



Sean M. Downey  
Director and Assistant General Counsel  
Legal Department

April 12, 2012

**VIA E-MAIL**

Mr. David Stawick  
Office of the Secretariat  
Commodity Futures Trading Commission  
Three Lafayette Centre  
1155 21st Street, N.W.  
Washington, D.C. 20581

**Re: Rule 40.2(a) Certification. Notification Regarding the Listing of Western Canadian Select (WCS) Crude Oil Option Contract for Trading on the NYMEX Trading Floor and Clearing through CME ClearPort®  
NYMEX Submission 12-116**

Dear Mr. Stawick:

The New York Mercantile Exchange, Inc. ("NYMEX" or "Exchange") is notifying the Commodity Futures Trading Commission ("CFTC" or "Commission") that it is self-certifying the listing of a new Western Canadian Select (WCS) Crude Oil Option (Rule Chapter 1212; Code WCO), for open outcry trading on the NYMEX trading floor and for submission for clearing through CME ClearPort® beginning at 6:00 p.m. on Sunday, April 15, 2012, for trade date Monday, April 16, 2012.

The option specifications are as follows:

- **Rule Chapter:** 1212
- **Contract Name:** Western Canadian Select (WCS) Crude Oil Option
- **Commodity Code:** WCO
- **Option Type:** Physically settled (exercise into futures), American-style option
- **Underlying Futures:** Western Canadian Select (WCS) Crude Oil Futures (WCE)
- **Contract Unit:** 1,000 barrels
- **Expiration Date:** Trading shall cease three business days prior to the expiration of the underlying futures.
- **Minimum Price Fluctuation:** \$0.01 per barrel
- **Strike Price Interval:** \$0.05 per barrel
- **First Listed Contract:** June 2012
- **Contract Listing Convention:** 24 consecutive months
- **Trading Hours:**

Open Outcry: Monday – Friday 9:00 a.m. – 2:30 p.m. (8:00 a.m. – 1:30 p.m. Chicago Time/CT).  
CME ClearPort: Sunday – Friday 6:00 p.m. – 5:15 p.m. (5:00 p.m. – 4:15 p.m. CT) with a 45-minute break each day beginning at 5:15 p.m. (4:15 p.m. CT).

• **Trading and Clearing Fees:**

| Exchange Fees |            |        |                |            |     |
|---------------|------------|--------|----------------|------------|-----|
|               | Member Day | Member | Cross Division | Non-Member | IIP |
| Pit           | \$0.45     | \$0.70 | \$0.95         | \$1.45     |     |
| Globex        | NA         | NA     | NA             | NA         | NA  |
| ClearPort     |            | \$1.75 |                | \$2.50     |     |

| Processing Fees    |            |            |
|--------------------|------------|------------|
|                    | Member     | Non-Member |
| Cash Settlement    | NA         | NA         |
| Futures from E/A   | NA         | NA         |
|                    | House Acct | Cust Acct  |
| Options E/A Notice | \$0.40     | \$0.85     |
| Delivery Notice    | NA         | NA         |

| Additional Fees and Surcharges |        |
|--------------------------------|--------|
| EFS Surcharge                  | NA     |
| Block Surcharge                | NA     |
| Facilitation Desk Fee          | \$0.20 |

The Exchange is also notifying the CFTC that it is self-certifying the insertion of the terms and conditions for the new option contract into the Position Limit, Position Accountability and Reportable Level Table and Header Notes located in the Interpretations and Special Notices Section of Chapter 5 of the NYMEX Rulebook in relation to the listing of the new contract. These terms and conditions establish the all month/any one month accountability levels, expiration month position limit, reportable level, diminishing balance and aggregation allocation for the new contract.

NYMEX business staff responsible for the new products and the NYMEX legal department collectively reviewed the designated contract market core principles ("Core Principles") as set forth in the Commodity Exchange Act ("CEA"). During the review, NYMEX staff identified that the new product may have some bearing on the following Core Principles:

- **Prevention of Market Disruption:** Trading in this contract will be subject to the NYMEX rules ("Rulebook") Chapters 4 and 7 which include prohibitions on manipulation, price distortion and disruptions of the delivery or cash-settlement process. As with all products listed for trading on one of CME Group's designated contract markets, activity in the new product will be subject to extensive monitoring and surveillance by CME Group's Market Regulation Department.
- **Contracts not Readily Subject to Manipulation:** The new contract is not readily subject to manipulation due to the deep liquidity and robustness of the underlying cash market, which provides diverse participation and sufficient transactions to support the final settlement.
- **Compliance with Rules:** Trading in this contract will be subject to the rules in Rulebook Chapter 4 which includes prohibitions against fraudulent, noncompetitive, unfair and abusive practices. Additionally, trading in this contract will also be subject to the full panoply of trade practice rules, the majority of which are contained in Chapter 5 and Chapter 8 of the Rulebook. As with all products listed for trading on one of CME Group's designated contract markets, activity in the new product will be subject to extensive monitoring and surveillance by CME Group's Market Regulation Department. The Market Regulation Department has the authority to exercise its investigatory and enforcement power where potential rule violations are identified.

