

CLIFFORD LEWIS  
 Traub Capital Management, LLC  
 97 Chapel Street  
 Needham, MA 02492

(781) 453 - 3929

All information contained herein is obtained by Traub Capital Management, LLC (Traub Capital) from sources believed by it to be reliable and accurate. The information, however, is presented "as is", without warranty of any kind. Traub Capital makes no representation or warranty, express or implied, as to the accuracy, timeliness, or completeness of any such information, nor does Traub Capital make any warranty, express or implied, of any kind, with regard to the results to be obtained from its use. All expressions of opinion are subject to change without notice. Traub Capital does not undertake to update or supplement this report or any of the information contained herein. You should assume that Traub Capital and its employees enter into securities transactions which may include hedging strategies and buying and selling short the securities discussed in its reports before and after the issuance of any report. Traub Capital further discloses that it, its directors, officers, employees and relatives thereof, as well as its clients, may now have and from time to time may have, directly or indirectly, a long or short position in the securities discussed and may sell or buy such securities at any time.

Copyright 2012 by Traub Capital Management, LLC. It is illegal to reproduce this report by any means and for any purpose unless you have our written permission.

**New Recommendation: BUY, Hess Corporation (HES) July 22, 2012**

**Recent P/E: 7.7** (ftm consensus)

**Recent Price: \$43**

**Target: \$65**

	<i>Q2 2012 est</i>	<i>Q3 2012 est</i>	<i>Q4 2012 est</i>	<i>Q1 2013 est</i>	<i>Q2 2013 est</i>
<b>Hess Corporation</b>					
Revenues	8,908	9,009	9,825	9,996	9,502
Other Corporate Revenue	-	-	-	-	-
Cost of Products Sold	5,752	5,763	6,428	6,552	5,992
Production Expenses	708	732	759	769	793
Marketing Expenses	325	325	325	325	325
Exploration Expenses	245	245	245	245	245
G&A plus Other Operating Expenses	138	138	138	138	138
Interest Expenses	105	106	107	108	109
Depreciation, depletion amortization	704	728	754	773	797
Impairments	-	-	-	-	-
Total Costs and Expenses	7,977	8,037	8,757	8,909	8,398
Profit Before Tax	931	972	1,068	1,087	1,104
Provision for Taxes	373	389	427	435	442
Net Income	559	583	641	652	662
Less: Net income (loss) non cntrl instst	-	-	-	-	-
Net Attributable to Hess	559	583	641	652	662
Shares Outstanding	340	340	340	340	340
EPS	1.64	1.71	1.88	1.92	1.95
Dividend	0.10	0.10	-	0.20	0.10
Analysts Consensus	1.38	1.17	1.38		

## **Concept:**

Hess Corporation has historically been an integrated oil company that explored for, drilled for, processed and subsequently marketed oil and oil products. Their retail and refining footprint is the northeastern United States, but their base for oil exploration is worldwide. The company is about one tenth the size of ExxonMobile. Hess has a substantial position in the oil fields of North Dakota and has made a substantial commitment to develop those resources.

The world's major oil companies, i.e. Shell, Exxon BP, China Petroleum, etc. are notably absent from North Dakota. The majors are typically looking for very large, concentrated oil finds. North Dakota is large, but it is not concentrated and it requires a large number of wells. Such a drilling strategy fits well with Hess but drilling multiple wells is expensive and the strategy does require finding oil at each well.

In the last two years, oil production from Hess wells in North Dakota has fallen short of the goals and the stock price has fallen. In March 2011, the stock price was \$85. The price performance followed the general decline in the price of oil through 2011 until September 2011. In October 2011, world oil prices began to recover. However, disappointing production from Hess operated properties in North Dakota weighed on any recovery of the Hess stock price.

About the same time, Hess abandoned its historic focus on integrated oil operations to concentrate its focus on crude oil production. In light of the poor production numbers coming out of its North Dakota wells, investors questioned the wisdom of that decision. The same decision to focus strictly on oil production also triggered considerable one-time charges to shut down money losing refining operations and strained investor's comfort with management decisions. The stock suffered as a result, continuing to fall through 2011 and 2012 to its low of \$40 reached in late June, 2012.

We believe that Hess has turned the corner. Recent data from their wells in North Dakota indicate a substantial increase in oil production. It also appears that the asset write-off process is pretty well complete and that Hess does have sufficient capital and asset resources to make good on their large bet on the Bakken oil field in North Dakota.

Increasing oil production and reasonable stability in worldwide oil pricing should lead to significantly improved earnings. The possible improvements in Hess's operations are largely unnoticed by analysts who project continued deterioration in earnings.

## **Summary:**

The operating results for Hess depend on two factors: the amount of oil they bring to the surface, i.e. their oil production, and on the price they sell that oil. We will look at each of the two factors.

Hess has major oil production properties around the world but principally in Equatorial Guiana, Russia, Norway, Libya and North Dakota. The fields in Equatorial Guiana and Norway are mature fields and exhibit normal declines in oil production over time. Libya is also a mature field. The production from Libya in 2010 and most of 2011 was zero as the country recovered from the Arab Spring disruptions. In late 2011, oil production in Libya was resumed and in Q2 2012 it reached its prewar level of about 20,000 barrels per day. Oil production for all oil companies in Russia is a political process. Hess's oil production there has been increasing slowly and Hess recently had its share of bad press over the typical state

of crime in that country. Taken all together, however, Hess's oil producing assets outside of the US and Libya are flat. Libya has added about 20,000 barrels per day in 2012, a fact that has escaped every analyst that I can find.

In North Dakota, Hess is the principal operator for about 1,000 oil and natural gas producing wells. The income to Hess varies from well to well depending on numerous factors so there is no direct nexus between the gross production numbers from Hess operated wells, to the net oil assigned to Hess. Lack of a direct connection notwithstanding, there is clear correlation between the total gross production in Hess operated wells and the net Hess portion.

To assess Hess oil production in North Dakota, I have used gross production at wells where Hess is the principal operator. In the section below entitled "Hess in the Bakken", I will explore the validity of this data. The data is hard to use, but fundamentally, the data should be pretty good.

The gross production rose slightly in Q1, 2012 over Q4, 2011. The small increase in Q1 Bakken production was under expectations. Unlike the small increases in Q1 2012, oil production increased substantially in April and May 2012; an increase that has not been anticipated by the Street.

Gross production data is not yet available for June. June data, however, is available on the number of new wells drilled. (Hess must file with the State of North Dakota for permits to drill new wells and this data is available, although not readily so.) In Q4 2011, Hess averaged 6.3 new wells per month. That number rose to 15.3 in Q1 2012 and increased further to 16 in April. It takes about three months to drill a well and for oil to flow in production quantities from it, so I expect to see the increased oil from the increased number of new wells to continue to improve Q2 results.

On the pricing issue, for the most part, Hess receives the world price for its oil. It does not set prices. In world markets, Hess gets world prices. There are an enormous number of factors that affect world oil prices, some of which I cover below in the section entitled "Oil Pricing", but it is my belief that world oil prices will hold up well over the next year or so at roughly \$100 per barrel.

