

## **Earlier availability of Argus US crude assessments effective 12 July 2006**

In response to client requests to make the Argus US crude data available earlier in the day, the following additional data modules will be published on Argus FTP sites. The site details, module name and other details are described below for both legacy g-code data series and the new PA-code CSV files.

### **Legacy Argus g-code data series**

Old style Argus data files containing legacy Argus "g-codes" data as published on [ftp.petroleumargus.com](ftp://petroleumargus.com), [ftp2.petroleumargus.com](ftp://2.petroleumargus.com) and [ftp3.petroleumargus.com](ftp://3.petroleumargus.com) in the /DATA/DHC folders with the following names:-

yyyymmdddhc.txt where yyyy is year value, mm is month value and dd is date value  
latestdhc.txt a single file over written

These files will now be posted at 5pm Houston time (11pm London time) and then overwritten at approximately 7.15pm Houston time (01.15am London time) with the current complete data set. Clients not requiring this data early can continue to leave existing download proceeds as they are currently set with no changes. Clients requiring an earlier feed of data should run an additional download shortly after 5pm Houston time to process the earlier data and then run the existing download to take the complete data set, note the later file will contain the full data from the earlier file plus all the remaining data expected for that day.

The early (5pm) data set will contain the following data series, the later data series will remain exactly as it currently is (and therefore its not detailed in this announcement).

| G-code      | Description                     | Price Type       |
|-------------|---------------------------------|------------------|
| GC001\$1\$L | ARGUS , ANS , USWC              | Bid              |
| GC001\$1\$H | ARGUS , ANS , USWC              | Ask              |
| GCDHC232\$  | ARGUS , ANS USWC                | Differential Bid |
| GCDHC233\$  | ARGUS , ANS USWC                | Differential Ask |
| GCBASLTHL   | ARGUS , BASRAH LIGHT            | Bid              |
| GCBASLTHH   | ARGUS , BASRAH LIGHT            | Ask              |
| GCDHC220\$  | ARGUS , BASRAH LIGHT            | Differential Bid |
| GCDHC221\$  | ARGUS , BASRAH LIGHT            | Differential Ask |
| GC012GA\$L  | ARGUS , BRENT USGC              | Bid              |
| GC012GA\$H  | ARGUS , BRENT USGC              | Ask              |
| GCDHC216\$  | ARGUS , BRENT USGC              | Differential Bid |
| GCDHC217\$  | ARGUS , BRENT USGC              | Differential Ask |
| GC0500THL   | ARGUS , CANADON SECO            | Bid              |
| GC0500THH   | ARGUS , CANADON SECO            | Ask              |
| GCDHC254\$  | ARGUS , CANADON SECO            | Differential Bid |
| GCDHC255\$  | ARGUS , CANADON SECO            | Differential Ask |
| GC083HA\$L  | ARGUS , CANO LIMON              | Bid              |
| GC083HA\$H  | ARGUS , CANO LIMON              | Ask              |
| GCDHC250\$  | ARGUS , CANO LIMON              | Differential Bid |
| GCDHC251\$  | ARGUS , CANO LIMON              | Differential Ask |
| GC077HA\$L  | ARGUS , CUSIANA                 | Bid              |
| GC077HA\$H  | ARGUS , CUSIANA                 | Ask              |
| GCDHC248\$  | ARGUS , CUSIANA                 | Differential Bid |
| GCDHC249\$  | ARGUS , CUSIANA                 | Differential Ask |
| GC0590THL   | ARGUS , ESCALANTE               | Bid              |
| GC0590THH   | ARGUS , ESCALANTE               | Ask              |
| GCDHC258\$  | ARGUS , ESCALANTE DIFFERENTIALS | Differential Bid |
| GCDHC259\$  | ARGUS , ESCALANTE DIFFERENTIALS | Differential Ask |
| GC220H1\$L  | ARGUS , EUGENE ISLAND           | Bid              |
| GC220H1\$H  | ARGUS , EUGENE ISLAND           | Ask              |
| GCDHC210\$  | ARGUS , EUGENE ISLAND           | Differential Bid |
| GCDHC211\$  | ARGUS , EUGENE ISLAND           | Differential Ask |
| GC019E1\$L  | ARGUS , HLS                     | Bid              |
| GC019E1\$H  | ARGUS , HLS                     | Ask              |
| GCDHC208\$  | ARGUS , HLS                     | Differential Bid |
| GCDHC209\$  | ARGUS , HLS                     | Differential Ask |