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- Position Limitations or Accountability: The spot month position limit for the new product is set at a conservative level that is approximately 11.4% of the monthly deliverable supply in the cash market. Positions in this option contract shall aggregate into positions in the underlying Western Canadian Select (WCS) Crude Oil futures (WCE) contract.
- Availability of General Information: The Exchange will publish information on the contract's specification on its website, together with daily trading volume, open interest and price information.
- Daily Publication of Trading Information: Trading volume, open interest and price information will be published daily on the Exchange's website and via quote vendors.
- Financial Integrity of Contracts: All contracts traded on the Exchange will be cleared by the Clearing House of the Chicago Mercantile Exchange Inc. which is a registered derivatives clearing organization with the Commission and is subject to all Commission regulations related thereto.
- Execution of Transactions: The new contract is dually listed for clearing through the CME ClearPort platform and on the NYMEX trading floor for open outcry trading. The CME ClearPort platform provides a competitive, open and efficient mechanism for novating transactions that are competitively executed by brokers. In addition, the NYMEX trading floor is available as a venue to provide for competitive and open execution of transactions.
- Trade Information: All required trade information is included in the audit trail and is sufficient for the Market Regulation Department to monitor for market abuse.
- Protection of Market Participants: Rulebook Chapters 4 and 5 contain multiple prohibitions precluding intermediaries from disadvantaging their customers. These rules apply to trading on all of the Exchange's competitive trading venues and will be applicable to transactions in this product.
- Disciplinary Procedures: Chapter 4 of the Rulebook contains provisions that allow the Exchange to discipline, suspend or expel members or market participants that violate the Rulebook. Trading in this contract will be subject to Chapter 4, and the Market Regulation Department has the authority to exercise its enforcement power in the event rule violations in this product are identified.
- Dispute Resolution: Disputes with respect to trading in this contract will be subject to the arbitration provisions set forth in Chapter 6 of the Rulebook. Chapter 6 allows all nonmembers to submit a claim for financial losses resulting from transactions on the Exchange to arbitration. A member named as a respondent in a claim submitted by a nonmember is required to participate in the arbitration pursuant to Chapter 6. Additionally, the Exchange requires that members resolve all disputes concerning transactions on the Exchange via arbitration.

Pursuant to Section 5c(c) of the CEA and CFTC Regulation 40.2(a), the Exchange hereby certifies that the attached contract complies with the CEA, including regulations under the CEA. There were no substantive opposing views to this proposal. A description of the cash market for this new product is attached.

The Exchange certifies that this submission has been concurrently posted on the Exchange's website at <http://www.cmegroup.com/market-regulation/rule-filings.html>.

Should you have any questions concerning the above, please contact the undersigned at (312) 930-8167 or [Sean.Downey@cmegroup.com](mailto:Sean.Downey@cmegroup.com).

Sincerely,

/s/Sean M. Downey  
Director and Assistant General Counsel

Attachments: Appendix A: Rule Chapter  
Appendix B: Chapter 5 Table  
Appendix C: Cash Market Overview and Analysis of Deliverable Supply

## Chapter 1212 Western Canadian Select (WCS) Crude Oil Option

### 1212100. SCOPE OF CHAPTER

This chapter is limited in application to put and call options on Western Canadian Select (WCS) Crude Oil futures contracts. In addition to the rules of this chapter, transactions in options on Western Canadian Select (WCS) Crude Oil futures shall be subject to the general rules of the Exchange insofar as applicable.

### 1212101. OPTION CHARACTERISTICS

The number of months open for trading at a given time shall be determined by the Exchange.

#### 1212101.A. Trading Schedule

The hours of trading for this contract shall be determined by the Exchange.

#### 1212101.B. Trading Unit

A Western Canadian Select (WCS) Crude Oil Call Option traded on the Exchange represents an option to assume a long position in the underlying Western Canadian Select (WCS) Crude Oil futures contract at the strike price. A Western Canadian Select (WCS) Crude Oil Put Option traded on the Exchange represents an option to a short position in the underlying Western Canadian Select (WCS) Crude Oil futures contract at the strike price.