In North America, the oil price picture is different. To be useful and valuable, crude oil from North Dakota needs further processing at refineries which are generally located in Texas and Louisiana on the Gulf of Mexico. Historically, oil in North America was found in Texas, refined there and shipped to everywhere else in the country. The North American infrastructure is set-up for that flow. The pipelines that carry the oil products are the cheapest method of transportation and these pipelines are all in the ground to support the historical flow of oil in this country.

Infrastructure is expensive to build. No one will start an expensive infrastructure to deliver oil products until the basic supply is assured. Once started, building the infrastructure and the pipelines takes time to put into place. Time to build infrastructure can be extensive in North America where any interstate movement of oil falls under jurisdiction of the political process in Washington. Since non-Texas crude oil production is a very recent development, the infrastructure spending is lagging and the non-Texas oil supply has far outstripped the development of the required infrastructure.

The new infrastructure and pipelines will cost-effectively carry oil from non-Texas sources, such as North Dakota to refineries and world markets. Until the infrastructure and pipelines

are in place, oil transportation from North Dakota will be constrained. Without infrastructure, transporting the crude oil to Gulf Coast refineries or transporting it to other world markets is expensive and sometimes not possible at all.

As a result of the infrastructure constraints, the additional expense to get oil from North Dakota to the world markets is reflected in the price. North American oil in general and North Dakota oil, in particular, is priced considerably below the world market price. For the same grade of oil, the price difference between Bakken sourced oil and oil sourced near sea-lanes is known as the “spread”.

Right now, the price spread for North Dakota oil is high, by about \$20 per barrel, compared to comparable grades of oil available in the world markets. The \$20 per barrel price spread is about the gross margin of the North Dakota oil, so you could double the margin on the oil produced if you could sell it at the world price with no spread.

To capture the spread, Hess is working on infrastructure. They have completed the first stage of their infrastructure in two areas and they will finish the second stage in both areas in 2012. Street analysts underappreciate Hess’s infrastructure development and their infrastructure development will lead to higher margins beginning in Q2 2012.

## **Background**

The oil industry consists of entities to find oil in the earth’s geological formations, drill down to those formations to bring the oil to the surface, convert the oil into useable products, store it and deliver it. These tasks are generally referred to as upstream operations, encompassing exploration and initial production of crude oil; midstream, consisting of crude oil and natural gas gathering pipeline and initial processing systems and downstream operations, consisting of oil refining, marketing and distribution systems.

Hess Corporation was founded in the 1930’s. Its initial focus was delivery of liquid oil products from refineries to customers. In a parallel corporate development, the Amerada Petroleum Corporation began in the early 20<sup>th</sup> century to search for oil in North America. The two companies joined forces in the 1960’s to become Amerada Hess, an integrated oil company with upstream, midstream and downstream operations. In 2006, it changed its name to Hess Corporation.

Since the 1930’s, the fortunes of the world’s oil industry have seen considerable ebb and flow. At some points along the way, downstream operations were very profitable and upstream portions were not. At other times, the reverse has been true. At some points, oil has been in abundant supply with relatively low prices. At other times, oil supply has been severely constrained resulting in relatively high prices.

Oil is the source of a great portion of the world’s energy supply. Energy affects every aspect of human life. As you would expect from a force touching every human life in numerous ways, the oil industry and politics have become intertwined to the extent that today geopolitical events are played out every day that impact the supply and the price of oil.

The oil industry is a global entity. World markets and world-class entities determine the global supply. There are five large private oil companies generally referred to as “Big Oil”. These companies are: ExxonMobile, Chevron, Royal Dutch Shell, BP and Total. As large as the major oil companies are in size, the many of the world’s state owned oil companies such

as those in Saudi Arabia, Russia, Iran, Venezuela, Brazil and Mexico are larger or even much larger. In the industry, Hess is a mid-sized oil company, about one-tenth the size of ExxonMobile.

As a global industry with a common product, there are very few opportunities in the oil industry to truly differentiate products. As such, any study of an oil company must include a look into the world oil market dynamics of demand, supply and price.

## **World Oil Supply and Demand**

The world demand for oil is currently about 90 million barrels per day. It is a slow growth industry, with the overall world demand growing at about 1% per year. Virtually all of the increase in the demand for oil is from the world's emerging economies. In the world's developed economies, such as the United States, Europe and Japan, even with economic growth, the demand for oil is flat or decreasing.

Oil has two primary uses: first as a transportation fuel and second as a raw material. As a transportation fuel, it has a high energy density. That is, the amount of energy in liquid oil products is high compared to the weight and the amount of space taken to store it in the vehicle. Liquid oil products, such as gasoline, are also relatively easy to store and to transport. As a raw material, there are no effective substitutes for oil to make plastics, lubricants and all manner of goods that society consumes.

As both a transportation fuel, and as a raw material, the state of the world's economies does impact the demand for oil. High growth in the world's economy, particularly in the world's developing economies, calls for increased oil, and little or no growth has the opposite effect. Oil demand is also considerably influenced by environmental concerns, automobile fuel economy and by demographics; as younger people tend to use more oil products than do older people.

As a mature, slow growth, industry, the world demand for oil is fairly predictable and there are numerous governmental and private organizations that specialize in predictions of oil demand.

Oil supply, on the other hand, is somewhat less predictable. There are four primary forces at work on the world's oil supply. First is the normal depletion rate of existing wells. Second is the advance of technology to find and procure oil. The third force is environmental. The fourth primary force is politics. Much of the world's oil supply is owned by state agencies and supply is dominated by political considerations. All four forces are continuously at work, sometimes pulling in the same direction and sometimes pulling in differing directions. The ultimate impact on the world's oil supply is determined by the sum of the forces. We will look quickly at them all.

First, depletion. Oil depletion from existing wells is predictable and steady. The characteristics of depletion have led to numerous studies and predictions of limited availability and society's imminent demise. The peak oil argument goes back well over 150 years when near extinction of sperm whales threatened to dim the light of the world's whale oil lamps. (Technology, in the form of kerosene, came to the rescue.) More recent peak oil arguments have emerged in the 1950's where geologist M. King Hubbert coined the term Peak Oil and described the geology of oil depletion from existing wells. Further credible

arguments were presented in the 1970's by the Club of Rome. More recently, Matt Simmons presented compelling evidence in his 2005 book "Twilight in the Desert".

Running out of oil makes good headline news and the world's experiences with oil shortages in 1973 and 1979 certainly give credibility to the view. It is also logical to conclude that some day the world will run out of oil. Since mankind continues to use oil and nobody is giving the world any more. What is here is all there is.

Unlike predictable depletion, the second force, technical advances in oil production, are not predictable and no one with new oil technology wants to share it with the world through headline news stories. Technical advances also tend to come in fits and starts. Major advancements in geology mapping, offshore drilling and drill bit guidance did not come in 1% increments with decades of advanced warning.

Today, one of the most significant technological advancements in oil production is unfolding. The development combines drill bit guiding systems with advanced geology to allow drilling straight down to penetrate to the middle of oil bearing rock formations and then turning the drill bit to drill parallel to the geological formations known to contain oil. These drilling techniques are combined with other techniques to create fissures in the underlying rock strata to allow oil to flow into the well bore. The techniques are generally referred to as horizontal drilling and fracturing or "fracking".

All known oil reserves are underlain by oil bearing geological formations that also contain oil. Horizontal drilling and fracking allow upstream operators to now bring that oil to the surface. The horizontal drilling and fracking technologies were developed in the United States and the US is furthest along in their use. These techniques have allowed the US to reverse the normal decline in oil production from known wells.

