

January 2010

AN INTERNET-BASED RESEARCH TOOL FROM PIRA ENERGY GROUP

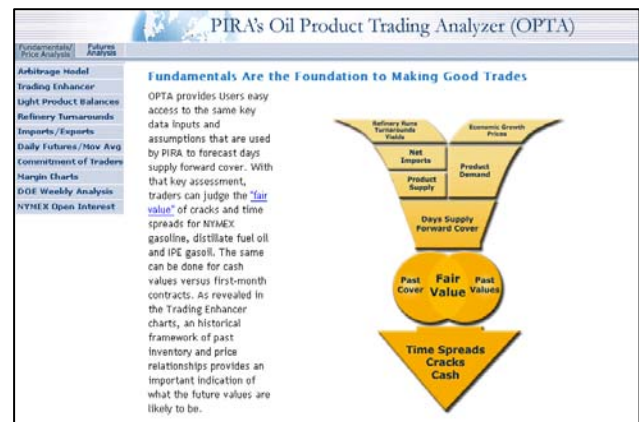
# OIL PRODUCTS TRADING ANALYZER

## OVERVIEW

### "Fundamentals Are the Foundation to Making Good Trades"

Every successful energy trader relies on experience and a certain amount of instinct. They are irreplaceable assets when contemplating, establishing, and defending a trading position. But even the most seasoned trader must rely on the cold, hard data. "Knowing the numbers" has been the foundation upon which PIRA Energy Group has built a 30-year reputation of being the most respected resource for energy market analysis and intelligence, now relied on by over 480 companies worldwide. PIRA's new online tool, the Oil Products Trading Analyzer (OPTA), is a reflection of that philosophy. It is the ideal resource to the industry player who recognizes that fundamentals are the foundation to making good trades.

OPTA provides the latest detailed market analysis, light product balances, and prices for petroleum products. It features current and historical data for production, stocks, demand, exports, and imports, along with PIRA's latest assessments of refinery margins and turnarounds. Subscribers are able to access current contract prices for futures, cracks, and spreads; moving-average analysis; Commitment of Traders statistics; and even a first-of-its kind worldwide arbitrage model.



The key feature of OPTA is the Trading Enhancer, where users get easy access to the same important data inputs and assumptions that are used by PIRA to forecast price relationships. Traders can judge the fair value of cracks and time spreads for NYMEX gasoline, distillate fuel oil and IPE gasoil. The same can be done for cash values versus first-month contracts.

### The OPTA Advantage: Trading Around "Fair Value"

Through its easy-to-access wealth of data and the tools necessary to extract and analyze the numbers, OPTA helps traders, refiners, and marketers to determine "fair value" of the products they deal in. They now have a critical advantage, because fair value gives them:

- A reliable framework for establishing a market position
- A unique decision-support tool
- Ongoing strategy validation
- Simple oversight and stress analysis
- A time-tested discipline
- Preparation for risk and volatility

To learn more about how OPTA can help you, the following pages explain what can be found in its many "modes." Or, better yet, contact your PIRA representative for a live online demonstration.

