Technical Terms

API Gravity: Industry scale expressing the gravity or density of liquid petroleum products. The higher the API gravity, the lighter the compound. Light crudes generally exceed 8 degrees API and heavy crudes are commonly labeled as those with an API gravity of 22 degrees or below, with intermediate crudes falling into the range in between.

Barrel: A unit of volume equal to 42 U.S. gallons.

Barrels Per Stream Day: The maximum number of barrels of input that a distillation unit can process within a 24- hour period when running at full capacity under optimal crude and product slate conditions with no allowance for downtime.

Biodiesel: Made from renewable resources like soybeans and other natural fats and oils. It works in any diesel engine with few or no modifications. It can be used in pure form (B100) or blended with petroleum diesel at any level. Some states are now mandating the use of biodiesel.

Blending Plant: A facility which has no refining capability but is either capable of producing finished motor gasoline through mechanical blending or of blending oxygenates with motor gasoline.

Branded: Distinction of product that is sold under a trademark owned by a refiner (or reseller in some instances) and usually affiliated with integrated or major oil firms. Branded product often carries a premium to unbranded product, since it can be sold under a branded "flag". Branded gasoline can be sold as unbranded product, but the reverse is not true.

Branded Average: An average of all branded suppliers, denoted with a (b) in the display. Calculated for gross or net.

Brent: Blend of crude oil from a critical group of North Sea fields, Brent is the standard contract for IPE crude oil futures trading and the most commonly referenced crude in Europe. It's described as the European counterpart of WTI; its morning performance is often a harbinger for the NYMEX opening.

Bulk Terminal: A facility used primarily for the storage and/or marketing of petroleum products and which has a total bulk storage capacity of 50,000 bbls or more and/or receives petroleum products by tanker, barge, or pipeline.

Catalytic Cracking: The refining process of breaking down the larger, heavier and more complex molecules into simpler and lighter molecules. Catalytic cracking is accomplished by the use of a catalytic agent and is an effective process for increasing the yield of gasoline from crude oil.

Catalytic Hydrocracking: A refining process that uses hydrogen and catalysts with relatively low temperatures and high pressures for converting middle boiling or residual material to high-octane gasoline, reformer charge stock, jet fuel, and/or high grade fuel oil. Can handle high sulfur feedstocks without prior desulfurization.

Catalytic Reforming: A refining process using controlled heat and pressure with catalysts to convert paraffinic and napthenic type hydrocarbons into petrochemical feedstocks and high octane stocks suitable for blending into finished gasoline.

Cetane: A measure of the ignition quality of a diesel fuel. Regular diesel generally has a cetane number of 40-45; while most premium cetanes have numbers between 45-50.

Coker: An oil refining unit in which heavy feed such as flasher bottoms, cycle oil from a fluid catalytic cracker, or thermal cracked glass oil is subjected to high temperatures. This causes the feed to crack, creating light oils. Coke-solid, densely packed carbons- builds up in the reactors of the unit and periodically needs to be removed.

Distillates: Includes No.1 , No. 2 and No. 4 fuel oils, and No. 1, No. 2 and No. 4 fuel oils and No.1, No. 2 and No. 4 diesel fuels. These are light fuel oils for home heating, for diesel engine fuel (including railroad engine fuel and fuel for agricultural machinery), and for electric power generation.

Ethanol: An alcohol which is most often derived from corn. Ethanol is designed to be blended with gasoline to produce a cleaner burning fuel and is an accepted oxygenate component for the oxygenated seasons mandated by the EPA.

Feedstock: Any of the raw or semifinished materials which move to the various units of a refinery or petrochemicalplant. Crude is a feedstock, but the term is mainly used to describe raw materials after the distillation process which go on to more sophisticated units at the refinery. VGO, catfeed, naptha, condensate and straight run No. 6 oil are commonly referred to as feedstocks.

FOB: Terms of a transaction where the seller agrees to make the product available within an agreed-upon time period at a given location. Any subsequent costs are the responsibility of the buyer.