Since 2005, oil production in the US is up about 25%, reversing the steady 2% annual decline in production since 1985. In fact, in the past two years, virtually all the growth in the world's total oil demand has been met with increasing US production.

What effect the horizontal drilling and fracking technologies will have on the balance of the world's oil production and the rate at which these new technologies will be implemented is totally unknown. The technologies do, however, have the potential to spark an enormous increase in the world's oil and natural gas supplies during the next 20 years. Notwithstanding the potential for new oil supplies, the price of Hess stock today is not much influenced by what might happen 20 years from now.

The third force, environmental considerations, is pretty well known. In developed countries particularly, virtually every change from the status quo faces opposition on environmental issues, real or imagined. At least the environmental opposition to oil development is pretty well known. The opposition is also pretty constant and not likely to result in any large negative surprises, so the environmental impacts are pretty well built into the expectations in the oil supply picture.

The fourth force, political considerations, however, is far from constant and is not neatly predictable. Libya, Iraq, Iran, Venezuela and much of equatorial Africa are all large petroleum exporting countries and every one is a potential tinderbox. Russia, Mexico, Brazil and Indonesia all have potential political issues to a lesser degree.

Any adverse political development in these countries could result in an immediate withdrawal of one to two million barrels a day from the world markets. A downward spike

in oil supply will certainly result in an upward spike in oil prices, the amount of and duration of which is very hard to predict.

There are only two counterbalancing factors to potential political disruptions. First is excess oil supply that can be brought on quickly and second is stored oil. The US keeps about two months' supply of oil in its strategic oil reserve. There are similar stockpiles in consuming countries around the globe. For excess supply that can be quickly brought to market, the world turns to Saudi Arabia. Saudi Arabia has pledged to bring order to the world oil markets by pumping more oil when the world needs more and by pumping less when it does not. Their true capability to pump additional oil is considered to be in the range of 1.5 to 3.0 million barrels per day.

Saudi Arabia's excess capacity changes from time to time varying based on the oil reserve geology, the recent rate of removal and new exploration activities in the Kingdom. Saudi Arabia does not publish a reserve capacity statistic and the exact amount is subject for considerable heated debate. In the final analysis, the nature of oil production is quite dependent on subterranean geology, which is not known with certainty.

It is not likely that even Saudi Arabia knows for sure how much excess capacity it has, but judging from events in the world energy markets in the past 25 years, it has enough to keep some sort of stability in the markets. Just as an aside, the last major spike in oil prices was in May, 2008, where the world benchmark oil price peaked at \$135 per barrel. At the time, President Bush called to ask if Saudi Arabia would pump some more oil to try to drive down the price. The Saudi response was that they would be more than happy to pump more oil, but they would need to have someone to actually buy it and that they had filled all the commitments that they had.

The typical definition of excess or reserve supply is that which can be brought on stream in 30 days. Even if you know exactly where the oil is and have drilled a well down to it, bringing oil on stream still requires a fairly expensive investment in infrastructure. There are not many commercial entities that would willingly invest in assets just for use in a 30-day emergency. It does not mean, however, that more supply could not be brought to market within 60, 90, 180 or 360 days. There just are no credible statistics on such parameters.

Predicting just how the forces of demand will play out against the four forces of oil supply will go at any point in time is pretty much of a crap shoot, but all the forces add up to impact the price of oil.

## **World Oil Price**

In the equilibrium price scenario, oil demand expands slowly at 1% per year or so as the world economies recover. Oil from known deposits declines at 2% per year or so. Oil from Iraq comes on-stream as they rebuild their capacity following the war. The flow of oil from Iran diminishes, effectively cancelling the increased Iraq production, and new oil discoveries and new oil technologies provide the balance of oil needed.

The equilibrium price scenario is the scenario most likely to occur according to the International Energy Agency (IEA) as well as by the US Energy Information Administration (EIA). Both agencies model the equilibrium price scenario, quickly summarized above, and both agencies conclude that under the equilibrium price scenario that there will probably be a

small increase in the real price of oil. That price increase in dollars will be greater if the dollar devalues and less if the value of the dollar increases.

Neither the EIA nor the IEA have any real data on the impact of the new oil extraction technologies. It is also interesting to note that both the EIA and the IEA both have been spectacularly unsuccessful at predicting the price of oil more than six months into the future and that projecting the most recent three months data for the next three months provides a price projection equally as good as either the IEA or the EIA, as does simply forecasting today's price to be the price three months from now. The prediction accuracy is equally good for any one of the above approaches. Another approach, which provides a marginally more accurate prediction, is to compare the existing spot price to the price target supported by Saudi Arabia. If the Saudi price target is higher than the spot, the prediction would be for the spot price to come up, or for the spot price to go down if the reverse is true.

Saudi Arabia has publically reiterated on numerous occasions, that they would like to see a stable world oil price at their target level and that they will pump more or less oil as is required to achieve that target. The effect, however, is somewhat masked by three factors: first it takes a number of months for any actions taken by Saudi Arabia to impact the world oil pricing; second, the volume of oil derivatives in the financial markets vastly exceeds any incremental Saudi Arabia effect and third, there are upper and lower limits of Saudi Arabia's ability to provide the necessary counterbalancing oil stream.

Even though neither the high nor the low of Saudi Arabian production is known with certainty, it is clear at the moment that Saudi Arabia at the moment has ample capability to add or to subtract oil from the world markets.

Today, the spot price of the OPEC Benchmark is \$103. The Saudi target is \$100. The world energy markets are in reasonable equilibrium and the best guess is for them to stay that way, barring any dramatic and unseen political developments. I have assumed a stable world oil price in the model.

For Hess, the price they receive is a bit more complex and is dependent on three variables. First, about two-thirds of the oil they produce is priced by the world standards, which is essentially the OPEC Secretariat Crude Oil Basket and does not often differ very far from the spot price for Brent crude. Hess's incremental oil is from the Bakken so the spread between Bakken oil and the world oil price is the second consideration. The third price consideration is the effect of the hedging activities Hess has put into place for 2012.

The OPEC benchmark price for crude declined about 20% in Q2 2012 compared to Q1. Given that a significant portion of Hess's output is hedged, I would expect to see some fall in the price they realized, but due to the hedging activities, the fall will probably be about 5%.

The price of Bakken oil has decreased about 30% in Q2 2012. The price of the Bakken oil is not hedged. Hess, however, will not feel the full impact of the decline in the price of Bakken crude because of their investment in infrastructure. Much of the decline in the price of Bakken oil is due to infrastructure constraints, most notable the capability to get the oil from North Dakota to refineries located on the East and Gulf coasts.

To help alleviate the transportation constraint, Hess has put into place a rail loading facility, which is running at about 50% of capacity in Q2 2012. It will handle almost all of Hess's crude oil once it reaches full capacity. The rail transportation allows Hess to ship to the Gulf Coast, the East Coast or to refineries in the Midwest. Rail transport is a bit higher priced

than pipeline transport by roughly \$10 per barrel, but the rail loading allows Hess to capture well over half the existing Bakken spread. The rail loading facility came on-stream in Q2, so I would expect to see some decline in the price realized for their Bakken crude in Q2, but not nearly the market decline.

