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ARGUS AMERICAS ASPHALT

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The most up-to-date Argus Americas Asphalt Methodology is available on www.argusmedia.com

Methodology overview

Methodology rationale

Argus strives to construct methodologies that reflect the way the market trades. Argus aims to produce price assessments which are reliable and representative indicators of commodity market values and are free from distortion. As a result, the specific currencies, volume units, locations and other particulars of an assessment are determined by industry conventions.

In the Americas asphalt markets, Argus publishes physical market prices in the open market as laid out in the specifications and methodology guide. Argus uses the trading period deemed by Argus to be most appropriate, in consultation with industry, to capture market liquidity.

In order to be included in the assessment process, deals must meet the minimum volume, delivery, timing and specification requirements in our methodology. In illiquid markets, and in other cases where deemed appropriate, Argus assesses the range within which product could have traded by applying a strict process outlined later in this methodology.

Survey process

Argus price assessments are informed by information received from a wide cross section of market participants, including producers, consumers and intermediaries. Argus reporters engage with the industry by proactively polling participants for market data. Argus will contact and accept market data from all credible market sources including front and back office of market participants and brokers. Argus will also receive market data from electronic trading platforms and directly from the back offices of market participants. Argus will accept market data by telephone, instant messenger, email or other means.

Argus encourages all sources of market data to submit all market data to which they are a party that falls within the Argus stated methodological criteria for the relevant assessment. Argus encourages all sources of market data to submit transaction data from back office functions.

Throughout all markets, Argus is constantly seeking to increase the number of companies willing to provide market data. Reporters are mentored and held accountable for expanding their pool of contacts. The number of entities providing market data can vary significantly from day to day based on market conditions.

For certain price assessments identified by local management, if more than 50pc of the market data involved in arriving at a price assessment is sourced from a single party the supervising editor will engage in an analysis of the market data with the primary reporter to ensure that the quality and integrity of the assessment has not been affected.

Market data usage

In each market, Argus uses the methodological approach deemed to be the most reliable and representative for that market. Argus will utilise various types of market data in its methodologies, to include:

- Transactions
- Bids and offers
- Other market information, to include spread values between grades, locations, timings, and many other data.

In many markets, the relevant methodology will assign a relatively higher importance to transactions over bids and offers, and a relatively higher importance to bids and offers over other market information. Certain markets however will exist for which such a hierarchy would produce unreliable and non-representative price assessments, and so the methodology must assign a different relative importance in order to ensure the quality and integrity of the price assessment. And even in markets for which the hierarchy normally applies, certain market situations will at times emerge for which the strict hierarchy would produce non-representative prices, requiring Argus to adapt in order to publish representative prices.

Verification of transaction data

Reporters carefully analyse all data submitted to the price assessment process. These data include transactions, bids, offers, volumes, counterparties, specifications and any other information that contributes materially to the determination of price. This high level of care described applies regardless of the methodology employed. Specific to transactions, bids, and offers, reporters seek to verify the price, the volume, the specifications, location basis, and counterparty. In some transactional average methodologies, reporters also examine the full array of transactions to match counterparties and arrive at a list of unique transactions. In some transactional average methodologies, full details of the transactions verified are published electronically and are accessible by subscribers.

Several tests are applied by reporters in all markets to transactional data to determine if it should be subjected to further scrutiny. If a transaction has been identified as failing such a test, it will receive further scrutiny. For assessments used to settle derivatives and for many other assessments, Argus has established internal procedures that involve escalation of inquiry within the source's company and escalating review within Argus management. Should this process determine that a transaction should be excluded from the price assessment process, the supervising editor will initiate approval and, if necessary, documentation procedures.

Primary tests applied by reporters

- Transactions not transacted at arm's length, including deals between related parties or affiliates.
- Transaction prices that deviate significantly from the mean of all transactions submitted for that day.
- Transaction prices that fall outside of the generally observed lows and highs that operated throughout the trading day.
- Transactions that are suspected to be a leg of another transaction or in some way contingent on an unknown transaction.
- Single deal volumes that significantly exceed the typical transaction volume for that market.
- Transaction details that are identified by other market participants as being for any reason potentially anomalous and perceived by Argus to be as such.