#### 1212101.C. Price Increments

Prices shall be quoted in dollars and cents per barrel. The minimum price increment shall be \$0.01 per barrel.

#### 1212101.D. Position Limits and Position Accountability

For purposes of calculating compliance with position limits, each contract will be aggregated with positions held in Western Canadian Select (WCS) Crude Oil futures. Each position in the contract will be calculated as a single position in the Western Canadian Select (WCS) Crude Oil futures contract.

In accordance with Rule 559, no person shall own or control positions in excess of 1,000 contracts net long or net short in the spot month.

In accordance with Rule 560:

1. the all-months accountability level shall be 10,000 futures-equivalent contracts net long or net short in all months combined;
2. the any-one month accountability level shall be 10,000 futures-equivalent contracts net long or net short in any single contract month excluding the spot month.

Refer to Rule 559 for requirements concerning the aggregation of positions and allowable exemptions from the specified position limits.

#### 1212101.E. Termination of Trading

The option contract shall expire at the close of trading three business days prior to the expiration of the underlying Western Canadian Select (WCS) Crude Oil futures contract.

#### 1212101.F. Type Option

The option is an American-style option which can be exercised on any business day prior to and on the expiration day.

### 1212102. EXERCISE PRICES

(A) On the first business day of trading in an option contract month, trading shall be at the following strike prices: (i) the previous day's settlement price for Western Canadian Select (WCS) Crude Oil futures contracts in the corresponding delivery month rounded off to the nearest five-cent increment strike price unless such settlement price is precisely midway between two five-cent increment strike prices in which case it shall be rounded off to the lower five-cent increment strike price and (ii) the strike price which is five-cent increment higher than the strike price described in subsection (A)(i) of this rule and (iii) the strike price which is five-cent increment lower than the strike price described in subsection (A)(i) of this rule.

(B) Thereafter, on any business day prior to the expiration of the option, (i) new consecutive strike prices for both puts and calls will be added such that at all times there will be at least one five-cent increment strike price above and below the at-the-money strike price available for trading in all option contract months. The at-the-money strike price will be determined in accordance with the procedures set forth in subsection (A)(i) of this rule.

(C) Notwithstanding the provisions of subsections (A) and (B) of this rule, if the Exchange determines that trading in Western Canadian Select (WCS) Crude Oil Option will be facilitated thereby, the Exchange may, by resolution, change the increments between strike prices, the number of strike prices which shall be traded on the first day in any new option contract month, the number of new strike prices which will be introduced on each business day or the period preceding the expiration of a Western Canadian Select (WCS) Crude Oil Option in which no new strike prices may be introduced.

NYMEX Rulebook Chapter 5 Position Limit Table  
 (Bold/underline indicates addition)

| <u>Contract Name</u>                                  | <u>Rule Chapter</u> | <u>Commodity Code</u> | <u>All Month Accountability Level</u> | <u>Any One Month Accountability Level</u> | <u>Expiration Month Limit</u> | <u>Reporting Level</u> | <u>Aggregate Into (1)</u> |
|---|---------------------|-----------------------|---------------------------------------|---|-------------------------------|------------------------|---------------------------|
|   |                     |                       | <u>Rule 560</u>                       | <u>Rule 560</u>                           | <u>Rule 559</u>               | <u>Rule 561</u>        |                           |
| <i>Petroleum</i>                                      |                     |                       |                                       |   |                               |                        |                           |
| <i>Canada</i>   |                     |                       |                                       |   |                               |                        |                           |
| <u>Western Canadian Select (WCS) Crude Oil Option</u> | <u>1212</u>         | <u>WCO</u>            | <u>10,000</u>                         | <u>10,000</u>                             | <u>1,000</u>                  | <u>25</u>              | <u>WCE</u>                |

### CONTRACT OVERVIEW

The New York Mercantile Exchange, Inc. (NYMEX or Exchange) is self-certifying the listing of physically delivered Western Canadian Select (WCS) Crude Oil Option contract. The contract is an American-style option and upon exercise, will result in a position in the underlying Western Canadian Select (WCS) Crude Oil futures contract.

