

ASIA

- Mangalore Refinery and Petrochemicals awards 0.5% marine fuel tender
- CPC Corporations sells VLSFO
- Bharat Petroleum Corporation sells HSFO to an oil major

EUROPE

- VLSFO demand strengthens in ARA
- Brent crude futures rise on EIA data
- Hi-5 spread widest in 9 days

AMERICAS

- Bunker prices stronger on rising resupply costs
- Two LA-area refineries expecting planned flaring during next few days
- Bulk trading quiet for VLSFO and HSFO

SINGAPORE BUNKERS (\$/mt delivered)

| PRODUCT | LOW | HIGH | MEAN | CHANGE |
|------------|--------|--------|---------|--------|
| LSMGO | 522.75 | 523.25 | 523.000 | 0.000 |
| 0.5% VLSFO | 490.75 | 491.25 | 491.000 | -2.000 |
| HS 380 CST | 382.75 | 383.25 | 383.000 | -4.000 |

ROTTERDAM BUNKERS (\$/mt delivered)

| PRODUCT | LOW | HIGH | MEAN | CHANGE |
|------------|--------|--------|---------|--------|
| DMA | 518.00 | 522.00 | 520.000 | 5.000 |
| 0.5% VLSFO | 478.00 | 482.00 | 480.000 | 5.000 |
| HS 380 CST | 371.00 | 375.00 | 373.000 | 6.000 |

HOUSTON BUNKERS (\$/mt ex-wharf)

| PRODUCT | BASIS DIFF* | LOW | HIGH | MEAN | CHANGE |
|------------|-------------|--------|--------|---------|--------|
| LSMGO | --- | 545.00 | 555.00 | 550.000 | 5.000 |
| 0.5% VLSFO | -123.59 | 481.00 | 485.00 | 483.000 | 5.000 |
| HS 380 CST | --- | 371.00 | 375.00 | 373.000 | 1.000 |

* Diff to Front Month NYMEX ULSD Futures Price as Displayed on Page 8

0.5% Very Low Sulfur Fuel Oil (\$/mt)

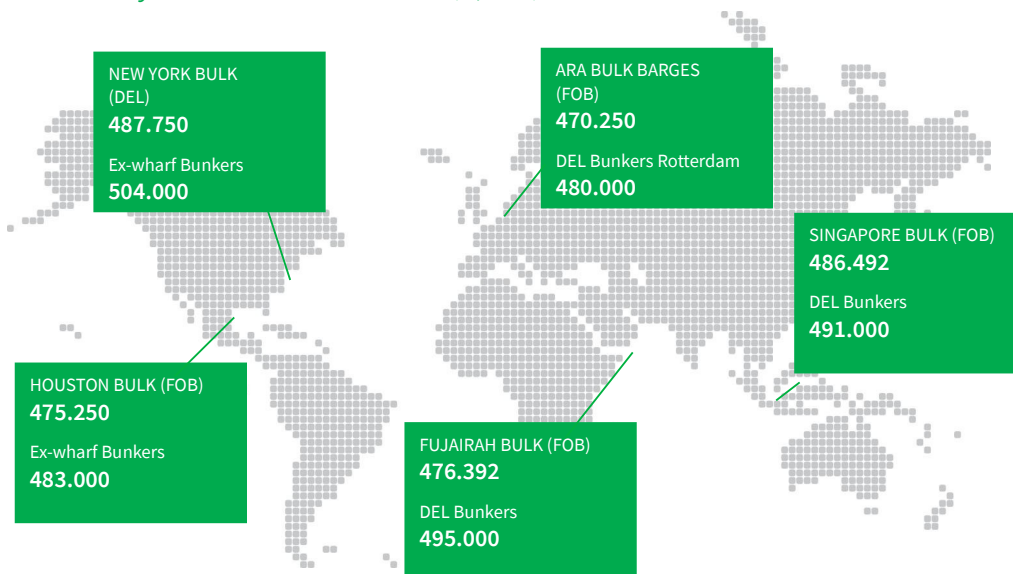


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ASIA

MRPL awards 0.5% marine fuel tender

Mangalore Refinery and Petrochemicals (MRPL) sold 40,000mt maximum 380 CST 0.5% sulfur marine fuel (MF) via a tender possibly to Trafigura at around \$3.50/mt discount to Singapore 0.5% MF assessment, said traders. The tender closed on Apr. 26 with loading from May 10-12.

While, CPC Corporation of Taiwan also sold 42,000mt 25 CST 0.5% very low sulfur fuel oil (VLSFO) via a tender possibly to Shell at around \$2.50/mt discount to Singapore 0.5% MF prices. The tender closed on Apr. 21 with loading from Kaohsiung over May 11-25.

Bharat Petroleum Corporation (BPCL) awarded its tender to export 30,000mt 180 CST 4% high sulfur fuel oil (HSFO) from Mumbai possibly to Shell. The tender closed on Apr. 26 loading from May 6-8. Bidders were also given another option to choose a 20,000mt cargo of the same grade for loading from Apr. 29-30. Indian refineries face weakened domestic demand for fuel oil given the increase in COVID-19 infections and refineries have started to cut their run rates to around 85-90%, said analysts.

Delivered HSFO and 0.5% MF prices in Singapore also weakened and assessed at \$383/mt and \$491/mt respectively on Wednesday.