Gasoline: A complex mixture of relatively volatile hydrocarbons with or without small quantities of additives, blended to form a fuel suitable for use in spark-ignition engines. Motor gasoline, as defined in ASTM Specification D 4814, is characterized as having a boiling range of 122 to 158 degrees F at the 10 percent recovery point to 365-374 degrees F a the 90 percent recovery point.

Hydrocracker: An oil refining process in which light or heavy gas oils or residue hydrocarbons are mixed with hydrogen under conditions of high temperature and pressure, in the presence of a catalyst, yielding light oils.

Hydrotreater: An oil refining unit in which a hydrocarbon is subjected to heat and pressure in the presence of a catalyst and hydrogen in order to remove sulfur and other contaminants such as nitrogen and metals.

Jobber: Someone who purchases refined products at the wholesale level and then transfers or resells the product at the retail level. The retail level sale/transfer can occur at facilities owned by jobber, independent dealers or commercial accounts.

Kerosene: Kerosene has a lower freeze point, lower flash point and lower pour point.

Lubricity: Several states have mandated the use of a lubricity additive in several on road Low Sulfur diesel fuels. OPIS provides separate pricing displays for Low Sulfur and Low Sulfur with lubricity products. Diesel postings which may include lubricity are Low Sulfur, Red Dye, Winter and Premium diesel products. Since all Ultra-Low-Sulfur products must have a lubricity component, it is not necessary to maintain a separate lubricity product grouping with Ultra-Low-Sulfur products.

MTBE: Methyl tertiary butyl ether, an ether used in the blending of reformulated gasolines, affecting vapor pressure and octane level. Unlike ethanol, MTBE is fungible and will not separate out during shipment. There is no domestic market for MTBE, so any production is exported.

Natural Gas: A naturally occurring fuel requiring different processing compared to crude. Liquefied natural gas (LNG) and compressed natural gas (CNG) are rated to be among the cleanest of fossil fuels.

No. 2 Ultra Low- Sulfur: No. 2 Ultra-Low Sulfur has a sulfur content of less than 15 ppm and must be used to supply at least 80% of the nations on road diesel fuel sold at the retail level as of Oct. 15, 2006. All of the OPIS Ultra Low Sulfur diesel products are understood to include lubricity.

No. 2 Low-Sulfur: Clear low-sulfur (LS No.2) diesel has a sulfur content up to 500 ppm and can be used for up to 20 % of the nations on road diesel fuel sold at the retail level. In addition to clear No.2 low sulfur, OPIS also provides pricing for Red Dye, Premium, Winter, Low-Emissions Diesel and Lubricity grades of low-sulfur diesel fuels.

No. 2 High-Sulfur: Clear high-sulfur No.2 diesel is used as an off-road fuel for equipment such as farm machinery or as home heating oil.

No. 1 Low-Sulfur: Clear low-sulfur fuel is commonly used for “blending” on-road fuels. Diesel is blended during winter months to create a diesel fuel that will not solidify or gel in colder temperatures.

No. 1 High-Sulfur: Clear high sulfur is used for various off road agricultural and industrial purposes. Crop drying ovens is one example.

No. 4 Fuel: A distillate fuel oil made by blending distillate fuel oil and residual fuel oil stocks. It conforms with ASTM Specification D 396 and is used extensively in industrial plants and in commercial burner installations that are not equipped with preheating facilities.

OPEC: The Organization of Petroleum Exporting Countries. This group has organized for the purpose of negotiation with oil companies on matters of oil production, prices and future concession rights. Current members are Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela.

Octane: A measure of the performance quality of gasoline in terms of antiknock qualities. The higher the octane number, the greater the antiknock qualities.

Premium Diesel: The higher cetane rating is what makes a regular diesel a premium diesel, along with some type of detergent package that serves to clean the engine as the fuel is burned. Cetane is to diesel what octane is to gasoline. Premium diesel typically has a minimum 45 cetane rating, whereas regular diesel is closer to a 38 to 40 cetane.

Red-dye: Diesel fuel is dyed red to denote it is being used for tax-exempt purposes. Entities that are tax-exempt (school boards, etc.) use red-dyed fuel because it is tax exempt. There is no difference in red-dyed product specifications. Red-dyed prices typically are 0.25 to 0.35cts higher than clear prices to recoup the charge for the dye and dying process.

