



# *How to Read the* **Kase Commentary on Natural Gas**

## **About the Commentary**

For traders and hedgers interested in what is expected for natural gas prices over the next few weeks, the Kase Commentary on Natural Gas provides an unparalleled level of accuracy and detail. The Commentary has proved to be over 95% accurate not only on price direction but in forecasting the exact prices (within a few cents) to which the market will trade or at which the market will turn.

The weekly forecast gives an outlook for the first three nearby natural gas contracts, as well as an outer month, and also provides trade status and other supportive information. The forecasts conform to the highest standards of mainstream technical analysis, as developed by award winning, Chartered Market Technician and Master of Financial Technical Analysis, Cynthia Kase - the first accredited market technician with an energy cash market and OTC trading background. Unlike many other analyses, the Commentary sets forth very specifically what is expected in terms of market direction and price, along with odds of the most likely and next most likely scenarios.

The most likely, primary scenario explains expected market direction, price and order of events expected based on the technicals. The primary scenario normally has 80% odds, sometimes lowered when warranted by the analysis. The secondary scenario, with default odds of 20%, defines what to expect in the less likely case, which usually only ensues in response to random events such as tropical storms or geopolitical crises.

In addition to the forecasts, the Commentary provides information on theoretical trade status for market timers and position holders, trade exit points and trading strategies, as well as an educational section.

## **The Glossary**

Throughout this guide and in the Commentary, technical words and phrases are underlined and linked to Kase's online glossary. Looking up the words on an ongoing basis will help to clarify terms and techniques used.

## **Summary Table**

The report begins with a summary table showing shorter term "Timer" trade status and longer term "Position" trade status, statistically significant reversal values, exit points and key levels that define prices at which the outlook shifts. Detailed descriptions of each column follow the sample table below.

	<b>Timers</b>	<b>Positions</b>	<b>Rev 1</b>	<b>Rev 2</b>	<b>Rev 3</b>	<b>Stop 1</b>	<b>Stop 2</b>	<b>Stop 3</b>	<b>Watch for Close</b>
	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>
NGZ09	Flat	S	0.112	0.131	0.153	5.292	5.311	5.333	\$4.35
NGF09	Flat	S	0.106	0.127	0.151	5.629	5.65	5.674	\$4.85
NGG10	Flat	S	0.115	0.14	0.169	5.69	5.715	5.744	\$5.23

### **Column 1**

The first column shows the commodity, contract month symbol and year. For example, NGZ09 is the December 2009 natural gas contract.

<b>Contract Month Symbol</b>	<b>Month</b>
F	January
G	February
H	March
J	April
K	May
M	June
N	July
Q	August
U	September
V	October
X	November
Z	December

### **Columns 2 and 3**

Columns 2 and 3 show Kase's theoretical trade status, based on Kase StatWare™ guidelines as of the weekly close. The designations used are "L" for long, "S" for short, and "Flat" for flat or holding no trade.

#### Column 2 is the Status of "Market Timers"

Market timers are assumed to enter trades using intra-day bars no longer than equivalent to about 90 minutes. Timing trades are held usually from one day to one week, and involve the modest risk related to 20 to 90 minute bars.

#### Column 3 is the Status of "Position Holders"

Position holders tend to be trend followers. This category includes both market timers who scale up to positions when daily signals trigger, as well as those who only trade one-third day bars and higher.

### **Columns 4, 5 and 6**

Columns 4, 5 and 6 show statistically significant reversal values (in cents) that are used to determine stop levels by trailing first from the entry price and then following the highest profit point. The reversal value is the amount of money that must be sacrificed before an exit is triggered. This value is deducted from the highest high, if long, or added to the lowest low, if short, to determine the current stop values. By default the reversal values are shown for timers. When timers are flat the reversal values are shown for positions holders. Generally, position reversal values would run approximately 2.5 times the value of the timer's reversals.

### **Columns 7, 8 and 9**

These columns show the three levels of Kase's DevStops as of the week's close. These stops are generated by whatever reversals are being shown. When both timers and positions holders are flat stops are not shown and reversal values may then be used to calculate stops for any new trades entered.

### ***Column 10***

The last column in the table shows prices that Kase considers critical if the market closes over or below. If the market is trading below the level then the value is a “close over”. If the market is trading above the level then the value is a “close below”. The implications of the closing level(s) mean a change in market tone or outlook might take place above or below that price point.

### **The Recap of Last Outlook**

The recap section briefly reviews Kase’s previous call against the actual outcome of price activity in order to track the Commentary’s performance.