SINGAPORE BULK FUEL (FOB)

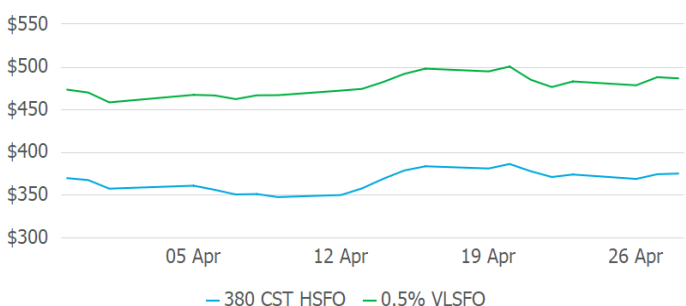
| PRODUCT (\$/mt) | BASIS DIFF* | LOW | HIGH | MEAN | CHANGE |
|------------------|-------------|--------|--------|---------|--------|
| 0.5% VLSFO | 0.89 | 486.24 | 486.74 | 486.492 | -1.317 |
| 380 CST HSFO | 0.67 | 374.59 | 375.09 | 374.841 | 0.752 |
| PRODUCT (\$/bbl) | BASIS DIFF* | LOW | HIGH | MEAN | CHANGE |
| 0.5% VLSFO | 0.13 | 72.55 | 72.63 | 72.589 | -0.197 |
| 380 CST HSFO | 0.11 | 58.99 | 59.07 | 59.030 | 0.118 |

* Cash mean differential to swaps for both grades

FUJAIRAH BULK FUEL (FOB)

| PRODUCT | LOW | HIGH | MEAN | CHANGE |
|---------------------|--------|--------|---------|--------|
| 0.5% VLSFO (\$/mt) | 476.14 | 476.64 | 476.392 | -1.317 |
| 0.5% VLSFO (\$/bbl) | 71.04 | 71.12 | 71.082 | -0.197 |

30-DAY PRICES FOR SINGAPORE BULK VLSFO (\$/mt FOB)



SINGAPORE FUEL BTU INDICATOR

| FUEL | API | BTUs/bbl | BTUs/mt | (\$/bbl) | (\$/mt) | BTUs/\$ |
|------------|------|-----------|------------|----------|---------|---------|
| LSMGO | 35.5 | 5,838,000 | 43,493,100 | 70.201 | 523.000 | 83,161 |
| 0.5% VLSFO | 19 | 6,116,255 | 40,991,141 | 73.262 | 491.000 | 83,485 |
| HS 380 CST | 11.3 | 6,246,000 | 39,662,100 | 60.315 | 383.000 | 103,556 |

* General Indication of the number of BTUs per US dollar spent for various grades of fuel based on API.

SINGAPORE BUNKERS (\$/mt delivered)

| PRODUCT | LOW | HIGH | MEAN | CHANGE |
|------------|--------|--------|---------|--------|
| LSMGO | 522.75 | 523.25 | 523.000 | 0.000 |
| 0.5% VLSFO | 490.75 | 491.25 | 491.000 | -2.000 |
| HS 380 CST | 382.75 | 383.25 | 383.000 | -4.000 |

FUJAIRAH BUNKERS (\$/mt delivered)

| PRODUCT | LOW | HIGH | MEAN | CHANGE |
|------------|--------|--------|---------|---------|
| LSMGO | 579.75 | 580.25 | 580.000 | -15.000 |
| 0.5% VLSFO | 494.75 | 495.25 | 495.000 | 4.000 |

CHIBA BUNKERS (\$/mt delivered)

| PRODUCT | LOW | HIGH | MEAN | CHANGE |
|------------|--------|--------|---------|---------|
| LSMDO | 709.75 | 710.25 | 710.000 | -20.000 |
| 0.5% VLSFO | 509.75 | 510.25 | 510.000 | -5.000 |

BUSAN BUNKERS (\$/mt delivered)

| PRODUCT | LOW | HIGH | MEAN | CHANGE |
|------------|--------|--------|---------|--------|
| LSMGO | 549.75 | 550.25 | 550.000 | 5.000 |
| 0.5% VLSFO | 517.75 | 518.25 | 518.000 | 8.000 |

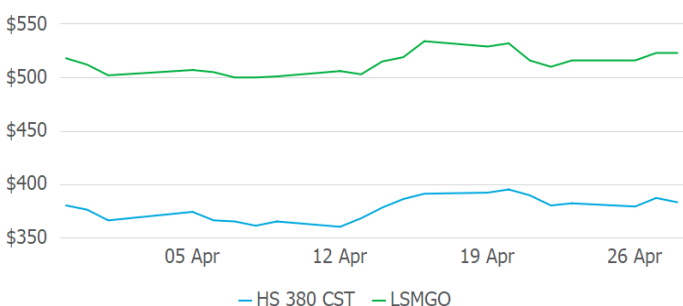
KAOHSIUNG BUNKERS (\$/mt delivered)

| PRODUCT | LOW | HIGH | MEAN | CHANGE |
|------------|--------|--------|---------|--------|
| LSMGO | 574.75 | 575.25 | 575.000 | 5.000 |
| 0.5% VLSFO | 521.75 | 522.25 | 522.000 | 10.000 |

ZHOUSHAN BUNKERS (\$/mt delivered)

| PRODUCT | LOW | HIGH | MEAN | CHANGE |
|------------|--------|--------|---------|--------|
| LSMGO | 554.75 | 555.25 | 555.000 | 15.000 |
| 0.5% VLSFO | 490.75 | 491.25 | 491.000 | 1.000 |

30-DAY PRICES FOR SINGAPORE BUNKERS (\$/mt delivered)



EUROPE

VLSFO demand strengthens in ARA

Bulk barge prices in the Amsterdam-Rotterdam-Antwerp (ARA) hub of northwest Europe firmed Wednesday, amid increasing fuel oil buying interest in the region and strengthening crude prices, according to market sources and U.S. Energy Information Administration (EIA) data.

Very low sulfur fuel oil (VLSFO) spot physical barge prices in ARA gained more than \$10/metric ton, according to OPIS assessment data, while its high sulfur counterpart (HSFO) rose by just shy of \$9/mt on the day.