| G-code      | Description                                 | Price Type       |
|-------------|---|------------------|
| GC071EC\$L  | ARGUS, ORIENTE                              | Bid              |
| GC071EC\$H  | ARGUS, ORIENTE                              | Ask              |
| GCDHC342\$  | ARGUS, ORIENTE                              | Differential Bid |
| GCDHC343\$  | ARGUS, ORIENTE                              | Differential Ask |
| GCDHC118L   | ARGUS, ORIENTE USWC                         | Bid              |
| GCDHC118H   | ARGUS, ORIENTE USWC                         | Ask              |
| GCDHC234\$  | ARGUS, ORIENTE USWC                         | Differential Bid |
| GCDHC235\$  | ARGUS, ORIENTE USWC                         | Differential Ask |
| GCPPOSE1\$L | ARGUS, POSEIDON                             | Bid              |
| GCPPOSE1\$H | ARGUS, POSEIDON                             | Ask              |
| GCDHC214\$  | ARGUS, POSEIDON                             | Differential Bid |
| GCDHC215\$  | ARGUS, POSEIDON                             | Differential Ask |
| GC045H1PL   | ARGUS, WTI POSTINGS PLUS                    | Differential Bid |
| GC045H1PH   | ARGUS, WTI POSTINGS PLUS                    | Differential Ask |
| GCDHC117L   | ARGUS, QUA IBOE USGC                        | Bid              |
| GCDHC117H   | ARGUS, QUA IBOE USGC                        | Ask              |
| GCDHC218\$  | ARGUS, QUA IBOE USGC                        | Differential Bid |
| GCDHC219\$  | ARGUS, QUA IBOE USGC                        | Differential Ask |
| GC0679THL   | ARGUS, VASCONIA                             | Bid              |
| GC0679THH   | ARGUS, VASCONIA                             | Ask              |
| GCDHC252\$  | ARGUS, VASCONIA                             | Differential Bid |
| GCDHC253\$  | ARGUS, VASCONIA                             | Differential Ask |
| GC045M1\$L  | ARGUS, WTI MIDLAND, MONTH 1                 | Bid              |
| GC045M1\$H  | ARGUS, WTI MIDLAND, MONTH 1                 | Ask              |
| GCDHC226\$  | ARGUS, WTI MIDLAND, MONTH 1                 | Differential Bid |
| GCDHC227\$  | ARGUS, WTI MIDLAND, MONTH 1                 | Differential Ask |
| GCDHC348L   | ARGUS, BONITO SOUR                          | Bid              |
| GCDHC348H   | ARGUS, BONITO SOUR                          | Ask              |
| GCDH503\$L  | ARGUS, BONITO SOUR                          | Differential Bid |
| GCDH503\$H  | ARGUS, BONITO SOUR                          | Differential Ask |
| GCDHC351L   | ARGUS, NAPO                                 | Bid              |
| GCDHC351H   | ARGUS, NAPO                                 | Ask              |
| GCDHC35L\$  | ARGUS, NAPO                                 | Differential Bid |
| GCDHC35H\$  | ARGUS, NAPO                                 | Differential Ask |
| GCDHC508L   | ARGUS, HIBERNIA                             | Bid              |
| GCDHC508H   | ARGUS, HIBERNIA                             | Ask              |
| GCDH508\$L  | ARGUS, HIBERNIA                             | Differential Bid |
| GCDH508\$H  | ARGUS, HIBERNIA                             | Differential Ask |
| GCDHC236\$  | ARGUS, LINE 63 P-PLUS                       | Differential Bid |
| GCDHC237\$  | ARGUS, LINE 63 P-PLUS                       | Differential Ask |
| GCDHC238\$  | ARGUS, MIDWAY SUNSET (KERN RIVER) P-PLUS    | Differential Bid |
| GCDHC239\$  | ARGUS, MIDWAY SUNSET (KERN RIVER) P-PLUS    | Differential Ask |
| GCDH527\$L  | ARGUS, SAN JOAQUIN LIGHT BLEND P-PLUS       | Differential Bid |
| GCDH527\$H  | ARGUS, SAN JOAQUIN LIGHT BLEND P-PLUS       | Differential Ask |
| GCDHC529L   | ARGUS, TERRA NOVA                           | Bid              |
| GCDHC529H   | ARGUS, TERRA NOVA                           | Ask              |
| GCDH529\$L  | ARGUS, TERRA NOVA                           | Differential Bid |
| GCDH529\$H  | ARGUS, TERRA NOVA                           | Differential Ask |
| GCDH530\$L  | ARGUS, WTI DIFF TO CALENDAR MONTH AVE NYMEX | Differential Bid |
| GCDH530\$H  | ARGUS, WTI DIFF TO CALENDAR MONTH AVE NYMEX | Differential Ask |
| GC045Q1\$\$ | NYMEX, WTI, MONTH 1                         | Settle           |
| GCDHC030\$  | ARGUS, NYMEX WTI MONTH 1, OPEN              | Open             |
| GCDHC040\$  | ARGUS, NYMEX WTI MONTH 1                    | Low              |
| GCDHC035\$  | ARGUS, NYMEX WTI MONTH 1                    | High             |
| GCDHC046\$  | ARGUS, NYMEX WTI MONTH 2, SETTLEMENT        | Settle           |
| GCDHC031\$  | ARGUS, NYMEX WTI MONTH 2, OPEN              | Open             |

