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Maxum Petroleum, Inc.

In October of 2009, the vibrant colors of autumn had arrived in Greenwich, Connecticut. But John Shapiro took little notice. He had just returned home from a meeting with the top management of Maxum Petroleum, Inc. concerning potential hedging strategies for the company's oil price exposures, and his mind was already focused on the challenges before him. Shapiro had recently retired from a long career managing global commodity trading for Morgan Stanley. Recommended to Maxum by a partner at Metalmark, one of Maxum's private equity owners, he was intimately familiar with the challenges of managing commodity price risk, particularly oil price risk.

Following numerous acquisitions of long-established operations, Maxum was now one of the United States' largest independent energy logistics companies. It marketed and distributed a comprehensive offering of refined petroleum products and value-added logistics and energy-management services to diverse customer base throughout the U.S. and the Panama Canal. In the wake of the 2008 oil price spike, which saw crude oil prices reach $147 a barrel before settling back into the $60 - $80 range in 2009, risk management had become a high priority for Maxum. The presence of Perot Bissell, Maxum's CEO, and Michel Salbaing, the company's CFO, at the October meeting with Shapiro underscored this fact.

The meeting covered a lot of ground, including a discussion of the nature of Maxum's oil price exposures, several possible methods for hedging those exposures – some routine and some more novel – and the general design principles that top management wanted to see shape whatever program was finally approved. Working with Maxum's finance team, Shapiro's assignment was to help convert the ideas and concepts surfaced in this initial meeting into a concrete set of proposals for senior management to consider. Although management had substantial experience with energy product procurement and price risk management, the unprecedented nature of the 2008 oil price movements experienced by this still young and growing company gave it reason enough to take a comprehensive look at its exposures. Shapiro knew he had his work cut out for him as he sat down at his desk and pondered the company's situation.

Background

Company History

Starting in the 1990s, a merger wave among large, integrated oil companies reduced the number of major producers to a handful of well-known companies that included BP, Chevron, ExxonMobil, Shell

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Oil, and ConocoPhillips. Likewise, the number of major finished lubricant producers dropped from eleven to six: Shell Oil, ExxonMobil, Chevron, ConocoPhillips, BP-Castrol, and Citgo. Along with this consolidation among the majors came a shift in their primary strategic focus to exploration and development, and a concomitant reduction of downstream marketing and distribution activities. At the same time, fuel purchasers increasingly began to outsource their fuel and lubricant procurement, and sought sophisticated, full-service solutions to their energy management needs. The combination of these trends provided attractive growth opportunities for well-capitalized energy logistics companies.

SPI Petroleum LLC, (later renamed Maxum Petroleum, Inc.) was organized in October 2003 by three private equity sponsors – Northwest Capital Appreciation, Waud Capital Partners, and RBC Capital Partners – for the purpose of launching a consolidation vehicle in the energy logistics field. Soon after being organized, SPI purchased Simons Petroleum, Inc., which was founded in 1947 and had extensive experience and relationships in the industry. SPI then acquired nine additional companies in the next three years.

In January of 2008, all of SPI's assets were merged into a new Delaware corporation, Maxum Petroleum, Inc. ("Maxum"), which was formed for the purpose of undertaking an initial public offering of stock. Subsequently, extreme turbulence in financial markets caused the company to cancel the offering. However, in January of 2009, Maxum received a $300 million capital infusion from Waud Capital Partners and Metalmark Capital, a private equity firm established by the principals of Morgan Stanley Capital Partners (MSCP) to manage the Metalmark Capital and MSCP funds.

In its 2009 fiscal year, Maxum sold more than 1.1 billion gallons of diesel fuel, and 52.3 million gallons of lubricants. It utilized a broad fuel and lubricant distribution platform that included access to more than 425 fuel supply points as well as blending facilities and packaging and distribution centers located at logistically important locations across the country. While it used common carriers to deliver refined petroleum products to easily accessible customer locations (approximately 35% of its fuel volume), it also maintained a fleet of specialized trucks, railcars and marine vessels to reach remote sites in rugged environments.

Maxum generated earnings before interest, taxes, depreciation and amortization (EBITDA) of $44.1 million, but a net loss of $13.1 million (after one-time, pre-tax special charges of $28.8 million), on revenues of $3.3 billion in FY2009. The company had expanded rapidly since its inception, with top-line growth averaging about 41% annually between FY2005 and FY2009. Recent financial statements are shown in **Exhibits 1** and **2**.

Given the steady consolidation of the petroleum marketing and distribution industry, continuous growth was crucial to Maxum's long-term success. The company sought to achieve growth by two means. First, it would continue executing selective acquisitions that would be accretive and meet certain other operating and financial criteria. Specifically, Maxum sought to acquire companies that would strengthen its competitive position by enhancing its products and services, increasing its scale to achieve greater purchasing power and operating efficiencies, and widening its geographic coverage and customer base. Second, it would realize organic growth by taking advantage of cross-selling opportunities; displacing smaller marketers who were unable to offer the same reliable, low-cost delivery services; and providing customers with more value-added services, thereby strengthening its relationships with them.

Industry and Competitive Environment

The refined petroleum marketing and distribution industry in the United States consisted primarily of the marketing and distribution of gasoline, distillate fuel oil (primarily diesel fuel), lubricating oil and residual fuel oil, and the provision of value-added logistics services. Independent fuel distributors purchased products from refiners or other distributors and resold them to fixed retail outlets, various end users, or other distributors. Lubricant distributors served commercial and industrial users, original equipment manufacturers, and passenger car motor oil suppliers.