“Demand for VLSFO is getting bigger the last few weeks,” said one ARA market source. “There is a clear interest from buyers in particular.”

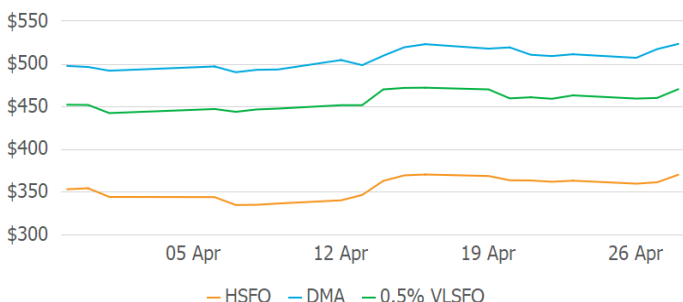
Fuel oil paper markets firmed on the day, with front month HSFO barge paper rising \$8.75/mt and VLSFO barge swaps gaining \$9.25/mt, according to broker data, compared with increases of between \$1-3/mt Tuesday for both sulfur grades.

The spread between HSFO and VLSFO barges, known as the Hi-5 spread, blew out amid rising crude and strengthening fuel oil price. The Hi-5 spread widened to \$100.19/mt, the widest since April 19, according to broker data compiled by OPIS.

Meanwhile, bolstered by news of a lower-than-expected draw in U.S. crude inventories and an increase in domestic refining activity, crude futures jumped higher. Brent crude futures were pegged at \$67.59/bbl by 4:30 p.m. U.K. time Wednesday, compared to \$65.88/bbl at the same market Tuesday, according to ICE data.

Overall U.S. crude inventories rose by 90,000 barrels in the latest week to 493.1 million barrels, EIA data showed Wednesday. Crude inventories in PADD3 fell by 5.1 million bbl, outweighing small gains in the other PADD districts. U.S. refinery utilization rates in the latest week nudged higher to 85.4% from 85.0% the week prior.

30-DAY PRICE FOR ARA BULK (\$/mt FOB Barge)



ARA FUEL BTU INDICATOR

| FUEL | API | BTUs/bbl | BTUs/mt | (\$/bbl) | (\$/mt) | BTUs/\$ |
|------------|------|-----------|------------|----------|---------|---------|
| DMA | 27.5 | 5,838,000 | 41,257,146 | 73.581 | 520.000 | 79,341 |
| 0.5% VLSFO | 19 | 6,116,255 | 40,991,141 | 71.620 | 480.000 | 85,398 |
| HS 380 CST | 11.3 | 6,246,000 | 39,662,100 | 58.740 | 373.000 | 106,333 |

* General Indication of the number of BTUs per US dollar spent for various grades of fuel based on API.

ROTTERDAM BUNKERS (\$/mt delivered)

| PRODUCT | LOW | HIGH | MEAN | CHANGE |
|------------|--------|--------|---------|--------|
| DMA | 518.00 | 522.00 | 520.000 | 5.000 |
| 0.5% VLSFO | 478.00 | 482.00 | 480.000 | 5.000 |
| HS 380 CST | 371.00 | 375.00 | 373.000 | 6.000 |

ANTWERP BUNKERS (\$/mt delivered)

| PRODUCT | LOW | HIGH | MEAN | CHANGE |
|------------|--------|--------|---------|--------|
| DMA | 517.00 | 521.00 | 519.000 | 8.000 |
| 0.5% VLSFO | 473.00 | 477.00 | 475.000 | 9.000 |
| HS 380 CST | 370.00 | 374.00 | 372.000 | 7.000 |

HAMBURG BUNKERS (\$/mt delivered)

| PRODUCT | LOW | HIGH | MEAN | CHANGE |
|------------|--------|--------|---------|--------|
| DMA | 541.00 | 545.00 | 543.000 | 2.000 |
| 0.5% VLSFO | 476.00 | 480.00 | 478.000 | -6.000 |
| HS 380 CST | 387.00 | 391.00 | 389.000 | 4.000 |

ISTANBUL BUNKERS (\$/mt delivered)

| PRODUCT | LOW | HIGH | MEAN | CHANGE |
|------------|--------|--------|---------|--------|
| LSMGO | 571.00 | 575.00 | 573.000 | 8.000 |
| 0.5% VLSFO | 520.00 | 524.00 | 522.000 | 7.000 |
| HS 380 CST | 410.00 | 414.00 | 412.000 | 7.000 |

GIBRALTAR BUNKERS (\$/mt delivered)

| PRODUCT | LOW | HIGH | MEAN | CHANGE |
|------------|--------|--------|---------|--------|
| LSMGO | 552.00 | 556.00 | 554.000 | 10.000 |
| 0.5% VLSFO | 493.00 | 497.00 | 495.000 | 9.000 |
| HS 380 CST | 405.00 | 409.00 | 407.000 | 5.000 |

PIRAEUS BUNKERS (\$/mt delivered)

| PRODUCT | LOW | HIGH | MEAN | CHANGE |
|------------|--------|--------|---------|--------|
| LSMGO | 568.00 | 572.00 | 570.000 | 10.000 |
| 0.5% VLSFO | 545.00 | 549.00 | 547.000 | 6.000 |
| HS 380 CST | 422.00 | 426.00 | 424.000 | 6.000 |

ARA BULK BARGES (FOB)

| PRODUCT (\$/mt) | BASIS DIFF* | LOW | HIGH | MEAN | CHANGE |
|------------------|-------------|--------|--------|-----------|--------|
| DMA | -9.25 | 519.14 | 530.52 | 530.000** | 14.750 |
| 0.5% VLSFO | -69.00 | 468.25 | 472.25 | 470.250 | 10.250 |
| HSFO | -- -- | 368.00 | 372.00 | 370.000 | 8.875 |
| PRODUCT (\$/bbl) | BASIS DIFF* | LOW | HIGH | MEAN | CHANGE |
| DMA | -1.31 | 73.46 | 75.07 | 74.996** | 2.087 |
| 0.5% VLSFO | -10.30 | 69.87 | 70.46 | 70.166 | 1.529 |
| HSFO | -- -- | 57.95 | 58.58 | 58.268 | 1.398 |

* Diff to Front Month ICE LS Gasoil Futures Prices as Displayed on Page 8

** The DMA price shows the average all day differential created by the OPIS450 methodology, and added to the front month LS Gasoil Settle.

