

1 | Contract Specifications – Energy Futures

Note A1914 B

FUTURES CONTRACT	BRENT CRUDE OIL	WEST TEXAS INTERMEDIATE CRUDE OIL
Trading system code	BRNT	WTIO
Trading hours	08h30 to 17h00 South African time. Admin period from 17h00 to 17h15. (Monday to Friday except South African National Holidays)	
Underlying instrument	A Brent crude oil futures contract meeting all specifications as listed on NYMEX, a subsidiary of the CME Group Inc. The JSE reserves the right to amend the contract specifications should these be amended by the reference exchange.	A light sweet crude oil futures contract meeting all specifications as listed and traded on NYMEX, a subsidiary of the CME Group Inc. The JSE reserves the right to amend the contract specifications including settlement methodology should this be amended by the reference exchange.
Contract months	March, June, September and December.	March, June, September and December.
Contract size	1 contract = 100 US barrels (or 15898.73 litres).	1 contract = 100 US barrels (or 15898.73 litres).
Quotations	In South African Rand per barrel.	In South African Rand per barrel.
Minimum price movement	0.20 ZAR per barrel.	0.20 ZAR per barrel.



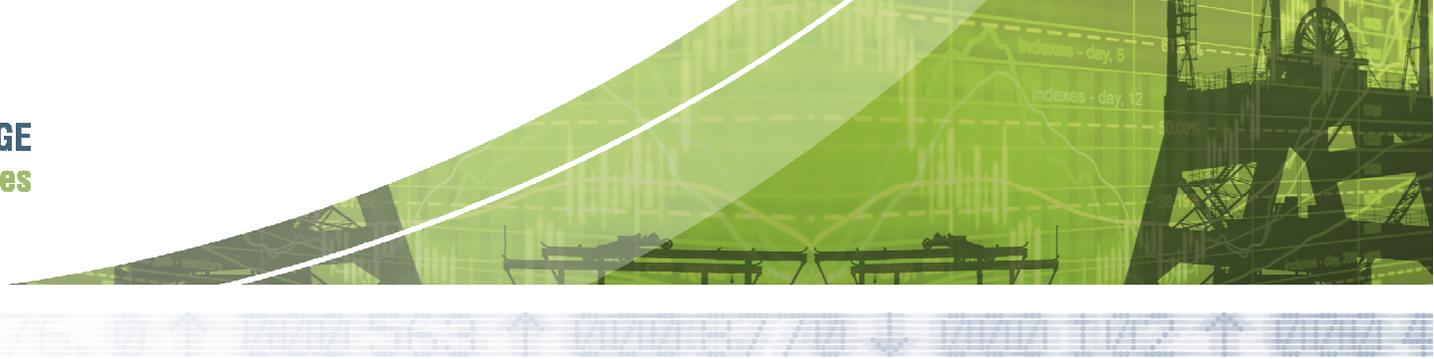
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Listing programme	Ensure a minimum of two expiries are always available for trade.																					
Expiry dates & times (see the product trading calendar on the web page www.jse.co.za/commodities for the detailed trading calendar)	Expiry dates will mirror the JSE currency futures contract. In terms of the CME expiry months referenced for market making purposes, the following will be used: <table border="1" data-bbox="371 719 689 935"> <thead> <tr> <th>JSE Expiry</th> <th>BRENT Reference</th> </tr> </thead> <tbody> <tr> <td>Mar</td> <td>May</td> </tr> <tr> <td>Jun</td> <td>Aug</td> </tr> <tr> <td>Sep</td> <td>Nov</td> </tr> <tr> <td>Dec</td> <td>Feb</td> </tr> </tbody> </table>	JSE Expiry	BRENT Reference	Mar	May	Jun	Aug	Sep	Nov	Dec	Feb	Expiry dates will mirror the JSE currency futures contract. In terms of the CME expiry months referenced for market making purposes, the following will be used: <table border="1" data-bbox="1178 719 1496 935"> <thead> <tr> <th>JSE Expiry</th> <th>WTI Reference</th> </tr> </thead> <tbody> <tr> <td>Mar</td> <td>May</td> </tr> <tr> <td>Jun</td> <td>Aug</td> </tr> <tr> <td>Sep</td> <td>Nov</td> </tr> <tr> <td>Dec</td> <td>Feb</td> </tr> </tbody> </table>	JSE Expiry	WTI Reference	Mar	May	Jun	Aug	Sep	Nov	Dec	Feb
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FUTURES CONTRACT	BRENT CRUDE OIL	WEST TEXAS INTERMEDIATE CRUDE OIL
<p>Determination of final cash settlement value</p>	<p>The final settlement price for cash settlement of the contract will require two components, a BRENT settlement value and a Rand Dollar exchange rate.</p> <p>The BRENT settlement value will refer to an average of 15 iterations referencing trades in the underlying derivative contract, taken every 1 minute for a period of 15 minutes ending 10h00 New York time (SA Summer: 16h46 – 17h00 and SA Winter: 15h46 – 16h00) on the business day aligned to the currency futures expiry date.</p> <p>The Dollar Rand exchange rate required to determine the final settlement price in South African Rands will be the same rate as calculated for the applicable currency futures contract, namely: a 5 minute process with iterations recorded every 30 seconds where the last spot trade within the 30 second interval will be recorded and then averaged over the 5 minute period. The close out process will run from 09h55 to 10h00 New York time. The expiry day will be two business days prior to the 3rd Wednesday of the expiry month (or the previous business day if that day is a public holiday).</p> <p>The two variables are calculated to 4 decimals and rounded off to 2 decimals for the final Rand settlement value.</p> <p>The final calculated Rand settlement value will be publish via the trading system (NUTRON) and included in the end of day settlement prices on the expiry day.</p> <p>In the event that any of the reference markets are not available to determine the final settlement value, the JSE will consider all relevant facts, information and circumstances to determine the final cash settlement value in order to ensure that it reflects a fair market value.</p>	<p>The final settlement price for cash settlement of the contract will require two components, a CME Group settlement value and a Rand Dollar exchange rate.</p> <p>The CME Group settlement value will refer to an average of 15 iterations referencing trades in the underlying derivative contract, taken every 1 minute for a period of 15 minutes ending 10h00 New York time (SA Summer: 16h46 – 17h00 and SA Winter: 15h46 – 16h00) on the business day aligned to the currency futures expiry date.</p> <p>The Dollar Rand exchange rate required to determine the final settlement price in South African Rands will be the same rate as calculated for the applicable currency futures contract, namely: a 5 minute process with iterations recorded every 30 seconds where the last spot trade within the 30 second interval will be recorded and then averaged over the 5 minute period. The close out process will run from 09h55 to 10h00 New York time. The expiry day will be two business days prior to the 3rd Wednesday of the expiry month (or the previous business day if that day is a public holiday).</p> <p>The two variables are calculated to 4 decimals and rounded off to 2 decimals for the final Rand settlement value.</p> <p>The final calculated Rand settlement value will be publish via the trading system (NUTRON) and included in the end of day settlement prices <u>on expiry day</u>.</p> <p>In the event that any of the reference markets are not available to determine the final settlement value, the JSE will consider all relevant facts, information and circumstances to determine the final cash settlement value in order to ensure that it reflects a fair market value.</p>