Refined petroleum marketing and distribution was a fragmented industry that serviced an even more fragmented customer base. It was also a rapidly consolidating industry. In 2008, approximately 6,900 fuel marketers and distributors operated in the United States, primarily in their respective local or regional markets. This marked a significant decline from the roughly 12,000 energy logistics competitors that operated just a decade earlier.

This consolidation trend was being driven partly by the advantages of purchasing power, economies of scale, and the greater reliability of large distributors. The latter, in particular, was critical to ensuring the continuous operation of manufacturing and industrial equipment such as drilling rigs, mining equipment, agricultural equipment, and other heavy machinery.

But equally important to this trend were the preferences of the major refiners themselves. As they de-emphasized downstream marketing and distribution, the majors sought to work with a core group of distributors with which they could maintain strong relationships. Their distribution partners were often viewed as de facto extensions of their brand name and logistics network, not simply resellers. Consequently, major refiners and lubricant manufacturers had become increasingly selective in choosing distributors with which to do business. Distributors with broad product and service offerings, large networks of customers, and better access to capital to support the expansion of their platforms to handle increased production volumes were generally more successful in maintaining strong relationships with refiners.

Managing the Supply Chain

Maxum differentiated itself by striving to excel along every dimension that would make it a valued partner to both suppliers and customers. Building strong relationships with both upstream and downstream partners simultaneously was a mutually reinforcing business model: strong customer loyalty and retention helped make Maxum a preferred customer to its own upstream suppliers; and, in turn, strong relationships with upstream refiners contributed to Maxum's ability to maintain continuity of supply even during severe market dislocations, thus making it a more reliable supplier to its downstream customers. For example, during the aftermath of Hurricane Katrina, Maxum's relationships with national and regional refiners, coupled with its proprietary, specialized distribution infrastructure, enabled Maxum to continue delivering fuel to the Gulf region when other local distributers could not.

Customer Relationships Maxum served over 10,000 customers in numerous end markets, including drilling, exploration and production; trucking; marine industries (commercial fishing, freight and tug barges, deep draft vessels and ports); mining; construction; railroad; automotive; government; and various manufacturing industries. Its top ten customers accounted for 17% of its total revenues in 2008, and its top 400 customers represented approximately 80%. No single customer accounted for more than 5% of total revenues, however.

Customer locations spanned the mid-west, mid-continent, southwest, west coast, central Appalachian regions of the United States, and the Panama Canal. Their locations often included rugged, operationally challenging environments (e.g., drilling rigs or mines) where few competitors had the experience and logistical capability to service. Maxum developed and maintained an extensive logistics infrastructure that enabled it to make a wide range of deliveries of both fuel and lubricants in various quantities to its customer base [1]

Maxum's scale, geographic footprint, reliability, and versatility in its delivery modes were considered important sources of competitive advantage in this fragmented industry. These all contributed to high customer retention rates. The average length of Maxum's relationships with its largest ten customers was more than 20 years.

In addition to its delivery services, Maxum offered its customers a number of other value-added services. These included safe removal and disposal of used oil products, on-site equipment monitoring and maintenance, fuel management programs, cost control programs, and equipment leasing. Maxum took advantage of its large logistical footprint to ensure that it could offer its customer base the most competitive fuel prices on a daily basis. This was accomplished by having multiple relationships with multiple suppliers throughout its distribution network.

Maxum also made available to its customers a variety of so-called "wet gallon" hedges. These were contracts with Maxum that would fix or limit the price of fuel that customers would have to pay over a specified length of time (see **Exhibit 3** for a description of these contracts). Maxum would then attempt to mitigate its own risks arising from these agreements by using exchange-traded and over-the-counter (OTC) derivative contracts.[2] Typically, between 3% and 6% of Maxum's gallons sold were covered by such risk management programs with customers.

Finally, Maxum extended trade credit to its customers. Prior to 2008, customers paid Maxum in 40 days, on average. By 2009, average days receivables had been reduced to about 30 days.

Supplier Relationships As with its customers, Maxum also maintained long-term relationships with a diverse group of petroleum refiners and lubricant manufacturers, which included BP, Shell Oil, Chevron, ExxonMobil, ConocoPhillips, Citgo, and Valero Energy. The average length of its relationships with its top five suppliers was more than 20 years. However, unlike its sales to its own downstream customers, Maxum's procurement from its upstream suppliers was considerably more concentrated. Its largest supplier of diesel fuel represented 30% of its total diesel fuel purchases, and its largest supplier of lubricants accounted for 27% of its total lubricant purchases.

Just as Maxum offered trade credit to its customers, so too did it receive trade credit from the major oil companies that supplied it. In keeping with industry norms, however, trade credit terms to petroleum product distributors were much tighter, typically requiring payment for diesel fuel in about 10 days.

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[1] Maxum generally avoided relationships with filling stations, however, which were viewed as a low-margin, high credit-risk business segment.

[2] The commodity underlying Maxum's agreements with customers was primarily ultra-low sulfur diesel fuel; however, the commodity underlying the exchange-traded and OTC options used for hedging was generally heating oil, which had similar physical and pricing properties to diesel fuel. Because they are not perfectly identical, Maxum was exposed to some "basis risk" in these arrangements. In other words, there was some risk that a change in the cash price of the fuel being hedged by Maxum's customers would not be perfectly offset by an equal and opposite change in the value of Maxum's exchange-traded or OTC derivative contracts.