MEDITERRANEAN BULK CARGOES (CIF)

| PRODUCT (\$/mt) | LOW | HIGH | MEAN | CHANGE |
|------------------|--------|--------|---------|--------|
| 0.5% VLSFO | 464.50 | 468.50 | 466.500 | 9.000 |
| HSFO | 364.25 | 368.25 | 366.250 | 8.750 |
| PRODUCT (\$/bbl) | LOW | HIGH | MEAN | CHANGE |
| 0.5% VLSFO | 69.31 | 69.90 | 69.606 | 1.343 |
| HSFO | 57.36 | 57.99 | 57.677 | 1.378 |

NWE BULK CARGOES (CIF)

| PRODUCT (\$/mt) | LOW | HIGH | MEAN | CHANGE |
|------------------|--------|--------|---------|--------|
| DMA | 530.00 | 534.00 | 532.000 | 14.750 |
| 0.5% VLSFO | 470.25 | 474.25 | 472.250 | 10.250 |
| HSFO | 370.00 | 374.00 | 372.000 | 8.875 |
| PRODUCT (\$/bbl) | LOW | HIGH | MEAN | CHANGE |
| DMA | 75.00 | 75.56 | 75.279 | 2.087 |
| 0.5% VLSFO | 70.17 | 70.76 | 70.464 | 1.529 |
| HSFO | 58.27 | 58.90 | 58.583 | 1.398 |

AMERICAS

Bunkers tick higher; Los Angeles refineries to see flaring

Bunkers rose across the Americas Wednesday on rising resupply costs and stronger crude values.

In Houston, suppliers reported moderate spot market activity and values were higher mostly on the overall stronger energy complex. VLSFO was indicated by several suppliers at \$485 per metric ton ex-wharf, while marine gasoil was reported from \$545-555/mtw. HS 380 CST indicated at \$375/mtw. VLSFO and MGO were assessed \$5/mt higher to \$481-485/mtw and \$545-555/mtw, respectively. HS 380 CST was marked \$1/mt higher to \$371-375/mtw.

A major supplier in New Orleans reported soft demand and only indications were heard in the spot market. VLSFO was indicated at \$510/mtw and MGO was reported at \$585/mtw. The port was assessed \$10/mt higher for MGO to \$570-580/mtw, and VLSFO was assessed \$9/mt stronger to \$500-504/mtw.

In New York Harbor, values climbed higher on the "market spike this morning," an East Coast broker said. Levels were indicated at \$510/mtw for VLSFO; \$610/mtw for MGO; and \$402/mtw for HS 380 CST. New York MGO was assessed \$16/mt higher to \$575-585/mtw; \$10/mt stronger for VLSFO to \$502-506/mtw; and \$6/mt higher for HS 380 CST to \$394-398/mtw.

West Coast spot market reporting was light, although values that were heard were stronger. Two refineries in the Los Angeles area have planned flaring at their respective plants due to "Start-Up/Shut down," OPIS reported earlier in the day. VLSFO was stronger by \$2/mt in Los Angeles and Seattle to \$500-504/mtw and \$530-534/mtw, respectively. Vancouver VLSFO was assessed \$1/mt higher to \$525-529/mtw. In MGO, Los Angeles added \$10/mt to \$605-615/mtw, while Seattle was marked \$5/mt stronger to \$640-650/mtw.

HOUSTON FUEL BTU INDICATOR

| PRODUCT | API | BTUs/bbl | BTUs/mt | MEAN (\$/bbl) | MEAN (\$/mt) | BTUs/\$ |
|------------|------|-----------|------------|---------------|--------------|---------|
| GC ULSD | 35.5 | 5,838,000 | 43,493,100 | 79.525 | 592.461 | 73,411 |
| 0.5% VLSFO | 19 | 6,116,255 | 40,991,141 | 72.068 | 483.000 | 84,868 |
| HS 380 CST | 11.3 | 6,246,000 | 39,662,100 | 58.740 | 373.000 | 106,333 |

* General Indication of the number of BTUs per US dollar spent for various grades of fuel based on API.

AMERICAS BUNKERS (\$/mt ex-wharf)