### CASH MARKET OVERVIEW

Western Canadian Select (WCS) is a heavy crude oil stream that is a blend of heavy oil sands production (called bitumen – a heavy tar-like type of crude oil), blended with Canadian heavy conventional crude oil and condensate diluents. It has a gravity of 20.5 degrees API, and sulfur of 3.33%. It is produced and traded at Hardisty, Alberta, which is the main crude oil hub in Canada with approximately 20 million barrels of storage. The main producers of WCS type crude oil are: Cenovus, Petro-Canada, Canadian Natural Resources, Suncor, Shell Canada, Exxon (Imperial), and Talisman Energy. The primary target market for WCS is refiners in the U.S. Midwest and the Rocky Mountain regions.<sup>1</sup>

#### Production Methods

Crude oil reserves in Canada are estimated at 175 billion barrels, the second largest in the world, according to The Oil and Gas Journal. Canadian crude oil is chiefly sourced from Western Provinces, Northwest Territories and Atlantic Canada. The country is also the largest exporter of crude oil to the United States, with exports averaging at 1.9 million barrels per day from 2007 – 2009, according to the U.S. Energy Information Administration (“EIA”).

There are two major kinds of oil production methods in Canada: conventional and unconventional, or oil sands. As conventional crude oil fields have matured and output declined, crude production from oil sands has surpassed that of conventional sources to meet demand. Oil sands production represented more than 50% of total Canadian crude oil production in 2009, according to the EIA.

Oil sands production employs two main technologies to recover oil; mining and in-situ, or “in-place”. Mining is an open pit operation that is effective in extracting oil sand deposits near the surface. After extraction,

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<sup>1</sup> Western Canadian Select description, *Energy Intelligence Research (2008) The International Crude Oil Handbook 2008*.

deposits are loaded into trucks and transported to a cleaning facility where bitumen is separated from the mixture with hot water. The bulk (75%) of Canada's estimated oil sands deposits are too deep below the surface to employ open pit mining, according to the EIA<sup>2</sup>.

The second method, in-situ, can reach the deeper sand deposits, which involves the use of steam to heat and separate bitumen from the surrounding sands, causing it to pool closer to the surface. The bitumen is then pumped from these pools using horizontal drain wells. Oil sands producers must add lighter hydrocarbons, such as natural gasoline or condensate, to the bitumen, once extracted, to allow it to flow through pipelines. According to the Canadian Association of Petroleum Producers (CAPP), roughly 20% of Canadian oil is recovered by mining while the remaining 80% is recovered through in-situ production<sup>3</sup>.

Oil sand deposits in Alberta are concentrated in three regions: Athabasca, Cold Lake, and Peace River. There are several active oil sands projects in Alberta where WCS-type crude oil is produced. These oil sands projects are connected and gathered via pipelines at Hardisty.

## **Consumption**

The U.S. market is the biggest consumer of Canadian crude oil. The main refinery demand area for WCS-type heavy crude oil is Midwestern U.S. or the Petroleum Administration for Defense District (PADD) II. Approximately 2.6 million barrels of crude oil flow per day through Canada's pipeline system.

The two major pipeline systems from Canada to the U.S. are Enbridge and Kinder Morgan pipelines. The Enbridge system is the largest crude oil pipeline in the world and is the main transporter of crude oil from Western Canada to PADD II. Enbridge is also connected to U.S. pipelines that deliver oil to Cushing, Oklahoma and the U.S. Gulf Coast. In 2008, 1.6 million barrels per day of crude oil, products, and Natural Gas Liquids flowed through the Enbridge system<sup>4</sup>.

Kinder Morgan operates the Express Pipeline, which originates in Hardisty and carries crude oil to Colorado, Montana, Utah, and Wyoming, and eventually connects with the Platte pipeline in Casper, Wyoming that supplies markets in Wood River, Illinois.<sup>5</sup>

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<sup>2</sup> <http://www.eia.gov/countries/cab.cfm?fips=CA>

<sup>3</sup> <http://www.capp.ca/rce/reports/oilsands/Pages/default.aspx#CHvyfTN5LSXF>

<sup>4</sup> <http://www.neb-one.gc.ca/clf-nsi/rnrgynfntn/rnrgyrprt/trnsprttt/trnsprtttssssmnt2009/trnsprtttssssmnt2009-eng.pdf>

<sup>5</sup> <http://www.eia.gov/countries/cab.cfm?fips=CA>



With greater Canadian oil sands production, companies have proposed new pipeline projects to better link Alberta with the U.S. Gulf Coast, including plans for:

- The Keystone system to link Hardisty with Patoka, Illinois and Cushing, Oklahoma. The system will have an initial capacity of 435,000 bbl/d, later expanded to 590,000 bbl/d. The project also includes plans to later expand the system to 1.1 million bbl/d and extend it to Port Arthur, Texas. The Keystone project is a joint venture of TransCanada and ConocoPhillips<sup>6</sup>.
- The 450,000-bbl/d Texas Access Pipeline to link Patoka, Illinois with Nederland, Texas. The project, a joint venture between Enbridge and ExxonMobil, could be online as early as 2012.
- Enbridge and BP intending to build a new system to connect the Chicago area with Houston, using a combination of new, existing, and reversed pipelines. The system has a target capacity of 250,000 bbl/d and start-up in 2012.