It is interesting to note that since the end of June, the world price of oil has rebounded, as has the price of Bakken oil. These pricing trends portend well for Hess in Q3 2012. I have assumed a modest price recovery for Hess for Q3 and thereafter for prices to remain steady throughout the balance of the forecast period.

A modest recovery in Q3 2012 followed by relative oil price stability is the same conclusion reached by the EIA, the IEA as well as by the Saudi price target models. None of these models of world oil prices portend any adverse political developments. Most assuredly, the political events would have an impact on the price of oil, most likely driving it higher. Given the massive derivative position for oil in the financial markets, it is plausible to believe that any political disturbance will result in a virtually immediate spike in the price of world oil, probably to a level far above a medium long-term price. Such an event would have a positive impact on Hess, but I have not allowed for it in this analysis.

It should be noted that while I have modeled a relatively level price for crude oil that the pricing dynamics of the industry actually make a stable oil price very hard to achieve in practice. We may well see fluctuations up or down. The fluctuations result from the timing differences of the various forces that impact on oil price. The four forces affecting oil supply are relatively long term impacts. Depletion is a 40-year effect. Environmental opposition can delay a project forever. Implementing the new fracking technology is pretty much limited to new wells, so its impact is positive for supply but slow. Adding and subtracting Saudi oil takes a minimum of three months to have any effect. On the other hand, the oil derivative markets react within milliseconds of any event and it is the derivative markets that set the spot price. Slow impact from real oil supply impacts and immediate reaction to events sets in place a dynamic that overshoots and subsequently undershoots a true equilibrium price. The derivative markets set the spot price of oil and these markets react extremely fast. The speed with which the derivative markets respond to world events is why virtually all oil price models have such poor records of forecasting oil prices beyond six months.

## **Hess in the Bakken**

Hess has a major stake in the various oil fields of the Dakotas and Eastern Montana. The oil fields in this are generally referred to as the “Bakken”, although technically the fields include Williston and a number of others. A large portion of the fields, however are in North Dakota and I will generally refer to Hess’s work there as the Bakken.

The oil there was originally discovered in the early 1950’s by exploration activities of the Amerada Petroleum Corporation, which merged with Hess in 1969. It is the recent technology of drill bit guiding systems coupled with fracking and relatively high oil prices that, together, have made oil production in the Bakken commercially viable.

Generally oil production involves several steps, including exploration, procuring mineral rights, exploratory drilling, commercial drilling, fracking, and infrastructure development. Mineral rights are generally procured by leasing the rights from the property holder in

defined drilling blocks. The typical leasing contract assigns about 20% of the minerals extracted to the owner of the property. The leasing agreement will generally run for five years, or for as long as any wells are producing oil or gas. If no oil or gas is found by the end of the term of the lease, the lease expires and the full title of the property reverts back to the property owner. If oil or gas is found, the mineral rights are “Held by Production” and the lease does not expire until no further production is forthcoming (which, as a practical matter is generally a very long time before nothing comes out of a drilled well.) Once mineral rights are “held by production” or “hbp”, the well operator is under no obligation to withdraw oil or gas at a maximum rate, or at a minimum rate. The well, however, must produce at some rate unless there is no infrastructure available to take the oil or gas. In that case, the well operator is allowed to delay taking production so long as the operator shows good faith in getting the necessary infrastructure in place.

Despite having been discovered in the 1950’s, the confluence of events that has made Bakken oil production commercially viable is a very recent development that dates back less than five years. As you might suspect, once commercial oil reserves are discovered, there is a mad rush to procure leases to the mineral rights. A large number of leases get signed in a relatively short time.

In areas, such as the Bakken, once oil is known to exist in a given leased land area, it is important to get a well in place before a lease expires, so that the mineral rights can be held by production. The first, or hbp, well can be an exploratory well or a regular production well.

If a regular production well is drilled, there is generally a disproportionately large cost with drilling the first well on a leased property. For the first regular production well, the well operator, in this case, Hess, would build a drilling “pad”, which consists of bringing in utilities, pouring a lot of concrete, setting up drilling apparatus, oil tanks, monitoring instrumentation, etc. Subsequent wells are then drilled from this pad in various directions reaching the far corners of the block of land assigned to the pad. After setting up the pad, subsequent wells are referred to as “pad” drilling as opposed to “hbp” drilling.

Hess has 17 drilling rigs in the Bakken. It takes one to two months to drill a well and the cost is generally \$10 to \$15 million per well, so the cash outflow is somewhere around \$170 million per month, or well over \$1 billion per year, which is a significant investment. Through Q1 of 2012, Hess’s drilling program was principally hbp drilling to secure the mineral rights. In Q2, 2012, the focus changed to pad drilling. The change in focus is very significant and it is under appreciated by the Street analysts. Pad drilling not only costs less per well, but is also statistically more productive: less costly because a good portion of the needed infrastructure is already in place, more productive, because there is always some knowledge gained from the results of the first well drilled from the pad. This knowledge can be applied to subsequent wells drilled near the original locations.

Information on well drilling and on well production in North Dakota is available from the North Dakota Industrial Commission (NDIC). Since all well operators need to pay taxes to the state as well as royalties to the leaseholders, each well operator must file reports every month. The well data is periodically audited by the NDIC and you can be sure that the leaseholders look closely at their royalty checks every month, so there is every reason to believe the NDIC data is pretty good. The data monthly, with a 45-day delay, is available on each well in the state.

In this report, in Appendix I, I have included a summary of the NDIC data that goes back several months. Data is included on each well for which Hess is the principle operator. The data includes the oil and gas production, the time the well was on-line and the amount of gas sold, the balance of the gas would have been burned, or “flared” at the well site. Figure I, below shows a summary of the data.