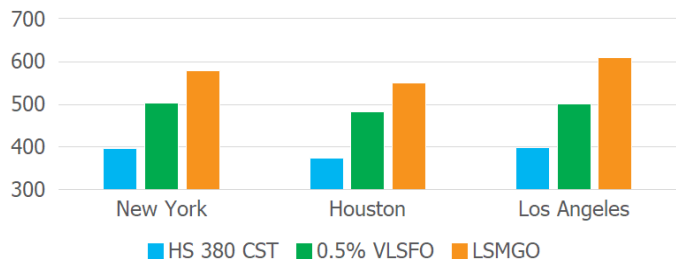
| HOUSTON | | | | | |
|--------------|-------------|--------|--------|---------|--------|
| PRODUCT | BASIS DIFF* | LOW | HIGH | MEAN | CHANGE |
| LSMGO | -- -- | 545.00 | 555.00 | 550.000 | 5.000 |
| 0.5% VLSFO | -123.59 | 481.00 | 485.00 | 483.000 | 5.000 |
| HS 380 CST | -- -- | 371.00 | 375.00 | 373.000 | 1.000 |
| NEW ORLEANS | | | | | |
| PRODUCT | BASIS DIFF* | LOW | HIGH | MEAN | CHANGE |
| LSMGO | -- -- | 570.00 | 580.00 | 575.000 | 10.000 |
| 0.5% VLSFO | -104.59 | 500.00 | 504.00 | 502.000 | 9.000 |
| HS 380 CST | -- -- | 391.00 | 395.00 | 393.000 | 5.000 |
| NEW YORK | | | | | |
| PRODUCT | BASIS DIFF* | LOW | HIGH | MEAN | CHANGE |
| LSMGO | -- -- | 575.00 | 585.00 | 580.000 | 16.000 |
| 0.5% VLSFO | -102.59 | 502.00 | 506.00 | 504.000 | 10.000 |
| HS 380 CST | -- -- | 394.00 | 398.00 | 396.000 | 6.000 |
| PHILADELPHIA | | | | | |
| PRODUCT | BASIS DIFF* | LOW | HIGH | MEAN | CHANGE |
| LSMGO | -- -- | 578.00 | 588.00 | 583.000 | 16.000 |
| 0.5% VLSFO | -100.59 | 504.00 | 508.00 | 506.000 | 9.000 |
| HS 380 CST | -- -- | 418.00 | 422.00 | 420.000 | 7.000 |
| NORFOLK | | | | | |
| PRODUCT | BASIS DIFF* | LOW | HIGH | MEAN | CHANGE |
| LSMGO | -- -- | 585.00 | 595.00 | 590.000 | 8.000 |
| 0.5% VLSFO | -69.59 | 535.00 | 539.00 | 537.000 | 3.000 |
| HS 380 CST | -- -- | 369.00 | 373.00 | 371.000 | 2.000 |
| SAVANNAH | | | | | |
| PRODUCT | BASIS DIFF* | LOW | HIGH | MEAN | CHANGE |
| LSMGO | -- -- | 600.00 | 610.00 | 605.000 | 5.000 |
| 0.5% VLSFO | -39.59 | 565.00 | 569.00 | 567.000 | 2.000 |
| HS 380 CST | -- -- | 482.00 | 486.00 | 484.000 | 1.000 |
| SEATTLE | | | | | |
| PRODUCT | BASIS DIFF* | LOW | HIGH | MEAN | CHANGE |
| LSMGO | -- -- | 640.00 | 650.00 | 645.000 | 5.000 |
| 0.5% VLSFO | -74.59 | 530.00 | 534.00 | 532.000 | 2.000 |
| HS 380 CST | -- -- | 439.00 | 443.00 | 441.000 | 1.000 |

AMERICAS BUNKERS - CONTINUED (\$/mt ex-wharf)

| LOS ANGELES | | | | | |
|-------------|-------------|---------|---------|----------|---------|
| PRODUCT | BASIS DIFF* | LOW | HIGH | MEAN | CHANGE |
| LSMGO | -- -- | 605.00 | 615.00 | 610.000 | 10.000 |
| 0.5% VLSFO | -104.59 | 500.00 | 504.00 | 502.000 | 2.000 |
| HS 380 CST | -- -- | 397.00 | 401.00 | 399.000 | 1.000 |
| PANAMA | | | | | |
| PRODUCT | BASIS DIFF* | LOW | HIGH | MEAN | CHANGE |
| LSMGO | -- -- | 590.00 | 600.00 | 595.000 | 5.000 |
| 0.5% VLSFO | -111.59 | 493.00 | 497.00 | 495.000 | 3.000 |
| HS 380 CST | -- -- | 403.00 | 407.00 | 405.000 | 1.000 |
| VANCOUVER | | | | | |
| PRODUCT | BASIS DIFF* | LOW | HIGH | MEAN | CHANGE |
| LSMGO | -- -- | 625.00 | 635.00 | 630.000 | 3.500 |
| 0.5% VLSFO | -79.59 | 525.00 | 529.00 | 527.000 | 1.000 |
| HS 380 CST | -- -- | 430.00 | 434.00 | 432.000 | 2.000 |
| MANZANILLO | | | | | |
| PRODUCT | BASIS DIFF* | LOW | HIGH | MEAN | CHANGE |
| LSMGO | -- -- | 1340.00 | 1350.00 | 1345.000 | 100.000 |
| 0.5% VLSFO | -- -- | 836.00 | 840.00 | 838.000 | 0.000 |
| HS 380 CST | -- -- | 635.00 | 639.00 | 637.000 | 0.000 |
| VERACRUZ | | | | | |
| PRODUCT | BASIS DIFF* | LOW | HIGH | MEAN | CHANGE |
| LSMGO | -- -- | 1340.00 | 1350.00 | 1345.000 | 100.000 |
| 0.5% VLSFO | -- -- | 836.00 | 840.00 | 838.000 | 0.000 |
| HS 380 CST | -- -- | 635.00 | 639.00 | 637.000 | 0.000 |
| VALPARAISO | | | | | |
| PRODUCT | BASIS DIFF* | LOW | HIGH | MEAN | CHANGE |
| LSMGO | -- -- | 729.00 | 739.00 | 734.000 | 0.000 |
| 0.5% VLSFO | -- -- | 620.00 | 624.00 | 622.000 | -3.000 |
| HS 380 CST | -- -- | 505.00 | 509.00 | 507.000 | 2.000 |

* Diff to Front Month NYMEX ULSD Futures as Displayed on Page 8

BUNKER FUELS vs LSMGO (\$/mt ex-wharf)