| G-code     | Description   | Price Type               |
|------------|---|--------------------------|
| GCDHC041\$ | ARGUS, NYMEX WTI MONTH 2  | Low                      |
| GCDHC036\$ | ARGUS, NYMEX WTI MONTH 2  | High                     |
| GCDHC047\$ | ARGUS, NYMEX WTI MONTH 3, SETTLEMENT                            | Settle                   |
| GCDHC032\$ | ARGUS, NYMEX WTI MONTH 3, OPEN                                  | Open                     |
| GCDHC042\$ | ARGUS, NYMEX WTI MONTH 3  | Low                      |
| GCDHC037\$ | ARGUS, NYMEX WTI MONTH 3  | High                     |
| GC045P1\$L | ARGUS, WTI MONTH 1, 14:15HRS                                    | Bid                      |
| GC045P1\$H | ARGUS, WTI MONTH 1, 14:15HRS                                    | Ask                      |
| GC045P2\$L | ARGUS, WTI MONTH 2, 14:15HRS                                    | Bid                      |
| GC045P2\$H | ARGUS, WTI MONTH 2, 14:15HRS                                    | Ask                      |
| GC045P3\$L | ARGUS, WTI MONTH 3, 14:15HRS                                    | Bid                      |
| GC045P3\$H | ARGUS, WTI MONTH 3, 14:15HRS                                    | Ask                      |
| GC045P4\$L | ARGUS, WTI MONTH 4, 14:15HRS                                    | Bid                      |
| GC045P4\$H | ARGUS, WTI MONTH 4, 14:15HRS                                    | Ask                      |
| GCMARS1\$L | ARGUS, MARS, MONTH 1  | Bid                      |
| GCMARS1\$H | ARGUS, MARS, MONTH 1  | Ask                      |
| GCDHC212\$ | ARGUS, MARS, MONTH 1  | Differential Bid         |
| GCDHC213\$ | ARGUS, MARS, MONTH 1  | Differential Ask         |
| GCDHC520L  | ARGUS, MARS, MONTH 2  | Bid                      |
| GCDHC520H  | ARGUS, MARS, MONTH 2  | Ask                      |
| GCDH520\$L | ARGUS, MARS, MONTH 2  | Differential Bid         |
| GCDH520\$H | ARGUS, MARS, MONTH 2  | Differential Ask         |
| GC046C1\$L | ARGUS, WTS, MONTH 1   | Bid                      |
| GC046C1\$H | ARGUS, WTS, MONTH 1   | Ask                      |
| GCDHC228\$ | ARGUS, WTS, MONTH 1   | Differential Bid         |
| GCDHC229\$ | ARGUS, WTS, MONTH 1   | Differential Ask         |
| GCDHC533L  | ARGUS, WTS, MONTH 2   | Bid                      |
| GCDHC533H  | ARGUS, WTS, MONTH 2   | Ask                      |
| GCDH533\$L | ARGUS, WTS, MONTH 2   | Differential Bid         |
| GCDH533\$H | ARGUS, WTS, MONTH 2   | Differential Ask         |
| GC028J1\$L | ARGUS, LLS, MONTH 1   | Bid                      |
| GC028J1\$H | ARGUS, LLS, MONTH 1   | Ask                      |
| GCDHC206\$ | ARGUS, LLS, MONTH 1   | Differential Bid         |
| GCDHC207\$ | ARGUS, LLS, MONTH 1   | Differential Ask         |
| GCDHC515L  | ARGUS, LLS, MONTH 2   | Bid                      |
| GCDHC515H  | ARGUS, LLS, MONTH 2   | Ask                      |
| GCDH515\$L | ARGUS, LLS, MONTH 2   | Differential Bid         |
| GCDH515\$H | ARGUS, LLS, MONTH 2   | Differential Ask         |
| GCDHC540A  | ARGUS, EUGENE ISLAND, WEIGHTED AVERAGE                          | Average                  |
| GCDHC540\$ | ARGUS, EUGENE ISLAND, WEIGHTED AVERAGE                          | Differential<br>Midpoint |
| GCDHC539A  | ARGUS, HLS, WEIGHTED AVERAGE                                    | Average                  |
| GCDHC539\$ | ARGUS, HLS, WEIGHTED AVERAGE                                    | Differential<br>Midpoint |
| GCDHC544A  | ARGUS, POSEIDON, WEIGHTED AVERAGE                               | Average                  |
| GCDHC544\$ | ARGUS, POSEIDON, WEIGHTED AVERAGE                               | Differential<br>Midpoint |
| GCDHC536A  | ARGUS, WTI MIDLAND, MONTH 1, WEIGHTED AVERAGE                   | Average                  |
| GCDHC536\$ | ARGUS, WTI MIDLAND, MONTH 1, WEIGHTED AVERAGE                   | Differential<br>Midpoint |
| GCDHC541A  | ARGUS, BONITO SOUR, WEIGHTED AVERAGE                            | Average                  |
| GCDHC541\$ | ARGUS, BONITO SOUR, WEIGHTED AVERAGE                            | Differential<br>Midpoint |
| GCDHC535\$ | ARGUS, WTI DIFF TO CMA NYMEX, WEIGHTED AVERAGE,<br>DIFFERENTIAL | Differential<br>Midpoint |
| GCDHC534\$ | ARGUS, WTI POSTINGS PLUS, WEIGHTED AVERAGE                      | Differential<br>Midpoint |
| GCDHC542A  | ARGUS, MARS, MONTH 1, WEIGHTED AVERAGE                          | Average                  |