## Data

Table 1 below indicates that Canadian crude oil production averaged at 3.35 million barrels per day during the 2007 – 2009 period. Meanwhile Canadian domestic consumption of crude oil averaged at approximately 2.1 million barrels per day in the same period.

**Table 1. Selected EIA Statistics for Crude Oil: Canada and U.S.**<sup>7</sup>

(Thousand Barrels per Day)

| Item and Region                              | 2007  | 2008  | 2009  | 2010  | Average |
|--|-------|-------|-------|-------|---------|
| Annual Production, Crude Oil, Canada         | 3,433 | 3,349 | 3,294 | 3,457 | 3,359   |
| Annual Consumption, Crude Oil, Canada        | 2,307 | 1,852 | 2,151 | NA    | 2,103   |
| U.S. Annual Imports of Crude Oil from Canada | 1,888 | 1,956 | 1,943 | 1,970 | 1,929   |

The Canadian Association of Petroleum Producers (CAPP) provides data on crude oil production. Accordingly, total oil sands production averaged approximately 1.3 million barrels per day or approximately 48% of the total Canadian oil production for the 2007– 2010 period. In addition, in 2010, more than 2.5 million barrels per day of crude oil were produced in Western Canada alone.

<sup>6</sup> <http://www.eia.gov/countries/cab.cfm?fips=CA>

<sup>7</sup> <http://tonto.eia.doe.gov/cfapps/ipdbproject/iedindex3.cfm?tid=5&pid=53&aid=1&cid=CA,&syid=2006&eyid=2010&unit=TBPD>  
<http://tonto.eia.doe.gov/cfapps/ipdbproject/iedindex3.cfm?tid=5&pid=54&aid=2&cid=CA,&syid=2006&eyid=2010&unit=TBPD>  
[http://www.eia.gov/dnav/pet/pet\\_move\\_impcus\\_a2\\_nus\\_epc0\\_im0\\_mbbldp\\_a.htm](http://www.eia.gov/dnav/pet/pet_move_impcus_a2_nus_epc0_im0_mbbldp_a.htm)

**Table 2. Canadian Crude Oil Production<sup>8</sup>**

(Thousand Barrels per Day)

|   | 2007         | 2008         | 2009         | 2010         | Average      |
|---|--------------|--------------|--------------|--------------|--------------|
| <b>Total Oil Sands Production</b>                     | 1,190        | 1,201        | 1,341        | 1,470        | 1,300        |
| Total Production, Western Canada                      | 2,373        | 2,366        | 2,454        | 2,552        | 2,421        |
| Total Production, Atlantic Canada                     | 369          | 342          | 268          | 276          | 314          |
| <b>Total Canadian Oil production</b>                  | <b>2,742</b> | <b>2,709</b> | <b>2,722</b> | <b>2,828</b> | <b>2,735</b> |
| <b>Share, oil sands vs. Total Canadian production</b> | <b>44%</b>   | <b>45%</b>   | <b>50%</b>   | <b>52%</b>   | <b>48%</b>   |

While the Exchange used oil sands production figures in developing the deliverable supply estimate, the Exchange believes the COLC data provide relevant information supplemental to oil sands production figures in developing its deliverable supply estimate.

Table 3 below provides monthly Canadian crude oil production statistics provided by the EIA for the period beginning January 2007 through Dec 2010.

**Table 3. EIA Statistics for Total Canadian Crude Oil Production: Monthly<sup>9</sup>**

(Thousands of Barrels per Day)

|                  | 2007          | 2008          | 2009          | 2010          |
|------------------|---------------|---------------|---------------|---------------|
| <b>January</b>   | 3,405         | 3,350         | 3,403         | 3,166         |
| <b>February</b>  | 3,467         | 3,357         | 3,484         | 3,430         |
| <b>March</b>     | 3,547         | 3,444         | 3,358         | 3,349         |
| <b>April</b>     | 3,455         | 3,299         | 3,111         | 3,440         |
| <b>May</b>       | 3,427         | 3,179         | 3,063         | 3,503         |
| <b>June</b>      | 3,297         | 3,201         | 3,220         | 3,536         |
| <b>July</b>      | 3,411         | 3,424         | 3,419         | 3,527         |
| <b>August</b>    | 3,647         | 3,435         | 3,329         | 3,549         |
| <b>September</b> | 3,459         | 3,305         | 3,272         | 3,382         |
| <b>October</b>   | 3,466         | 3,348         | 3,340         | 3,434         |
| <b>November</b>  | 3,475         | 3,456         | 3,477         | 3,747         |
| <b>December</b>  | 3,325         | 3,394         | 3,319         | 3,736         |
| <b>Total</b>     | <b>41,381</b> | <b>40,191</b> | <b>39,793</b> | <b>41,800</b> |