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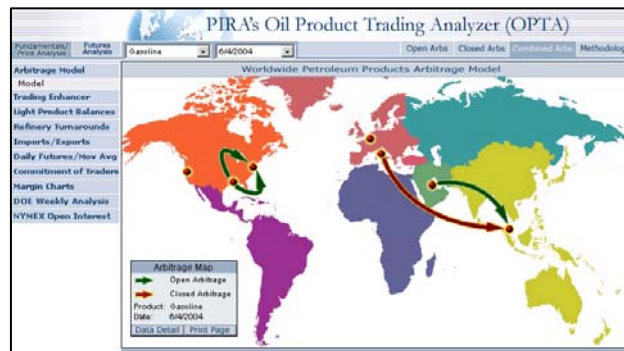
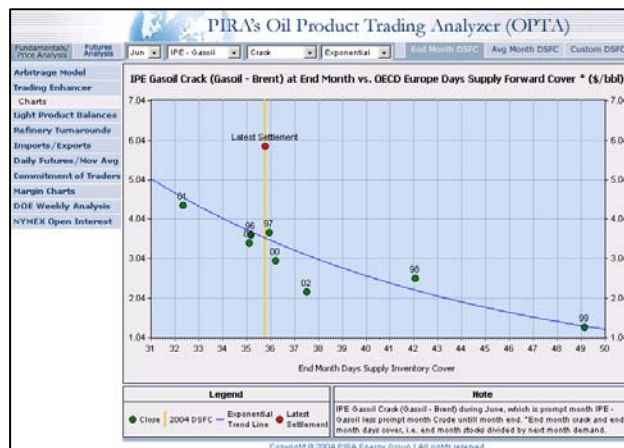
## WHAT CAN YOU DO WITH OPTA?

In one easy-to-navigate site, OPTA provides a wealth of data and research tools designed specifically for the sophisticated oil products trader. These features include:

### ▶ Trading Enhancer

The key feature of OPTA, the Trading Enhancer offers the same tools that PIRA consultants use in developing their price forecasts. Users can view historical contract and cash prices on the basis of action during their tenures as the front month and at contract expiration, both relative to days supply forward cover. Prices for individual futures contracts, cash-versus-futures spreads, front-to-back spreads, and crack spreads can be examined to determine timing of seasonal trends, view price history under a similar supply/demand environment and inventory situation, and forecast market moves. These relationships can be utilized as a predictive tool in forecasting price or planning trading/hedging strategies and planning refinery operations.

The charts provide a matrix of data points (including the latest settlement price) overlaid on a vertical line of days supply forward cover (DSFC). A trend line can show you the likely "fair value" of that contract as determined by recent history – and therefore reveal what position to take on that contract. Subscribers can view the Trading Enhancer using the end-month DSFC or average DSFC, as well as input their own custom DSFC figure.



### ▶ Arbitrage Model

The OPTA Arbitrage Model offers interactive modeling capabilities linked to the most recent price and freight data, LS diesel coverage, revealing current arbitrage opportunities for gasoline, RBOB, jet kerosene, distillate fuel oil, or residual fuel oil. Historical data are also provided. Users can monitor markets to assess and anticipate opening – or closing – plays by accessing a detailed breakout of each arbitrage, including:

- Arbitrage incentive
- Source and destination price
- LS diesel coverage
- Route (via freight or pipeline)
- Transportation charges:
  - Freight cost
  - Insurance
  - In-transit loss
  - Canal tolls, port surcharges and duties

Gasoline Combined Arbitrage Detail for 6/4/2004	
<b>From USGC to NYH (Pipeline)</b>	
Route	\$/bbl
Arbitrage Incentive	0.59
Destination Price (NYC Uni 87 RFO)	51.68
Source Price (USOul Uni 87 RFO)	49.69
Freight	1.27
Insurance/Intransit Loss	0.13
<b>From MED to Singapore</b>	
Route	\$/bbl
Arbitrage Incentive	-0.18
Destination Price (Sing Mogas 95 Uni)	48.50
Source Price (Italian Premium Unleaded)	44.68
Freight	3.00
Canal Toll	0.86
Insurance/Intransit Loss	0.12

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## ▶ Light Product Balances

In this mode, OPTA users can view PIRA's latest forecast of monthly crude runs and light product supply/demand balances for the U.S., Europe and Japan. These balances provide an effective road map to estimate and anticipate run levels and import/exports, creating a basis to view the impact of increasing, or decreasing, product demand in each region. Ultimately, inventory levels drive relative prices, and these are determined by the balances. The spreadsheets include:

- For the U.S.:
  - Gasoline and Distillate Balance
  - Commercial Stocks
  - Yields on Crude Runs
  - Gasoline and Distillate Yield Graphs
  - USGC Gasoline/Distillate Prices
- For Europe:
  - Gasoline and Gas/Diesel Oil Balance
  - Commercial Stocks
  - IEA, Europe Yields (% on Crude Runs)
  - Refinery Turnarounds and Crude Runs
  - Gasoline and Distillate Yield Graphs
  - Rotterdam Gasoline/Distillate Prices
- For Japan:
  - Gasoline and Gas/Diesel Oil Balance
  - Commercial Stocks
  - Japanese Yields (% on Crude Runs)
  - Refinery Turnarounds and Crude Runs
  - Gasoline and Distillate Yield Graphs
  - Japanese Gasoline/Distillate Prices

PIRA's Oil Product Trading Analyzer (OPTA)								
A1		Last Updated						
Light Product Balance		U.S. Gasoline and Distillate Balance (MMB/D)						
U.S.		Jan-04	Feb-04	Mar-04	Apr-04	May-04	Jun-04	Jul-04
4	Gasoline	8.34	8.28	8.43	8.70	8.95	8.88	8.88
5	Production	56.28	56.30	56.95	57.60	58.32	58.40	58.20
6	Yield (% on Crude Run)	0.31	0.41	0.51	0.49	0.55	0.55	0.55
7	Imports	0.09	0.16	0.14	0.09	0.09	0.11	0.09
8	Exports	0.22	0.25	0.37	0.40	0.46	0.44	0.47
9	Net Imports	8.56	8.53	8.80	9.10	9.41	9.43	9.35
10	Total Supply	8.88	8.74	8.92	9.10	9.20	9.22	9.21
11	Demand	-0.13	-0.21	-0.13	0.00	0.21	0.21	0.14
12	Fin. Sbk. Chg. MMB/D	-3.90	-6.07	-3.88	-0.04	8.50	8.33	4.40
13	Fin. Sbk. Chg. MMB	142	127	122	122	129	146	150
14	Blend Sbk. Chg. MMB/D	0.18	0.03	0.07	0.08	-0.15	0.01	-0.12
15	Tot. Comm. Sbk. Chg. MMB/D	0.06	-0.18	-0.06	0.08	0.06	0.22	0.02
16	Tot. Comm. Sbk. MMB	208	203	201	204	205	212	213
17	Total Supply	23.00	23.52	22.66	22.25	22.24	22.66	23.07
18	Average During Month	23.03	22.75	22.12	22.13	22.30	23.04	22.43
19	End Month							
20	Distillate	3.60	3.47	3.58	3.92	3.91	3.86	3.79
21	Production	24.29	23.57	24.04	25.30	24.00	24.30	24.00
22	Yield (% on Crude Run)	0.36	0.50	0.43	0.32	0.32	0.30	0.26
23	Imports	0.07	0.09	0.10	0.10	0.16	0.12	0.10
24	Exports	0.29	0.42	0.33	0.23	0.19	0.10	0.10
25	Net Imports	3.89	3.88	3.89	4.05	3.98	4.04	3.95
26	Total Supply	4.35	4.27	4.13	3.98	3.89	3.87	3.70
27	Demand	-0.46	-0.38	-0.23	0.09	0.09	0.17	0.25
28	Fin. Sbk. Chg. MMB/D	-14.30	-11.10	-7.20	2.67	2.60	4.50	7.69
29	Comm. Sbk. Chg. MMB	122	111	104	107	109	114	122
30	Comm. Sbk. MMB							

## ▶ Refinery Turnarounds

PIRA does a detailed turnaround survey of U.S. refiners along with a "best-guess" estimate of European and Japan monthly turnarounds. U.S. data is shown by-PADD for crude distillation and FCC units as well as monthly overall U.S. details for hydrocrackers, cokers and reformers. PIRA also provides a weekly turnaround assessment looking ahead 5 weeks showing PADD detail for crude distillation and FCC units. When considered in the context of projected light product balances, turnaround information can provide insight into potential openings of arbitrage plays and price activity for futures, cracks and spreads.