| G-code     | Description  | Price Type               |
|------------|--|--------------------------|
| GCDHC542\$ | ARGUS, MARS, MONTH 1, WEIGHTED AVERAGE   | Differential<br>Midpoint |
| GCDHC543A  | ARGUS, MARS, MONTH 2, WEIGHTED AVERAGE   | Average                  |
| GCDHC543\$ | ARGUS, MARS, MONTH 2, WEIGHTED AVERAGE   | Differential<br>Midpoint |
| GCDHC545A  | ARGUS, WTS, MONTH 1, WEIGHTED AVERAGE  | Average                  |
| GCDHC545\$ | ARGUS, WTS, MONTH 1, WEIGHTED AVERAGE  | Differential<br>Midpoint |
| GCDHC546A  | ARGUS, WTS, MONTH 2, WEIGHTED AVERAGE  | Average                  |
| GCDHC546\$ | ARGUS, WTS, MONTH 2, WEIGHTED AVERAGE  | Differential<br>Midpoint |
| GCDHC537A  | ARGUS, LLS, MONTH 1, WEIGHTED AVERAGE  | Average                  |
| GCDHC537\$ | ARGUS, LLS, MONTH 1, WEIGHTED AVERAGE  | Differential<br>Midpoint |
| GCDHC538A  | ARGUS, LLS, MONTH 2, WEIGHTED AVERAGE  | Average                  |
| GCDHC538\$ | ARGUS, LLS, MONTH 2, WEIGHTED AVERAGE  | Differential<br>Midpoint |
| GCUSWTI1M  | ARGUS, WTI FORMULA BASIS, MONTH 1  | Midpoint                 |
| GCUSWTI2M  | ARGUS, WTI FORMULA BASIS, MONTH 2  | Midpoint                 |
| GCDHC551L  | ARGUS, SOUTHERN GREEN CANYON, DIFFERENTIAL TO WTI                                    | Bid                      |
| GCDHC551H  | ARGUS, SOUTHERN GREEN CANYON, DIFFERENTIAL TO WTI                                    | Ask                      |
| GCDH551\$L | ARGUS, SOUTHERN GREEN CANYON, DIFFERENTIAL TO WTI                                    | Differential Bid         |
| GCDH551\$H | ARGUS, SOUTHERN GREEN CANYON, DIFFERENTIAL TO WTI                                    | Differential Ask         |
| GCDHC551A  | ARGUS, SOUTHERN GREEN CANYON, DIFFERENTIAL TO WTI,<br>WEIGHTED AVERAGE               | Average                  |
| GCDHC551\$ | ARGUS, SOUTHERN GREEN CANYON, DIFFERENTIAL WEIGHTED AVERAGE                          | Differential<br>Midpoint |
| GCDH540MA  | ARGUS, EUGENE ISLAND, MONTH TO DATE WEIGHTED AVERAGE                                 | Average                  |
| GCDH539MA  | ARGUS, HLS, MONTH TO DATE WEIGHTED AVERAGE   | Average                  |
| GCDH544MA  | ARGUS, POSEIDON, MONTH TO DATE WEIGHTED AVERAGE                                      | Average                  |
| GCDH536MA  | ARGUS, WTI MIDLAND, MONTH 1, MONTH TO DATE WEIGHTED<br>AVERAGE                       | Average                  |
| GCDH541MA  | ARGUS, BONITO SOUR, MONTH TO DATE WEIGHTED AVERAGE                                   | Average                  |
| GCDH534MA  | ARGUS, WTI POSTINGS PLUS, MONTH TO DATE WEIGHTED AVERAGE                             | Average                  |
| GCDH542MA  | ARGUS, MARS, MONTH 1, MONTH TO DATE WEIGHTED AVERAGE                                 | Average                  |
| GCDH543MA  | ARGUS, MARS, MONTH 2, MONTH TO DATE WEIGHTED AVERAGE                                 | Average                  |
| GCDH545MA  | ARGUS, WTS, MONTH 1, MONTH TO DATE WEIGHTED AVERAGE                                  | Average                  |
| GCDH546MA  | ARGUS, WTS, MONTH 2, MONTH TO DATE WEIGHTED AVERAGE                                  | Average                  |
| GCDH537MA  | ARGUS, LLS, MONTH 1, MONTH TO DATE WEIGHTED AVERAGE                                  | Average                  |
| GCDH538MA  | ARGUS, LLS, MONTH 2, MONTH TO DATE WEIGHTED AVERAGE                                  | Average                  |
| GCDH551MA  | ARGUS, SOUTHERN GREEN CANYON, DIFFERENTIAL TO WTI, MONTH<br>TO DATE WEIGHTED AVERAGE | Average                  |
| GCDH535MA  | ARGUS, WTI DIFF TO CMA NYMEX, MONTH TO DATE WEIGHTED<br>AVERAGE                      | Average                  |