According to Canadian Oil Logistics Committee Calgary ("COLC"), WCS production averaged approximately at 280,000 barrels per day in 2009. As mentioned previously, WCS is a heavy blend of crude oil

<sup>8</sup><http://www.capp.ca/library/publicationsdoe.gov/cfapps/ipdbproject/iedindex3.cfm?tid=5&pid=53&aid=1&cid=CA,&syid=2006&eyid=2010&unit=TBPD>

<http://tonto.eia.doe.gov/cfapps/ipdbproject/iedindex3.cfm?tid=5&pid=54&aid=2&cid=CA,&syid=2006&eyid=2010&unit=TBPD>  
[http://www.eia.gov/dnav/pet/pet\\_move\\_impcus\\_a2\\_nus\\_epc0\\_im0\\_mbbldp\\_a.htm](http://www.eia.gov/dnav/pet/pet_move_impcus_a2_nus_epc0_im0_mbbldp_a.htm)

<sup>9</sup><http://www.capp.ca/library/publications/crudeOilAndOilSands/pages/pubInfo.aspx?DocId=191090#tOJSyV4S5bkv>

<sup>9</sup><http://tonto.eia.doe.gov/cfapps/ipdbproject/iedindex3.cfm?tid=50&pid=53&aid=1&cid=CA,&syid=2006&eyid=2010&freq=M&unit=TBPD>

that can be delivered from a basket of similar-grades. The Exchange believes the COLC data provides additional relevant information in developing a deliverable supply estimate.

The COLC website provides detailed information about the pipeline flows in Canada as well as relevant capacity information. For recent time periods, the COLC data show that WCS flows are rising steadily, and are currently over 300,000 barrels per day. In addition, the recent COLC capacity estimates show that the WCS pipeline capacity is in the range of 330,000 barrels per day during March 2011. Furthermore, NYMEX recently spoke with a number of industry sources who confirmed that WCS production has been in the range of 300,000 to 330,000 barrels per day.

WCS production is limited only by the Hardisty terminal facility blending capacity and not the current WCS production figures, as the WCS production fluctuates depending on market conditions. The COLC data show the Husky terminal has WCS capacity of up to 350,000 barrels per day and that monthly volumes have recently ranged from 300,000 to 330,000 barrels per day. In addition, industry sources state that the WCS blending capacity has risen in 2011, and will continue to rise in the coming years. Several industry sources have additionally provided estimates for WCS production "capacity."<sup>10</sup>

As WCS is blended from different crude oil streams and crude-related components, its production can fluctuate depending on market conditions. Industry sources provided estimates ranging from 350,000 to 750,000 barrels per day potential capacity upon capital improvements at the Hardisty terminal allowing for blending of additional volumes of WCS. Currently, approximately 600,000 barrels per day are produced from the main streams that are used to blend WCS (LLK, Cold Lake, LLB, and Bow River).<sup>11</sup> Of those 600,000 barrels per day, 300,000 to 330,000 barrels were used to blend WCS while the remainder of the 600,000 barrels was not used to blend but has rather been sold as that specific grade. Approximately 70% of the WCS stream is typically LLK, Cold Lake, LLB, and Bow River production while the remaining 30% is some combination of light conventional crude, either derived from oil sands production or synthetic crude, depending on seasonality and price.

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<sup>10</sup> Capacity here does not refer to what could be extracted from the ground; rather, it refers to how to combine what is being extracted from the ground and blended into different streams.

<sup>11</sup>These four streams are LLK (65,000 bpd), Cold Lake (194,000 bpd), LLB (174,000 bpd), and Bow River (163,000 bpd). <http://www.colcomm.com/statistics/MonthlyCapabilityNumbers/2011CapabilityReports/index.phtml> (accessed on 08/05/2011)

Consequently, based on COLC data on WCS blending capacity, as well as other industry sources, we believe it is reasonable to include the blending capacity at the Husky terminal as a key factor in the deliverable supply estimates. Therefore, we believe the COLC production figure of 330,000 barrels per day for WCS production is a reasonable estimate of deliverable supply.

## Stocks

Table 4 below provides monthly total petroleum stocks of Canada in million barrels for the period beginning January 2007 through December 2010. The minimum level for inventories was 165 million barrels whereas the maximum level reached 195 million barrels. According to the most recent available data from EIA, inventories averaged at 185 million barrels in 2010.

