         | 1.2            | 1.2            | Infinity     | 0.7            |
| Payoff Ratio            | 2.84           | 2.84           | 0            | 0              |

## 8.2.3.25.3 Monthly

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$647,422.96   | \$647,422.96   | \$205,065.76 | \$1,016,312.92 |
| Net Profit              | \$547,422.96   | \$547,422.96   | \$105,065.76 | \$916,312.92   |
| Net Profit %            | 547.42%        | 547.42%        | 105.07%      | 916.31%        |
| Annualized Gain %       | 10.74%         | 10.74%         | 4.00%        | 13.50%         |
| Exposure                | 45.25%         | 45.25%         | 0.00%        | 65.18%         |
| Total Commission        | (\$200.00)     | (\$200.00)     | \$0.00       | (\$76.43)      |
| Return on Cash          | \$183,362.15   | \$183,362.15   | \$105,065.76 | \$144,398.89   |
| Margin Interest Paid    | (\$0.94)       | (\$0.94)       | \$0.00       | \$0.00         |
| Dividends Received      | \$107,612.60   | \$107,612.60   | \$0.00       | \$178,129.05   |
| Number of Trades        | 13             | 13             | 0            | 1              |
| Average Profit          | \$42,109.46    | \$42,109.46    | \$0.00       | \$916,312.92   |
| Average Profit %        | 14.64%         | 14.64%         | 0.00%        | 0.00%          |
| Average Bars Held       | 8.69           | 8.69           | 0            | 220            |
| Winning Trades          | 6              | 6              | 0            | 1              |
| Win Rate                | 46.15%         | 46.15%         | 0.00%        | 100.00%        |
| Gross Profit            | \$554,148.26   | \$554,148.26   | \$0.00       | \$593,784.98   |
| Average Profit          | \$92,358.04    | \$92,358.04    | \$0.00       | \$593,784.98   |
| Average Profit %        | 38.87%         | 38.87%         | 0.00%        | 0.00%          |
| Average Bars Held       | 14.33          | 14.33          | 0            | 220            |
| Max Consecutive Winners | 4              | 4              | 0            | 1              |
| Losing Trades           | 7              | 7              | 0            | 0              |
| Loss Rate               | 53.85%         | 53.85%         | 0.00%        | 0.00%          |
| Gross Loss              | (\$297,699.12) | (\$297,699.12) | \$0.00       | \$0.00         |
| Average Loss            | (\$42,528.45)  | (\$42,528.45)  | \$0.00       | \$0.00         |
| Average Loss %          | -6.13%         | -6.13%         | 0.00%        | 0.00%          |
| Average Bars Held       | 3.86           | 3.86           | 0            | 0              |
| Max Consecutive Losses  | 3              | 3              | 0            | 0              |
| Maximum Drawdown        | (\$182,756.59) | (\$182,756.59) | \$0.00       | (\$232,270.09) |
| Maximum Drawdown Date   | 6/30/2008      | 6/30/2008      | 12/31/1991   | 2/27/2009      |
| Maximum Drawdown %      | -23.26%        | -23.26%        | 0.00%        | -28.64%        |
| Maximum Drawdown % Date | 6/30/2008      | 6/30/2008      | 4/24/2010    | 5/31/2000      |
| Wealth-Lab Score        | 18.21          | 18.21          | 0            | 14.78          |
| Sharpe Ratio            | 0.46           | 0.46           | 0            | 0.41           |
| Profit Factor           | 1.86           | 1.86           | 0            | Infinity       |
| Recovery Factor         | 3              | 3              | Infinity     | 3.95           |
| Payoff Ratio            | 6.34           | 6.34           | 0            | 0              |

### 8.2.3.26 UAM

#### 8.2.3.26.1 Daily

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold       |
|-------------------------|----------------|----------------|--------------|------------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00     |
| Ending Capital          | \$3.02         | \$3.02         | \$205,705.34 | \$3,387,574.82   |
| Net Profit              | (\$99,996.98)  | (\$99,996.98)  | \$105,705.34 | \$3,287,574.82   |
| Net Profit %            | -100.00%       | -100.00%       | 105.71%      | 3287.57%         |
| Annualized Gain %       | -43.22%        | -43.22%        | 4.00%        | 21.11%           |
| Exposure                | 47.65%         | 47.65%         | 0.00%        | 100.86%          |
| Total Commission        | (\$19,742.35)  | (\$19,742.35)  | \$0.00       | (\$1,053.00)     |
| Return on Cash          | \$6,119.89     | \$6,119.89     | \$105,705.34 | \$0.00           |
| Margin Interest Paid    | (\$25.88)      | (\$25.88)      | \$0.00       | (\$18,872.18)    |
| Dividends Received      | \$0.00         | \$0.00         | \$0.00       | \$0.00           |
|                         |                |                |              |                  |
| Number of Trades        | 128            | 128            | 0            | 1                |
| Average Profit          | (\$781.23)     | (\$781.23)     | \$0.00       | \$3,287,574.82   |
| Average Profit %        | -7.71%         | -7.71%         | 0.00%        | 3149.00%         |
| Average Bars Held       | 5.51           | 5.51           | 0            | 4,623.00         |
|                         |                |                |              |                  |
| Winning Trades          | 16             | 16             | 0            | 1                |
| Win Rate                | 12.50%         | 12.50%         | 0.00%        | 100.00%          |
| Gross Profit            | \$162,966.32   | \$162,966.32   | \$0.00       | \$3,306,447.00   |
| Average Profit          | \$10,185.40    | \$10,185.40    | \$0.00       | \$3,306,447.00   |
| Average Profit %        | 12.26%         | 12.26%         | 0.00%        | 3149.00%         |
| Average Bars Held       | 12.44          | 12.44          | 0            | 4,623.00         |
| Max Consecutive Winners | 3              | 3              | 0            | 1                |
|                         |                |                |              |                  |
| Losing Trades           | 112            | 112            | 0            | 0                |
| Loss Rate               | 87.50%         | 87.50%         | 0.00%        | 0.00%            |
| Gross Loss              | (\$269,057.31) | (\$269,057.31) | \$0.00       | \$0.00           |
| Average Loss            | (\$2,402.30)   | (\$2,402.30)   | \$0.00       | \$0.00           |
| Average Loss %          | -10.56%        | -10.56%        | 0.00%        | 0.00%            |
| Average Bars Held       | 4.52           | 4.52           | 0            | 0                |
| Max Consecutive Losses  | 43             | 43             | 0            | 0                |
|                         |                |                |              |                  |
| Maximum Drawdown        | (\$171,322.78) | (\$171,322.78) | \$0.00       | (\$4,283,900.66) |
| Maximum Drawdown Date   | 10/8/2003      | 10/8/2003      | 12/2/1991    | 3/5/2009         |
| Maximum Drawdown %      | -100.00%       | -100.00%       | 0.00%        | -79.37%          |
| Maximum Drawdown % Date | 10/8/2003      | 10/8/2003      | 4/24/2010    | 3/5/2009         |
|                         |                |                |              |                  |
| Wealth-Lab Score        | -181.39        | -181.39        | 0            | 4.32             |
| Sharpe Ratio            | -0.99          | -0.99          | 0            | 0.54             |
| Profit Factor           | 0.61           | 0.61           | 0            | Infinity         |
| Recovery Factor         | 0              | 0              | Infinity     | 0.77             |
| Payoff Ratio            | 1.16           | 1.16           | 0            | 0                |