- Transaction details that are reported by one counterparty differently than the other counterparty.
- Any transaction details that appear to the reporter to be illogical or to stray from the norms of trading behaviour. This could include but is not limited to divergent specifications, unusual delivery location and counterparties not typically seen.
- Transactions that involve the same counterparties, the same price and delivery dates are checked to see that they are separate deals and not one deal duplicated in Argus records.

Secondary tests applied by editors for transactions identified for further scrutiny

Transaction tests

- The impact of linkage of the deal to possible other transactions such as contingent legs, exchanges, options, swaps, or other derivative instruments. This will include a review of transactions in markets that the reporter may not be covering.
- The nature of disagreement between counterparties on transactional details.
- The possibility that a deal is directly linked to an offsetting transaction that is not publicly known, for example a “wash trade” which has the purpose of influencing the published price.
- The impact of non-market factors on price or volume, including distressed delivery, credit issues, scheduling issues, demurrage, or containment.

Source tests

- The credibility of the explanation provided for the outlying nature of the transaction.
- The track record of the source. Sources will be deemed more credible if they
 - Regularly provide transaction data with few errors.
 - Provide data by Argus’ established deadline.
 - Quickly respond to queries from Argus reporters.
 - Have staff designated to respond to such queries.
- How close the information receipt is to the deadline for information, and the impact of that proximity on the validation process.

Assessment guidelines

When insufficient, inadequate, or no transaction information exists, or when Argus concludes that a transaction based methodology will not produce representative prices, Argus reporters will make an assessment of market value by applying intelligent judgment based on a broad array of factual market information. Reporters must use a high degree of care in gathering and validating all market data used in determining price assessments, a degree of care equal to that applying to gathering and validating transactions. The information used to form an assessment could include deals done, bids, offers, tenders, spread trades, exchange trades, fundamental supply and demand information and other inputs.

The assessment process employing judgment is rigorous, replicable, and uses widely accepted valuation metrics. These valuation metrics mirror the process used by physical commodity traders

to internally assess value prior to entering the market with a bid or offer. Applying these valuation metrics along with sound judgment significantly narrows the band within which a commodity can be assessed, and greatly increases the accuracy and consistency of the price series. The application of judgment is conducted jointly with the supervising editor, in order to be sure that guidelines below are being followed. Valuation metrics include the following:

Relative value transactions

Frequently transactions occur which instead of being an outright purchase or sale of a single commodity, are instead exchanges of commodities. Such transactions allow reporters to value less liquid markets against more liquid ones and establish a strong basis for the exercise of judgment.

- Exchange one commodity for a different commodity in the same market at a negotiated value.
- Exchange delivery dates for the same commodity at a negotiated value.
- Exchange a commodity in one location for the same commodity at another location at a negotiated value.

Bids and offers

If a sufficient number of bids and offers populate the market, then in most cases the highest bid and the lowest offer can be assumed to define the boundaries between which a deal could be transacted.

Comparative metrics

The relative values between compared commodities are readily discussed in the market and can be discovered through dialogue with market participants. These discussions are the precursor to negotiation and conclusion of transactions.

- Comparison to the same commodity in another market centre.
- Comparison to a more actively traded but slightly different specification commodity in the same market centre.
- Comparison to the same commodity traded for a different delivery timing.
- Comparison to the commodity’s primary feedstock or primary derived product(s).
- Comparison to trade in the same commodity but in a different modality (as in barge versus oceangoing vessel) or in a different total volume (as in full cargo load versus partial cargo load).

Volume minimums and transaction data thresholds

Argus typically does not establish thresholds strictly on the basis of a count of transactions, as this could lead to unreliable and non-representative assessments and because of the varying transportation infrastructure found in all commodity markets. Instead, minimum volumes are typically established which may apply to each transaction accepted, to the aggregate of transactions, to transactions which set a low or high assessment or to other volumetrically relevant parameters.

For price assessments used to settle derivatives, Argus will seek to establish minimum transaction data thresholds and when no such threshold can be established Argus will explain the reasons. These

thresholds will often reflect the minimum volumes necessary to produce a transaction-based methodology, but may also establish minimum deal parameters for use by a methodology that is based primarily on judgment.