## ▶ Imports/Exports

This mode includes the most recent data covering source and destination for gasoline and distillate/gasoil moving to and from the U.S. and Western Europe. Also included are the latest Suez Canal movements for these two products, tying the East (Asia) to the West. Historical data provide insight into regularly occurring arbitrage opportunities, timing, sources, and destinations, and they tie in with price activity on futures exchanges. What moved where in recent months and in the prior year provide insight into future movements.

► Rhine River Water Levels

Located at the junction of the Ruhr and the Rhine rivers, in the key Ruhr region, Ruhrort is the largest river harbor in Europe. While freight rates are impacted by a number of factors, including supply/demand of shipping and diesel prices, water levels represent a key driver, dictating the amount of product that can be loaded on barges. If water levels are low, barges will carry less load, which means reduced efficiency and therefore higher per-barrel transportation costs. Also, low water levels imply more product gets backed up into the ARA area. In addition, other obstacles to navigation, like flooding, may affect transportation costs.

► Daily Futures / Moving Averages

This mode provides a one-click source of NYMEX and IPE futures data:

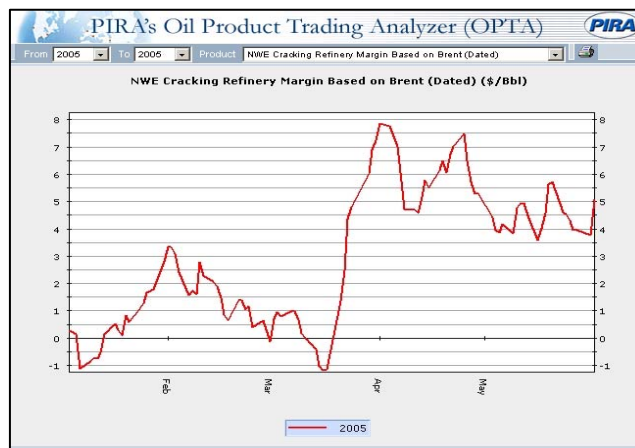
- **Futures Contract Prices and Spreads.** Users can view the previous five days' close for the next 10-month futures:
  - Contract prices for: NYMEX WTI crude, NY harbor gasoline, No.2 fuel oil, natural gas, and propane gas; and for IPE Brent crude and gasoil.
  - Spreads for NYMEX unleaded less WTI, heating oil less WTI, gasoline less heating oil, and propane less natural gas; and for IPE gasoil less Brent.
  - Crack spread.
  - Front-to-back spreads for: NYMEX WTI, unleaded gasoline, heating oil, and natural gas; and for IPE Brent and gasoil.
- **Moving Average Charts.** Graphical representation of the settlement price and 13-, 34-, 40-, 50-, 100-, and 200-day moving averages for each futures contract.