## 8.2.3.26.2 Weekly

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold       |
|-------------------------|----------------|----------------|--------------|------------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00     |
| Ending Capital          | \$84,650.06    | \$84,650.06    | \$205,617.00 | \$3,045,105.73   |
| Net Profit              | (\$15,349.94)  | (\$15,349.94)  | \$105,617.00 | \$2,945,105.73   |
| Net Profit %            | -15.35%        | -15.35%        | 105.62%      | 2945.11%         |
| Annualized Gain %       | -0.90%         | -0.90%         | 4.00%        | 20.43%           |
| Exposure                | 55.06%         | 55.06%         | 0.00%        | 99.39%           |
| Total Commission        | (\$5,413.22)   | (\$5,413.22)   | \$0.00       | (\$936.33)       |
| Return on Cash          | \$29,741.95    | \$29,741.95    | \$105,617.00 | \$6,052.56       |
| Margin Interest Paid    | (\$43.27)      | (\$43.27)      | \$0.00       | \$0.00           |
| Dividends Received      | \$0.00         | \$0.00         | \$0.00       | \$0.00           |
|                         |                |                |              |                  |
| Number of Trades        | 92             | 92             | 0            | 1                |
| Average Profit          | (\$166.85)     | (\$166.85)     | \$0.00       | \$2,945,105.73   |
| Average Profit %        | 0.75%          | 0.75%          | 0.00%        | 3149.00%         |
| Average Bars Held       | 6.55           | 6.55           | 0            | 958              |
|                         |                |                |              |                  |
| Winning Trades          | 27             | 27             | 0            | 1                |
| Win Rate                | 29.35%         | 29.35%         | 0.00%        | 100.00%          |
| Gross Profit            | \$436,688.90   | \$436,688.90   | \$0.00       | \$2,939,053.17   |
| Average Profit          | \$16,173.66    | \$16,173.66    | \$0.00       | \$2,939,053.17   |
| Average Profit %        | 20.58%         | 20.58%         | 0.00%        | 3149.00%         |
| Average Bars Held       | 11.41          | 11.41          | 0            | 958              |
| Max Consecutive Winners | 3              | 3              | 0            | 1                |
|                         |                |                |              |                  |
| Losing Trades           | 65             | 65             | 0            | 0                |
| Loss Rate               | 70.65%         | 70.65%         | 0.00%        | 0.00%            |
| Gross Loss              | (\$481,737.51) | (\$481,737.51) | \$0.00       | \$0.00           |
| Average Loss            | (\$7,411.35)   | (\$7,411.35)   | \$0.00       | \$0.00           |
| Average Loss %          | -7.48%         | -7.48%         | 0.00%        | 0.00%            |
| Average Bars Held       | 4.54           | 4.54           | 0            | 0                |
| Max Consecutive Losses  | 12             | 12             | 0            | 0                |
|                         |                |                |              |                  |
| Maximum Drawdown        | (\$350,945.91) | (\$350,945.91) | \$0.00       | (\$3,581,607.28) |
| Maximum Drawdown Date   | 12/24/1998     | 12/24/1998     | 12/6/1991    | 3/6/2009         |
| Maximum Drawdown %      | -95.07%        | -95.07%        | 0.00%        | -75.58%          |
| Maximum Drawdown % Date | 12/24/1998     | 12/24/1998     | 4/24/2010    | 3/6/2009         |
|                         |                |                |              |                  |
| Wealth-Lab Score        | -3.2           | -3.2           | 0            | 5.02             |
| Sharpe Ratio            | 0.07           | 0.07           | 0            | 0.53             |
| Profit Factor           | 0.91           | 0.91           | 0            | Infinity         |
| Recovery Factor         | 0              | 0              | Infinity     | 0.82             |
| Payoff Ratio            | 2.75           | 2.75           | 0            | 0                |

## 8.2.3.26.3 Monthly

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold       |
|-------------------------|----------------|----------------|--------------|------------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00     |
| Ending Capital          | \$254,276.25   | \$254,276.25   | \$205,065.76 | \$4,102,598.82   |
| Net Profit              | \$154,276.25   | \$154,276.25   | \$105,065.76 | \$4,002,598.82   |
| Net Profit %            | 154.28%        | 154.28%        | 105.07%      | 4002.60%         |
| Annualized Gain %       | 5.23%          | 5.23%          | 4.00%        | 22.49%           |
| Exposure                | 53.21%         | 53.21%         | 0.00%        | 92.52%           |
| Total Commission        | (\$1,010.86)   | (\$1,010.86)   | \$0.00       | (\$1,203.00)     |
| Return on Cash          | \$49,295.19    | \$49,295.19    | \$105,065.76 | \$103,801.82     |
| Margin Interest Paid    | (\$36.04)      | (\$36.04)      | \$0.00       | \$0.00           |
| Dividends Received      | \$0.00         | \$0.00         | \$0.00       | \$0.00           |
| Number of Trades        | 25             | 25             | 0            | 1                |
| Average Profit          | \$6,171.05     | \$6,171.05     | \$0.00       | \$4,002,598.82   |
| Average Profit %        | 5.20%          | 5.20%          | 0.00%        | 0.00%            |
| Average Bars Held       | 5.52           | 5.52           | 0            | 220              |
| Winning Trades          | 10             | 10             | 0            | 1                |
| Win Rate                | 40.00%         | 40.00%         | 0.00%        | 100.00%          |
| Gross Profit            | \$363,636.87   | \$363,636.87   | \$0.00       | \$3,898,797.00   |
| Average Profit          | \$36,363.69    | \$36,363.69    | \$0.00       | \$3,898,797.00   |
| Average Profit %        | 30.50%         | 30.50%         | 0.00%        | 0.00%            |
| Average Bars Held       | 9.3            | 9.3            | 0            | 220              |
| Max Consecutive Winners | 3              | 3              | 0            | 1                |
| Losing Trades           | 15             | 15             | 0            | 0                |
| Loss Rate               | 60.00%         | 60.00%         | 0.00%        | 0.00%            |
| Gross Loss              | (\$258,619.77) | (\$258,619.77) | \$0.00       | \$0.00           |
| Average Loss            | (\$17,241.32)  | (\$17,241.32)  | \$0.00       | \$0.00           |
| Average Loss %          | -11.67%        | -11.67%        | 0.00%        | 0.00%            |
| Average Bars Held       | 3              | 3              | 0            | 0                |
| Max Consecutive Losses  | 5              | 5              | 0            | 0                |
| Maximum Drawdown        | (\$230,352.92) | (\$230,352.92) | \$0.00       | (\$4,522,580.30) |
| Maximum Drawdown Date   | 6/30/2003      | 6/30/2003      | 12/31/1991   | 2/27/2009        |
| Maximum Drawdown %      | -76.23%        | -76.23%        | 0.00%        | -71.48%          |
| Maximum Drawdown % Date | 6/30/2003      | 6/30/2003      | 4/24/2010    | 2/27/2009        |
| Wealth-Lab Score        | 2.34           | 2.34           | 0            | 6.93             |
| Sharpe Ratio            | 0.19           | 0.19           | 0            | 0.56             |
| Profit Factor           | 1.41           | 1.41           | 0            | Infinity         |
| Recovery Factor         | 0.67           | 0.67           | Infinity     | 0.89             |
| Payoff Ratio            | 2.61           | 2.61           | 0            | 0                |