Should no transaction threshold exist, or should submitted data fall below this methodology's stated transaction data threshold for any reason, Argus will follow the procedures outlined elsewhere in this document regarding the exercise of judgment in the price assessment process.

Transparency

Argus values transparency in energy markets. As a result, where available, we publish lists of deals in our reports that include price, basis, counterparty and volume information. The deal tables allow subscribers to cross check and verify the deals against the prices. Argus feels transparency and openness is vital to developing confidence in the price assessment process.

Swaps and forwards markets

Argus publishes forward assessments for numerous markets. These include forward market contracts that can allow physical delivery and swaps contracts that swap a fixed price for the average of a floating published price. Argus looks at forward swaps to inform physical assessments but places primary emphasis on the physical markets.

Publications and price data

Americas asphalt prices are published in the Argus Americas Asphalt report. Subsets of these prices appear in other Argus market reports and newsletters in various forms. The price data are available independent of the text-based report in electronic files that can feed into various databases. These price data are also supplied through various third-party data integrators. The Argus website also provides access to prices, reports and news with various web-based tools. All Argus prices are kept in a historical database and available for purchase. Contact your local Argus office for information.

A publication schedule is available at www.argusmedia.com

Corrections to assessments

Argus will on occasion publish corrections to price assessments after the publication date. We will correct errors that arise from clerical mistakes, calculation errors, or a misapplication of our stated methodology. Argus will not retroactively assess markets based on new information learned after the assessments are published. We make our best effort to assess markets based on the information we gather during the trading day assessed.

Ethics and compliance

Argus operates according to the best practices in the publishing field, and maintains thorough compliance procedures throughout the firm. We want to be seen as a preferred provider by our subscribers, who are held to equally high standards, while at the same time maintaining our editorial integrity and independence. Argus has a strict ethics policy that applies to all staff. The policy can be found on our website at www.argusmedia.com. Included in this

policy are restrictions against staff trading in any energy commodity or energy related stocks, and guidelines for accepting gifts. Argus also has strict policies regarding central archiving of email and instant messenger communication, maintenance and archiving of notes, and archiving of spreadsheets and deal lists used in the price assessment process. Argus publishes prices that report and reflect prevailing levels for open-market arms length transactions (please see the [Argus Global Compliance Policy](#) for a detailed definition of arms length).

Consistency in the assessment process

Argus recognises the need to have judgment consistently applied by reporters covering separate markets, and by reporters replacing existing reporters in the assessment process. In order to ensure this consistency, Argus has developed a programme of training and oversight of reporters. This programme includes:

- A global price reporting manual describing among other things the guidelines for the exercise of judgment
- Cross-training of staff between markets to ensure proper holiday and sick leave backup. Editors that float between markets to monitor staff application of best practices
- Experienced editors overseeing reporting teams are involved in daily mentoring and assisting in the application of judgment for illiquid markets
- Editors are required to sign-off on all price assessments each day, thus ensuring the consistent application of judgment.

Review of methodology

The overriding objective of any methodology is to produce price assessments which are reliable and representative indicators of commodity market values and are free from distortion. As a result, Argus editors and reporters are regularly examining our methodologies and are in regular dialogue with the industry in order to ensure that the methodologies are representative of the market being assessed. This process is integral with reporting on a given market. In addition to this ongoing review of methodology, Argus conducts reviews of all of its methodologies and methodology documents on at least an annual basis.

Argus market report editors and management will periodically and as merited initiate reviews of market coverage based on a qualitative analysis that includes measurements of liquidity, visibility of market data, consistency of market data, quality of market data and industry usage of the assessments. Report editors will review:

- Appropriateness of the methodology of existing assessments
- Termination of existing assessments
- Initiation of new assessments.

The report editor will initiate an informal process to examine viability. This process includes:

- Informal discussions with market participants
- Informal discussions with other stakeholders
- Internal review of market data

Should changes, terminations, or initiations be merited, the report editor will submit an internal proposal to management for review and approval. Should changes or terminations of existing assessments be approved, then formal procedures for external consultation are begun.