### **The Outlook**

The outlook presents a brief summary of both the primary and secondary scenarios, along with the key targets as well as support or resistance levels. The purpose of this section is to give a quick look at the forecast, as well as an easy way to review the outlook historically and is not meant as a substitute for the analysis.

### **The Summary**

This section is an Executive Summary designed for those who want some detail but do not want to delve into the full technical explanations. The Summary gives an overview of the forecast in more detail. It includes technical reasons for the outlook within the primary and secondary scenarios and their odds. It also briefly examines the second, third and outer month contracts being reviewed.

### **The Analysis and Outer Month**

This Analysis gives an in depth examination of the technical price outlook, and states the forecast and strong bias for the forthcoming week for the first nearby contract, or if the first nearby is set to terminate shortly the second nearby. Similarly the Outer Month gives an analysis of an outer month contract to give a view of the longer dated contracts. Important technical factors such as patterns, support, resistance, and the like are detailed, as well as specific observations, biases, short-term and long-term targets, and important decision points.

Drawing upon background and experience, Kase selects upside and downside targets by using traditional forecasting techniques combined with judgment in evaluating the results. These elements include, but are not limited to, Kase wave analysis, retracements, DevStops, geometric formations, StatWare, momentum indicators, candlestick patterns, gaps and moving averages.

### ***Kase Wave Analysis***

Kase uses a form of wave analysis called “Kase Wave Analysis” utilizing techniques developed since 1983 when the first major energy contract was introduced. Kase Wave Analysis is not only more simple than Elliott Wave Theory, but more applicable to commodities. Also, it is based on thorough statistical analysis not just theory. The methodical and thorough research as well as years of forecasting experience has shown that futures, especially physical commodities, trade in three-wave patterns. To evaluate the patterns Kase uses Fibonacci extensions to find confluent targets and projection cascades that connect both targets and wave formations.

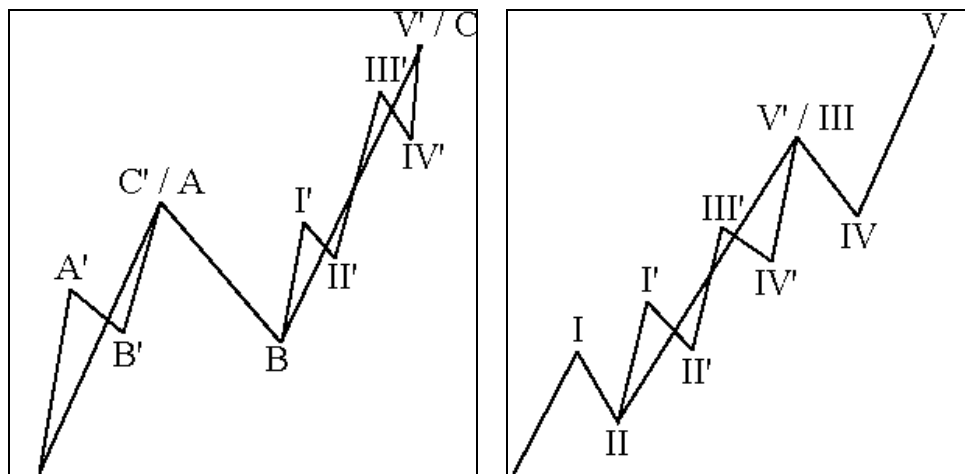
Waves “nest” and therefore have different levels associated with them, from the largest scale which would be considered Level 1, to each wave in Level 1 breaking down to a Level 2 pattern, and so forth. Normally, the larger the structure and the higher the level, the more important the wave is. Also the most recent waves are more important than earlier waves within the same level or structural size. So to make clear a wave’s position within the structure, the Kase Commentary

uses a labeling convention for both three- and five-wave patterns. Patterns that consist of three waves are always labeled with letters (alpha). Patterns consisting of five waves may be labeled numerically if conforming to traditional Elliott wave rules for five-wave patterns, and if not, by letter. The labeling follows through from one level to another in charts shown and discussed throughout the analysis. So if there are three different levels for a wave structure the convention is carried through to show not only the wave cycle but also the level. A table of the ABC and five-wave labeling is shown below. Waves below the 10<sup>th</sup> level, if ever necessary, will be shown in lowercase and in a smaller font size on the chart.