Michel Salbaing, the company's CFO, underscored the conservative posture of the major oil producers when it came to the extension of trade credit:

> Some major producers are very risk averse when it comes to trade credit. They might assess you as being able to support $5 million of credit, but they'll only give you $1 million. Ironically, when oil prices rise your need for credit goes up because you are selling the same number of gallons at higher prices. In 2008 when prices sky-rocketed and demand for product remained fundamentally unchanged, some major refiners reduced credit to their distribution partners.

Financial Management

In addition to trade credit, Maxum relied upon two other primary sources of financing: debt and retained earnings. Maxum had paid no cash dividends in recent years, so all operating cash flows were retained in the business. This source of funds was significant but varied with EBITDA performance. Funding shortfalls in any given period were met with the use of debt. Historically, Maxum's borrowings had taken two forms: a $155 million seven-year term loan provided by a consortium of hedge funds, and a $335 million asset-backed revolving credit facility with a syndicate of banks.

Maxum's term loan was initiated in 2006 to finance some acquisitions, pay fees, and refinance some existing indebtedness. It bore a floating interest rate of LIBOR plus 600 basis points and was secured by a first lien on all assets other than accounts receivable and inventory, and a second lien on those. Certain protective covenants required Maxum to obtain permission from the term debt holders before undertaking acquisitions, making certain other types of capital expenditures, and increasing its revolving credit facility. This term loan was repaid in 2009 ahead of maturity with the infusion of new equity capital from Metalmark and Waud Capital.

Maxum used its revolving credit facility to finance its working capital needs and to help pay for acquisitions, as needed. Under its revolving credit agreement, Maxum could borrow the equivalent of 85% of its qualified receivables and 70% of its qualified inventory (its "availability"), up to a maximum of $335 million. However, there was a lower threshold of $35 million of remaining credit-line availability which, once reached, would trigger weekly reporting requirements by Maxum, additional monitoring by the banks, and restrictions on certain types of transactions without lender approval. The credit facility was secured by a first lien on all accounts receivable and inventory, and a second lien on all other assets. Interest on the borrowed portion of the facility was charged at LIBOR plus a percentage based on Maxum's fixed charge coverage (a commitment fee, also based on Maxum's fixed-charge coverage ratio, was charged on the unused portion of the facility, if any). A covenant in the agreement required Maxum to maintain a fixed charge coverage ratio of at least 1.15.[3]

Typically, Maxum managed its revolving credit facility in such a way as to maintain excess availability well above the $35 million threshold. The purpose of this cushion was to provide the company with some financial flexibility that would enable it to take advantage of attractive investment opportunities or to meet other unexpected financial needs. In the fall of 2009, management had earmarked $70 million of its revolver to support potential new acquisition opportunities, and another $50 million to manage unforeseen risks for total availability of $120 million.

[3] Fixed charge coverage was measured as the ratio of EBITDA to the sum of interest expense and other debt service payments.

The 2007 - 2008 Oil Price Spike

After trading in the $20 to $40 per barrel range for much of the 21st century's first decade, oil prices began rising steadily beginning in the spring of 2007, and sharply so by the first half of 2008 (see **Exhibit 4**). This spike affected Maxum in a variety of ways. Since Maxum charged its customers a spread over its own supply costs for fuel, increases in the market price of oil were passed on to them. But the rise in oil prices also had some side effects that imposed new financial pressures on Maxum. One was a build up of accounts receivable. Two forces drove this build up. First, and most directly, higher prices combined with steady demand for fuel inflated the dollar amount tied up in a day of receivables. Second, the number of days of accounts receivable being carried on Maxum's balance sheet increased as Maxum's customers stretched their payables in an attempt to manage their own liquidity.

Finally, for some customers, the margin squeeze arising from rapidly escalating fuel prices meant more than simply taking longer to settle their payables: their solvency came into question. Bissell described the situation this way:

> Our customers' credit quality was a big concern of ours. We're in a relatively low-margin business, so credit losses can destroy a lot of value for us. The way we addressed this situation was by raising prices where we could to reflect the higher costs of doing business and downsizing our customer base. We let go of about 10% of our volume due to a combination of credit and pricing concerns. We had to do this to protect our balance sheet and to focus our working capital to support a stronger set of customers.

At the same time, some of Maxum's suppliers began to tighten their own commercial credit terms. One supplier wanted to reduce Maxum's trade credit from $20 million to $15 million, and to require payment in seven days instead of ten. Other suppliers saw the price run up as an opportunity and increased credit limits as a method to capture more business from Maxum.

These pressures on its receivables and payables forced Maxum to depend even more heavily on its existing revolving credit facility. But there were limits to their ability to borrow, as Bissell observed:

> Our internal forecasts in late 2007 when oil was well below $100 a barrel showed that if oil prices rose above $135 a barrel and we did not change the way we were doing business, our revolving credit availability would decrease to levels that we were not comfortable with. We could try to raise the size of our revolving credit facility, but to do that we needed to get permission not only from our banks, but from our term loan holders as well. Our banks were more than willing to raise the revolving credit facility amount because they understood the value of underlying collateral and the company's performance. However, our term lenders (primarily comprised of hedge funds) were less familiar with our business model and saw the increase in oil prices as an opportunity to extract incremental return. We estimated that it would cost us about $10 million in fees and additional interest expense to secure the consents from our term lenders that would allow us to increase our revolving credit facility by just $50 million. At the time this seemed like an egregious cost and the company was in full compliance with all of its financial covenants. We were able to take other measures including reducing our volumes, shortening payment terms for our customers, and adopting a more aggressive approach to collections. These remedies were successful, but also came with some cost to our franchise.