Changes to methodology

Formal proposals to change methodologies typically emerge out of the ongoing process of internal and external review of the methodologies. Formal procedures for external consultation regarding material changes to existing methodologies will be initiated with an announcement of the proposed change published in the relevant Argus report. This announcement will include:

- Details on the proposed change and the rationale
- Method for submitting comments with a deadline for submissions
- For prices used in derivatives, notice that all formal comments will be published after the given consultation period unless submitter requests confidentiality.

Argus will provide sufficient opportunity for stakeholders to analyse and comment on changes, but will not allow the time needed to follow these procedures to create a situation wherein unrepresentative or false prices are published, markets are disrupted, or market participants are put at unnecessary risk. Argus will engage with industry throughout this process in order to gain acceptance of proposed changes to methodology. Argus cannot however guarantee universal acceptance and will act for the good order of the market and ensure the continued integrity of its price assessments as an overriding objective.

Following the consultation period, Argus management will commence an internal review and decide on the methodology change. This will be followed by an announcement of the decision, which will be published in the relevant Argus report and include a date for implementation. For prices used in derivatives, publication of stakeholders' formal comments that are not subject to confidentiality and Argus' response to those comments will also take place.

Introduction

Argus Americas Asphalt is a weekly report on the bulk and rack markets for asphalt. It features price assessments, posted prices, market commentary, market news, transportation costs and asphalt production economics. The report is published every Friday, with the exception of some public holidays. For a full list of publication dates, see Argus' [publication schedules](#).

Asphalt price assessments

Asphalt price assessments reflect open-market, arms length deals. For a detailed definition of arms length, see the [Argus Global Compliance Policy](#).

Unless otherwise noted, assessments are the range of spot trade since the last publication. The low is the lowest price transacted, and the high is the highest price transacted. Argus will take into account deals confirmed by one or both counterparties. Deals must be considered representative to have a bearing on Argus assessments. Argus reserves the right to exclude deals from the range of trade. If a reported deal falls well outside of the generally observed highs and lows that operated throughout the week or raises other concerns, Argus will analyse the transaction in light of other market data in order to determine if the deal should be excluded. This process is critical to ensuring that the Argus range of trade is accurate and representative.

Rack

Rack prices reflect trade in one or more grades of asphalt within a defined geographic region. For detailed parameters, see the rack assessments table. Rack price assessments reflect trade where the seller commits to deliver to the buyer's truck, typically at a truck-loading rack.

In the absence of confirmed trade, assessments will reflect the range within which trade could have occurred. Argus will determine that range with reference to one or more of:

- sellers' offer levels
- sellers' postings
- discounts to offer levels/postings that sellers typically offer their customers
- the price at which buyers tell Argus they would be willing to buy
- the price buyers say they have been quoted by their supplier(s)
- the price at which local, state, provincial, or federal authorities contract product by tender
- price changes in local residual fuel oil markets
- price changes at competing or nearby asphalt markets
- asphalt production economics, including coker yields and asphalt's value as a fuel oil blendstock
- transportation costs

Seasonal rack prices

Argus publishes seasonal rack prices for asphalt in western Canada, where truck-loading racks close for business during the winter months. The final price assessment for Edmonton, Manitoba and Saskatchewan is published in the first Argus Americas Asphalt report on or after 30 November. Assessments are resumed in the first report on or after 1 March.

Posted rack prices

Argus publishes posted prices for asphalt sold at Canadian and Latin American truck-loading racks. Posted prices are the distributors' official selling prices, and may not reflect the price at which the majority of buyers are able to purchase asphalt. Prices are posted in local currency. Argus publishes them in both their original form and in US dollars per short ton, using current exchange rates (see the currency conversion explanation below).

Posted prices are updated on the date when the new prices take effect, as determined by each seller.