AMERICAS BARGE RATES (\$/mt)

| LOCATION | LOW | HIGH |
|---------------|-------|-------|
| Houston | 11.00 | 20.00 |
| New Orleans | 10.50 | 19.00 |
| New York | 9.10 | 14.80 |
| Philadelphia | 7.27 | 11.83 |
| Norfolk, VA | 9.10 | 14.80 |
| Savannah | 10.25 | 21.00 |
| Los Angeles | 13.00 | 20.00 |
| Seattle | 12.50 | 18.50 |
| Panama | 10.25 | 18.75 |
| Vancouver, BC | 11.25 | 18.74 |
| Manzanillo | 12.45 | 18.50 |
| Veracruz | 12.45 | 18.50 |
| Valparaiso | 12.25 | 19.25 |

* Typical Barge Rates for Parcels of 600-1600mt

OPIS Benchmark Rack ULSD

OPIS GROSS TERMINAL ULTRA LOW SULFUR DISTILLATE PRICES

| LOCATION | RACK LOW (\$/gal) | RACK LOW (\$/mt) | DIFF TO NYMEX* (\$/gal) | DIFF TO NYMEX* (\$/mt) | RACK AVG (\$/gal) | RACK AVG (\$/mt) | DIFF TO NYMEX* (\$/gal) | DIFF TO NYMEX* (\$/mt) |
|----------------|-------------------|------------------|-------------------------|------------------------|-------------------|------------------|-------------------------|------------------------|
| Houston** | 1.9017 | 595.042 | -0.0369 | -11.546 | 2.0186 | 631.620 | 0.0800 | 25.032 |
| New York | 1.9810 | 619.855 | 0.0424 | 13.267 | 2.0231 | 633.028 | 0.0845 | 26.440 |
| Philadelphia | 1.9357 | 605.681 | -0.0029 | -0.907 | 1.9634 | 614.348 | 0.0248 | 7.760 |
| Norfolk | 1.9130 | 598.578 | -0.0256 | -8.010 | 1.9446 | 608.465 | 0.0060 | 1.877 |
| Savannah | 1.9980 | 625.174 | 0.0594 | 18.586 | 2.0242 | 633.372 | 0.0856 | 26.784 |
| New Orleans | 1.8835 | 589.347 | -0.0551 | -17.241 | 1.9243 | 602.113 | -0.0143 | -4.474 |
| Los Angeles*** | 1.9121 | 598.296 | -0.0265 | -8.292 | 1.9799 | 619.511 | 0.0413 | 12.923 |
| Seattle | 1.9850 | 621.107 | 0.0464 | 14.519 | 2.0221 | 632.715 | 0.0835 | 26.127 |
| Detroit | 1.9435 | 608.121 | 0.0049 | 1.533 | 2.0084 | 628.428 | 0.0698 | 21.840 |
| Vancouver | 2.5240 | 789.760 | 0.5854 | 183.172 | 2.5264 | 790.511 | 0.5878 | 183.923 |

* Diff to Front Month Nymex ULSD Settle

** ULSD LED

*** CARB ULSD (adjusted to exclude CAR)

HOUSTON BULK FUEL (FOB)

| PRODUCT (\$/bbl) | DIFF* | LOW | HIGH | MEAN | CHANGE |
|------------------|---------|--------|--------|---------|--------|
| 0.5% VLSFO | -10.51 | 70.76 | 71.06 | 70.912 | 0.448 |
| 3% HSFO | -- -- | 57.40 | 57.50 | 57.450 | 0.650 |
| PRODUCT (\$/mt) | DIFF* | LOW | HIGH | MEAN | CHANGE |
| 0.5% VLSFO | -131.34 | 474.25 | 476.25 | 475.250 | 3.000 |
| 3% HSFO | -- -- | 364.49 | 365.12 | 364.808 | 4.128 |

BASIS NEW YORK HARBOR BULK FUEL (DELIVERED)

| PRODUCT (\$/bbl) | DIFF* | LOW | HIGH | MEAN | CHANGE |
|------------------|---------|--------|--------|---------|--------|
| 0.3% ULSFO | -- -- | 79.06 | 79.16 | 79.110 | 0.490 |
| 0.5% VLSFO | -8.64 | 72.63 | 72.93 | 72.777 | 0.448 |
| 1% SFO | -- -- | 65.00 | 65.50 | 65.250 | 0.600 |
| 3% HSFO | -- -- | 59.25 | 59.75 | 59.500 | 0.650 |
| PRODUCT (\$/mt) | DIFF* | LOW | HIGH | MEAN | CHANGE |
| 0.3% ULSFO | -- -- | 540.77 | 541.45 | 541.112 | 3.352 |
| 0.5% VLSFO | -118.84 | 486.75 | 488.75 | 487.750 | 3.000 |
| 1% SFO | -- -- | 412.75 | 415.92 | 414.338 | 3.810 |
| 3% HSFO | -- -- | 376.24 | 379.41 | 377.825 | 4.128 |

* Diff to Front Month NYMEX ULSD Futures as Displayed on Page 8

U.S. GULF COAST FOB LNG (\$/MMBtu)

| | 1-15 DAY 04/29-05/13 | 16-30 DAY 05/14-05/28 | 31-45 DAY 05/29-06/12 | 46-60 DAY 06/13-06/27 |
|--------------|-------------------------|--------------------------|--------------------------|--------------------------|
| Differential | 4.086 | 4.107 | 4.056 | 4.056 |
| NG Price | 2.936 | 2.960 | 3.011 | 3.011 |
| Assessment | 7.022 | 7.067 | 7.067 | 7.067 |