As it happened, oil prices peaked just below $150 a barrel, and eventually declined to the $35 to $40 per barrel range by December of 2008. Maxum was successful in keeping within its credit limits and its

financial covenants through the measures described above. But even this rapid return to lower prices imposed other financial pressures for Maxum, as Bissell explained:

> There were also consequences for our customer hedging program as oil prices declined. After suffering through the run up, some of our key strategic customers wanted to lock in prices with us through our hedging program when oil got back down to $100 a barrel. We offered fixed-price contracts to some of our most creditworthy customers and hedged ourselves by buying futures. As oil prices continued to drop, however, we had to satisfy margin calls associated with the hedges, which reduced our availability on the facility, restricting our ability to do acquisitions or take advantage of other opportunities.

The impact of the 2007-08 oil price rise on Maxum's income statement and balance sheet is shown in **Exhibit 5**.

Designing a Hedging Program

By the fall of 2009, diesel fuel prices had dropped to $2.10 per gallon; and Maxum had raised $300 million of new private capital, repaid its term loan, and reduced the outstanding balance on its credit facility to less than $70 million. The new private capital positioned the company to continue its plans to grow and further integrate the business. But with memories of the recent oil price rise still fresh in their minds, Maxum's senior executives began giving careful attention to the management of the company's oil price risk. "Variations in energy prices have always happened and are bound to happen again," Salbaing noted. "We were left with the question, 'How do we defend ourselves in a future situation like this?'"

To help answer this question, Salbaing's team first undertook a careful analysis of the relationship between fuel prices and Maxum's working capital needs. Based on their 2008 experience, they already knew that, for every 1.25¢ increase in the price per gallon of diesel fuel, Maxum would have to borrow another $1 million on its revolver to support its current base of business assuming no other changes were made with respect terms and conditions with Maxum's customer base. Their analysis also indicated that a return of crude oil prices into the $139 per barrel range would likely translate into $4.00 per gallon diesel fuel prices. At this level, they concluded, Maxum's draws on its revolver would begin eating into the cushions earmarked for acquisitions and unforeseen risks. This confronted the company with a dilemma. According to Bissell, a resurgence of borrowing at this level could limit acquisitions and green-field growth investments. On the other hand, it was precisely in this sort of oil-price environment that attractive opportunities to grow through acquisitions and green-field projects would likely arise. These would have to be foregone for liquidity reasons, unless Maxum could increase the limit on its revolver.

At $175 per barrel oil prices, diesel fuel costs would be expected to rise to $5.00 per gallon, and Maxum would surpass the $300 million threshold in its revolver. At this level of borrowing, the company would need to begin thinking about potentially shrinking its customer base or increasing its revolver, and would once again be subject to closer monitoring by its bank lenders.

The meeting with John Shapiro in October of 2009 was arranged to explore various approaches for relieving the financial pressures that might be imposed on Maxum if oil prices should return to these high levels. The simplest approaches for managing risk were to hedge against specific price risks using futures contracts, or to insure against them using option contracts. Maxum had gained considerable experience with these types of instruments from the management of its exposures acquired from the wet gallon hedges offered to customers. Each of these instruments is characterized by somewhat

different contractual requirements and payoffs at maturity. A description of basic crude oil derivative contracts is provided in **Exhibit 6**. Terms and prices on various futures and options contracts during the fall of 2009 are shown in **Exhibits 7** and **8**.

While futures and options were the most fundamental contracts available for hedging oil price risk, a comprehensive, workable hedging program was not limited to using only these two types of derivatives; combinations could also be considered. In fact, Shapiro cautioned that using "plain vanilla" hedging techniques might not result in a program that would be best suited for Maxum.

Drawing from more than 25 years of experience trading energy, Shapiro emphasized that successful risk management programs required extreme discipline. He placed particular importance on the long-run sustainability of any program that was undertaken. Through the years, he had seen as many risk management efforts fail for behavioral reasons as for poor design or poor execution. Senior management could easily become discouraged if risk management strategies required continued outlays for protecting against low probability events, necessitated constant decision making, or left themselves open to decision regret. In the absence of sharp price movements that would cause the "insurance" to pay off, even simple option-buying programs, for example, could appear more of a costly luxury than a necessity. As such, they would often be abandoned, ironically, sometimes just before the sort of extreme price jump that would have proved the wisdom of having bought the insurance.

Option Spreads

In light of Shapiro's experience and advice, the management group assembled to consider Maxum's oil price exposures discussed several potential combinations of crude oil derivatives. One was a so-called "costless collar," which consisted of "writing" (i.e., selling) a crude oil put option at an exercise price somewhat below the current spot price for crude, while simultaneously buying a crude oil call option at an exercise price higher than the current spot price. For example, if crude oil prices were at $80 per barrel, Maxum might write a put option exercisable six months later at, say, $70 per barrel and simultaneously buy a call option exercisable on the same date at, say, $90 per barrel. The proceeds from the writing of the put options would be used to cover the cost of buying the call options; hence, the term "costless" collar (although in practice, the combined value of the short put and long call position would not necessarily be precisely zero).

"Ratio writing" alternatives were also discussed. Ratio writing entailed buying and selling different quantities of puts and calls with different strike prices. One possibility identified for further analysis and consideration was a "2x1" option spread. In this case, Maxum would simultaneously buy an out-of-the-money call option (i.e., one with an exercise price above the current spot price for oil) and sell *two* deep out-of-the-money calls with the same maturity as the purchased option, but with a *higher* exercise price. To provide protection against significant oil price increases, the two exercise prices would be set significantly above the current spot price. For example, with oil at $80 per barrel in the spot market, Maxum might go long a four-month call exercisable at $100 per barrel while going short two four-month calls exercisable at $110 per barrel.