Argus publishes posted prices for:

Brazil

Posted in Brazilian reals or R/t

Acelen: CAP 50/70

- Mataripe, fca

Petrobras: CAP 50/70, CAP 30/45

- Lubnor, fca
- Regap, fca
- Revap, ex-works
- Repar, ex-works
- Reduc, fca
- Refap, fca
- Replan, ex-works

Ream: CAP 50/70

- Reman, fob
- Reman, ex-works

Canada

Posted in Canadian dollars or C\$/t

Bitumar:

- Toronto PG 58-28
- Montreal:
 - PG 58S-28
 - PG 58H-34
 - PG 52V-40
 - PG 58E-34
 - PG 58H-28
 - PG 58V-28
 - PG 64H-28
 - PG 64E28
 - PG 64EEE28

Suncor: PG 58-28, PG 58-34

- Montreal, at refinery

Colombia

Posted in Colombian pesos or Ps/t

Ecopetrol: Pen 60/70

- Barrancabermeja, at refinery

Costa Rica

Posted in Costa Rican colons or C/t

Recope: AC-30, CRS-1 emulsion

US Department of Transportation (DoT) indexes

Argus republishes DoT indexes for some US states. These prices are published by the state DoT, and used as a basis for compensating either the state or its contractors for changes in the price of asphalt that affect the cost of a state-funded construction project.

Rail

Rail price assessments reflect trade in a defined volume of one or more asphalt grades, where the seller commits to deliver the product into the buyer's railcar, at loading terminals within a defined region during the named month. For detailed parameters, see the rail assessments table.

In the absence of confirmed trade, assessments will reflect the range within which spot trade could have occurred. Argus will determine that range with reference to one or more of:

- delivered-by-rail prices
- rail transportation costs
- changes in the price of high-sulphur fuel oil since the last publication
- price changes at competing or nearby asphalt markets
- consensus among participants in that market
- asphalt production economics, including coker yields and asphalt's value as a fuel oil blendstock

Waterborne

Waterborne price assessments reflect trade in a defined volume of one or more asphalt grades, where the seller commits to deliver from or into vessels at terminals within a defined region, and within a defined time-frame. For detailed parameters, see the waterborne assessments table.

In the absence of confirmed waterborne trade, assessments will reflect the range within which spot trade could have occurred. Argus will determine that range with reference to one or more of:

- fob markets, where the assessment is for cif/cfr trade
- cif/cfr markets, where the assessment is for fob trade
- asphalt freight rates (*see below*)
- changes in the price of high-sulphur fuel oil since the last publication
- price changes at competing or nearby asphalt markets
- consensus among participants in that market

Grades and specifications

Asphalt grades specified in each of the tables for rack, rail, and waterborne assessments below are typically expected to meet the following quality criteria:

	Penetration of 100g needle for five seconds at 25°C, mm	
	Min	Max
Pen 35/50	35	50
Pen 40/50	40	50
Pen 40/60	40	60
Pen 50/70	50	70
Pen 60/70	60	70
Pen 70/100	70	100
Pen 80/100	80	100
Pen 100/160	100	160
Pen 150/200A	150	200
Pen 160/220	150	220

	Average 7-day pavement design temperature, °C		Flash point, min °C
	Max	Min	
PG 58-28	<58	>28	230
PG 58-34	<58	>34	230
PG 64-10	<64	>10	230
PG 64-16	<64	>16	230
PG 64-22	<64	>22	230
PG 64-28	<64	>28	230
PG 64-34	<64	>34	230
PG 67-22	<67	>22	230
PG 70-10	<70	>10	230
PG 70-28	<70	>28	230

Viscosity at 60°C (Poise)	
AC-30	3,000 ± 600

Non-asphalt oil price assessments

Argus Americas Asphalt includes “week-range” price assessments for non-asphalt commodities, including fuel oil, gasoil, and crude. These are based on assessments published in four daily products reports — Argus European Products, Argus US Products, Argus Asia-Pacific Products and Argus Crude.

The week-range low is the lowest of all daily lows published in the relevant daily report since Argus Americas Asphalt was last published. The high is the highest of all daily highs published in the relevant daily report since Argus Americas Asphalt was last published.

If the daily report publishes only a midpoint for the relevant assessment, the week-range low is the lowest of all daily midpoints published in the relevant daily report since Argus Americas Asphalt was last published. The week-range high is the highest of all daily midpoints published in the relevant daily report since Argus Americas Asphalt was last published.