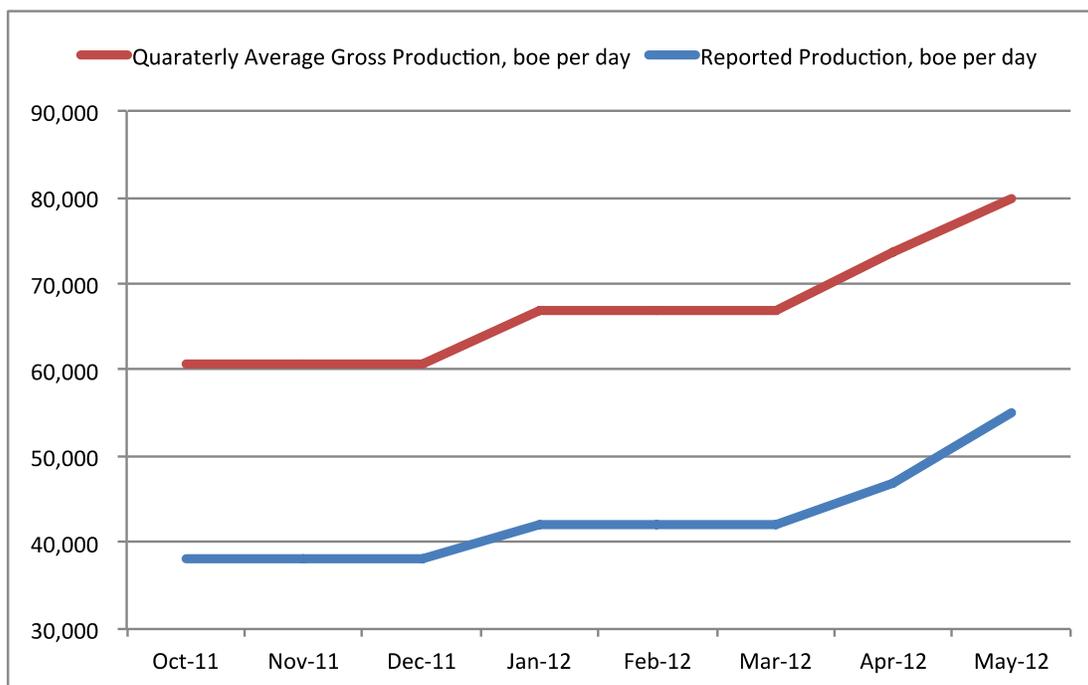


Figure I

The red upper line represents the gross oil production from Hess operated wells. The blue, lower line represents the net oil production of Hess Corporation. For the most part, Hess only reports its net production quarterly in its 10Q statement. The gross production data is the NDIC data and is available monthly with a 45-day lag. The graph represents a combination of quarterly and monthly data when it was comparably available. You can see the unmistakable correlation between gross production and net production. You can also see that in April and May the gross production is up substantially. You can also see a slight convergence of the two lines indicating that the Hess portion of the gross production is improving slightly. In their Q1 earnings conference call, Hess reported April net production. I combined a slight improvement in the Hess portion of gross production with the NDIC reported gross production to calculate what should be the Hess reported production in net production May.

Projecting the increases seen in April and May through June indicates a substantial increase in Hess’s Bakken production. Street analysts expectations are for flat production or perhaps a very small increase.

To substantiate the June increase, I looked at new well data. This data is also reported to the NDIC, but it is also available within a few days of the operator pulling a permit to drill, so

unlike the production data, the information on new wells is available through June. Hess completed an average of 6.3 wells per month in 2011 Q4, which jumped to 15.3 in 2012 Q1 and to 16 in April. There is generally a 3-month lag between the time a permit is pulled and the time the well starts to produce. Given the substantial increase in wells drilled in February, March and April, there should be a significant boost in oil production in Q2.

The NDIC data is publicly available, but it is not easy to find and it is hard to use. The NDIC data also reports gross production of wells operated by Hess. Hess downplays the importance of gross production data, so it is probable that most Street analysts are not accumulating the NDIC gross production data. It is clear, however, from the data that there is an unmistakable correlation between gross production and Hess net production, that the percentage of Hess net production is increasing and that the overall trend is significantly higher.

The increase in Q2 Hess oil production in the Bakken coupled with the modest price reduction for that oil is the most significant finding of this analysis. The production increase in the Bakken is not anticipated by Street Analysts, who, in general have lowered their forecasts in the past two months, rather than raising them as would be appropriate given the production data.

Going forward in the Bakken, I expect several positive trends. First, Hess is pretty well finished with hbp drilling and will increase pad drilling, which will shorten the drilling time, lower the well drilling cost and most likely result in higher production wells as more information is gleaned from each well drilled from each pad. Second, the number of wells drilled each month has the potential to increase as the time to drill each well decreases. Third, Hess can choose which wells to drill rather than to let expiring leases dictate the drilling plan. Fourth, Hess's rail loading station will be able to handle increased oil production. Fifth, Hess is expanding its ability to process natural gas from wells to separate high chain hydrocarbons in the form of natural gas liquids. On an energy equivalent basis, the natural gas liquids are worth about 200 times their value as a component of natural gas. Hess is presently flaring significant amounts of natural gas, so every cubic foot of extra gas it processes is done at a very high profit margin. Sixth, the oil produced per well in the NDIC data shows an increase of about 3% per month. All six factors are positive.

## **Hess in the Rest of the World (ROW)**

In the non-Bakken areas, Hess's operations are fairly predictable. In Equatorial Guiana, their largest asset, production will show a normal decline associated with mature fields. The same is true in Norway. In Russia, their production will have ups and downs as Russian politics play out. Hess also has a producing asset in Libya, which has been closed due to the Arab Spring uprising in that country. Production in Libya started back on line in Q1 2011 at the rate of 11,000 barrels per day. Full production of the Hess assets in Libya should produce 22,000 barrels per day. Indications from other Libya assets of other companies point to full restoration of pre-revolution levels that has been already achieved or will be shortly. In guidance for the balance of 2012, I would expect to see Hess reinstate their oil production from Libya at the rate of over 20,000 barrels per day.

Hess has stated a goal of assessing assets outside of the US and looking to sell these assets to help finance the Bakken capital investment is a priority. Given Hess's corporate balance

sheet, they can negotiate from a position of strength, so I see any sale of ROW assets as a neutral in their forward outlook.

On the pricing front, Hess is a price taker in the market. They do not make the price, except to the extent that their hedging activities can lock in prices. Their 2012 hedging activities have been undertaken at a world price of \$107. For the rest of 2012, the world oil price should be close to their hedged level, so I do not expect any major impact from the world oil price.

## **Hess Segment Reporting**

Hess operates in two segments, the Exploration and Production Segment (E&P) and the Marketing and Refining (M&R) Segment. All of the comments in the various sections above relate to the Exploration and Production segment, which accounts for virtually all the profits of the Corporation.

Hess reports a full income statement on the E&P segment, but the reported data for their corporate expenses and for the M&R Segment is not complete. The same is true for the balance of the integrated oil companies, so Hess is certainly no worse than the others in what it reports.

Exact reported data on M&R notwithstanding; I have modeled the M&R Segment and have reconstructed historical data. While the impact on total corporate profit is not large, M&R going forward should have a positive impact on corporate profits. Historically M&R has run at a loss, so for M&R to be going from a net loss to a net gain is a very positive impact.

In 2011, Hess and its joint venture partner closed their jointly owned refinery in the Virgin Islands. That refinery, known as HOVENSA, was built, primarily to refine Venezuelan crude oil transported in and out by sea. The thought process made sense when the facility was built, but subsequent world events worked against the economics of the facility. Most recently, the continuing poor relationship with the US and Venezuela has had an ill effect. Lower natural gas price in the US was the final straw. Refineries use huge amounts of energy. When the HOVENSA refinery was built, the energy needed was available simply by burning the residual oil that was not economic to refine further. Today, in virtually all world-class refineries, all the oil is processed. In the refineries in the US, the energy they need is available from cheap natural gas. Energy from natural gas is priced at about \$3 per million BTU's compared to a similar amount of crude oil that would be worth about \$25. Unless you have cheap natural gas available, you cannot run a refinery economically in today's environment.

Closing HOVENSA cost Hess over \$500 million in write-off's in 2011, but it has a positive impact going forward by eliminating the on-going loss of about \$100 million per year.

Hess's one remaining refining asset is in northern New Jersey. This refinery is small, but it is part of a large energy complex and most importantly, it has access to inexpensive natural gas. The New Jersey refinery sits astride a major natural gas pipeline that serves the East Coast, so it can use the inexpensive energy source. It uses the same inexpensive natural gas energy source to power an electricity generating facility serving New York City.

Hess's refinery has taken advantage of the spread between crude oil price and heating oil and gasoline prices, known as the "crack spread". Historically, the crack spread has been less

than \$10 per barrel, but it widened to \$25 per barrel in Q1 of 2012 and held at that level in Q2. As a result, I have projected Profit Before Tax from M&R to be break even, which is an improvement on the \$50 million loss in Q2 of 2011.