Level	Alpha Wave Counts	Numeric Wave Counts
1	A	I
2	A'	I'
3	A''	I''
4	a	1
5	a'	1'
6	a''	1''
7	a*	i
8	a**	i'
9	a#	i''
10	a##	i*
11	a	i

When discussing a wave in the analysis a capital 'W' is used for wave layers 1 through 3. For sub-waves in layers 4 and beyond a lowercase 'w' is used. So for instance Wave A versus wave a/C'.

The charts below show examples of labeling for both ABC and five wave structures. Note that in the ABC formation on the left, Wave C breaks down into a sub five-wave pattern at the second level. Even though this is the first five-wave pattern on the chart the second level convention is still used for all waves on that level.



Targets and projections for waves labeled are shown in tables such as the one below. Targets and projections are color coded for easy identification throughout the analysis. The label for the first wave in a wave cycle is shown in the first column followed by the X, Y and Z swing points that

comprise or define the wave cycle, followed by the confluence points to which the wave cycle projects. Targets and projections are labeled as smaller than (S), equal to (E), intermediate (I), larger than (L), extended wave C (XC), trend terminus (3X), phi (P1), phi<sup>2</sup> (P2) and phi<sup>3</sup> (P3).

Wave	X	Y	Z	4.37	4.25	<del>4.03</del>	3.84
A'/A	5.989	5.173	5.366		I	L	3X
A	"	4.941	5.271	P2	E		I, P3

These tables not only show projections and targets, but also connections among targets and projections through across the row, down the column or diagonal cascades. Cascades are normally shown with arrows drawn in the direction of the cascade through the connecting targets and waves.

### Retracements

Retracements are used to both determine and confirm key support and resistance levels. During times when there are few waves in a particular direction, and thus few targets generated in that direction by waves, retracements are especially helpful.

Below is a typical resistance retracement table that shows retracements for a move down from \$5.989 to \$4.555. Retracements from intermediate swing highs of \$5.271 and \$4.984 are also shown. Once again confluence points are color coded for ease of identification.

### NGZ09 Retracements to \$4.555

From:	4.984	5.271	5.989
21%		4.71	4.86
38%	4.72	4.83	5.10
50%	4.77	4.91	5.27
62%	4.82	5.00	5.44
78%	4.89	5.11	5.67
89%	4.94	5.19	5.83

### DevStops

Kase also uses daily and weekly DevStops to help determine and confirm confluent support and resistance levels. Stops that have been met are shown as a dash [-]. Through detailed research Kase is able to estimate the odds of the various stops being hit. Also important support or resistance is determined by a correspondence between Dev3 on the daily and either the warning line or Dev1 on the weekly.

NG Long	Warn	Dev1	Dev2	Dev3	Dev4.5	Dev6
Daily - K	-	-	5.72	<del>5.58</del>	5.32	5.13
Weekly - K	5.73	<del>5.57</del>	5.39	5.17	4.98	4.75

### Geometric Patterns

Geometric patterns do not always form but when they do, Kase takes them and their potential targets into consideration in the analysis.

### ***Momentum Indicators***

Kase also uses the Stochastic, RSI and MACD in addition to Kase's proprietary momentum indicators the KaseCD and Kase PeakOscillator help determine overbought and oversold conditions and more importantly divergence.

### **Divergence**

Divergences are a reliable momentum signal indicating that a potentially major turn is about to occur. Bearish divergence takes place when prices have made a higher or equal high and a momentum indicator has made a lower or equal positive peak. Bullish divergence takes place when prices have made a lower or equal low peak and a momentum indicator has made higher or equal (i.e. less negative) negative peaks.

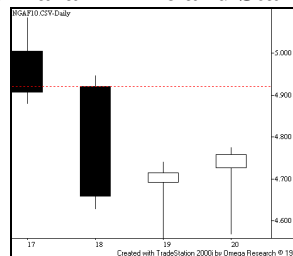
### **Overbought and Oversold**

Overbought and oversold conditions are not as reliable as divergences, but can still be a useful warning signal that the market is exhausted and may turn. Most momentum indicators have predefined thresholds to identify these conditions. A market that moves beyond the upper boundary is considered overbought. A move below the lower boundary is oversold. Some indicators such as the KaseCD and Kase PeakOscillator pinpoint specific points at which a PeakOut or overbought/oversold signals take place. Other indicators such as Stochastics and the RSI just identify the condition of overbought/oversold, and therefore, prices can remain in these conditions for an extended period of time.