### 8.2.3.27 UNS

#### 8.2.3.27.1 Daily

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$26,175.61    | \$26,175.61    | \$205,705.34 | \$177,974.90   |
| Net Profit              | (\$73,824.39)  | (\$73,824.39)  | \$105,705.34 | \$77,974.90    |
| Net Profit %            | -73.82%        | -73.82%        | 105.71%      | 77.97%         |
| Annualized Gain %       | -7.03%         | -7.03%         | 4.00%        | 3.18%          |
| Exposure                | 47.18%         | 47.18%         | 0.00%        | 107.83%        |
| Total Commission        | (\$6,584.00)   | (\$6,584.00)   | \$0.00       | (\$8.00)       |
| Return on Cash          | \$14,461.41    | \$14,461.41    | \$105,705.34 | \$891.06       |
| Margin Interest Paid    | (\$1.03)       | (\$1.03)       | \$0.00       | (\$12,760.25)  |
| Dividends Received      | \$3,740.10     | \$3,740.10     | \$0.00       | \$36,513.99    |
|                         |                |                |              |                |
| Number of Trades        | 412            | 412            | 0            | 1              |
| Average Profit          | (\$179.19)     | (\$179.19)     | \$0.00       | \$77,974.90    |
| Average Profit %        | -0.30%         | -0.30%         | 0.00%        | 49.34%         |
| Average Bars Held       | 6.34           | 6.34           | 0            | 4,634.00       |
|                         |                |                |              |                |
| Winning Trades          | 102            | 102            | 0            | 1              |
| Win Rate                | 24.76%         | 24.76%         | 0.00%        | 100.00%        |
| Gross Profit            | \$240,002.89   | \$240,002.89   | \$0.00       | \$53,330.10    |
| Average Profit          | \$2,352.97     | \$2,352.97     | \$0.00       | \$53,330.10    |
| Average Profit %        | 5.92%          | 5.92%          | 0.00%        | 49.34%         |
| Average Bars Held       | 11.63          | 11.63          | 0            | 4,634.00       |
| Max Consecutive Winners | 4              | 4              | 0            | 1              |
|                         |                |                |              |                |
| Losing Trades           | 310            | 310            | 0            | 0              |
| Loss Rate               | 75.24%         | 75.24%         | 0.00%        | 0.00%          |
| Gross Loss              | (\$332,027.76) | (\$332,027.76) | \$0.00       | \$0.00         |
| Average Loss            | (\$1,071.06)   | (\$1,071.06)   | \$0.00       | \$0.00         |
| Average Loss %          | -2.35%         | -2.35%         | 0.00%        | 0.00%          |
| Average Bars Held       | 4.61           | 4.61           | 0            | 0              |
| Max Consecutive Losses  | 22             | 22             | 0            | 0              |
|                         |                |                |              |                |
| Maximum Drawdown        | (\$168,107.80) | (\$168,107.80) | \$0.00       | (\$188,898.66) |
| Maximum Drawdown Date   | 7/24/1996      | 7/24/1996      | 12/2/1991    | 12/15/1992     |
| Maximum Drawdown %      | -93.29%        | -93.29%        | 0.00%        | -88.23%        |
| Maximum Drawdown % Date | 7/24/1996      | 7/24/1996      | 4/24/2010    | 12/15/1992     |
|                         |                |                |              |                |
| Wealth-Lab Score        | -28.8          | -28.8          | 0            | 0.35           |
| Sharpe Ratio            | -0.29          | -0.29          | 0            | 0.15           |
| Profit Factor           | 0.72           | 0.72           | 0            | Infinity       |
| Recovery Factor         | 0              | 0              | Infinity     | 0.41           |
| Payoff Ratio            | 2.52           | 2.52           | 0            | 0              |



## 8.2.3.27.2 Weekly

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$258,910.58   | \$258,910.58   | \$205,617.00 | \$183,000.19   |
| Net Profit              | \$158,910.58   | \$158,910.58   | \$105,617.00 | \$83,000.19    |
| Net Profit %            | 158.91%        | 158.91%        | 105.62%      | 83.00%         |
| Annualized Gain %       | 5.31%          | 5.31%          | 4.00%        | 3.34%          |
| Exposure                | 50.81%         | 50.81%         | 0.00%        | 101.27%        |
| Total Commission        | (\$1,288.00)   | (\$1,288.00)   | \$0.00       | (\$8.00)       |
| Return on Cash          | \$52,807.14    | \$52,807.14    | \$105,617.00 | \$2,372.86     |
| Margin Interest Paid    | (\$1.32)       | (\$1.32)       | \$0.00       | (\$6,652.67)   |
| Dividends Received      | \$30,823.99    | \$30,823.99    | \$0.00       | \$35,472.00    |
| Number of Trades        | 81             | 81             | 0            | 1              |
| Average Profit          | \$1,961.86     | \$1,961.86     | \$0.00       | \$83,000.19    |
| Average Profit %        | 0.89%          | 0.89%          | 0.00%        | 49.34%         |
| Average Bars Held       | 6.89           | 6.89           | 0            | 958            |
| Winning Trades          | 29             | 29             | 0            | 1              |
| Win Rate                | 35.80%         | 35.80%         | 0.00%        | 100.00%        |
| Gross Profit            | \$360,023.63   | \$360,023.63   | \$0.00       | \$51,808.00    |
| Average Profit          | \$12,414.61    | \$12,414.61    | \$0.00       | \$51,808.00    |
| Average Profit %        | 9.04%          | 9.04%          | 0.00%        | 49.34%         |
| Average Bars Held       | 11.52          | 11.52          | 0            | 958            |
| Max Consecutive Winners | 6              | 6              | 0            | 1              |
| Losing Trades           | 52             | 52             | 0            | 0              |
| Loss Rate               | 64.20%         | 64.20%         | 0.00%        | 0.00%          |
| Gross Loss              | (\$284,742.86) | (\$284,742.86) | \$0.00       | \$0.00         |
| Average Loss            | (\$5,475.82)   | (\$5,475.82)   | \$0.00       | \$0.00         |
| Average Loss %          | -3.66%         | -3.66%         | 0.00%        | 0.00%          |
| Average Bars Held       | 4.31           | 4.31           | 0            | 0              |
| Max Consecutive Losses  | 10             | 10             | 0            | 0              |
| Maximum Drawdown        | (\$107,473.37) | (\$107,473.37) | \$0.00       | (\$145,065.21) |
| Maximum Drawdown Date   | 5/15/2009      | 5/15/2009      | 12/6/1991    | 5/7/1999       |
| Maximum Drawdown %      | -58.26%        | -58.26%        | 0.00%        | -77.62%        |
| Maximum Drawdown % Date | 6/28/1996      | 6/28/1996      | 4/24/2010    | 5/7/1999       |
| Wealth-Lab Score        | 4.36           | 4.36           | 0            | 0.74           |
| Sharpe Ratio            | 0.16           | 0.16           | 0            | 0.16           |
| Profit Factor           | 1.26           | 1.26           | 0            | Infinity       |
| Recovery Factor         | 1.48           | 1.48           | Infinity     | 0.57           |
| Payoff Ratio            | 2.47           | 2.47           | 0            | 0              |