NYMEX - IPE Future Contract Prices and Spreads											
		Jul 2005	Aug 2005	Sep 2005	Oct 2005	Nov 2005	Dec 2005	Jan 2006	Feb 2006	Mar 2006	Apr 2006
<b>June 01 2005 (Wednesday)</b>											
<b>Contract Price</b>											
NYMEX - WTI	\$/bbl	54.60	55.42	55.79	56.01	56.17	56.24	56.18	56.05	55.91	55.76
NYMEX - NY Harbor Gasoline	¢/gal	154.42	154.58	153.83	148.48	146.58	145.93	147.03	148.38	149.73	158.53
NYMEX - No.2	¢/gal	154.00	154.79	155.99	157.29	158.84	160.39	161.54	161.64	159.84	155.74
NYMEX - Natural Gas	\$/MMBtu	6.79	6.86	6.89	6.96	7.49	8.00	8.30	8.31	8.15	7.13
NYMEX - Propane Gas	¢/gal	80.50	81.00	81.50	82.25	82.50	82.75	82.75	82.75	82.75	82.75
<b>Spread</b>											
NYMEX Unleaded less WTI	\$/bbl	10.26	9.50	8.82	6.35	5.39	5.05	5.57	6.27	6.98	10.82
NYMEX Heating Oil less WTI	\$/bbl	10.08	9.59	9.73	10.05	10.54	11.12	11.67	11.84	11.22	9.65
NYMEX Gasoline less Heating Oil	¢/gal	0.42	-0.21	-2.16	-8.81	-12.26	-14.46	-14.51	-13.26	-10.11	2.79
NYMEX Propane less Natural Gas	\$/MMBtu	2.05	2.03	2.06	2.07	1.57	1.09	0.78	0.77	0.93	1.96
<b>Crack (3:2:1)</b>											
Crack	\$/bbl	10.20	9.53	9.12	7.59	7.11	7.07	7.60	8.13	8.39	10.43
<b>Front to Back</b>											
WTI	\$/bbl		-0.82	-0.37	-0.22	-0.16	-0.07	0.06	0.13	0.14	0.15
Unleaded gasoline	¢/gal		-0.16	0.75	5.35	1.90	0.65	-1.10	-1.35	-1.35	-8.80
Heating Oil	¢/gal		-0.79	-1.20	-1.30	-1.55	-1.55	-1.15	-0.10	1.80	4.10
Natural Gas	\$/bbl		-0.07	-0.03	-0.07	-0.53	-0.51	-0.31	-0.01	0.16	1.03
<b>May 31 2005 (Tuesday)</b>											
<b>Contract Price</b>											
NYMEX - WTI	\$/bbl	51.97	52.75	53.03	53.25	53.43	53.51	53.47	53.36	53.24	
IPE - Brent	\$/bbl	50.73	51.20	51.55	51.72	51.75	51.71	51.66	51.58	51.48	
NYMEX - NY Harbor Gasoline	¢/gal	146.70	146.87	146.07	140.72	138.87	138.22	138.27	140.62	142.07	
NYMEX - No.2	¢/gal	144.95	145.90	147.20	146.65	150.25	151.90	153.15	153.30	151.50	
IPE - Gasoil	¢/gal	146.57	147.84	149.20	149.68	150.00	150.00	150.00	149.60	148.64	
NYMEX - Natural Gas	\$/MMBtu	6.38	6.45	6.49	6.56	7.13	7.65	7.98	7.99	7.84	
NYMEX - Propane Gas	¢/gal	79.25	79.75	80.25	81.00	81.25	81.50	81.50	81.50	81.50	

► Commitment of Traders

This mode provides a wealth of data divided into two parts:

- Current and historical weekly Commitment of Trader data for all NYMEX futures and options contracts.
- Charts that indicate recent trends in comparisons of commodity price vs. non-commercial net positions.



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### ▶ Margin Charts

This mode provides a series of charts that show recent netback refining margin trends. The 10 margin calculations are based upon data generated by PIRA's refinery model simulation of operations in each regional refining center. Historical data are available in excel and chart format. **The margins include:**

- NWE cracking margin (Dated Brent)
- NWE hydroskimming margin (Dated Brent)
- USGC cracking margin (LLS)
- USGC cracking margin (WTI Midland)
- Group 3 cracking margin (WTI Cushing)
- Chicago cracking margin (WTI Cushing)
- Singapore topping margin (Dubai)
- Singapore cracking margin (Dubai)
- Med cracking margin (Urals Med)
- Med hydroskimming margin (Urals Med)

### ▶ DOE Weekly Analysis

A key part of PIRA's Global Oil Retainer Service, the DOE Weekly Analysis provides PIRA's weekly tabulation of DOE statistics along with expert analysis that points out emerging trends behind the data. The report — published every Wednesday after the DOE releases its "Weekly Petroleum Status Report" — is conveniently bundled into OPTA for ready reference, giving users the ability to compare most recent data to historical data in order to prepare their own analysis and identify trends as they unfold.