## **Hess Model**

To model Hess, it is important, as with any entity, to identify the factors that will affect the performance and then project each of those factors. Factors affecting E&P and M&R are drastically different, so it is important to look at the effects individually and for this reason, the model is built on a segment basis, even though some of the underlying data is estimated or inferred in the M&R Segment.

## **Conclusion**

Hess has turned the corner on its Bakken drilling and on the oil production there. Marketing and Refining will show some benefit this year from the increased differential between crude oil price and the price of the refined products. We expect to see earnings increase in Q2 2012 from the levels achieved in Q1 2012 in spite of the fact that Q2 2012 is seasonally lower than Q1 and in spite of the fact that the Street Analysts consensus shows a substantial decline for Q2 2012 compared to Q1.

Given the improved earnings picture, we recommend a purchase of Hess shares and we recommend that purchase be completed prior to their Q2 earnings announcement on July 25<sup>th</sup>.

# Hess Corporation Quarterly Projection

	Q1 2012	Q2 2012 est	Q3 2012 est	Q4 2012 est	Q1 2013 est	Q2 2013 est	Q3 2013 est	Q4 2013 est
<b>Exploration &amp; Production</b>								
Crude Oil Volume, barrels per day								
Bakken Production, boepd	42,000	51,500	55,000	60,000	65,000	70,000	75,000	75,000
United States, Non Bakken	53,000	53,000	54,000	55,000	56,000	57,000	58,000	59,000
United States, total including Bakken	95,000	104,500	109,000	115,000	121,000	127,000	133,000	134,000
Europe	94,000	94,000	95,000	95,000	95,000	96,000	96,000	96,000
Africa	71,000	75,000	75,000	75,000	75,000	75,000	75,000	75,000
Asia	16,000	16,000	16,000	16,000	16,000	16,000	16,000	16,000
Total International	181,000	185,000	186,000	186,000	186,000	187,000	187,000	187,000
Total	276,000	289,500	295,000	301,000	307,000	314,000	320,000	321,000
Natural Gas Liquids, barrels per day								
United States	14,000	14,500	15,000	16,000	17,000	18,000	19,000	20,000
Europe	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
Asia and Other	2,000	2,000	1,500	1,500	1,500	1,500	1,500	1,500
Total	19,000	19,500	19,500	20,500	21,500	22,500	23,500	24,500
Natural Gas, mcf per day								
United States	100,000	100,000	110,000	120,000	130,000	140,000	150,000	160,000
Europe	61,000	61,000	60,000	95,000	70,000	65,000	60,000	100,000
Asia & Other	449,000	449,000	425,000	400,000	450,000	450,000	425,000	450,000
Total	610,000	610,000	595,000	615,000	650,000	655,000	635,000	710,000
E&P Sales, Reported	2,620	2,796	2,895	3,008	3,048	3,147	3,233	3,315
Other Sales, Reported	63	25	15	15	15	15	15	15
E&P Sales Adjustments	-	-	-	-	-	-	-	-
E&P Production Expenses	673	708	732	759	769	793	814	835
E&P Exploration Expenses	253	245	245	245	245	245	245	245
G & A for Exploration & Production only	65	70	70	70	70	70	70	70
Depreciation, depletion and amortization, E&P	659	682	706	732	751	775	799	805
Adjustments & Impairments, E&P	-	-	-	-	-	-	-	-
Profit Before Tax, E&P Segment	1,033	1,117	1,157	1,216	1,228	1,279	1,320	1,375
Profit Before Tax Crossfoot	1,033	1,117	1,157	1,216	1,228	1,279	1,320	1,375
<b>Marketing &amp; Refining</b>								
M&R Sales Total	6,802	6,087	6,099	6,803	6,933	6,340	6,288	6,877
M&R Misc. Sales Adjustments	262	-	-	-	-	-	-	-
Cost of Products Sold	6,679	5,752	5,763	6,428	6,552	5,992	5,942	6,499
Marketing Expenses	331	325	325	325	325	325	325	325
Depreciation, depletion & amortization	19	22	22	22	22	22	22	22
Profit before tax M&R	35	(12)	(12)	27	34	2	(1)	31
<b>Hess Corporation</b>								
Revenues	9,747	8,908	9,009	9,825	9,996	9,502	9,536	10,207
Other Corporate Revenue								
Cost of Products Sold	6,679	5,752	5,763	6,428	6,552	5,992	5,942	6,499
Production Expenses	673	708	732	759	769	793	814	835
Marketing Expenses	331	325	325	325	325	325	325	325
Exploration Expenses	253	245	245	245	245	245	245	245
G&A plus Other Operating Expenses	131	138	138	138	138	138	138	138
Interest Expenses	104	105	106	107	108	109	110	111
Depreciation, depletion and amortization	678	704	728	754	773	797	821	827
Impairments	-	-	-	-	-	-	-	-
Total Costs and Expenses	8,849	7,977	8,037	8,757	8,909	8,398	8,395	8,979
Profit Before Tax	898	931	972	1,068	1,087	1,104	1,141	1,227
Provision for Taxes	338	373	389	427	435	442	456	491
Net Income	560	559	583	641	652	662	685	736
Less: Net income (loss) for non cntrl interest	15	-	-	-	-	-	-	-
Net Attributable to Hess	545	559	583	641	652	662	685	736
Shares Outstanding	340.3	340	340	340	340	340	340	340
EPS	1.60	1.64	1.71	1.88	1.92	1.95	2.01	2.16