U.S. GULF COAST LIGHT CYCLE OIL (\$/gal)

| PRODUCT | LOW | HIGH | MEAN | CHANGE |
|-----------------|------|------|-------|--------|
| LT Cycle Oil | 1.75 | 1.76 | 1.757 | 0.068 |
| LS LT Cycle Oil | 1.73 | 1.74 | 1.735 | 0.068 |

Swaps

SINGAPORE (\$/mt)

| MONTH | HSFO | VLSFO | SPREAD | SPREAD CHANGE |
|-------|--------|--------|--------|---------------|
| May | 374.25 | 485.75 | 111.50 | -2.30 |
| Jun | 373.75 | 484.85 | 111.10 | -2.40 |
| Jul | 372.25 | 484.00 | 111.75 | -2.50 |

* Values at 16:30 Singapore time

EAST/WEST (\$/mt)

| MONTH | HSFO | CHANGE | VLSFO | CHANGE |
|-------|-------|--------|-------|--------|
| May | 11.00 | 0.00 | 22.83 | 0.25 |
| Jun | 11.25 | 0.00 | 22.33 | 0.00 |
| Jul | 12.25 | 0.25 | 22.08 | 0.00 |

* Values at 16:30 UK time

ARA (\$/mt)

| MONTH | HSFO | VLSFO | SPREAD | SPREAD CHANGE |
|-------|--------|--------|--------|---------------|
| May | 371.02 | 471.67 | 100.65 | 0.52 |
| Jun | 370.27 | 471.67 | 101.40 | 1.02 |
| Jul | 367.77 | 471.67 | 103.90 | 1.52 |

* Values at 16:30 UK time

HOUSTON

| MONTH (\$/bbl) | HSFO | VLSFO | SPREAD | SPREAD CHANGE |
|----------------|-------|-------|--------|---------------|
| May | 57.40 | 75.00 | 17.60 | -0.15 |
| Jun | 57.30 | 74.85 | 17.55 | -0.15 |
| Jul | 57.00 | 74.85 | 17.85 | -0.35 |

| MONTH (\$/mt) | HSFO | VLSFO | SPREAD | SPREAD CHANGE |
|---------------|--------|--------|--------|---------------|
| May | 364.49 | 502.65 | 138.16 | -0.78 |
| Jun | 363.86 | 501.65 | 137.79 | -0.78 |
| Jul | 361.95 | 501.65 | 139.70 | -2.13 |

* Values at 16:30 CST time

Crack Spreads

ASIA BULK RESIDUAL FUEL OIL vs CRUDE CRACK SPREAD (\$/bbl)

| LOCATION | VLSFO | CHANGE | HSFO | CHANGE |
|-----------------|-------|--------|--------|--------|
| Singapore/Brent | 6.299 | -0.287 | -7.260 | 0.028 |

* Brent at 16:30 Singapore time

ARA BULK RESIDUAL FUEL OIL vs CRUDE CRACK SPREAD (\$/bbl)

| LOCATION | VLSFO | CHANGE | HSFO | CHANGE |
|-----------------|-------|--------|--------|--------|
| Rotterdam/Brent | 2.576 | -0.181 | -9.322 | -0.312 |

* Brent at 16:30 UK time

HOUSTON BULK RESIDUAL FUEL OIL vs CRUDE CRACK SPREAD (\$/bbl)

| LOCATION | VLSFO | CHANGE | HSFO | CHANGE |
|---------------|-------|--------|--------|--------|
| Houston/Brent | 3.642 | -0.402 | -9.820 | -0.200 |

* Brent at Settle (19:30 UK time)

GULF COAST LSVGO BARGE vs BUNKER SPREAD (\$/bbl)

| LSVGO | 0.5% VLSFO BULK | 0.5% VLSFO BUNKER | LSVGO vs VLSFO BULK | LSVGO vs VLSFO BUNKER |
|-------|-----------------|-------------------|---------------------|-----------------------|
| 71.36 | 70.91 | 72.07 | 0.45 | -0.71 |

OPIS Spot

OPIS SPOT ULSD

| LOCATION | MEAN (\$/gal) | MEAN (\$/mt) | DIFF TO NYMEX (\$/gal) | DIFF TO NYMEX (\$/mt) |
|-----------------------|---------------|--------------|------------------------|-----------------------|
| Gulf Coast | 1.8935 | 592.461 | -0.0452 | -14.127 |
| New York Harbor Barge | 1.9376 | 606.275 | -0.0010 | -0.313 |
| Los Angeles* | 1.9647 | 614.755 | 0.0261 | 8.167 |
| Pacific Northwest | 2.0136 | 630.055 | 0.0750 | 23.468 |

* ULS No.2

Energy Futures

ICE BRENT 16:30 SINGAPORE MARKER (\$/bbl)

| MONTH | PRICE | CHANGE |
|-------|-------|--------|
| Jun | 66.29 | 0.09 |
| Jul | 65.76 | 0.14 |
| Aug | 65.37 | 0.16 |

ICE BRENT 16:30 UK MARKER (\$/bbl)

| MONTH | PRICE | CHANGE |
|-------|-------|--------|
| Jun | 67.59 | 1.71 |
| Jul | 67.09 | 1.71 |
| Aug | 66.65 | 1.65 |

ICE BRENT SETTLE (\$/bbl)

| MONTH | PRICE | CHANGE |
|-------|-------|--------|
| Jun | 67.27 | 0.85 |
| Jul | 66.78 | 0.91 |
| Aug | 66.38 | 0.91 |

ICE LS GASOIL SETTLE (\$/mt)

| MONTH | PRICE | CHANGE |
|-------|--------|--------|
| May | 539.25 | 13.75 |
| Jun | 541.00 | 13.50 |
| Jul | 542.50 | 13.50 |