Also available in this mode is a series of charts, providing a graphical perspective on the recent history of the following items:

Commercial Stocks, by PADD	Four Major Products Supplied	Reformulated Gasoline Imports
Crude Oil Commercial Imports	Gasoline Blending Components Imports	Reformulated Gasoline Stocks
Crude Oil Commercial Stocks	Gasoline Blending Components Stocks	Residual Fuel Oil Imports
Distillate Imports	High Sulfur Distillate Stocks	Residual Fuel Oil Products Supplied
Distillate Products Supplied	Jet Kero Imports	Residual Fuel Oil Stocks
Distillate Stocks	Jet Kero Products Supplied	Total Gasoline Imports
Finished Gasoline Imports	Jet Kero Stocks	Total Gasoline Stocks
Finished Gasoline Products Supplied	Products Supplied	Unfinished Oils Stocks

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▶ Japan Weekly Analysis, Data Tables, and Charts

A key part of PIRA's Global Oil Retainer Service and OPTA, the *Japan Weekly Oil Analysis*, distributed each Wednesday, focuses on the current supply/demand conditions in Japan, with an explicit forecast of supply/demand for the following week and PIRA's broader expectation for market conditions over the next 30 days. In addition to the written analysis, each week includes an updated data table that covers:

- Individual product demands
- Import-export trends
- Product yields
- Crude throughput
- Inventory levels of crude and products

Accompanying the written analysis and data table is a series of charts that include:

- Crude oil runs, stocks and days supply forward cover
- Production, stocks, exports, refinery yields, days supply forward cover and implied demand for: gasoline, gas oil/diesel (LS and HS), jet fuel, kerosene, and fuel oil (LS/HS)
- Stocks for finished and unfinished products, feedstocks and total commercial inventories
- Imports for total products
- Demand and days supply forward cover for the four major products

▶ NYMEX Open Interest

This mode provides a useful summary in Excel format of NYMEX Open Interest for crude oil, heating oil, unleaded gasoline, and natural gas. The data include a summary for front month, total open interest, and the ratio of front month to total, broken down by the number of days before contract expiration. There is also a summary sheet listing the Open Interest and trade prices broken down by the contract trade date, as well as a sheet comparing open interest for current and recent front-month contracts versus last year.

▶ Futures Analysis

OPTA has an entire section devoted to futures analysis, giving users exclusive, timely and convenient access to PIRA's constantly updated daily NYMEX and IPE price data and charts, which include historical and current price discovery to facilitate analysis. Users can examine specific contract performance from a historical perspective (e.g. April gasoline contract performance during March for each of the past five years). This capability extends to all spreads and contracts, enabling the user to identify recurring patterns and historical trade entry and exit points.

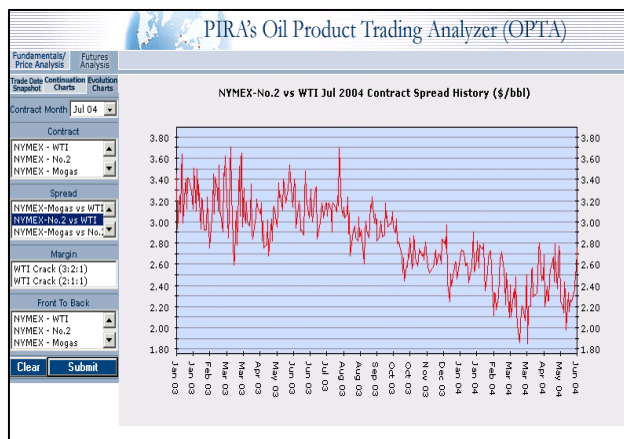
The screenshot displays the 'NYMEX - WTI Contract Strip History for Jun 01 (\$/bbl)' and 'NYMEX - Megas Contract Strip History for Jun 01 (\$/gal)'. The interface includes a navigation pane on the left with options like 'Fundamental Price Analysis', 'Contract Strip', and 'Spread'. The main area shows two data tables with columns for months from July to June. The WTI table shows prices ranging from approximately \$42.93 to \$154.00, while the Megas table shows prices ranging from approximately \$0.51 to \$154.42.