Yet another suggestion was a "1x2" option spread – the inverse of the aforementioned 2x1 alternative. A 1x2 option spread would entail writing *one* out-of-the-money crude oil call option while simultaneously buying *two* deep out-of-the-money call options with the same maturity as the written call but with an even *higher* exercise price. If executed skillfully, the prices of the short and long positions would net out such that the overall position would have little or no cost at inception.

Design Principles

The October meeting with management had given Shapiro much to consider and analyze. Although no specific method for managing Maxum's oil price risks had been settled upon, a shared understanding had emerged about what the general features of a good risk management program for Maxum would be. Clearly, the program had to be designed such that it would provide substantial cash for Maxum when its liquidity was being absorbed by high oil prices. But at the same time, Bissell had made it clear that, "We're not in the business of trying to be smarter than the market. We are trying to protect ourselves against the impact of a rapid and substantial increase in the price of oil similar to what we experienced in the first half of 2008." He didn't want to see Maxum's risk management program inadvertently slip into a trading function in which the company tried to generate profits from the selective trading of crude oil derivatives in the normal course of business.

For his part, Salbaing had emphasized the need, "… to find a system that would enable us to stay with the program over the long run." This meant that the program had to be affordable, both in the sense that it would not produce substantial losses as oil prices fluctuated, and also that it would not be complex and cumbersome to manage.[4]

Defense or Offense?

As Shapiro contemplated the design challenge before him, he was particularly intrigued by an observation made at the meeting: the impairment of Maxum's financial flexibility due to high oil prices was somewhat correlated with emergence of attractive acquisition and other investment opportunities in the energy logistics industry. Indeed, Bissell had specifically asked, "Can we protect against the consequences of high oil prices *and* still take advantage of a situation in which our rivals are running out of capital and forced to sell or shrink their customer base?" Could a risk management program be designed that would enable Maxum to play defense *and* offense at one and the same time while remaining true to the general design principles that had emerged from the meeting? As Shapiro reflected on this intriguing puzzle, various ideas began coursing through his mind. He grabbed a pad and pen and began sketching some payoff diagrams.

[4] It was fully appreciated, however, that continuous hedging activities using crude oil derivatives would inevitably result in quarterly losses from time to time. Generally speaking, quarterly losses in the range of $75,000 to $125,000 were likely to be seen as tolerable. However, losses greater than $300,000 per quarter would likely raise concerns about the economic effectiveness of the hedging program.

Exhibit 1 Maxum Petroleum Income Statements ($ thousands; fiscal year ends June 30)

	2007	2008	2009
Revenues	$3,207,813	$4,868,398	$3,321,521
Cost of sales	3,005,288	4,611,201	3,064,441
Gross margin	202,525	257,197	257,080
Operating expenses	149,978	215,800	219,215
Operating income	52,547	41,397	37,865
Interest expense	21,717	33,688	33,535
Other income (expense)	237	(12,154)	(22,484)
Income before taxes	31,067	(4,445)	(18,154)
Income tax expense	11,648	(1,592)	(5,027)
Net income (loss)	$19,419	($2,853)	($13,127)
EBITDA	$78,588	$63,686	$44,098
Depreciation expense	$26,140	$34,831	$29,023
One time special charges reflected in earnings:			
Loss on strategic sale of business	$ -		$ 1,181
Business transformation	-	-	4,687
Transaction expenses	705	3,689	18,888
Loss on early extinguishment of debt	1,008	-	2,994
Loss contingency	-	7,000	1,001
Total one-time special charges	$1,713	$14,264	$28,751

Source: Company documents.

Exhibit 2 Maxum Petroleum Balance Sheets ($ thousands; fiscal year ends June 30)

	2007	2008	2009
Cash	$8,927	$4,460	$3,061
Restricted cash	2,115	1,405	10,726
Accounts receivable	335,719	418,823	201,165
Inventory	54,700	70,398	67,106
Prepaids and other current assets	18,901	11,999	23,416
Total current assets	420,362	507,085	305,474
Net property, plant, & equipment	66,388	76,538	78,560
Other assets	175,058	209,346	223,949
Total Assets	$661,808	$792,969	$607,983
Accounts payable	$166,357	$194,736	$107,598
Accruals and other current liabilities	19,799	43,496	47,566
Deferred revenue	853	3,105	2,863
Current portion of long-term debt	1,837	3,759	2,602
Total current liabilities	188,846	245,096	160,629
Long-term debt			
Revolver	174,510	228,139	63,458
Other	162,942	163,369	5,298
Deferred income tax	27,612	26,625	32,246
Total long-term liabilities	365,064	418,133	101,002
Total Liabilities	$553,910	$663,229	$261,631
Total Stockholders' Equity	105,814	128,050	344,836
Minority interest	2,084	1,690	1,516
Total Equity	$107,898	$129,740	$346,352
Total Liabilities and Stockholder's Equity	$661,808	$792,969	$607,983

Source: Company documents.

Exhibit 3 Maxum's "Wet Gallon" Hedges Offered to Clients

Fixed-Firm: A contract that offers a fixed price for a specific quantity of fuel during an agreed-upon time period. The time period may be for 1 to 24 months in the future.

Flex-Term: A fixed-firm price that the client has the flexibility of paying when taking delivery of fuel, or paying current market prices, as they choose. With flex-term contracts, the client can purchase fuel at market prices or at the contracted price, depending on which is most advantageous.