## 8.2.3.27.3 Monthly

|                         | All Trades    | Long Trades   | Short Trades | Buy & Hold     |
|-------------------------|---------------|---------------|--------------|----------------|
| Starting Capital        | \$100,000.00  | \$100,000.00  | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$127,642.63  | \$127,642.63  | \$205,065.76 | \$60,765.80    |
| Net Profit              | \$27,642.63   | \$27,642.63   | \$105,065.76 | (\$39,234.20)  |
| Net Profit %            | 27.64%        | 27.64%        | 105.07%      | -39.23%        |
| Annualized Gain %       | 1.34%         | 1.34%         | 4.00%        | -2.68%         |
| Exposure                | 53.11%        | 53.11%        | 0.00%        | 279.59%        |
| Total Commission        | (\$312.00)    | (\$312.00)    | \$0.00       | (\$8.00)       |
| Return on Cash          | \$32,029.34   | \$32,029.34   | \$105,065.76 | \$0.00         |
| Margin Interest Paid    | (\$1.20)      | (\$1.20)      | \$0.00       | (\$91,998.66)  |
| Dividends Received      | \$16,259.85   | \$16,259.85   | \$0.00       | \$34,481.74    |
| Number of Trades        | 20            | 20            | 0            | 1              |
| Average Profit          | \$1,382.13    | \$1,382.13    | \$0.00       | (\$39,234.20)  |
| Average Profit %        | -0.35%        | -0.35%        | 0.00%        | 13.63%         |
| Average Bars Held       | 6.75          | 6.75          | 0            | 220            |
| Winning Trades          | 6             | 6             | 0            | 1              |
| Win Rate                | 30.00%        | 30.00%        | 0.00%        | 100.00%        |
| Gross Profit            | \$74,074.47   | \$74,074.47   | \$0.00       | \$18,282.72    |
| Average Profit          | \$12,345.75   | \$12,345.75   | \$0.00       | \$18,282.72    |
| Average Profit %        | 16.22%        | 16.22%        | 0.00%        | 13.63%         |
| Average Bars Held       | 9             | 9             | 0            | 220            |
| Max Consecutive Winners | 2             | 2             | 0            | 1              |
| Losing Trades           | 14            | 14            | 0            | 0              |
| Loss Rate               | 70.00%        | 70.00%        | 0.00%        | 0.00%          |
| Gross Loss              | (\$94,719.83) | (\$94,719.83) | \$0.00       | \$0.00         |
| Average Loss            | (\$6,765.70)  | (\$6,765.70)  | \$0.00       | \$0.00         |
| Average Loss %          | -7.45%        | -7.45%        | 0.00%        | 0.00%          |
| Average Bars Held       | 5.79          | 5.79          | 0            | 0              |
| Max Consecutive Losses  | 4             | 4             | 0            | 0              |
| Maximum Drawdown        | (\$75,278.51) | (\$75,278.51) | \$0.00       | (\$163,075.81) |
| Maximum Drawdown Date   | 12/31/1999    | 12/31/1999    | 12/31/1991   | 12/31/1999     |
| Maximum Drawdown %      | -56.76%       | -56.76%       | 0.00%        | -107.25%       |
| Maximum Drawdown % Date | 12/31/1999    | 12/31/1999    | 4/24/2010    | 12/31/1999     |
| Wealth-Lab Score        | 1.09          | 1.09          | 0            | -1.99          |
| Sharpe Ratio            | -0.07         | -0.07         | 0            | 0.27           |
| Profit Factor           | 0.78          | 0.78          | 0            | Infinity       |
| Recovery Factor         | 0.37          | 0.37          | Infinity     | 0              |
| Payoff Ratio            | 2.18          | 2.18          | 0            | 0              |

### 8.2.3.28 VIT

#### 8.2.3.28.1 Daily

|                         | All Trades    | Long Trades   | Short Trades | Buy & Hold    |
|-------------------------|---------------|---------------|--------------|---------------|
| Starting Capital        | \$100,000.00  | \$100,000.00  | \$100,000.00 | \$100,000.00  |
| Ending Capital          | \$193,465.27  | \$193,465.27  | \$109,486.29 | \$294,994.73  |
| Net Profit              | \$93,465.27   | \$93,465.27   | \$9,486.29   | \$194,994.73  |
| Net Profit %            | 93.47%        | 93.47%        | 9.49%        | 194.99%       |
| Annualized Gain %       | 33.05%        | 33.05%        | 4.00%        | 59.70%        |
| Exposure                | 52.10%        | 52.10%        | 0.00%        | 99.53%        |
| Total Commission        | (\$40.00)     | (\$40.00)     | \$0.00       | (\$8.00)      |
| Return on Cash          | \$5,235.04    | \$5,235.04    | \$9,486.29   | \$0.00        |
| Margin Interest Paid    | (\$0.27)      | (\$0.27)      | \$0.00       | (\$519.43)    |
| Dividends Received      | \$0.00        | \$0.00        | \$0.00       | \$0.00        |
|                         |               |               |              |               |
| Number of Trades        | 3             | 3             | 0            | 1             |
| Average Profit          | \$31,155.09   | \$31,155.09   | \$0.00       | \$194,994.73  |
| Average Profit %        | 31.86%        | 31.86%        | 0.00%        | 190.45%       |
| Average Bars Held       | 4.67          | 4.67          | 0            | 28            |
|                         |               |               |              |               |
| Winning Trades          | 2             | 2             | 0            | 1             |
| Win Rate                | 66.67%        | 66.67%        | 0.00%        | 100.00%       |
| Gross Profit            | \$109,154.97  | \$109,154.97  | \$0.00       | \$195,514.16  |
| Average Profit          | \$54,577.49   | \$54,577.49   | \$0.00       | \$195,514.16  |
| Average Profit %        | 58.01%        | 58.01%        | 0.00%        | 190.45%       |
| Average Bars Held       | 6             | 6             | 0            | 28            |
| Max Consecutive Winners | 2             | 2             | 0            | 1             |
|                         |               |               |              |               |
| Losing Trades           | 1             | 1             | 0            | 0             |
| Loss Rate               | 33.33%        | 33.33%        | 0.00%        | 0.00%         |
| Gross Loss              | (\$20,924.47) | (\$20,924.47) | \$0.00       | \$0.00        |
| Average Loss            | (\$20,924.47) | (\$20,924.47) | \$0.00       | \$0.00        |
| Average Loss %          | -20.45%       | -20.45%       | 0.00%        | 0.00%         |
| Average Bars Held       | 2             | 2             | 0            | 0             |
| Max Consecutive Losses  | 1             | 1             | 0            | 0             |
|                         |               |               |              |               |
| Maximum Drawdown        | (\$45,405.11) | (\$45,405.11) | \$0.00       | (\$86,491.53) |
| Maximum Drawdown Date   | 10/30/2009    | 10/30/2009    | 12/31/2007   | 2/27/2009     |
| Maximum Drawdown %      | -22.33%       | -22.33%       | 0.00%        | -62.92%       |
| Maximum Drawdown % Date | 10/30/2009    | 10/30/2009    | 4/24/2010    | 2/27/2009     |
|                         |               |               |              |               |
| Wealth-Lab Score        | 49.28         | 49.28         | 0            | 22.24         |
| Sharpe Ratio            | 0.7           | 0.7           | 0            | 0.9           |
| Profit Factor           | 5.22          | 5.22          | 0            | Infinity      |
| Recovery Factor         | 2.06          | 2.06          | Infinity     | 2.25          |
| Payoff Ratio            | 2.84          | 2.84          | 0            | 0             |