FUTURES CONTRACT	BRENT CRUDE OIL	WEST TEXAS INTERMEDIATE CRUDE OIL
Trade types accommodated	<p>All trading activity (bids and offers) must be entered onto the central order book during trading hours however the JSE will accommodate the following report only trade types provided they meet the existing criteria:</p> <ul style="list-style-type: none">• Exchange for Risk (EFR's).• Net-off of positions applicable to the same legal entity.• The JSE will accept transactions specific to the contract outside of the standard trading hours as agreed between registered counterparties. A minimum contract volume of 30 contracts will be required in order for this transaction to be processed, this is with reference to opening up new positions, no minimum contract volume will apply should the transaction result in the closing of positions by a registered participant. These transactions must be reported to the JSE before 07h30 the following morning and must be market related – the transactions will then be entered into the order book by the JSE before market opens	



2 | Contract Specifications — Crude Oil Options

OPTIONS CONTRACT	BRENT CRUDE OIL	WEST TEXAS INTERMEDIATE CRUDE OIL
Trading System Code	BRNT	WTIO
Trading Hours	09:00 to 17:00 South African time. (Monday to Friday except South African national holidays)	
Underlying Instrument	A JSE Brent Crude Oil Futures Contract	A JSE WTI Crude Oil Futures Contract
Options Type	American style options	
Contract size	One contract = 100 barrels	One contract = 100 barrels
Contract months	March, June, September and December	March, June, September and December
Price Quotation	Options will be quoted in Rands (ZAR) per contract	
Strike price intervals	R10.00 per barrel strike price intervals	R10.00 per barrel strike price intervals.
Expiration of trading	Options will expire on the same day as the listed futures contract and reference the published closing price in order to determine if the option strike is in the money.	
Exercise Criteria	Options are American style with the long position holder able to exercise the option position at any time during trading hours up to and including the expiration date. All in the money options will be automatically exercised by the JSE at expiration.	



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Daily Mark-to-market	The JSE will determine the daily m-t-m in accordance with the defined processes. The JSE reserves the right to introduce a volatility surface.	The JSE will determine the daily m-t-m in accordance with the defined processes. The JSE reserves the right to introduce a volatility surface.
Settlement Method	Cash settled in South African Rand (ZAR).	
Exchange Fees	R6.00 per contract (incl Vat), all options exercised into futures will not be charged a JSE fee, if exercised early the trades should not be included in any post trade activity to realise this benefit.	R6.00 per contract (incl Vat), all options exercised into futures will not be charged a JSE fee, if exercised early the trades should not be included in any post trade activity to realise this benefit.
Qualifying audience allowed to participate	<ul style="list-style-type: none"> • Individuals and Foreigners have no limits. • Corporate entities have no limits. • Retirement funds and long term insurance companies subject to their 25% foreign allocation limits. • Investment managers and registered collective investment schemes subject to their 35% foreign allocation limits. 	
Trade types accommodated	<p>All trading activity (bids and offers) must be entered onto the central order book during trading hours however the JSE will accommodate the following report only trade types provided they meet the existing criteria:</p> <ul style="list-style-type: none"> • Exchange for Risk (EFR's). • Net-off of positions applicable to the same legal entity. • The JSE will accept transactions specific to the contract outside of the standard trading hours as agreed between registered counterparties. A minimum contract volume of 30 contracts will be required in order for this transaction to be processed, this is with reference to opening up new positions, no minimum contract volume will apply should the transaction result in the closing of positions by a registered participant. These transactions must be reported to the JSE before 07h30 the following morning and must be market related – the transactions will then be entered into the order book by the JSE before market opens. 	



JOHANNESBURG STOCK EXCHANGE
SAFEX Commodity Derivatives