Refinery: An installation that manufactures finished petroleum products from crude oil, unfinished oils, natural gas liquids, other hydrocarbons and oxygenates.

Reformulated Gasoline: Finished motor gasoline, the composition and properties of which meets the requirements of the reformulated gasoline regulations promulgated by the U.S. EPA under Section 211(k) of the Clean Air Act.

Reid Vapor Pressure (RVP): RVP is used to measure pressure in terms of pounds per square inch (psi). In terms of gasoline, RVP is used as an ozone control mechanism.

Residual Fuel: A general classification for the heavier oils, known as No. 5 and No. 6 fuel oils, that remain after the distillate fuel oils and lighter hydrocarbons are distilled away in refinery operations and conform to ASTM Specifications D396 and D975. No. 5 oil is used in steam-powered government vessels and inshore power plants. No. 6furl oil includes Bunker C fuel and is used for the production of electric power, space heating, vessel bunkering and various industrial purposes.

Technical Analysis: Analysis primarily derived from studying historical buying/selling patterns in futures and spot markets and attempting to predict with reasonable certainty the probability of mimicking those movements again. Technical analysis is often very sophisticated and is probably the single most critical factor in determining day- to-day futures price movements.

Thermal Cracking: A refining process in which heat and pressure are used to break down, rearrange or combine hydrocarbon molecules. Thermal cracking includes visbreaking, fluid coking, delayed coking and other thermal cracking processes.

Unbranded: To be involved in marketing or distributing petroleum products without being under refiner trademark or log. Unbranded purchases can either be “contract,” (specific annual volume requirements) or “spot” (no specific volume requirements).

Wet Bbl: Industry term to specify actual physical barrels, often in a very prompt timeframe. Contrasts with paper bbl, where title is not backed up with actual physical material.

Winter Diesel: During the winter months, on road diesel fuels may be blended with other diesel fuels or chemical additives to produce a Winter diesel that will not begin to solidify or gel due to cold

temperatures. OPIS also provides pricing for Red Dye, Premium, and Lubricity grades of Winter diesel fuels.

Business Terms

Basis: The difference between the price of the actual commodity (e.g. heating oil) and the price of the futures contract. Basis can be calculated by subtracting the futures price from the cash price. For example, if N.Y. Harbor physical heating oil is 60 cts/gal and the futures price is 61 cts/gal, the basis is -1/00 cts/gal.

Basis Risk: Price exposure associated with variation in the relationship between a physical or cash price and the appropriate NYMEX reference. These risks may be associated with location, product specifications, and time variations.

Broker: Anyone who executes futures or options contracts in exchange for a commission fee. The term can apply to account executives who take phone orders and pass the execution on to the floor; the term also applies to floor brokers on the NYMEX who actually execute the orders in the pit.

Call option: Also referred to simply as a "call". Refers to an option which gives the buyer the right, but not the obligation, to buy a futures contract at a specific strike price.

Cap: Risk management program which, usually in exchange for an upfront premium, offers a price ceiling for various size purchases of fuel. Caps are most commonly offered from suppliers who utilize petroleum futures options.

Collar: Term, which refers to a futures or derivatives program where the buyer locks in a price ceiling, but also a price floor. A trucking company which caps its autumn price at 60 cts/gal but only shares in a downward moves to 50 cts/gal has utilized a collar program from its supplier.

Cost Plus: A pricing mechanism, commonly used by transportation firms, which takes an OPIS average, adds in a specific "cost" that is freight, or a mark-up and creates a buying price.

Crack Spread: Term applied to the differential between what a typical refined products mix would yield and the value of crude. The common crack spread features a per bbl reference derived of 66.6% unleaded gasoline and 33.4% No. 2 oil. The resulting average is compared to the WTI number for the resulting "crack spread".

Day Trade: The purchase and sale of a futures or option contract during the same business day. Much of the activity of locals is focused around day trading.

Delivered Spot: Detailed estimates of rack replacement costs using spot prices and including pipeline tariff costs, shrinkage fees, proprietary additive fees plus other miscellaneous costs.