**Table 4. Total Petroleum Stocks of Canada<sup>12</sup>**

|          | Total Petroleum Stocks, End of Period (Millions Barrels) |          | Total Petroleum Stocks, End of Period (Millions Barrels) |          | Total Petroleum Stocks, End of Period (Millions Barrels) |          | Total Petroleum Stocks, End of Period (Millions Barrels) |
|----------|--|----------|--|----------|--|----------|--|
| Jan-2007 | 171  | Jan-2008 | 178  | Jan-2009 | 177  | Jan-2010 | 172  |
| Feb-2007 | 165  | Feb-2008 | 175  | Feb-2009 | 177  | Feb-2010 | 174  |
| Mar-2007 | 167  | Mar-2008 | 174  | Mar-2009 | 175  | Mar-2010 | 180  |
| Apr-2007 | 167  | Apr-2008 | 176  | Apr-2009 | 178  | Apr-2010 | 181  |
| May-2007 | 170  | May-2008 | 174  | May-2009 | 178  | May-2010 | 177  |
| Jun-2007 | 169  | Jun-2008 | 174  | Jun-2009 | 177  | Jun-2010 | 178  |
| Jul-2007 | 173  | Jul-2008 | 181  | Jul-2009 | 181  | Jul-2010 | 187  |
| Aug-2007 | 178  | Aug-2008 | 179  | Aug-2009 | 182  | Aug-2010 | 193  |
| Sep-2007 | 178  | Sep-2008 | 179  | Sep-2009 | 177  | Sep-2010 | 194  |
| Oct-2007 | 176  | Oct-2008 | 183  | Oct-2009 | 179  | Oct-2010 | 194  |
| Nov-2007 | 176  | Nov-2008 | 180  | Nov-2009 | 177  | Nov-2010 | 195  |
| Dec-2007 | 175  | Dec-2008 | 174  | Dec-2009 | 169  | Dec-2010 | 195  |

## Prices

Canadian crude oil is typically traded at a differential to the NYMEX Light Sweet Crude Oil futures contract and is priced in U.S. dollars and cents per barrel. Price differentials of heavy crude oil are determined by various factors including pipeline capacity, supply and demand fundamentals, seasonality and quality.

<sup>12</sup> <http://www.eia.gov/cfapps/ipdbproject/iedindex3.cfm?tid=50&pid=5&aid=5&cid=&syid=2007&eyid=2010&freq=M&unit=MBBL>

Figure 1 below reflects the historical settlement prices of NYMEX Canadian Heavy Crude Oil (Net Energy) Index futures, a financial futures contract based on the Net Energy Index. The contract represents a differential to the NYMEX Light Sweet Crude Oil futures contract in U.S. dollars per barrel. On average, the average spread for Western Canadian Select crude oil was -17.85 dollars per barrel in the past 12 months.