### ***Candlestick Patterns***

Kase uses monthly, weekly and daily candlestick patterns to help identify market direction and confirm support and resistance levels. The analysis usually shows both a chart of a given pattern as well as a table with the completion (complete) and confirmation (confirm) points as shown below. The table the candlestick's magnitude - daily, weekly or monthly - and also the position, counting bars back from zero, of the bar used to calculate the completion and confirmation points. The completion point is the midpoint of the bar and the confirmation point its open.

### **Daily Harami Line and Star Setup**

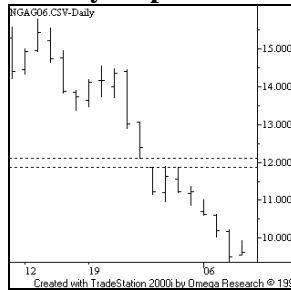


Back >>>>	2	2
Day	Complete	Confirm
F	4.79	4.92

### ***Gaps***

Gaps also help determine market direction and targets. In addition to a chart illustrating the gap, a table is shown with the projections from applicable swing high or low points. The table shows the points from which a projection is taken as well as the projected prices for the gap.

### Daily Gap NGG06

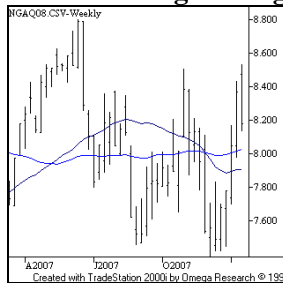


From:	Projections:
14.49	9.16
15.78	7.88

### Moving Averages

Kase uses simple moving averages to confirm support and resistance. Both a chart and table of the moving average is shown when they are confluent with key price targets. The table identifies the moving averages as daily, weekly or monthly for each row and the length of the moving average in each column.

### 26-, and 52-Week Moving Averages - NGQ08



MA	26	52
Weekly	7.91	8.03

### The Monte Carlo Section

The Monte Carlo simulation uses a random number generator along with Kase's proprietary methods for choosing trend and volatility inputs to determine prices across a range of probabilities and trend scenario for a 10-day lookforward. The result is a highly accurate and unbiased statistical forecast.

Five unique scenarios are showing the table: no bias (0), normal up/down (+/-) and strong up/down (++/--). The no bias case is a neutral market simulation and the up and down scenarios imitate rising and falling markets of varying degrees.

The table helps to confirm the importance of targets and support or resistance levels in addition to the likelihood that they will be met in the next week or so. The simulations can also help to identify what type of condition the market is in and whether that is neutral, biased up or biased down.

The 50<sup>th</sup> percentile shows the most likely expectation for each scenario. In the down market scenarios the odds increase for prices below the 50<sup>th</sup> percentile and increase for prices above the 50<sup>th</sup> percentile. In the up market scenarios odds decrease for prices below the 50<sup>th</sup> percentile and increase for prices above the 50<sup>th</sup> percentile.

As an example, if the market is trending strongly down (--) the most likely expectation is \$4.38 as shown in the table below. This same target with a +/- \$0.03 range in the normal down case (-) has 40% odds of being met in the next 10 days. In the no bias case (0) \$4.38 has 10% odds.

Percentile	--	-	0	+	++
5	3.96	4.03	4.26	4.46	4.55
10	4.04	4.13	4.35	4.55	4.67
20	4.15	4.26	4.47	4.68	4.83
30	4.24	4.34	4.56	4.77	4.89
40	4.31	4.41	4.63	4.86	4.97
50	4.38	4.49	4.71	4.94	5.00
60	4.45	4.55	4.78	5.02	5.14
70	4.52	4.64	4.87	5.10	5.23
80	4.62	4.73	4.97	5.20	5.32
90	4.74	4.83	5.09	5.34	5.47
95	4.83	4.97	5.20	5.45	5.62

For the up scenarios, in a strong up trend (++) the most likely expectation is \$5.00 as illustrated in the table. This same target with a +/- \$0.03 range has 40% odds in the normal up case (+), and 20% odds in the no bias case (0) even though this price shows up in the 60<sup>th</sup> and 80<sup>th</sup> percentiles, respectively. As stated above, in the up market scenarios odds decrease for prices below the 50<sup>th</sup> percentile and increase for prices above the 50<sup>th</sup> percentile. Thus, in the strong up case \$4.83 has 80% odds of being met even though it shows up in the 20<sup>th</sup> percentile.