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Data retrieval (to 1986) allows the user to view the contract or spread's 12-month strip for that date over history in order to examine historical market structure and relationships. For example, a user could look at the entire strip for crude oil on November 1 during each of the past eight years.

The Futures Analysis section is divided into three modes:

- **Trade Date Snapshot:** Provides data tables you wish to see (from the choices of Contract Strip, Spread, Crack, or Front-to-Back) for the date you want.
- **Continuation Charts:** OPTA users can follow the movements of one specific contract, crack, or spread over a period of time. The graphs are designed to make technical analysis as easy as possible. Users are able to study the markets and contracts they are interested in, over the short and long term; spot trends as they develop; and pinpoint critical historical patterns for more successful trading.
- **Evolution Charts:** Users can create evolution charts that allow them to analyze and compare a specific contract, crack or spread with historical data covering a similar time period. For example, a user could analyze the price action for May gas cracks over the past five years to determine when they typically rise or fall and how they perform at expiration. Utilizing this information, traders and hedgers can each set entry and exit points and plan forward strategies.



## FEES

OPTA is sold either on a single-user basis or via licensing terms, with options for up to 5, 15, or more users. Current clients to PIRA's Retainer Service can subscribe to OPTA at a discount. Clients to PIRA's Oil Trade Flow Portal receive a further price reduction. See the Acceptance Form for information.

## ABOUT PIRA ENERGY GROUP

PIRA Energy Group, founded in 1976, is an international energy consulting firm offering Retainer Client Services as well as customized consulting on a broad range of subjects in the international oil, natural gas, electricity, and emissions markets. PIRA provides evaluation of key U.S. and international energy fundamentals and issues that impact the behavior and performance of the industry and its various markets and sectors. Currently, more than 500 entities in over 60 countries subscribe to PIRA Client Services, including international and national integrated oil and gas companies, independent producers, refiners, marketers, oil and gas pipelines, electric and gas utilities, industrials, trading companies, financial institutions and government agencies.

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## ACCEPTANCE FORM

(Company) \_\_\_\_\_ wishes to become a Licensed User to PIRA's OIL PRODUCTS TRADING ANALYZER and understands and agrees that the fees are:

License Size	For PIRA Retainer Clients	Trade Flow Portal Clients	For Non-Clients
Single User	\$20,000 per annum	\$15,000	\$31,000
Up to 5 Users	\$26,000 per annum	\$21,000	\$42,000
Up to 15 Users	\$33,000 per annum	\$28,000	\$53,000
More than 15	Contact PIRA	Contact PIRA	Contact PIRA

Clients requiring usage access spread across more than 1 site (i.e. office address) pay a 10% premium for each additional site up to 4 total sites (sites 5 and beyond are at no extra fee).

Company: \_\_\_\_\_

Name/Title of Primary Contact: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Phone/Fax: \_\_\_\_\_

E-mail: \_\_\_\_\_

Signature: \_\_\_\_\_

Fee: \_\_\_\_\_

PLEASE MAIL OR FAX TO: PIRA Energy Group  
Attn.: Managing Director, Client Services  
3 Park Avenue, 26th Floor  
New York, NY 10016-5989  
Phone: 212-686-6808; Fax: 212-686-6628

For more information, please contact your PIRA representative at: 212-686-6808 or via email: [sales@pira.com](mailto:sales@pira.com)

**Note:** PIRA's OPTA service contains no confidential technical information, to the best knowledge of PIRA. However, except for information, which is or becomes available to the public in printed publication, or is already in the possession of subscriber or developed independently by subscriber, or is received by subscriber in good faith from a third party, any information in the service is for the sole and confidential use of the subscriber. Subscribers agree to use reasonable efforts to protect the confidential nature of the information supplied to them as part of this service.