NATURAL GAS (\$/mmBtu)

| MONTH | PRICE | CHANGE |
|-------|-------|--------|
| May | 2.925 | 0.052 |
| Jun | 2.960 | 0.018 |
| Jul | 3.011 | 0.016 |

NYMEX WTI CRUDE OIL (\$/bbl)

| MONTH | PRICE | CHANGE |
|-------|---------|--------|
| Jun | 63.8600 | 0.9200 |
| Jul | 63.7500 | 0.9500 |
| Aug | 63.4400 | 0.9600 |

NYMEX ULSD (cts/gal)

| MONTH | PRICE | CHANGE |
|-------|----------|--------|
| May | 193.8600 | 3.2900 |
| Jun | 193.9700 | 3.2600 |
| Jul | 194.1200 | 3.2200 |

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For complete methodology, visit www.opisnet.com/about/methodology

Bulk FO Trading Remains Quiet

In bulk fuel oil markets, Gulf Coast trading remained quiet with no deals heard done for either HSFO or VLSFO. Values moved in sympathy with swaps, which were up across the board. VLSFO was up \$3/mt to \$487.75/mt. Using a 19 API, the value equates to June ICE Brent plus \$3.64/bbl, or \$70.91/bbl outright. HSFO gained 65cts rising to \$57.45/bbl.

The East Coast market was also quiet with little heard done for the region. Values moved higher with swaps. VLSFO was assessed \$3/mt higher to \$387.75/mt, which using a 19 API equates to June ICE Brent plus \$5.51/bbl, or \$72.78/bbl outright. 1%S rose 60cts to \$65.25/bbl and the 3% product added 65cts going to \$59.50/bbl.

Cargo Update

EUROPE

- The *Jupiter Sun* was due to load 100,000 mt of fuel oil from St Petersburg, Russia, April 29-30, on subs to bp for discharge in the U.S. Gulf
- The *Suez George* is set to load 130,000 mt of fuel oil by ship-to-ship transfer off Malta on May 1, bound for Singapore
- Mercuria chartered the *Houston Star* to load 100,000 mt of fuel oil on May 1, loading in the Baltics for shipment to a U.S. Gulf port

AMERICAS

- The *Dong-A Maia* tanker was headed to the port of Freeport in the Bahamas with a 47,500-mt fuel oil cargo from Taman, Vitol reported charterer

US Gulf Coast Residual Fuel Stocks Rise With Crude Inputs, Production

U.S. Gulf Coast (PADD 3) residual fuel stocks increased last week with higher crude inputs and production, government statistics show, but nationwide levels showed little direction.

The U.S. Energy Information Administration data for the week ending April 23 showed nationwide stocks of residual fuel to be essentially flat at 32.3 million bbl, while in PADD 3 stocks rose 500,000 bbl, to 18.8 million bbl, and PADD 1 was down 200,000 bbl, to 7 million bbl.

Crude inputs expressed as a percentage of refinery capacity were higher, up 0.4% nationwide to 84.4%, while PADD 3 was higher by 1.2% to 89.5%, and PADD 1 shot up 7.7% to 76.8%.

Last year in PADD 3, well into the effects of the pandemic, crude runs were only 74.7% of capacity, while two years ago they were 91.9%.

Residual fuel production was mostly higher, up 49,000 b/d in PADD 3 to 72,000 b/d, up 33,000 b/d nationwide to 225,000 b/d, but down 3,000 b/d in PADD 1 to 36,000 b/d.

Imports were up in PADD 3 by 72,000 b/d, to 128,000 b/d, but down nationwide by 18,000 b/d, to 134,000 b/d; PADD 1 fell 88,000 b/d, to zero.

Exports are not broken out by PADD region in the weekly report; they fell 49,000 b/d, to 84,000 b/d nationwide.

Demand is also not broken out by PADD (Petroleum Administration for Defense Districts), but nationwide it was up 211,000 b/d, to 281,000 b/d. Last year, demand was 110,000 b/d, but two years ago it was 206,000 b/d, suggesting current demand is headed back to pre-COVID-19 pandemic levels. --Reporting by Robert Sharp, robert.sharp@ihsmarkit.com; Edited by Tom Sosnowski, thomas.sosnowski@ihsmarkit.com

Two LA-Area Refineries Expecting Planned Flaring Over Next Few Days

A pair of companies notified local regulators of planned multiday flaring at their respective Los Angeles-area refineries beginning Wednesday.

PBF is anticipating flaring at its 166,200-b/d Torrance, California, refinery through May 3, due to a "Start-up/Shut down," according to a filing with the South Coast Air Quality Management District (SCAQMD).

The refinery previously reported unplanned flaring to SCAQMD due to a "mechanical/electrical malfunction" last week and flaring due to planned maintenance at the start of March.

Separately, the Carson portion of Marathon Petroleum's 382,000-b/d Los Angeles refinery is expecting flaring through May 1, also due to "Start-Up/Shut down," a filing with SCAQMD noted. As previously reported by OPIS, the company notified the SCAQMD of unplanned flaring for an unspecified cause at the Carson portion of the L.A. refinery on April 15 and at the Wilmington portion of the refinery on April 19.

Whether or not imminent planned flaring at the Marathon and PBF refineries was connected to unplanned flaring earlier this month was not immediately clear, as spokespersons for the companies were not immediately available for comment Wednesday.

Meanwhile, in the Pacific Northwest, earlier this month Shell initiated planned maintenance at its 145,000-b/d Anacortes, Washington, refinery, according to a filing with Northwest Clean Air Agency, for expected flaring associated with the work. The refiner filed a notification with the same agency on April 27 that "there may be flaring per flare management plan [with the] startup of process units following maintenance." --Reporting by Kylee West, kwest@opisnet.com, Max Tang, jtang@opisnet.com; Editing by Michael Kelly, michael.kelly3@ihsmarkit.com