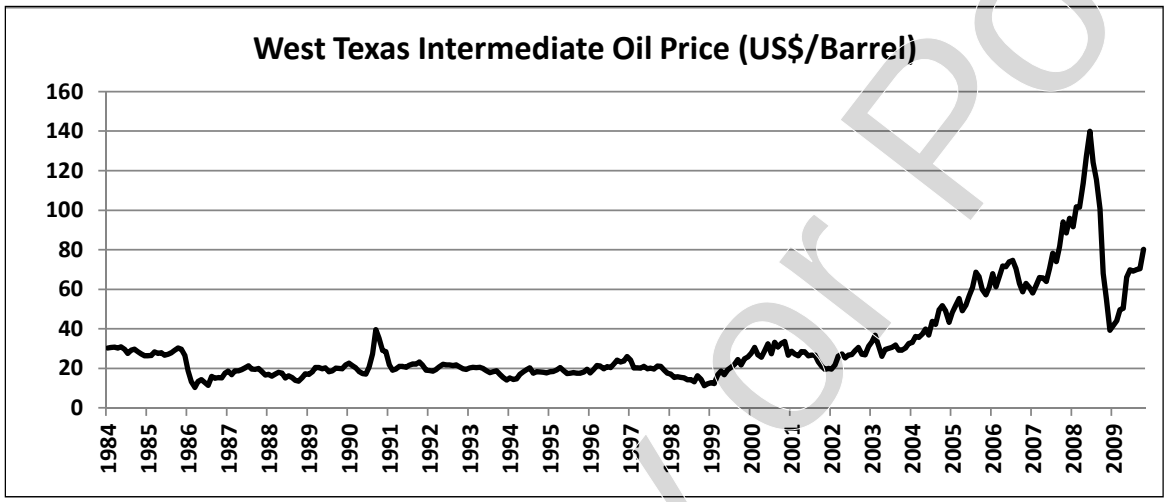
Ceiling with a Floor: A contract that reduces price volatility by providing a ceiling that the fuel price will not exceed, and a floor that the price will not go below.

Ceiling without a Floor: The fuel price is "capped" at a mutually agreed price. The client participates in all downward movements in price, but never pays more than the ceiling price.

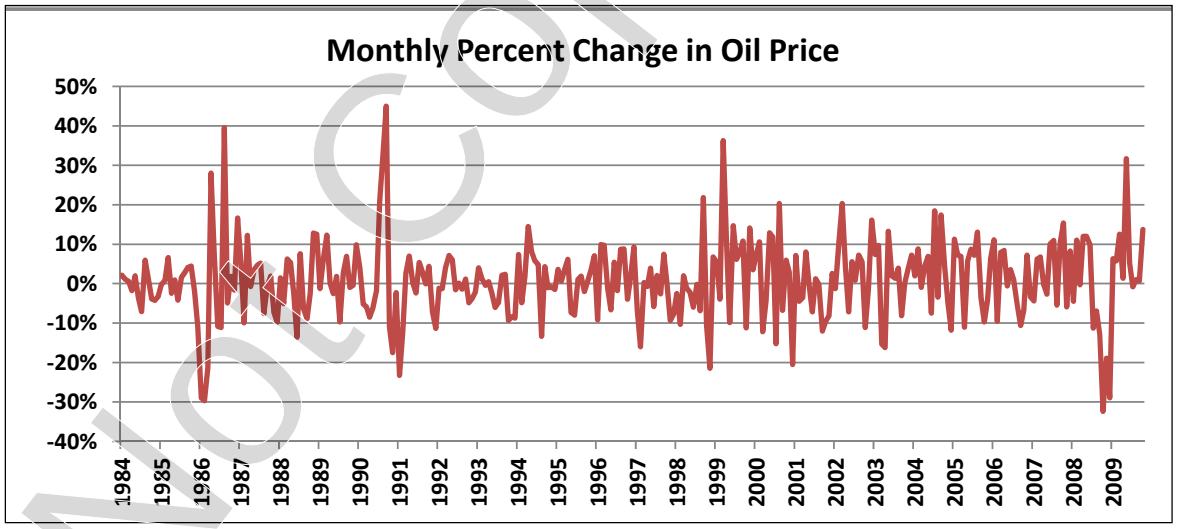
In addition to these standard hedging contracts, Maxum offered many customized hedging programs designed to meet the unique requirements of the various commercial and industrial users that it services.

Source: Maxum Petroleum, Inc. website: *Risk Management*.

Exhibit 4 Historic Crude Oil Spot Prices



Source: Global Financial Data, accessed December 2010.



Source: Bloomberg (West Texas Intermediate Oil Price), accessed December 2010.

Exhibit 5 Maxum Petroleum, Inc., Condensed Monthly Financial Statements, June 2007 – December 2008 (thousands of dollars; except crude oil price per barrel)