## 8.2.3.28.2 Weekly

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold    |
|-------------------------|----------------|----------------|--------------|---------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00  |
| Ending Capital          | \$91,072.01    | \$91,072.01    | \$109,686.33 | \$255,877.73  |
| Net Profit              | (\$8,927.99)   | (\$8,927.99)   | \$9,686.33   | \$155,877.73  |
| Net Profit %            | -8.93%         | -8.93%         | 9.69%        | 155.88%       |
| Annualized Gain %       | -3.89%         | -3.89%         | 4.00%        | 48.97%        |
| Exposure                | 50.54%         | 50.54%         | 0.00%        | 105.29%       |
| Total Commission        | (\$200.00)     | (\$200.00)     | \$0.00       | (\$8.00)      |
| Return on Cash          | \$3,877.88     | \$3,877.88     | \$9,686.33   | \$0.00        |
| Margin Interest Paid    | (\$0.36)       | (\$0.36)       | \$0.00       | (\$1,200.71)  |
| Dividends Received      | \$0.00         | \$0.00         | \$0.00       | \$0.00        |
|                         |                |                |              |               |
| Number of Trades        | 13             | 13             | 0            | 1             |
| Average Profit          | (\$686.77)     | (\$686.77)     | \$0.00       | \$155,877.73  |
| Average Profit %        | 4.74%          | 4.74%          | 0.00%        | 148.15%       |
| Average Bars Held       | 5.77           | 5.77           | 0            | 123           |
|                         |                |                |              |               |
| Winning Trades          | 4              | 4              | 0            | 1             |
| Win Rate                | 30.77%         | 30.77%         | 0.00%        | 100.00%       |
| Gross Profit            | \$99,009.05    | \$99,009.05    | \$0.00       | \$157,078.44  |
| Average Profit          | \$24,752.26    | \$24,752.26    | \$0.00       | \$157,078.44  |
| Average Profit %        | 48.54%         | 48.54%         | 0.00%        | 148.15%       |
| Average Bars Held       | 11.5           | 11.5           | 0            | 123           |
| Max Consecutive Winners | 1              | 1              | 0            | 1             |
|                         |                |                |              |               |
| Losing Trades           | 9              | 9              | 0            | 0             |
| Loss Rate               | 69.23%         | 69.23%         | 0.00%        | 0.00%         |
| Gross Loss              | (\$111,814.56) | (\$111,814.56) | \$0.00       | \$0.00        |
| Average Loss            | (\$12,423.84)  | (\$12,423.84)  | \$0.00       | \$0.00        |
| Average Loss %          | -14.73%        | -14.73%        | 0.00%        | 0.00%         |
| Average Bars Held       | 3.22           | 3.22           | 0            | 0             |
| Max Consecutive Losses  | 4              | 4              | 0            | 0             |
|                         |                |                |              |               |
| Maximum Drawdown        | (\$97,578.31)  | (\$97,578.31)  | \$0.00       | (\$90,889.98) |
| Maximum Drawdown Date   | 3/20/2009      | 3/20/2009      | 12/14/2007   | 3/20/2009     |
| Maximum Drawdown %      | -70.57%        | -70.57%        | 0.00%        | -70.11%       |
| Maximum Drawdown % Date | 3/20/2009      | 3/20/2009      | 4/24/2010    | 3/20/2009     |
|                         |                |                |              |               |
| Wealth-Lab Score        | -13.13         | -13.13         | 0            | 13.9          |
| Sharpe Ratio            | 0.23           | 0.23           | 0            | 0.8           |
| Profit Factor           | 0.89           | 0.89           | 0            | Infinity      |
| Recovery Factor         | 0              | 0              | Infinity     | 1.72          |
| Payoff Ratio            | 3.3            | 3.3            | 0            | 0             |

## 8.2.3.28.3 Monthly

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold    |
|-------------------------|----------------|----------------|--------------|---------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00  |
| Ending Capital          | \$132,035.81   | \$132,035.81   | \$109,709.89 | \$269,138.77  |
| Net Profit              | \$32,035.81    | \$32,035.81    | \$9,709.89   | \$169,138.77  |
| Net Profit %            | 32.04%         | 32.04%         | 9.71%        | 169.14%       |
| Annualized Gain %       | 12.48%         | 12.48%         | 4.00%        | 52.05%        |
| Exposure                | 52.77%         | 52.77%         | 0.00%        | 100.10%       |
| Total Commission        | (\$1,016.00)   | (\$1,016.00)   | \$0.00       | (\$8.00)      |
| Return on Cash          | \$4,772.89     | \$4,772.89     | \$9,709.89   | \$0.00        |
| Margin Interest Paid    | (\$0.40)       | (\$0.40)       | \$0.00       | (\$52.33)     |
| Dividends Received      | \$0.00         | \$0.00         | \$0.00       | \$0.00        |
|                         |                |                |              |               |
| Number of Trades        | 64             | 64             | 0            | 1             |
| Average Profit          | \$500.56       | \$500.56       | \$0.00       | \$169,138.77  |
| Average Profit %        | 1.16%          | 1.16%          | 0.00%        | 168.76%       |
| Average Bars Held       | 5.84           | 5.84           | 0            | 594           |
|                         |                |                |              |               |
| Winning Trades          | 22             | 22             | 0            | 1             |
| Win Rate                | 34.38%         | 34.38%         | 0.00%        | 100.00%       |
| Gross Profit            | \$286,942.99   | \$286,942.99   | \$0.00       | \$169,191.10  |
| Average Profit          | \$13,042.86    | \$13,042.86    | \$0.00       | \$169,191.10  |
| Average Profit %        | 14.18%         | 14.18%         | 0.00%        | 168.76%       |
| Average Bars Held       | 10.32          | 10.32          | 0            | 594           |
| Max Consecutive Winners | 5              | 5              | 0            | 1             |
|                         |                |                |              |               |
| Losing Trades           | 42             | 42             | 0            | 0             |
| Loss Rate               | 65.63%         | 65.63%         | 0.00%        | 0.00%         |
| Gross Loss              | (\$259,679.66) | (\$259,679.66) | \$0.00       | \$0.00        |
| Average Loss            | (\$6,182.85)   | (\$6,182.85)   | \$0.00       | \$0.00        |
| Average Loss %          | -5.66%         | -5.66%         | 0.00%        | 0.00%         |
| Average Bars Held       | 3.5            | 3.5            | 0            | 0             |
| Max Consecutive Losses  | 8              | 8              | 0            | 0             |
|                         |                |                |              |               |
| Maximum Drawdown        | (\$165,003.75) | (\$165,003.75) | \$0.00       | (\$94,894.66) |
| Maximum Drawdown Date   | 3/16/2009      | 3/16/2009      | 12/12/2007   | 2/23/2009     |
| Maximum Drawdown %      | -76.49%        | -76.49%        | 0.00%        | -68.33%       |
| Maximum Drawdown % Date | 3/16/2009      | 3/16/2009      | 4/24/2010    | 2/23/2009     |
|                         |                |                |              |               |
| Wealth-Lab Score        | 5.56           | 5.56           | 0            | 16.47         |
| Sharpe Ratio            | 0.44           | 0.44           | 0            | 0.84          |
| Profit Factor           | 1.1            | 1.1            | 0            | Infinity      |
| Recovery Factor         | 0.19           | 0.19           | Infinity     | 1.78          |
| Payoff Ratio            | 2.51           | 2.51           | 0            | 0             |