### New style Argus PA-code data in CSV format

This data is available on the <ftp://argusmediagroup.com> site in the /DCRDEUS folder. The process is similar to above, an earlier data set will be created at 5pm Houston time (11pm London time) and will NOT be over written by the later file, a second file will be written.

The file names are:-

Early file

yyyymmdddhca.csv where yyyy is year value, mm is month value and dd is date value for the 5pm data file  
latestdhca.txt a single file over written each day

Late file

yyyymmdddhc.csv where yyyy is year value, mm is month value and dd is date value for the 7.15pm data file  
latestdhc.txt a single file over written each day

Clients not requiring this data early can continue to leave existing download proceeds as they are currently set with no changes. Clients requiring an earlier feed of data should run an additional download shortly after 5pm Houston time to process the new earlier data (called dhca) and then run the existing download to take the complete data set, note the later file will contain the full data from the earlier file plus all the remaining data expected for that day.

The early (5pm) data set will contain the following data series, the later data series will remain exactly as it currently is (and therefore its not detailed in this announcement).

| PA-code   | Time Stamp | Price Type | Continuous Forward | Description             |
|-----------|------------|------------|--------------------|-------------------------|
| PA0000008 | 3          | 1          | 1                  | ANS USWC month          |
| PA0000008 | 3          | 2          | 1                  | ANS USWC month          |
| PA0000008 | 3          | 6          | 1                  | ANS USWC month          |
| PA0000008 | 3          | 7          | 1                  | ANS USWC month          |
| PA0000036 | 3          | 1          | 0                  | Basrah Light USGC       |
| PA0000036 | 3          | 2          | 0                  | Basrah Light USGC       |
| PA0000036 | 3          | 6          | 0                  | Basrah Light USGC       |
| PA0000036 | 3          | 7          | 0                  | Basrah Light USGC       |
| PA0000073 | 3          | 1          | 0                  | Brent USGC              |
| PA0000073 | 3          | 2          | 0                  | Brent USGC              |
| PA0000073 | 3          | 6          | 0                  | Brent USGC              |
| PA0000073 | 3          | 7          | 0                  | Brent USGC              |
| PA0000078 | 3          | 1          | 0                  | Canadon Seco            |
| PA0000078 | 3          | 2          | 0                  | Canadon Seco            |
| PA0000078 | 3          | 6          | 0                  | Canadon Seco            |
| PA0000078 | 3          | 7          | 0                  | Canadon Seco            |
| PA0000080 | 3          | 1          | 0                  | Cano Limon              |
| PA0000080 | 3          | 2          | 0                  | Cano Limon              |
| PA0000080 | 3          | 6          | 0                  | Cano Limon              |
| PA0000080 | 3          | 7          | 0                  | Cano Limon              |
| PA0000085 | 3          | 1          | 0                  | Cusiana                 |
| PA0000085 | 3          | 2          | 0                  | Cusiana                 |
| PA0000085 | 3          | 6          | 0                  | Cusiana                 |
| PA0000085 | 3          | 7          | 0                  | Cusiana                 |
| PA0000108 | 3          | 1          | 0                  | Escalante               |
| PA0000108 | 3          | 2          | 0                  | Escalante               |
| PA0000108 | 3          | 6          | 0                  | Escalante               |
| PA0000108 | 3          | 7          | 0                  | Escalante               |
| PA0000114 | 25         | 1          | 1                  | Eugene Island month     |
| PA0000114 | 25         | 2          | 1                  | Eugene Island month     |
| PA0000114 | 25         | 6          | 1                  | Eugene Island month     |
| PA0000114 | 25         | 7          | 1                  | Eugene Island month     |
| PA0000122 | 25         | 1          | 1                  | HLS month               |
| PA0000122 | 25         | 2          | 1                  | HLS month               |
| PA0000122 | 25         | 6          | 1                  | HLS month               |
| PA0000122 | 25         | 7          | 1                  | HLS month               |
| PA0000185 | 3          | 1          | 0                  | Oriente                 |
| PA0000185 | 3          | 2          | 0                  | Oriente                 |
| PA0000185 | 3          | 6          | 0                  | Oriente                 |
| PA0000185 | 3          | 7          | 0                  | Oriente                 |
| PA0000188 | 3          | 1          | 0                  | Oriente USWC            |
| PA0000188 | 3          | 2          | 0                  | Oriente USWC            |
| PA0000188 | 3          | 6          | 0                  | Oriente USWC            |
| PA0000188 | 3          | 7          | 0                  | Oriente USWC            |
| PA0000193 | 25         | 1          | 1                  | Poseidon month          |
| PA0000193 | 25         | 2          | 1                  | Poseidon month          |
| PA0000193 | 25         | 6          | 1                  | Poseidon month          |
| PA0000193 | 25         | 7          | 1                  | Poseidon month          |
| PA0000195 | 25         | 6          | 1                  | WTI Postings plus month |