One of the most common observations discussed in the Commentary is what prices fall in the 5% for the strong and 10% for the normal probability positions for the up and down scenarios. These prices usually line up with key support and resistance levels. In the table above a close over \$4.83 would indicate the there is just a 5% to 10% chance that the market is in a downward biased scenario. On the opposite end of the table a close below \$4.55 would indicate that there is just a 5% to 10% chance that the market is in an upward biased scenario.

### The Strategy

This section outlines Kase's suggested trading strategy for both position holders and market timers. The Commentary discusses how aggressively to trade in either direction, what turning points to look out for, points at which strategy should be adjusted, how to best catch turns based on current market formations and similar advice.

### Signal Review Section

The purpose of this section is to give users of Kase StatWare™, a backdrop against which to both check trades, as well as to compare their interpretation of the software against Kase's. This section sets forth the ideal, "dispassionate" trader scenario, and readers who take the time to go through all the signals weekly may improve quickly in the use of Kase technology.

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Trade	Position	BL	Entry	Time	Price	Indication	BL	Exits	Time	Price	Indication	%	Gain/Loss
1	L	3	9/5	1007	5.922	2nd Buy	5	9/5	1409	5.97	KCDD	80	0.066
							3	9/6	1025	6.06	Reversal	20	
2	S	3	9/6	1025	6.06	2nd Sell	8	9/8	1636	5.66	Weekend	100	0.400
												<b>Total Gains/Loss</b>	<b>0.466</b>
												<b>Average Gain/Loss</b>	<b>0.233</b>

### **Column 1**

The first column shows the trade number. If an open trade is carried into the weekend this column will be labeled as *Open*, and the entire row will be in italics.

### **Columns 2 through 7**

These columns contain data that represents the entry point of the trade. Note that below these columns is a comments field that will contain special notes about the trade if applicable.

Column 2 is the position entered - This is either long (L) or short (S).

Column 3 is the bar length (BL) - This is the bar length used to enter the trade. Normally this will be the timing chart.

Columns 4 through 6 indicate the date, time and price the trade was entered

Column 7 is the entry indication (i.e. 2<sup>nd</sup> Sell)

### **Columns 8 through 13**

These columns contain data representing the exit points of the trade. Because a trade is normally exited in two phases there are two rows used for exit signals.

Column 8 is the bar length (BL) - This is the bar length used to exit the trade.

Columns 9 through 11 indicate the trade exit date, exit time and exit price.

Column 12 shows the type of exit signal - see Legend below

Column 13 is the percent of the trade that was lifted (i.e. 80% for KCD Divergence)

### **Column 14**

The last column shows the gain or loss that was made on the trade.

#### **Summary Table Legend**

KCD Divergence	KCDD
KCD Peak	KCDP
PeakOscillator Divergence	KPOD
PeakOut	PO
DevStop #	Dev#

### **Kase Bar and Index Table**

This table sets forth the recommended ranges for the Kase Bar lengths for each contract. Ideally the monitor chart is equivalent to a 60 to 90 minute chart while the timing chart is equivalent to about a 15 to 20 minute chart.

The index values listed are derived from the PeakOscillator, which measures the rate of change of trend. The index values are a measure of current momentum relative to recent market behavior. The nearer the index values to 100%, the greater the probability of a turn.

### **The Mini Trading Lesson and Scorecard**

A Mini Trading Lesson is included in most issues of the Commentary, and as the name implies, is a brief lesson on technical analysis or risk management. The lessons provide additional insight regarding the theory behind, the interpretation of, and the effective use of technical indicators, trading and risk management techniques and other related subjects.

Twice per year the scorecard for the Commentary is published. This is a track record of how well the Commentary has performed on a weekly basis as a measure of scenario, price and order that series of events took place. The details of how the scorecard is calculated are published with the scorecard.

### **Conventions**

Throughout the Commentary several conventions are used to clarify certain aspects of the forecast, targets, projection and other various terms to help clarify the analysis.

#### ***Targets vs. Projections***

In the Analysis the calculated prices for most impulse extensions are called targets. Other calculations including the trend terminus, XC, P1, P2 and P3 levels are called projections.

#### ***Target vs. Support or Resistance***

When the primary scenario calls for the market to decline, lower prices are referred to as targets and higher prices as resistance. When the call is for the market to rise, higher prices are referred to as targets and lower prices as support.

#### ***Contract Month vs. Calendar Month***

When discussing a contract month such as NYMEX January Natural gas as in “the January contract”, the Analysis will often refer to this simply as “January”. When referring to a calendar month, as in a date, the analysis will specifically state that it is discussing “calendar month of January” or “calendar January”.