### 8.2.3.29 WTW

#### 8.2.3.29.1 Daily

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$98,936.93    | \$98,936.93    | \$139,213.59 | \$99,799.36    |
| Net Profit              | (\$1,063.07)   | (\$1,063.07)   | \$39,213.59  | (\$200.64)     |
| Net Profit %            | -1.06%         | -1.06%         | 39.21%       | -0.20%         |
| Annualized Gain %       | -0.13%         | -0.13%         | 4.00%        | -0.02%         |
| Exposure                | 49.48%         | 49.48%         | 0.00%        | 102.89%        |
| Total Commission        | (\$2,752.00)   | (\$2,752.00)   | \$0.00       | (\$8.00)       |
| Return on Cash          | \$23,454.13    | \$23,454.13    | \$39,213.59  | \$56.61        |
| Margin Interest Paid    | (\$0.20)       | (\$0.20)       | \$0.00       | (\$2,793.93)   |
| Dividends Received      | \$5,209.05     | \$5,209.05     | \$0.00       | \$10,588.03    |
|                         |                |                |              |                |
| Number of Trades        | 172            | 172            | 0            | 1              |
| Average Profit          | (\$6.18)       | (\$6.18)       | \$0.00       | (\$200.64)     |
| Average Profit %        | -0.03%         | -0.03%         | 0.00%        | -7.67%         |
| Average Bars Held       | 7.13           | 7.13           | 0            | 2,122.00       |
|                         |                |                |              |                |
| Winning Trades          | 61             | 61             | 0            | 0              |
| Win Rate                | 35.47%         | 35.47%         | 0.00%        | 0.00%          |
| Gross Profit            | \$342,125.16   | \$342,125.16   | \$0.00       | \$0.00         |
| Average Profit          | \$5,608.61     | \$5,608.61     | \$0.00       | \$0.00         |
| Average Profit %        | 4.52%          | 4.52%          | 0.00%        | 0.00%          |
| Average Bars Held       | 11.84          | 11.84          | 0            | 0              |
| Max Consecutive Winners | 7              | 7              | 0            | 0              |
|                         |                |                |              |                |
| Losing Trades           | 111            | 111            | 0            | 1              |
| Loss Rate               | 64.53%         | 64.53%         | 0.00%        | 100.00%        |
| Gross Loss              | (\$371,851.21) | (\$371,851.21) | \$0.00       | (\$8,051.34)   |
| Average Loss            | (\$3,350.01)   | (\$3,350.01)   | \$0.00       | (\$8,051.34)   |
| Average Loss %          | -2.53%         | -2.53%         | 0.00%        | -7.67%         |
| Average Bars Held       | 4.54           | 4.54           | 0            | 2,122.00       |
| Max Consecutive Losses  | 11             | 11             | 0            | 1              |
|                         |                |                |              |                |
| Maximum Drawdown        | (\$145,061.14) | (\$145,061.14) | \$0.00       | (\$143,183.45) |
| Maximum Drawdown Date   | 3/4/2009       | 3/4/2009       | 11/15/2001   | 3/3/2009       |
| Maximum Drawdown %      | -66.69%        | -66.69%        | 0.00%        | -70.78%        |
| Maximum Drawdown % Date | 3/4/2009       | 3/4/2009       | 4/24/2010    | 3/3/2009       |
|                         |                |                |              |                |
| Wealth-Lab Score        | -0.43          | -0.43          | 0            | -0.04          |
| Sharpe Ratio            | -0.11          | -0.11          | 0            | 0.02           |
| Profit Factor           | 0.92           | 0.92           | 0            | 0              |
| Recovery Factor         | 0              | 0              | Infinity     | 0              |
| Payoff Ratio            | 1.79           | 1.79           | 0            | 0              |

## 8.2.3.29.2 Weekly

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$136,256.74   | \$136,256.74   | \$139,198.64 | \$96,781.70    |
| Net Profit              | \$36,256.74    | \$36,256.74    | \$39,198.64  | (\$3,218.30)   |
| Net Profit %            | 36.26%         | 36.26%         | 39.20%       | -3.22%         |
| Annualized Gain %       | 3.74%          | 3.74%          | 4.00%        | -0.39%         |
| Exposure                | 50.51%         | 50.51%         | 0.00%        | 104.24%        |
| Total Commission        | (\$600.00)     | (\$600.00)     | \$0.00       | (\$8.00)       |
| Return on Cash          | \$20,143.55    | \$20,143.55    | \$39,198.64  | \$0.48         |
| Margin Interest Paid    | (\$0.18)       | (\$0.18)       | \$0.00       | (\$3,973.39)   |
| Dividends Received      | \$7,195.48     | \$7,195.48     | \$0.00       | \$10,552.33    |
|                         |                |                |              |                |
| Number of Trades        | 38             | 38             | 0            | 1              |
| Average Profit          | \$954.12       | \$954.12       | \$0.00       | (\$3,218.30)   |
| Average Profit %        | 0.51%          | 0.51%          | 0.00%        | -9.21%         |
| Average Bars Held       | 6.68           | 6.68           | 0            | 440            |
|                         |                |                |              |                |
| Winning Trades          | 16             | 16             | 0            | 0              |
| Win Rate                | 42.11%         | 42.11%         | 0.00%        | 0.00%          |
| Gross Profit            | \$128,679.73   | \$128,679.73   | \$0.00       | \$0.00         |
| Average Profit          | \$8,042.48     | \$8,042.48     | \$0.00       | \$0.00         |
| Average Profit %        | 7.09%          | 7.09%          | 0.00%        | 0.00%          |
| Average Bars Held       | 9.81           | 9.81           | 0            | 0              |
| Max Consecutive Winners | 4              | 4              | 0            | 0              |
|                         |                |                |              |                |
| Losing Trades           | 22             | 22             | 0            | 1              |
| Loss Rate               | 57.89%         | 57.89%         | 0.00%        | 100.00%        |
| Gross Loss              | (\$119,761.83) | (\$119,761.83) | \$0.00       | (\$9,797.72)   |
| Average Loss            | (\$5,443.72)   | (\$5,443.72)   | \$0.00       | (\$9,797.72)   |
| Average Loss %          | -4.27%         | -4.27%         | 0.00%        | -9.21%         |
| Average Bars Held       | 4.41           | 4.41           | 0            | 440            |
| Max Consecutive Losses  | 4              | 4              | 0            | 1              |
|                         |                |                |              |                |
| Maximum Drawdown        | (\$45,265.32)  | (\$45,265.32)  | \$0.00       | (\$137,321.62) |
| Maximum Drawdown Date   | 3/20/2009      | 3/20/2009      | 11/16/2001   | 2/27/2009      |
| Maximum Drawdown %      | -27.45%        | -27.45%        | 0.00%        | -69.11%        |
| Maximum Drawdown % Date | 3/20/2009      | 3/20/2009      | 4/24/2010    | 2/27/2009      |
|                         |                |                |              |                |
| Wealth-Lab Score        | 5.37           | 5.37           | 0            | -0.63          |
| Sharpe Ratio            | 0.07           | 0.07           | 0            | 0.01           |
| Profit Factor           | 1.07           | 1.07           | 0            | 0              |
| Recovery Factor         | 0.8            | 0.8            | Infinity     | 0              |
| Payoff Ratio            | 1.66           | 1.66           | 0            | 0              |