**Figure 1. NYMEX Canadian Heavy Crude Oil (Net Energy) Index Futures Front Month Settlement Prices**

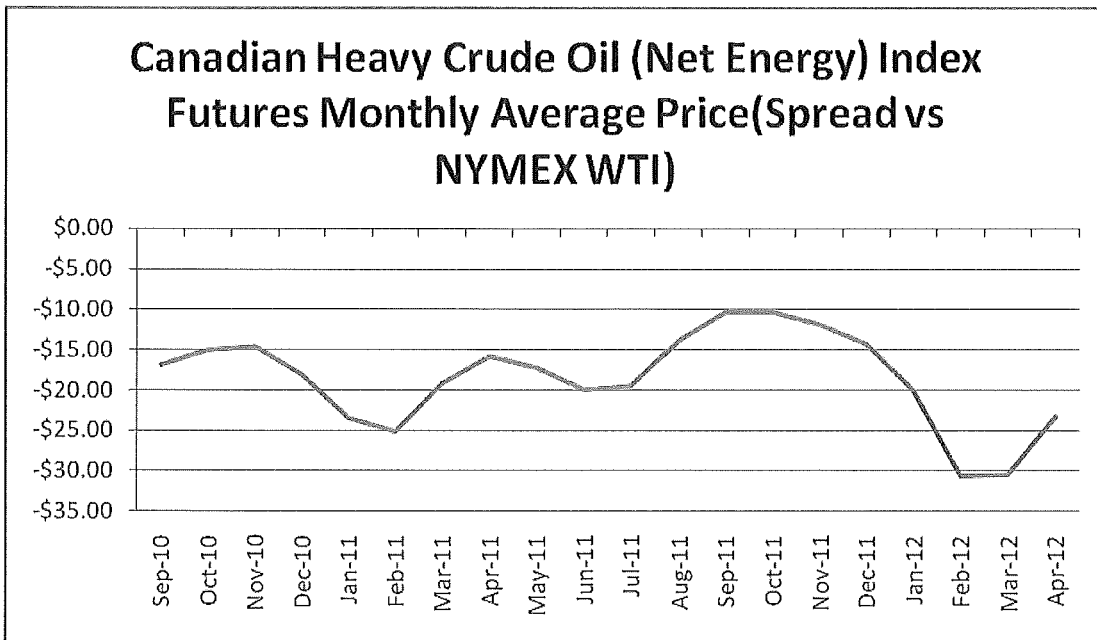


Table 5 below provides the historical settlement prices of NYMEX Canadian Heavy Crude Oil (Net Energy) Index futures for September 2010 through April 2012.

**Table 5. Monthly Settlement Prices –Canadian Heavy Crude Oil (Net Energy) Index Futures**

(dollars per barrel)

| Month     | Monthly Average Price |
|-----------|-----------------------|
| 9/1/2010  | -\$16.91              |
| 10/1/2010 | -\$15.08              |
| 11/1/2010 | -\$14.58              |
| 12/1/2010 | -\$18.06              |
| 1/1/2011  | -\$23.40              |
| 2/1/2011  | -\$25.08              |
| 3/1/2011  | -\$19.10              |
| 4/1/2011  | -\$15.78              |
| 5/1/2011  | -\$17.13              |
| 6/1/2011  | -\$19.96              |
| 7/1/2011  | -\$19.55              |

|           |          |
|-----------|----------|
| 8/1/2011  | -\$13.90 |
| 9/1/2011  | -\$10.29 |
| 10/1/2011 | -\$10.37 |
| 11/1/2011 | -\$11.80 |
| 12/1/2011 | -\$14.36 |
| 1/1/2012  | -\$19.92 |
| 2/1/2012  | -\$30.69 |
| 3/1/2012  | -\$30.48 |
| 4/1/2012  | -\$23.24 |

The average daily physical WCS trading volume underlying the Net Energy index since January 2010 was 225,000 barrels per day, with an average transaction size of 35,000 barrels. The Exchange believes that this level of spot trading activity is conducive to a highly liquid, diverse and robust market and will prevent price manipulation.

## ANALYSIS OF DELIVERABLE SUPPLY

In its analysis of deliverable supply, the Exchange has focused on WCS blending production from the COLC data as the most conservative measure that was accurately representative of deliverable WCS crude oil supply at the Hardisty terminal. At this time, the Exchange is not including stocks data in its analysis of deliverable supply as stocks data tend to fluctuate heavily.

Further, the Exchange preferred to avoid adjusting deliverable crude oil supply estimates for spot market availability. Specifically, a typical cash market term agreement allows the possibility of re-trading the contracted quantity back in the spot market, so deliverable supply is not bound by a restrictive contractual agreement. Industry sources have explained that producers sell their output in accordance with term-agreements or spot sales, which are referred in the industry as "first sales." The Exchange estimates that 90% of WCS is sold on a "first sales" basis, which, according to industry sources and standard oil industry practice, does not remove the quantities sold from re-trading in the spot market and this was recently revalidated by conversations with market participants. Industry sources additionally have provided the following information to NYMEX: approximately 50% of the first-sales buyers are marketers and 50% are refiners. The marketers typically re-sell all of their purchases in the spot market; therefore, 45% of total WCS production that is sold to marketers is re-sold in the spot-market. Also, industry sources estimate that approximately 75% of the first-sale purchases by refiners are re-sold in the spot-market; thus, another 33.75% of the total WCS production is re-sold in the spot-market from the refiners.

Additionally, 10% of the WCS production is typically sold in the spot-market. The Exchange's estimate, based upon market participants' behavior, is that 88.75% of the production is either first-sold or re-sold in the spot-market. Market participants are consistent in their statements that first sales do not permanently remove these volumes from being re-sold in the spot market. Consequently, the Exchange submits that 88.75% of the WCS production is traded in the physical spot market.

Finally, the COLC data show WCS blending production of 330,000 barrels per day, which is equivalent to 9.9 million barrels per month (9,900 contract equivalents). Further, we make an adjustment to incorporate our spot trading estimate (whereby 88.75% of production is typically traded in the spot market) with the end result that the monthly deliverable supply is approximately 8,785 contract equivalents. The spot month position limit of 1,000 contracts represents 11.4% of the total monthly supply of 8,785 contract equivalents. Therefore, the spot month limit for the option contract shall be 1,000 contracts and shall aggregate into the underlying WCS futures contract.