For daily crude and product report methodologies, see argusmedia.com/methodology

Example:

Argus Americas Asphalt is published at close of business on 10 and 17 January 2014. Argus US Products reports US Gulf no 6 fuel oil as follows in the intervening period:

	No 6 fuel oil 3pc	
	Low	High
13 Jan 14	90	90.5
14 Jan 14	89	90
15 Jan 14	88	88.5
16 Jan 14	88.5	90
17 Jan 14	90	90.25

The Argus Americas Asphalt published on 17 January 2014 will report US Gulf No 6 fuel oil as follows:

	No 6 fuel oil 3pc	
	Low	High
17 Jan 14	88	90.5

Freight assessments

Rail

Rail assessments are of the cost of transporting up to 84 railcars by rail on the named route, including rail tariffs and fuel surcharges.

Rail assessments are published for

- Billings to Kansas City
- Billings to Portland OR
- Chicago to Atlanta
- Chicago to Dallas
- Chicago to Kansas City
- Twin Cities to Dallas

Railcar leasing rates

Railcar leasing rates are published for coiled and insulated full-serve railcars on a \$/car/month basis for the following terms

- < 1 year lease
- 1-5 year lease
- >5 year lease

See the [Argus Petroleum Transportation North America methodology](#).

Waterborne

Assessments reflect the prorated costs of chartering a vessel, using it to transport a cargo of asphalt, and repositioning the vessel at its next port of call. Assessments are made on the basis of a prorated 12-month timecharter, fuel costs, port costs, Panama Canal transit costs, and the US Harbor Maintenance Fee, if applicable. Calculations do not incorporate a broker fee, but do incorporate agency fees at the port of loading and the port of discharge.

Vessels are expected:

- to load a full cargo
- to cover 5pc more water than the shortest route (i.e. 5pc “sea margin” or “weather factor”)
- to take on fuel at the point of loading or the nearest port to the port of loading if fuel is not available at the port of loading
- to take on fuel for the repositioning leg
 - at the port of loading if the laden voyage was less than 1,000 miles before sea margin
 - at the port of discharge if the laden voyage was 1,000 miles or more before sea margin
 - at the nearest port to the port of discharge if the laden voyage was 1,000 miles or more before sea margin and fuel is unavailable at the port of discharge
- to steam at full speed
- to avoid the sulfur emissions control area (ECA) to the maximum extent possible, unless to do so would be uneconomical
- to burn a 0.1pc S fuel oil-distillate blend when steaming within a sulfur ECA

Assessments are for the following laden and repositioning legs, and reflect the use of a vessel with the following approximate metric deadweight tonnage:

Laden from	Laden to	Repositioning to	Vessel dwt
Amuay Bay	Baltimore	Amuay Bay	6,000
Amuay Bay	Portland ME	Amuay Bay	6,000
Amuay Bay	Portland OR	Amuay Bay	11,000
Amuay Bay	Santo Domingo	Amuay Bay	6,000
Amuay Bay	West Palm Beach FL	Amuay Bay	6,000
New Orleans	Coatzacoalcos	New Orleans	6,000
New Orleans	Fortaleza	New Orleans	6,000
New Orleans	Puerto Ventanas	New Orleans	11,000
New Orleans	Santo Domingo	New Orleans	6,000
Rayong	Portland OR	Amuay Bay	15,000
Saint John	Baltimore	Saint John	11,000
Saint John	Providence	Saint John	15,000
Saint John	Puerto Ventanas	New Orleans	15,000
Saint John	West Palm Beach FL	Saint John	15,000
Tarragona	Baltimore	Tarragona	15,000
Tarragona	Fortaleza	New Orleans	6,000
Tarragona	Portland ME	Tarragona	15,000
Tarragona	Providence	Tarragona	15,000
Tarragona	Santo Domingo	Amuay Bay	11,000
Tarragona	West Palm Beach FL	Tarragona	15,000
Ulsan	Portland OR	Amuay Bay	6,000

Market commentary

Argus' market commentaries aim to explain price moves with reference to market fundamentals. Argus Americas Asphalt features a detailed commentary on price moves in each region covered. Argus does not publish counterparty names in Argus Americas Asphalt market commentaries. Many companies in the Americas can only reveal deals to the press if confidentiality is maintained. Maintaining confidentiality allows Argus to gather more information and create more robust assessments.