| PA-code   | Time Stamp | Price Type | Continuous Forward | Description                                    |
|-----------|------------|------------|--------------------|--|
| PA0000195 | 25         | 7          | 1                  | WTI Postings plus month                        |
| PA0000200 | 3          | 1          | 0                  | Qua Iboe USGC                                  |
| PA0000200 | 3          | 2          | 0                  | Qua Iboe USGC                                  |
| PA0000200 | 3          | 6          | 0                  | Qua Iboe USGC                                  |
| PA0000200 | 3          | 7          | 0                  | Qua Iboe USGC                                  |
| PA0000240 | 3          | 1          | 0                  | Vasconia                                       |
| PA0000240 | 3          | 2          | 0                  | Vasconia                                       |
| PA0000240 | 3          | 6          | 0                  | Vasconia                                       |
| PA0000240 | 3          | 7          | 0                  | Vasconia                                       |
| PA0000245 | 25         | 1          | 1                  | WTI Midland month                              |
| PA0000245 | 25         | 2          | 1                  | WTI Midland month                              |
| PA0000245 | 25         | 6          | 1                  | WTI Midland month                              |
| PA0000245 | 25         | 7          | 1                  | WTI Midland month                              |
| PA0001655 | 25         | 1          | 1                  | Bonito sour month                              |
| PA0001655 | 25         | 2          | 1                  | Bonito sour month                              |
| PA0001655 | 25         | 6          | 1                  | Bonito sour month                              |
| PA0001655 | 25         | 7          | 1                  | Bonito sour month                              |
| PA0002325 | 3          | 1          | 0                  | Napo   |
| PA0002325 | 3          | 2          | 0                  | Napo   |
| PA0002325 | 3          | 6          | 0                  | Napo   |
| PA0002325 | 3          | 7          | 0                  | Napo   |
| PA0002354 | 3          | 1          | 0                  | Hibernia                                       |
| PA0002354 | 3          | 2          | 0                  | Hibernia                                       |
| PA0002354 | 3          | 6          | 0                  | Hibernia                                       |
| PA0002354 | 3          | 7          | 0                  | Hibernia                                       |
| PA0002356 | 3          | 6          | 1                  | Line 63 Postings Plus month                    |
| PA0002356 | 3          | 7          | 1                  | Line 63 Postings Plus month                    |
| PA0002364 | 3          | 6          | 1                  | Midway Sunset (Kern River) Postings Plus month |
| PA0002364 | 3          | 7          | 1                  | Midway Sunset (Kern River) Postings Plus month |
| PA0002366 | 3          | 6          | 1                  | San Joaquin Light Blend Implied P-plus month   |
| PA0002366 | 3          | 7          | 1                  | San Joaquin Light Blend Implied P-plus month   |
| PA0002368 | 3          | 1          | 0                  | Terra Nova                                     |
| PA0002368 | 3          | 2          | 0                  | Terra Nova                                     |
| PA0002368 | 3          | 6          | 0                  | Terra Nova                                     |
| PA0002368 | 3          | 7          | 0                  | Terra Nova                                     |
| PA0002369 | 25         | 6          | 1                  | WTI Diff to year month average Nymex           |
| PA0002369 | 25         | 7          | 1                  | WTI Diff to year month average Nymex           |
| PA0002652 | 3          | 5          | 1                  | Nymex WTI month                                |
| PA0002652 | 3          | 10         | 1                  | Nymex WTI month                                |
| PA0002652 | 3          | 11         | 1                  | Nymex WTI month                                |
| PA0002652 | 3          | 12         | 1                  | Nymex WTI month                                |
| PA0002652 | 3          | 5          | 2                  | Nymex WTI month                                |
| PA0002652 | 3          | 10         | 2                  | Nymex WTI month                                |
| PA0002652 | 3          | 11         | 2                  | Nymex WTI month                                |
| PA0002652 | 3          | 12         | 2                  | Nymex WTI month                                |
| PA0002652 | 3          | 5          | 3                  | Nymex WTI month                                |
| PA0002652 | 3          | 10         | 3                  | Nymex WTI month                                |
| PA0002652 | 3          | 11         | 3                  | Nymex WTI month                                |
| PA0002652 | 3          | 12         | 3                  | Nymex WTI month                                |
| PA0002668 | 19         | 1          | 1                  | WTI month                                      |
| PA0002668 | 19         | 2          | 1                  | WTI month                                      |
| PA0002668 | 19         | 1          | 2                  | WTI month                                      |
| PA0002668 | 19         | 2          | 2                  | WTI month                                      |
| PA0002668 | 19         | 1          | 3                  | WTI month                                      |
| PA0002668 | 19         | 2          | 3                  | WTI month                                      |
| PA0002668 | 19         | 1          | 4                  | WTI month                                      |