	June 07	July 07	Aug. 07	Sept. 07	Oct. 07	Nov. 07	Dec. 07	Jan. 08	Feb. 08	March 08	April 08	May 08	June 08	July 08	Aug. 08	Sept. 08	Oct. 08	Nov. 08	Dec. 08
Crude oil price per barrel	$70.68	$78.21	$74.04	$81.66	$94.53	$88.71	$95.98	$91.75	$101.84	$101.58	$113.46	$127.35	$140.00	$124.08	$115.46	$100.64	$67.81	$54.43	$44.60
Revenue	342,217	332,045	351,297	322,089	389,063	381,003	375,413	400,813	390,528	448,892	481,142	524,781	471,331	522,021	475,902	410,536	365,289	246,718	198,311
Cost of sales	321,607	311,769	329,626	302,186	368,500	360,719	355,803	379,467	369,006	426,769	459,039	500,987	447,329	496,807	449,756	386,391	339,232	224,206	176,894
Gross margin	20,610	20,276	21,671	19,903	20,563	20,284	19,610	21,346	21,522	22,123	22,103	23,794	24,002	25,214	26,146	24,145	26,057	22,512	21,417
Operating income	-3,285	4,646	6,201	1,961	2,947	3,567	-263	3,216	4,119	3,676	3,546	5,765	2,015	6,896	8,330	4,821	6,651	4,888	1,518
Net income	-2,854	1,621	2,217	-918	512	768	-2,528	473	793	-239	599	1,198	-7,349	2,630	3,470	-667	1,952	1,458	562
Cash	11,042	17,889	10,176	6,090	6,442	3,860	13,627	7,215	10,439	4,508	8,544	5,888	5,866	5,300	9,618	18,130	39,669	44,052	45,089
Accounts receivable	335,719	340,245	327,798	359,281	385,005	386,640	391,925	407,290	400,049	421,997	444,318	460,283	418,823	438,927	424,116	366,283	303,906	262,145	209,272
Inventory	54,700	61,410	61,245	69,002	76,322	85,786	81,659	85,822	84,322	71,161	84,193	84,109	70,398	77,674	82,574	75,389	71,532	69,487	67,484
Other	18,901	16,992	10,421	19,113	16,627	16,547	20,934	20743	20,833	21,350	21,472	17,682	11,998	13,957	13,818	13,592	14,230	14,735	40,969
Total current assets	420,362	436,536	409,640	453,486	484,396	492,833	508,145	521,070	515,643	519,016	558,527	567,962	507,085	535,858	530,126	473,394	429,337	390,419	362,814
Net PP&E	66,388	68,822	73,930	70,873	72,173	72,525	76,556	77,723	77,957	78,895	78,694	78,086	76,538	77,183	76,831	76,637	76,236	75,637	74,743
Other assets	175,058	162,815	175,061	169,463	165,639	168,809	213,057	211,482	210,054	210,689	210,358	209,485	209,346	208,179	207,211	211,435	225,831	224,287	228,589
Total assets	661,808	668,173	658,631	693,822	722,208	734,167	797,758	810,275	803,654	808,600	847,579	855,533	792,969	821,220	814,168	761,466	731,404	690,343	666,146
Accounts payable	166,357	161,808	157,385	176,985	177,616	177,031	166,136	177,657	179,798	184,193	214,773	224,758	194,736	197,925	204,586	163,188	170,955	131,822	95,909
Other	22,489	21,078	22,190	22,861	25,161	27,961	43,971	38,654	33,977	33,337	31,215	37,956	50,360	50,182	51,318	48,425	50,122	48,929	71,696
Total current liabilities	188,846	182,886	179,575	199,846	202,777	204,992	210,107	216,311	213,775	217,530	245,988	262,714	245,096	248,107	255,904	211,613	221,077	180,751	167,605
Revolving credit line	174,510	199,806	178,770	196,376	224,407	233,379	257,140	256,845	250,838	257,882	267,732	252,077	228,139	248,246	229,828	219,693	178,347	176,021	159,164
Other long-term debt	162,942	160,957	160,993	163,541	161,090	161,066	166,190	167,163	167,122	164,891	164,963	165,814	163,369	165,593	165,689	162,835	162,657	162,775	167,298
Deferred Taxes	27,612	20,521	31,500	23,989	23,634	23,634	30,323	37,554	37,554	34,874	34,874	39,703	26,625	26,625	26,625	30,939	30,939	30,939	30,939
Total equity	107,898	104,004	107,793	110,070	110,301	111,097	133,998	132,402	134,366	133,423	134,022	135,226	129,740	132,648	136,122	136,385	138,384	139,856	141,140
Total liabilities and stockholders' equity	661,808	668,173	658,631	693,822	722,208	734,167	797,758	810,275	803,654	808,600	847,579	855,533	792,969	821,220	814,168	761,466	731,404	690,343	666,146

Source: Company documents.

Exhibit 6 Basic Crude Oil Derivative Contracts

Crude Oil Futures

Crude oil futures contracts are standardized contracts between two parties in which the buyer agrees to take delivery from the seller of a specified quantity of light sweet crude oil on a predetermined date. Futures contracts are traded on the New York Mercantile Exchange (NYMEX), where the underlying quantity of oil being traded is in units of 1,000 barrels (or 42,000 gallons), and prices are quoted in dollars and cents per barrel. Maturities are listed for up to nine years forward. Settlement is made by physical F.O.B. delivery of the contracted amount of oil at a pre-specified pipeline or storage facility.

To open a futures position, the exchange requires traders – both buyers and sellers – to post "margin"; that is, they must have cash on account equivalent to 2% to 10% of the value of the futures contract. Once the contract is opened, the initial margin amount is transferred from the trader's margin account to the exchange's clearing firm and remains there as long as the futures position stays open. Subsequently, if the value of the position declines, a "margin call" will be made that will require the trader whose position incurs the decline to "top up" his or her margin account to meet the initial margin requirement.[a] The purpose of margin requirements is to ensure that buyers and sellers of futures contracts will be able to fulfill their futures contract obligations.[b]

Crude Oil Options

Crude oil options are option contracts in which the underlying asset is a crude oil futures contract on 1,000 barrels of light sweet crude with the same exercise price and maturity date as the option itself.[c] They provide the right, but not the obligation, for the contract holder to buy (i.e., to assume a long position, in the case of a call option), or sell (i.e., to assume a short position, in the case of a put contract), the underlying crude oil futures contract at a specified strike price on or before a specified expiration date. Crude oil options are also traded on NYMEX with prices quoted in dollars and cents per barrel. Settlement is made by exercise into the underlying futures contract.