## 8.2.3.29.3 Monthly

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$98,936.93    | \$98,936.93    | \$139,213.59 | \$99,799.36    |
| Net Profit              | (\$1,063.07)   | (\$1,063.07)   | \$39,213.59  | (\$200.64)     |
| Net Profit %            | -1.06%         | -1.06%         | 39.21%       | -0.20%         |
| Annualized Gain %       | -0.13%         | -0.13%         | 4.00%        | -0.02%         |
| Exposure                | 49.48%         | 49.48%         | 0.00%        | 102.89%        |
| Total Commission        | (\$2,752.00)   | (\$2,752.00)   | \$0.00       | (\$8.00)       |
| Return on Cash          | \$23,454.13    | \$23,454.13    | \$39,213.59  | \$56.61        |
| Margin Interest Paid    | (\$0.20)       | (\$0.20)       | \$0.00       | (\$2,793.93)   |
| Dividends Received      | \$5,209.05     | \$5,209.05     | \$0.00       | \$10,588.03    |
|                         |                |                |              |                |
| Number of Trades        | 172            | 172            | 0            | 1              |
| Average Profit          | (\$6.18)       | (\$6.18)       | \$0.00       | (\$200.64)     |
| Average Profit %        | -0.03%         | -0.03%         | 0.00%        | -7.67%         |
| Average Bars Held       | 7.13           | 7.13           | 0            | 2,122.00       |
|                         |                |                |              |                |
| Winning Trades          | 61             | 61             | 0            | 0              |
| Win Rate                | 35.47%         | 35.47%         | 0.00%        | 0.00%          |
| Gross Profit            | \$342,125.16   | \$342,125.16   | \$0.00       | \$0.00         |
| Average Profit          | \$5,608.61     | \$5,608.61     | \$0.00       | \$0.00         |
| Average Profit %        | 4.52%          | 4.52%          | 0.00%        | 0.00%          |
| Average Bars Held       | 11.84          | 11.84          | 0            | 0              |
| Max Consecutive Winners | 7              | 7              | 0            | 0              |
|                         |                |                |              |                |
| Losing Trades           | 111            | 111            | 0            | 1              |
| Loss Rate               | 64.53%         | 64.53%         | 0.00%        | 100.00%        |
| Gross Loss              | (\$371,851.21) | (\$371,851.21) | \$0.00       | (\$8,051.34)   |
| Average Loss            | (\$3,350.01)   | (\$3,350.01)   | \$0.00       | (\$8,051.34)   |
| Average Loss %          | -2.53%         | -2.53%         | 0.00%        | -7.67%         |
| Average Bars Held       | 4.54           | 4.54           | 0            | 2,122.00       |
| Max Consecutive Losses  | 11             | 11             | 0            | 1              |
|                         |                |                |              |                |
| Maximum Drawdown        | (\$145,061.14) | (\$145,061.14) | \$0.00       | (\$143,183.45) |
| Maximum Drawdown Date   | 3/4/2009       | 3/4/2009       | 11/15/2001   | 3/3/2009       |
| Maximum Drawdown %      | -66.69%        | -66.69%        | 0.00%        | -70.78%        |
| Maximum Drawdown % Date | 3/4/2009       | 3/4/2009       | 4/24/2010    | 3/3/2009       |
|                         |                |                |              |                |
| Wealth-Lab Score        | -0.43          | -0.43          | 0            | -0.04          |
| Sharpe Ratio            | -0.11          | -0.11          | 0            | 0.02           |
| Profit Factor           | 0.92           | 0.92           | 0            | 0              |
| Recovery Factor         | 0              | 0              | Infinity     | 0              |
| Payoff Ratio            | 1.79           | 1.79           | 0            | 0              |



### 8.2.3.30 XEL

#### 8.2.3.30.1 Daily

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$87,096.00    | \$87,096.00    | \$205,705.34 | \$159,117.08   |
| Net Profit              | (\$12,904.00)  | (\$12,904.00)  | \$105,705.34 | \$59,117.08    |
| Net Profit %            | -12.90%        | -12.90%        | 105.71%      | 59.12%         |
| Annualized Gain %       | -0.75%         | -0.75%         | 4.00%        | 2.56%          |
| Exposure                | 50.25%         | 50.25%         | 0.00%        | 94.09%         |
| Total Commission        | (\$6,760.00)   | (\$6,760.00)   | \$0.00       | (\$8.00)       |
| Return on Cash          | \$45,607.91    | \$45,607.91    | \$105,705.34 | \$7,698.76     |
| Margin Interest Paid    | (\$1.18)       | (\$1.18)       | \$0.00       | (\$5,444.52)   |
| Dividends Received      | \$40,901.95    | \$40,901.95    | \$0.00       | \$51,165.69    |
|                         |                |                |              |                |
| Number of Trades        | 423            | 423            | 0            | 1              |
| Average Profit          | (\$30.51)      | (\$30.51)      | \$0.00       | \$59,117.08    |
| Average Profit %        | -0.14%         | -0.14%         | 0.00%        | 5.41%          |
| Average Bars Held       | 6.51           | 6.51           | 0            | 4,634.00       |
|                         |                |                |              |                |
| Winning Trades          | 141            | 141            | 0            | 1              |
| Win Rate                | 33.33%         | 33.33%         | 0.00%        | 100.00%        |
| Gross Profit            | \$458,081.50   | \$458,081.50   | \$0.00       | \$5,697.15     |
| Average Profit          | \$3,248.80     | \$3,248.80     | \$0.00       | \$5,697.15     |
| Average Profit %        | 2.71%          | 2.71%          | 0.00%        | 5.41%          |
| Average Bars Held       | 11.2           | 11.2           | 0            | 4,634.00       |
| Max Consecutive Winners | 5              | 5              | 0            | 1              |
|                         |                |                |              |                |
| Losing Trades           | 282            | 282            | 0            | 0              |
| Loss Rate               | 66.67%         | 66.67%         | 0.00%        | 0.00%          |
| Gross Loss              | (\$557,494.17) | (\$557,494.17) | \$0.00       | \$0.00         |
| Average Loss            | (\$1,976.93)   | (\$1,976.93)   | \$0.00       | \$0.00         |
| Average Loss %          | -1.56%         | -1.56%         | 0.00%        | 0.00%          |
| Average Bars Held       | 4.16           | 4.16           | 0            | 0              |
| Max Consecutive Losses  | 15             | 15             | 0            | 0              |
|                         |                |                |              |                |
| Maximum Drawdown        | (\$125,200.61) | (\$125,200.61) | \$0.00       | (\$121,946.63) |
| Maximum Drawdown Date   | 3/2/2009       | 3/2/2009       | 12/2/1991    | 7/29/2002      |
| Maximum Drawdown %      | -64.30%        | -64.30%        | 0.00%        | -77.69%        |
| Maximum Drawdown % Date | 3/2/2009       | 3/2/2009       | 4/24/2010    | 7/29/2002      |
|                         |                |                |              |                |
| Wealth-Lab Score        | -2.45          | -2.45          | 0            | 0.61           |
| Sharpe Ratio            | -0.16          | -0.16          | 0            | 0.07           |
| Profit Factor           | 0.82           | 0.82           | 0            | Infinity       |
| Recovery Factor         | 0              | 0              | Infinity     | 0.48           |
| Payoff Ratio            | 1.73           | 1.73           | 0            | 0              |