| PA-code   | Time Stamp | Price Type | Continuous Forward | Description                                  |
|-----------|------------|------------|--------------------|--|
| PA0002668 | 19         | 2          | 4                  | WTI month                                    |
| PA0002811 | 25         | 1          | 1                  | Mars month                                   |
| PA0002811 | 25         | 2          | 1                  | Mars month                                   |
| PA0002811 | 25         | 6          | 1                  | Mars month                                   |
| PA0002811 | 25         | 7          | 1                  | Mars month                                   |
| PA0002811 | 25         | 1          | 2                  | Mars month                                   |
| PA0002811 | 25         | 2          | 2                  | Mars month                                   |
| PA0002811 | 25         | 6          | 2                  | Mars month                                   |
| PA0002811 | 25         | 7          | 2                  | Mars month                                   |
| PA0002812 | 25         | 1          | 1                  | WTS month                                    |
| PA0002812 | 25         | 2          | 1                  | WTS month                                    |
| PA0002812 | 25         | 6          | 1                  | WTS month                                    |
| PA0002812 | 25         | 7          | 1                  | WTS month                                    |
| PA0002812 | 25         | 1          | 2                  | WTS month                                    |
| PA0002812 | 25         | 2          | 2                  | WTS month                                    |
| PA0002812 | 25         | 6          | 2                  | WTS month                                    |
| PA0002812 | 25         | 7          | 2                  | WTS month                                    |
| PA0002813 | 25         | 1          | 1                  | LLS month                                    |
| PA0002813 | 25         | 2          | 1                  | LLS month                                    |
| PA0002813 | 25         | 6          | 1                  | LLS month                                    |
| PA0002813 | 25         | 7          | 1                  | LLS month                                    |
| PA0002813 | 25         | 1          | 2                  | LLS month                                    |
| PA0002813 | 25         | 2          | 2                  | LLS month                                    |
| PA0002813 | 25         | 6          | 2                  | LLS month                                    |
| PA0002813 | 25         | 7          | 2                  | LLS month                                    |
| PA0003355 | 25         | 4          | 1                  | Eugene Island weighted average month         |
| PA0003355 | 25         | 49         | 1                  | Eugene Island weighted average month         |
| PA0003356 | 25         | 4          | 1                  | HLS weighted average month                   |
| PA0003356 | 25         | 49         | 1                  | HLS weighted average month                   |
| PA0003357 | 25         | 4          | 1                  | Poseidon weighted average month              |
| PA0003357 | 25         | 49         | 1                  | Poseidon weighted average month              |
| PA0003358 | 25         | 4          | 1                  | WTI Midland weighted average month           |
| PA0003358 | 25         | 49         | 1                  | WTI Midland weighted average month           |
| PA0003359 | 25         | 4          | 1                  | Bonito sour weighted average month           |
| PA0003359 | 25         | 49         | 1                  | Bonito sour weighted average month           |
| PA0003360 | 25         | 49         | 1                  | Nymex WTI CMA weighted average month         |