Currency conversions

Argus converts the price of asphalt sold using local Canadian or Latin American currencies and/or priced per metric tonne to US dollars per short ton. Currency conversions are based on the average of exchange rates on each business day up to and including the business day before the day of publication.

Asphalt economics

Argus assesses asphalt's value as a fuel oil blendstock in Los Angeles, New York and the US Gulf. Calculations assume an asphalt density of 5.6 bl/st.

Asphalt's value as a fuel oil blendstock is calculated as follows, where **f** is fuel oil, **h** is heating oil, and **bv** is blendstock value:

$$bv (\$/st) = 7.2f (\$/bl) - 1.6h (\$/bl)$$

The following assessments are used to calculate blendstock values:

- Los Angeles EPA ULSD - see the [Argus US Products methodology](#)
- NYH heating oil cargo - see the [Argus US Products methodology](#)
- Waterborne USGC high sulphur diesel barge - see the [Argus US Products methodology](#)
- Los Angeles bunker 380cst - see the [Argus Marine Fuels methodology](#)
- NYH No 6 3pc fuel oil - see the [Argus US Products methodology](#)
- USGC No 6 3pc fuel oil- see the [Argus US Products methodology](#)

Argus assesses coker yields for the US Gulf and the US midcontinent. Coker yields reflect the value of a short ton of asphalt after it has been processed in a delayed coking unit. Cokers in both regions are assumed to yield, by weight, 8pc LPG, 11pc naphtha, 19pc heavy coker gasoil, 30pc petroleum coke, 32pc light coker gasoil.

The following are used to calculate US coker yields:

- Propane Mt Belvieu Enterprise - see the [Argus NGL Americas methodology](#)
- USGC full-range naphtha - see the [Argus US Products methodology](#)
- USGC VGO 2pc barge - see the [Argus US Products methodology](#)
- USGC fob petcoke 6.5pc - see the [Energy Argus Petroleum Coke methodology](#)
- ULSD Colonial 62 - see the [Argus US Products methodology](#)
- Propane Conway - see the [Argus NGL Americas methodology](#)
- USGC full-range naphtha - see the [Argus US Products methodology](#)
- USGC VGO 2pc barge - see the [Argus US Products methodology](#)
- US midcontinent petcoke - calculated based on the USGC fob petcoke 6.5pc assessment and a fixed barge rate differential - see the [Energy Argus Petroleum Coke methodology](#)
- ULSD Group 3 Magellan - see the [Argus US Products methodology](#)