	Q1 2012	Q2 2012 est	Q3 2012 est	Q4 2012 est	Q1 2013 est	Q2 2013 est	Q3 2013 est	Q4 2013 est
<b>Percent of Segment Revenue</b>								
E&P Sales, Reported	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Other Sales, Reported	2.4%	0.9%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
E&P Sales Adjustments	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
E&P Production Expenses	25.7%	25.3%	25.3%	25.2%	25.2%	25.2%	25.2%	25.2%
E&P Exploration Expenses	9.7%	8.8%	8.5%	8.1%	8.0%	7.8%	7.6%	7.4%
G & A for Exploration & Production only	2.5%	2.5%	2.4%	2.3%	2.3%	2.2%	2.2%	2.1%
Depreciation, depletion and amortization, E&	25.2%	24.4%	24.4%	24.3%	24.6%	24.6%	24.7%	24.3%
Adjustments & Impairments, E&P	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Profit Before Tax, E&P Segment	39.4%	39.9%	40.0%	40.4%	40.3%	40.7%	40.8%	41.5%
<b>M&amp;R Sales Total</b>								
M&R Sales Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
M&R Misc. Sales Adjustments	3.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cost of Products Sold	98.2%	94.5%	94.5%	94.5%	94.5%	94.5%	94.5%	94.5%
Marketing Expenses	4.9%	5.3%	5.3%	4.8%	4.7%	5.1%	5.2%	4.7%
Depreciation, depletion & amortization	0.3%	0.4%	0.4%	0.3%	0.3%	0.3%	0.3%	0.3%
Profit before tax M&R	0.5%	-0.2%	-0.2%	0.4%	0.5%	0.0%	0.0%	0.5%
<b>Hess Corporation Percent of Revenue</b>								
Revenues	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Other Corporate Revenue	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cost of Products Sold	68.5%	64.6%	64.0%	65.4%	65.5%	63.1%	62.3%	63.7%
Production Expenses	6.9%	7.9%	8.1%	7.7%	7.7%	8.3%	8.5%	8.2%
Marketing Expenses	3.4%	3.6%	3.6%	3.3%	3.3%	3.4%	3.4%	3.2%
Exploration Expenses	2.6%	2.8%	2.7%	2.5%	2.5%	2.6%	2.6%	2.4%
G&A plus Other Operating Expenses	1.3%	1.5%	1.5%	1.4%	1.4%	1.5%	1.4%	1.4%
Interest Expenses	1.1%	1.2%	1.2%	1.1%	1.1%	1.1%	1.2%	1.1%
Depreciation, depletion and amortization	7.0%	7.9%	8.1%	7.7%	7.7%	8.4%	8.6%	8.1%
Impairments	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total Costs and Expenses	90.8%	89.5%	89.2%	89.1%	89.1%	88.4%	88.0%	88.0%
Profit Before Tax	9.2%	10.5%	10.8%	10.9%	10.9%	11.6%	12.0%	12.0%
Provision for Taxes	3.5%	4.2%	4.3%	4.3%	4.3%	4.6%	4.8%	4.8%
Net Income	5.7%	6.3%	6.5%	6.5%	6.5%	7.0%	7.2%	7.2%
Less: Net income (loss) for non cntrl interest	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Net Attributable to Hess	5.6%	6.3%	6.5%	6.5%	6.5%	7.0%	7.2%	7.2%
<b>Quarter to Quarter Change</b>								
E&P Sales, Reported	0.8%	6.7%	3.5%	7.6%	5.3%	4.6%	6.1%	5.3%
Other Sales, Reported	125.0%		-40.0%					
E&P Sales Adjustments								
E&P Production Expenses	9.8%	5.1%	3.4%	7.3%	5.0%	4.4%	5.9%	5.3%
E&P Exploration Expenses	-40.6%	-3.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G & A for Exploration & Production only	-20.7%	7.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Depreciation, depletion and amortization, E&	1.2%	3.5%	3.5%	7.3%	6.3%	5.8%	6.4%	3.9%
Adjustments & Impairments, E&P								
Profit Before Tax, E&P Segment	20.8%	8.1%	3.6%	8.9%	6.1%	5.2%	7.5%	7.5%
M&R Sales Total	14.7%	-10.5%	0.2%	11.8%	13.7%	-6.8%	-9.3%	8.5%
M&R Misc. Sales Adjustments	-2.6%	-100.0%						
Cost of Products Sold	-0.5%	-13.9%	0.2%	11.8%	13.7%	-6.8%	-9.3%	8.5%
Marketing Expenses	-7.7%	-1.9%		0.0%	0.0%	0.0%	0.0%	0.0%
Depreciation, depletion & amortization	-5.0%	15.8%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%
<b>Hess Corp Quarter to Quarter Change</b>								
Revenues	10.5%	-8.6%	1.1%	9.1%	1.7%	-4.9%	0.4%	7.0%
Other Corporate Revenue								
Cost of Products Sold	-0.5%	21.0%	0.2%	11.5%	1.9%	-8.5%	-0.8%	9.4%
Production Expenses	9.8%	5.1%	3.4%	3.8%	1.2%	3.2%	2.6%	2.6%
Marketing Expenses	-7.7%	-1.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Exploration Expenses	-40.6%	-3.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
G&A plus Other Operating Expenses	-11.7%	5.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Interest Expenses	11.8%	1.0%	1.0%	0.9%	0.9%	0.9%	0.9%	0.9%
Depreciation, depletion and amortization	1.0%	3.9%	3.4%	3.6%	2.4%	3.1%	3.1%	0.7%
Impairments								
Total Costs and Expenses	-1.9%	-9.9%	0.8%	9.0%	1.7%	-5.7%	0.0%	7.0%
Profit Before Tax	N/M	3.7%	4.3%	9.9%	1.7%	1.6%	3.4%	7.6%
Provision for Taxes	N/M	10.2%	4.3%	9.9%	1.7%	1.6%	3.4%	7.6%
Net Income	N/M	-0.2%	4.3%	9.9%	1.7%	1.6%	3.4%	7.6%
Less: Net income (loss) for non cntrl interest	N/M	-100.0%						
Net Attributable to Hess	N/M	2.5%	4.3%	9.9%	1.7%	1.6%	3.4%	7.6%

## Annual Projections

	2010	2011	2012	2013
<b>Exploration &amp; Production</b>				
Crude Oil Volume, barrels per day				
Bakken Production, boepd	16,000	30,000	52,125	71,250
United States, Non Bakken	58,500	51,250	53,750	57,500
United States, total including Bakken	74,500	81,250	105,875	128,750
Europe	88,000	88,750	94,500	95,750
Africa	113,000	65,750	74,000	75,000
Asia	13,500	13,500	16,000	16,000
Total International	214,500	168,000	184,500	186,750
Total	289,000	249,250	290,375	315,500
Natural Gas Liquids, barrels per day				
United States	13,500	13,000	14,875	18,500
Europe	3,250	3,500	3,000	3,000
Asia and Other	750	1,000	1,750	1,500
Total	17,500	17,500	19,625	23,000
Natural Gas, mcf per day				
United States	108,250	99,500	107,500	145,000
Europe	134,500	81,500	69,250	73,750
Asia & Other	426,500	441,750	430,750	443,750
Total	669,250	622,750	607,500	662,500
E&P Sales, Reported	8,744	10,047	11,406	12,742
Other Sales, Reported	1,233	464	118	60
E&P Sales Adjustments				-
E&P Production Expenses	1,925	2,352	2,872	3,210
E&P Exploration Expenses	865	1,195	988	980
G & A for Exploration & Production only	280	313	275	280
Depreciation, depletion and amortization, E&P	2,222	2,305	2,780	3,129
Adjustments & Impairments, E&P	532	358	59	-
Profit Before Tax, E&P Segment	4,153	3,988	4,551	5,203
<b>Marketing &amp; Refining</b>				
M&R Sales Total	24,403	26,877	25,788	26,439
M&R Misc. Sales Adjustments	233	483	262	-
Cost of Products Sold	23,407	26,774	24,623	24,985
Marketing Expenses	1,356	1,379	1,306	1,300
Depreciation, depletion & amortization	83	89	85	88
Profit before tax M&R	(210)	(882)	36	66
<b>Hess Corporation</b>				
Revenues	34,613	37,871	37,575	39,241
Other Corporate Revenue				
Cost of Products Sold	23,407	26,774	24,623	24,985
Production Expenses	1,925	2,352	2,872	3,210
Marketing Expenses	1,356	1,379	1,306	1,300
Exploration Expenses	865	1,195	988	980
G&A plus Other Operating Expenses	552	575	545	552
Interest Expenses	361	383	422	438
Depreciation, depletion and amortization	2,305	2,394	2,865	3,217
Impairments	532	358	59	0
Total Costs and Expenses	31,303	35,410	33,679	34,682
Profit Before Tax	3,310	2,461	3,895	4,559
Provision for Taxes	1,173	785	1,526	1,824
Net Income	2,137	1,676	2,369	2,735
Less: Net income (loss) for non cntrl interest	13	(27)	15	0
Net Attributable to Hess	2,124	1,703	2,354	2,735
Shares Outstanding	328	340	340	335
EPS	6.47	5.01	6.92	8.17
Dividend	0.40	0.40	0.40	0.40