| PA0003361 | 25         | 49         | 1                  | WTI Postings weighted average month          |
| PA0003362 | 25         | 4          | 1                  | Mars weighted average month                  |
| PA0003362 | 25         | 49         | 1                  | Mars weighted average month                  |
| PA0003362 | 25         | 4          | 2                  | Mars weighted average month                  |
| PA0003362 | 25         | 49         | 2                  | Mars weighted average month                  |
| PA0003363 | 25         | 4          | 1                  | WTS weighted average month                   |
| PA0003363 | 25         | 49         | 1                  | WTS weighted average month                   |
| PA0003363 | 25         | 4          | 2                  | WTS weighted average month                   |
| PA0003363 | 25         | 49         | 2                  | WTS weighted average month                   |
| PA0003364 | 25         | 4          | 1                  | LLS weighted average month                   |
| PA0003364 | 25         | 49         | 1                  | LLS weighted average month                   |
| PA0003364 | 25         | 4          | 2                  | LLS weighted average month                   |
| PA0003364 | 25         | 49         | 2                  | LLS weighted average month                   |
| PA0003373 | 0          | 8          | 1                  | WTI Formula Basis month                      |
| PA0003373 | 0          | 8          | 2                  | WTI Formula Basis month                      |
| PA0003967 | 25         | 1          | 1                  | Southern Green Canyon month                  |
| PA0003967 | 25         | 2          | 1                  | Southern Green Canyon month                  |
| PA0003967 | 25         | 6          | 1                  | Southern Green Canyon month                  |
| PA0003967 | 25         | 7          | 1                  | Southern Green Canyon month                  |
| PA0003968 | 25         | 4          | 1                  | Southern Green Canyon weighted average month |

| PA-code   | Time Stamp | Price Type | Continuous Forward | Description                                      |
|-----------|------------|------------|--------------------|--|
| PA0003968 | 25         | 49         | 1                  | Southern Green Canyon weighted average month     |
| PA0004058 | 25         | 49         | 1                  | Eugene Island MTD weighted average month         |
| PA0004059 | 25         | 49         | 1                  | HLS MTD weighted average month                   |
| PA0004060 | 25         | 49         | 1                  | Poseidon MTD weighted average month              |
| PA0004061 | 25         | 49         | 1                  | WTI Midland MTD weighted average month           |
| PA0004062 | 25         | 49         | 1                  | Bonito sour MTD weighted average month           |
| PA0004063 | 25         | 49         | 1                  | WTI Postings MTD weighted average month          |
| PA0004064 | 25         | 49         | 1                  | Mars MTD weighted average month                  |
| PA0004064 | 25         | 49         | 2                  | Mars MTD weighted average month                  |
| PA0004065 | 25         | 49         | 1                  | WTS MTD weighted average month                   |
| PA0004065 | 25         | 49         | 2                  | WTS MTD weighted average month                   |
| PA0004066 | 25         | 49         | 1                  | LLS MTD weighted average month                   |
| PA0004066 | 25         | 49         | 2                  | LLS MTD weighted average month                   |
| PA0004068 | 25         | 49         | 1                  | Southern Green Canyon MTD weighted average month |
| PA0004078 | 25         | 49         | 1                  | Nymex WTI CMA MTD weighted average month         |