Derivatives: General term used to describe the class of futures-related instruments offered by oil companies, banks, large brokerage houses, etc. These programs are "derived" from general futures contracts but often are tailor-made to individual market and company needs.

Fundamental Analysis: Analysis derived from actual supply and demand factors such as inventories, refinery operations, physical buying patterns, or disruptions in the supply and distribution chain. Contrasts with technical analysis.

Futures Margin: A deposit required of futures participants that guarantees assurance of performance. Funds are on hand to assure that the buyer or seller makes good on any losses that might accrue on his position. Margin deposits are a sort of futures performance bond.

Gross Average: An average of all suppliers, calculated without the deduction of any prompt-payment terms.

Hedger: Oil industry participant who takes a futures, options, or derivatives position opposite that of a position held in the cash or contract market. A refiner who sells 500 forward gasoline contracts against his future production is hedging. A hedger is looking to reduce risk in exchange for a guaranteed margin, he may forego larger profits in reducing his exposure.

Long: Having an outstanding position where one has bought a futures contract or a wet bbl. A speculative "long" would be hopeful of a market increase. A lot of "length" in the wet or futures market could be descriptive of a market where too many buyers are holding inventory.

Margin: The funds deposited by a buyer or seller of a futures contract that ensure performance of the contract.

Margin Call: A demand for initial or variation margin from a commission house to a customer and/or from the clearing house to a clearing member.

Net Average: An average of all rack suppliers, calculated with any prompt-payment discount reduced for the applicable suppliers.

NYMEX: The New York Mercantile Exchange is an exchange where a number of commodities, including WTI crude, heating oil, and unleaded gasolines are traded on a future basis.

OPIS Benchmark Averages: Published averages commonly used as a basis for buying/selling fuel: contract (10:00 AM EST), closing averages (6:00 PM EST), newsletter and 5- day averages published in the weekly OPIS newsletter.

OPIS Low: The lowest supplier price at that particular rack on that day. Available in newsletter, standard **and/or terminal display.**

OPIS High: The highest supplier price at that particular rack on that day. Available in newsletter, standard and/or terminal display.

OPIS Newsletter Average: The published Thursday evening average (except on certain holiday weeks) in the printed OPIS newsletter. This average is ALWAYS gross. The OPIS Newsletter started in 1980 when the market moved only once a week. Since major fuel purchases are referenced to this published price, it is one of many benchmarks available from OPIS today.

Petroleum Administration For Defense Districts (PADD or PAD): Five geographic area into which the United States was divided by the Petroleum Administration for Defense for purposes of administration during federal price controls or oil allocation:

PADD1: CT, DC, DE, FL, GA, ME, MD, MA, NH NJ, NY, SC, NC, PN, RI, VT, VA, WV

PADD2: IL, IN, IA, KS, KY, MI, MN, MO, NE, ND, OH, OK, SD, TN, WI

PADD3: AL, AR, LA, MS, NM, TX

PADD 4: CO, ID, MO, UT, WY

PADD5: AK, AZ, CA, HI, NV, OR, WA

Short: Having an outstanding position to sell a wt bbl or a futures contract. A speculative "short" would be hopeful of a market decline so the trader could eventually buy back bbl at a lower price. A market with too many short traders is often described as oversold.

Short Covering: Description which usually pertains to a market where speculative shorts are covering or cancelling out their positions by buying product. A rally from short covering is not indicative of new buying and is often violent but brief.

Speculator: Industry or non Industry participant who eyes a futures or options profit by anticipating a future price movement or changing relationship.

Spot: a cash deal for supply wherein the price is negotiated between the buyer and the seller and the supply commitment varies.

Spot Margin: Additional funds required to be on hand as a contract approaches its delivery date.

Spreads: In futures markets, applies to the differences between prices of futures contracts for different delivery months, or to the difference in prices for different commodities.

Strategic Petroleum Reserve (SPR): Petr4oleum stocks maintained by the Federal Government for use during periods of major supply interruption.

Unbranded Average: An average of all unbranded suppliers, denoted with a (u) in the display. Calculated for gross or net.

Upstream: Term applying to functions or facilities close to the wellhead.