	2010	2011	2012	2013
<b>Percent of Segment Revenue</b>				
E&P Sales, Reported	100.0%	100.0%	100.0%	100.0%
Other Sales, Reported	14.1%	4.6%	1.0%	0.5%
E&P Sales Adjustments	0.0%	0.0%	0.0%	0.0%
E&P Production Expenses	22.0%	23.4%	25.2%	25.2%
E&P Exploration Expenses	9.9%	11.9%	8.7%	7.7%
G & A for Exploration & Production only	3.2%	3.1%	2.4%	2.2%
Depreciation, depletion and amortization, E&P	25.4%	22.9%	24.4%	24.6%
Adjustments & Impairments, E&P	6.1%	3.6%	0.5%	0.0%
Profit Before Tax, E&P Segment	47.5%	39.7%	39.9%	40.8%
M&R Sales Total	100.0%	100.0%	100.0%	100.0%
M&R Misc. Sales Adjustments	1.0%	1.8%	1.0%	0.0%
Cost of Products Sold	95.9%	99.6%	95.5%	94.5%
Marketing Expenses	5.6%	5.1%	5.1%	4.9%
Depreciation, depletion & amortization	0.3%	0.3%	0.3%	0.3%
Profit before tax M&R	-0.9%	-3.3%	0.1%	0.3%

### Hess Corporation Percent of Revenue

Revenues	100.0%	100.0%	100.0%	100.0%
Other Corporate Revenue	0.0%	0.0%	0.0%	0.0%
Cost of Products Sold	67.6%	70.7%	65.5%	63.7%
Production Expenses	5.6%	6.2%	7.6%	8.2%
Marketing Expenses	3.9%	3.6%	3.5%	3.3%
Exploration Expenses	2.5%	3.2%	2.6%	2.5%
G&A plus Other Operating Expenses	1.6%	1.5%	1.4%	1.4%
Interest Expenses	1.0%	1.0%	1.1%	1.1%
Depreciation, depletion and amortization	6.7%	6.3%	7.6%	8.2%
Impairments	1.5%	0.9%	0.2%	0.0%
Total Costs and Expenses	90.4%	93.5%	89.6%	88.4%
Profit Before Tax	9.6%	6.5%	10.4%	11.6%
Provision for Taxes	3.4%	2.1%	4.1%	4.6%
Net Income	6.2%	4.4%	6.3%	7.0%
Less: Net income (loss) for non cntrl interest	0.0%	-0.1%	0.0%	0.0%
Net Attributable to Hess	6.1%	4.5%	6.3%	7.0%

### Year to Year Change

E&P Sales, Reported		14.9%	13.5%	11.7%
Other Sales, Reported		-62.4%	-74.6%	-49.2%
E&P Sales Adjustments				
E&P Production Expenses		22.2%	22.1%	11.8%
E&P Exploration Expenses		38.2%	-17.3%	-0.8%
G & A for Exploration & Production only		11.8%	-12.1%	1.8%
Depreciation, depletion and amortization, E&P		3.7%	20.6%	12.6%
Adjustments & Impairments, E&P		-32.7%	-83.5%	-100.0%
Profit Before Tax, E&P Segment		-4.0%	14.1%	14.3%
M&R Sales Total		10.1%	-4.1%	2.5%
M&R Misc. Sales Adjustments		107.3%	-45.8%	-100.0%
Cost of Products Sold		14.4%	-8.0%	1.5%
Marketing Expenses		1.7%	-5.3%	-0.5%
Depreciation, depletion & amortization		7.2%	-4.5%	3.5%
Profit before tax M&R		320.2%	-104.1%	83.2%

### Hess Corporation

Revenues		9.4%	-0.8%	4.4%
Other Corporate Revenue				
Cost of Products Sold		14.4%	-8.0%	1.5%
Production Expenses		22.2%	22.1%	11.8%
Marketing Expenses		1.7%	-5.3%	-0.5%
Exploration Expenses		38.2%	-17.3%	-0.8%
G&A plus Other Operating Expenses		4.2%	-5.3%	1.3%
Interest Expenses		6.1%	10.2%	3.8%
Depreciation, depletion and amortization		3.9%	19.7%	12.3%
Impairments		-32.7%	-83.5%	-100.0%
Total Costs and Expenses		13.1%	-4.9%	3.0%
Profit Before Tax		-25.6%	58.3%	17.0%
Provision for Taxes		-33.1%	94.5%	19.5%
Net Income		-21.6%	41.3%	15.5%
Less: Net income (loss) for non cntrl interest		-307.7%	-155.6%	-100.0%
Net Attributable to Hess		-19.8%	38.2%	16.2%

## Appendix I

### Hess Operated North Dakota Wells

<b>Hess Operated Bakken Production</b>	<b>Oct-11</b>	<b>Nov-11</b>	<b>Dec-11</b>	<b>Jan-12</b>	<b>Feb-12</b>	<b>Mar-12</b>	<b>Apr-12</b>	<b>May-12</b>	<b>Jun-12</b>
Number of Producing Wells	658	669	689	710	720	739	752	773	
Net Change from Prior Month		11	20	21	10	19	13	21	
Number of Development Wells		17	8	26	17	25	21	14	
Total Barrels per Well-Day	93.2	93.5	101.8	107.0	96.4	98.8	107.8	112.2	
Total Barrels per Day	47,401	49,232	54,457	57,767	53,716	56,102	61,120	67,211	70,000
New Wells in the Month	6.3	6.3	6.3	15.3	15.3	15.3	16.0	9.0	8.0
Average Initial Production from New Well	536.6	536.6	536.6	766.2	766.2	766.2	784.2	692.7	N/A
Total BPD Quarterly Average	50,375	50,375	50,375	55,909	55,909	55,909	61,120	67,211	70,000
Reported Production, boe per day	38,000	38,000	38,000	42,000	42,000	42,000	47,000	55,000	62,000
Reported Monthly Production or EST								52,425	55,000
Hess Portion Percent or EST			69.8%			74.9%	76.9%	78.0%	78.0%
Total Gas Sold (million cubic feet)	2,007,409	1,691,671	1,973,469	1,996,411	1,843,653	2,091,958	2,185,537	2,402,102	
Percentage of Gas Recovered	70.9%	68.4%	66.3%	70.2%	67.5%	68.1%	70.1%	68.8%	
Barrels of Natural Gas Liquids	4,103	6,254	5,130	4,662	3,426	3,174	3,777		
Barrel Equivalents of Natural Gas	10,793	9,398	10,610	10,733	10,596	11,247	12,142	12,915	
Quarterly average boe Natural gas	10,267	10,267	10,267	10,859	10,859	10,859	12,528	12,528	
Gross Production boe per day	58,193	58,630	65,067	68,501	64,311	67,349	73,262	80,126	
Net Hess Oil production percent	65.3%	64.8%	58.4%	61.3%	65.3%	62.4%	64.2%	68.6%	
Quarterly Average Gross Production	60,642	60,642	60,642	66,767	66,767	66,767	73,648	79,739	