## 8.2.3.30.2 Weekly

|                         | All Trades     | Long Trades    | Short Trades | Buy & Hold     |
|-------------------------|----------------|----------------|--------------|----------------|
| Starting Capital        | \$100,000.00   | \$100,000.00   | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$258,140.03   | \$258,140.03   | \$205,617.00 | \$155,902.64   |
| Net Profit              | \$158,140.03   | \$158,140.03   | \$105,617.00 | \$55,902.64    |
| Net Profit %            | 158.14%        | 158.14%        | 105.62%      | 55.90%         |
| Annualized Gain %       | 5.30%          | 5.30%          | 4.00%        | 2.45%          |
| Exposure                | 52.88%         | 52.88%         | 0.00%        | 93.18%         |
| Total Commission        | (\$1,368.00)   | (\$1,368.00)   | \$0.00       | (\$8.00)       |
| Return on Cash          | \$50,991.50    | \$50,991.50    | \$105,617.00 | \$7,898.58     |
| Margin Interest Paid    | (\$0.99)       | (\$0.99)       | \$0.00       | (\$4,739.36)   |
| Dividends Received      | \$52,429.98    | \$52,429.98    | \$0.00       | \$49,669.14    |
|                         |                |                |              |                |
| Number of Trades        | 86             | 86             | 0            | 1              |
| Average Profit          | \$1,838.84     | \$1,838.84     | \$0.00       | \$55,902.64    |
| Average Profit %        | 0.62%          | 0.62%          | 0.00%        | 2.94%          |
| Average Bars Held       | 6.84           | 6.84           | 0            | 958            |
|                         |                |                |              |                |
| Winning Trades          | 30             | 30             | 0            | 1              |
| Win Rate                | 34.88%         | 34.88%         | 0.00%        | 100.00%        |
| Gross Profit            | \$244,721.57   | \$244,721.57   | \$0.00       | \$3,074.28     |
| Average Profit          | \$8,157.39     | \$8,157.39     | \$0.00       | \$3,074.28     |
| Average Profit %        | 6.35%          | 6.35%          | 0.00%        | 2.94%          |
| Average Bars Held       | 11.7           | 11.7           | 0            | 958            |
| Max Consecutive Winners | 4              | 4              | 0            | 1              |
|                         |                |                |              |                |
| Losing Trades           | 56             | 56             | 0            | 0              |
| Loss Rate               | 65.12%         | 65.12%         | 0.00%        | 0.00%          |
| Gross Loss              | (\$190,002.03) | (\$190,002.03) | \$0.00       | \$0.00         |
| Average Loss            | (\$3,392.89)   | (\$3,392.89)   | \$0.00       | \$0.00         |
| Average Loss %          | -2.44%         | -2.44%         | 0.00%        | 0.00%          |
| Average Bars Held       | 4.23           | 4.23           | 0            | 0              |
| Max Consecutive Losses  | 8              | 8              | 0            | 0              |
|                         |                |                |              |                |
| Maximum Drawdown        | (\$53,856.17)  | (\$53,856.17)  | \$0.00       | (\$110,592.15) |
| Maximum Drawdown Date   | 9/6/2002       | 9/6/2002       | 12/6/1991    | 8/2/2002       |
| Maximum Drawdown %      | -37.85%        | -37.85%        | 0.00%        | -72.79%        |
| Maximum Drawdown % Date | 9/6/2002       | 9/6/2002       | 4/24/2010    | 8/2/2002       |
|                         |                |                |              |                |
| Wealth-Lab Score        | 6.22           | 6.22           | 0            | 0.71           |
| Sharpe Ratio            | 0.15           | 0.15           | 0            | 0.05           |
| Profit Factor           | 1.29           | 1.29           | 0            | Infinity       |
| Recovery Factor         | 2.94           | 2.94           | Infinity     | 0.51           |
| Payoff Ratio            | 2.6            | 2.6            | 0            | 0              |

## 8.2.3.30.3 Monthly

|                         | All Trades    | Long Trades   | Short Trades | Buy & Hold     |
|-------------------------|---------------|---------------|--------------|----------------|
| Starting Capital        | \$100,000.00  | \$100,000.00  | \$100,000.00 | \$100,000.00   |
| Ending Capital          | \$382,149.85  | \$382,149.85  | \$205,065.76 | \$153,946.68   |
| Net Profit              | \$282,149.85  | \$282,149.85  | \$105,065.76 | \$53,946.68    |
| Net Profit %            | 282.15%       | 282.15%       | 105.07%      | 53.95%         |
| Annualized Gain %       | 7.60%         | 7.60%         | 4.00%        | 2.38%          |
| Exposure                | 54.57%        | 54.57%        | 0.00%        | 92.99%         |
| Total Commission        | (\$264.00)    | (\$264.00)    | \$0.00       | (\$8.00)       |
| Return on Cash          | \$57,606.10   | \$57,606.10   | \$105,065.76 | \$7,696.89     |
| Margin Interest Paid    | (\$0.64)      | (\$0.64)      | \$0.00       | (\$4,656.26)   |
| Dividends Received      | \$58,349.48   | \$58,349.48   | \$0.00       | \$48,460.34    |
| Number of Trades        | 17            | 17            | 0            | 1              |
| Average Profit          | \$16,597.05   | \$16,597.05   | \$0.00       | \$53,946.68    |
| Average Profit %        | 5.62%         | 5.62%         | 0.00%        | 2.34%          |
| Average Bars Held       | 7.71          | 7.71          | 0            | 220            |
| Winning Trades          | 8             | 8             | 0            | 1              |
| Win Rate                | 47.06%        | 47.06%        | 0.00%        | 100.00%        |
| Gross Profit            | \$232,593.86  | \$232,593.86  | \$0.00       | \$2,445.71     |
| Average Profit          | \$29,074.23   | \$29,074.23   | \$0.00       | \$2,445.71     |
| Average Profit %        | 16.94%        | 16.94%        | 0.00%        | 2.34%          |
| Average Bars Held       | 12.63         | 12.63         | 0            | 220            |
| Max Consecutive Winners | 2             | 2             | 0            | 1              |
| Losing Trades           | 9             | 9             | 0            | 0              |
| Loss Rate               | 52.94%        | 52.94%        | 0.00%        | 0.00%          |
| Gross Loss              | (\$66,398.94) | (\$66,398.94) | \$0.00       | \$0.00         |
| Average Loss            | (\$7,377.66)  | (\$7,377.66)  | \$0.00       | \$0.00         |
| Average Loss %          | -4.45%        | -4.45%        | 0.00%        | 0.00%          |
| Average Bars Held       | 3.33          | 3.33          | 0            | 0              |
| Max Consecutive Losses  | 3             | 3             | 0            | 0              |
| Maximum Drawdown        | (\$38,743.60) | (\$38,743.60) | \$0.00       | (\$109,098.18) |
| Maximum Drawdown Date   | 1/31/2008     | 1/31/2008     | 12/31/1991   | 7/31/2002      |
| Maximum Drawdown %      | -20.44%       | -20.44%       | 0.00%        | -72.57%        |
| Maximum Drawdown % Date | 6/30/2000     | 6/30/2000     | 4/24/2010    | 7/31/2002      |
| Wealth-Lab Score        | 11.08         | 11.08         | 0            | 0.7            |
| Sharpe Ratio            | 0.33          | 0.33          | 0            | 0.06           |
| Profit Factor           | 3.5           | 3.5           | 0            | Infinity       |
| Recovery Factor         | 7.28          | 7.28          | Infinity     | 0.49           |
| Payoff Ratio            | 3.81          | 3.81          | 0            | 0              |