An options trader does not have to meet the margin requirements of the underlying futures contract to set up the position. However, an option buyer must pay an option premium to the seller. Typically, for options maturing in a year or less and not deeply in the money, the premium on a crude oil option would be less than the initial margin requirements on the underlying crude oil futures contract. The premium paid is not recoverable, except to the extent that the option matures sufficiently deep "in the money" (i.e., the underlying asset is worth more than the option's exercise price) to more than compensate for the premium paid. If the option expires "at" or "out of the money" (i.e., the value of the underlying asset is equal to or less than the option's exercise price), the option is worthless and the premium paid by the buyer is lost.

Source: Casewriter.

[a] Margin calls are made only if the position's value declines below the so-called "maintenance margin" – the minimum amount a futures trader is required to maintain in his or her margin account in order to hold the position. The maintenance margin is usually a little below the initial margin so that minor fluctuations in price do not trigger immediate margin calls.

[b] Maxum also had a number of relationships with dealers through which it could execute over-the-counter (OTC) derivative transactions. While economically similar to futures contracts, OTC forward contracts differ from NYMEX futures in several important respects. For example, margin on OTC forward contracts is posted only by clients, not by dealers; credit relationships with the dealers might enable clients to reduce or avoid posting initial margin (although variation margin would still have to be posted as prices varied); and most OTC derivatives have average price settlements.

[c] Technically, to accommodate market-clearing mechanisms, crude oil options cease trading three business days prior to the cessation of trading in the underlying futures contract.

Exhibit 7 NYMEX West Texas Intermediate Crude Oil Futures Contracts, October 23, 2009

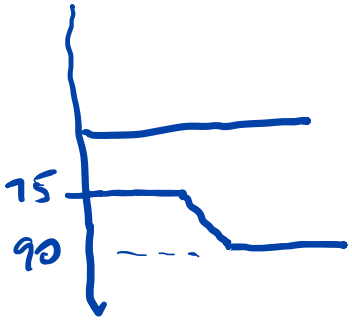
For delivery on:	Price per barrel
Spot	$80.50
2010	
January	$81.19
February	81.87
March	82.43
April	$82.91
May	83.36
June	83.79
July	$84.11
August	84.39
September	84.68
October	$84.99
November	85.34
December	85.69
2011	
January	$85.88
February	86.05
March	86.21
April	$86.37
May	86.53
June	86.68
July	$86.83
August	86.97
September	87.11
October	$87.26
November	87.41
December	87.57

Source: Bloomberg (futures), accessed December 2010.

Exhibit 8 Chicago Mercantile Exchange Crude Oil Option Contracts, October 23, 2009

Calls		
Month of Maturity	Exercise Price	Settle Price
1 Month	70	11.03
1 Month	75	6.87
1 Month	80	3.68
1 Month	85	1.7
1 Month	90	0.78
1 Month	100	0.19
1 Month	110	0.08
2 Months	70	12.67
2 Months	75	8.89
2 Months	80	5.82
2 Months	85	3.59
2 Months	90	2.13
2 Months	100	0.79
2 Months	110	0.39
3 Months	70	14.19
3 Months	75	10.61
3 Months	80	7.62
3 Months	85	5.27
3 Months	90	3.53
3 Months	100	1.65
3 Months	110	0.83
4 Months	70	15.54
4 Months	75	12.11
4 Months	80	9.19
4 Months	85	6.81
4 Months	90	4.94
4 Months	100	2.59
4 Months	110	1.44
5 Months	70	16.61
5 Months	75	13.22
5 Months	80	10.27
5 Months	85	7.85
5 Months	90	5.9
5 Months	100	3.24
5 Months	110	1.89
6 Months	70	17.59
6 Months	75	14.23
6 Months	80	11.28
6 Months	85	8.83
6 Months	90	6.81
6 Months	100	3.91
6 Months	110	2.41

Puts		
Month of Maturity	Exercise Price	Settle Price
1 Month	70	0.54
1 Month	75	1.37
1 Month	80	3.18
1 Month	85	6.2
1 Month	90	10.28
1 Month	100	19.68
1 Month	110	29.58
2 Months	70	1.48
2 Months	75	2.7
2 Months	80	4.63
2 Months	85	7.4
2 Months	90	10.93
2 Months	100	19.59
2 Months	110	29.19
3 Months	70	2.33
3 Months	75	3.74
3 Months	80	5.75
3 Months	85	8.4
3 Months	90	n.a.
3 Months	100	19.77
3 Months	110	28.95
4 Months	70	3.12
4 Months	75	4.69
4 Months	80	6.77
4 Months	85	9.38
4 Months	90	12.5
4 Months	100	20.14
4 Months	110	28.99
5 Months	70	3.72
5 Months	75	5.32
5 Months	80	7.37
5 Months	85	9.94
5 Months	90	n.a.
5 Months	100	20.3
5 Months	110	28.94
6 Months	70	4.26
6 Months	75	5.89
6 Months	80	7.93
6 Months	85	10.46
6 Months	90	n.a.
6 Months	100	20.51
6 Months	110	28.99



Source: Bloomberg (options), accessed December 2010.

Note: n.a. (not available).