Rack assessments			
Assessment	Rack locations	Grades included	Currency/unit of assessment
US Atlantic coast			
Southwest Maine	Portland and 50 mile radius, Bangor, Searsport	PG 64-28	\$/st
Greater Boston	Providence, Boston, Manchester, Portsmouth	PG 64-28	\$/st
Connecticut	New Haven, Hartford, Portland, Bridgeport	PG 64-22	\$/st
Albany	Albany, Athens,	PG 64-22	\$/st
Western NY/Western PA	Warren, Tonawanda, Pittsburgh, Buffalo, Floreffe	PG 64-22	\$/st
New York City	New York City metropolitan area	PG 64-22	\$/st
Philadelphia	Philadelphia, Paulsboro	PG 64-22	\$/st
Baltimore	Baltimore	PG 64-22	\$/st
Southeast Virginia	Richmond to Hampton Roads	PG 64-22	\$/st
Coastal Carolinas	Wilmington, Charleston	PG 64-22	\$/st
Inland North Carolina	Charlotte, Winston-Salem, Wilson	PG 64-22	\$/st
Atlanta	Atlanta	PG 64-22, PG 67-22	\$/st
Savannah	Savannah	PG 64-22, PG 67-22	\$/st
Jacksonville	Jacksonville	PG 64-22	\$/st
Miami	Miami metropolitan area	PG 64-22	\$/st
US Gulf coast			
Tampa	Tampa	PG 64-22	\$/st
Northern Alabama	Tuscaloosa, Decatur	PG 64-22	\$/st
Mobile	Mobile	PG 64-22, PG 67-22	\$/st
Southeast Louisiana	New Orleans and 50 mile radius	PG 64-22	\$/st
Mississippi	Vicksburg, Lumberton	PG 64-22, PG 67-22	\$/st
Houston	Houston and 50 mile radius	PG 64-22	\$/st
Northeast Texas	Northeast of Waco. Ardmore OK	PG 64-22	\$/st
US midcontinent			
Chicago metropolitan area	Chicago, Whiting, Utica, Calumet, Bartlett, Joliet	PG 64-22	\$/st
Twin Cities	St Paul, Minneapolis	PG 58-28	\$/st
Wisconsin	Milwaukee, Rhinelander, Green Bay	PG 64-22	\$/st
Southeast Michigan	Detroit, Bay City	PG 64-22	\$/st
Indianapolis	Indianapolis	PG 64-22	\$/st
Northern Ohio	Cleveland, Canton, Wellsville, Toledo	PG 64-22	\$/st
Mid-Ohio River	Cincinnati, Louisville, Catlettsburg	PG 64-22	\$/st
Kansas City	Kansas City	PG 64-22	\$/st
Tulsa	Tulsa, Muskogee	PG 64-22	\$/st
St Louis	St Louis, Wood River, Meredosia	PG 64-22	\$/st
Southern Kentucky/Tennessee	Kuttawa, Memphis, Nashville, Knoxville, Chattanooga	PG 64-22	\$/st
Omaha	Omaha	PG 64-22	\$/st
US west coast-Rockies			
Phoenix	Phoenix, Tucson	PG 70-10	\$/st
Bakersfield	Bakersfield	PG 64-10, PG 64-16	\$/st
San Francisco Bay Area	Oakland, San Francisco, Sacramento	PG 64-10, PG 64-16	\$/st
Los Angeles	Los Angeles	PG 64-10, PG 64-16	\$/st
Denver	Commerce City	PG 64-22	\$/st
Portland	Portland	PG 64-22	\$/st
Montana	Billings, Great Falls, Laurel	PG 64-22	\$/st
Las Vegas	Las Vegas	PG 64-22	\$/st
Salt Lake City	Salt Lake City	PG 64-22	\$/st
Seattle	Seattle, Tacoma	PG 64-22	\$/st
Wyoming	Cheyenne, Casper, Sinclair, Rawlins	PG 64-22	\$/st
Canada			
Edmonton	Edmonton	Pen 150/200A	C\$/t
Toronto	Toronto, Hamilton	PG 58-28	C\$/t
Montreal	Montreal	PG 58S-28	C\$/t
Saskatchewan	Regina, Lloydminster	Pen 150/200A	C\$/t
Manitoba	Winnipeg	Pen 150/200A	C\$/t

Rail assessments						
Assessment	Location	Grades	Currency/unit of assessment	Timing	Delivery	Cargo size '000t
USMC						
Asphalt	IL, IN, MI, OH, KY, OK, MN, Warren PA	PG 64-22	\$/st	Named month	fob	3-10
Roofing Flux	IL, IN, MI, OH, KY, OK, MN, Warren PA	Suitable for Type III flux, Type IV flux	\$/st	Named month	fob	3-10
Rockies						
Asphalt	MT, WY, CO	PG 64-22	\$/st	Named month	fob	5-15
US Gulf coast						
Roofing flux	AL, GA, MS, LA, TX	Suitable for Type III flux, Type IV flux	\$/st	Named month	fob	3-10

Waterborne assessments							
Assessment	Location	Grades	Price type	Currency/unit of assessment	Timing (days forward)	Delivery	Cargo size '000t
US Atlantic coast							
New Jersey	Paulsboro, Linden	PG 64-22	Outright price	\$/st	21-30	fob	5.5-13
New England	MA, ME	PG 64-28	Outright price	\$/st	5-40	cif	5.5-13
New York	NYH terminals	PG 64-22	Outright price	\$/st	5-40	cif	5.5-13
Mid-Atlantic	New York, Baltimore, coastal Virginia	PG 64-22	Outright price	\$/st	15-40	cif	5.5-30
US Gulf coast							
US Gulf	Greater New Orleans, Mobile, Corpus Christi	PG 64-22, PG 67-22, AC-30	Outright price	\$/st	10-45	fob	5 minimum
US midcontinent							
Asphalt	IL, IN, MI	PG 64-22	Outright price	\$/st	10-30	fob	5-15