

**SUPPLEMENT NO. 2 TO
TRANSPORTATION SHEET NO. 5**
(Cancels Supplement No. 1)

MARS OIL PIPELINE COMPANY

RULES AND REGULATIONS

GOVERNING

THE TRANSPORTATION OF

PETROLEUM

BY

PIPELINE

GENERAL APPLICATION

The Rules and Regulations published herein apply only to Transportation Sheets, which make specific reference to Mars Oil Pipeline Company rules Transportation Sheet No. 5, supplements thereto and successive issues hereof. For rules with multiple options, only one option will apply. The individual Transportation Sheet should be referenced for the applicable option.

EFFECTIVE: OCTOBER 1, 2012

Issued By:
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RULES AND REGULATIONS

This Carrier will transport Petroleum as defined herein, receiving and delivering the same through its own facilities and lines, and where applicable, lines of connecting carriers, subject to the following Rules and Regulations.

115A. CLAIMS, SUITS, AND TIME FOR FILING

(Cancels 115)

As a condition precedent to recovery for loss, damage, or delay to shipments, claims must be filed in writing with the Carrier within **[W]**~~six (6)~~ nine (9) months after delivery of the Petroleum, or, in case of failure to make delivery, then within **[W]**~~six (6)~~ nine (9) months after a reasonable time for delivery has elapsed; and suits arising out of such claims shall be instituted against the Carrier only within two (2) years from the time when the Carrier delivers, or arranges delivery of, the Petroleum or, in case of failure to make or arrange delivery, then within two (2) years after a reasonable time for delivery has elapsed. Any such loss or damage shall be determined solely on the basis of volumetric loss and not on the monetary value of the Petroleum. Where claims are not filed or suits are not instituted thereon in accordance with the foregoing provisions, Carrier will not be liable and such claims will not be paid.

125. Gravity and Sulfur Bank

[R1]

To assure that no Shipper will be materially damaged or allowed to benefit by changes in gravity and sulfur due to the intermixing of Petroleum in the system, Shippers will be required, as a condition of Nominating, to participate in a Gravity and Sulfur Bank. A fee of .2 cents per Barrel will be assessed to cover costs for administration of the quality bank for the Shippers.

The tables of gravity and sulfur differential values per Barrel as attached hereto as Exhibits A, B, and C are incorporated herein and made a part of these Rules and Regulations.

Carrier shall administer the quality bank providing adjustments for the value of Petroleum with different qualities in the manner specified below for both receipt and delivery volumes:

Applicable Barrels and gravities shall be the net Barrels at 60 degrees Fahrenheit (with no deduction for loss allowance) and the gravities recorded by the Carrier at points where it customarily records gravities and quantities.

The weighted average gravity differential value per Barrel (for two or more gravities of Petroleum), as hereinafter referred to, shall be obtained in the following manner: multiply the gravity differential values per Barrel (from the attached tables as same are from time to time revised) by the number of Barrels to which such gravity differential values are applicable and then divide the total of the resultant gravity differential values in dollars and cents by the total of the applicable Barrels.

Applicable Barrels and sulfur content shall be the net Barrels at 60 degrees Fahrenheit (with no deduction for loss allowance) and the sulfur content recorded by a competent laboratory for samples obtained by the Carrier at the points where it customarily measures and samples receipts for custody transfer.

The weighted average sulfur differential value per Barrel (for two or more sulfur contents of Petroleum), as hereinafter referred to, shall be obtained in the following manner: multiply the sulfur differential values per Barrel by the number of Barrels to which such sulfur differential values are applicable and then divide the total of the resultant sulfur differential values in dollars and cents by the total of the applicable Barrels.

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Sulfur content as furnished by the laboratory at the true gravity shall be adjusted to reflect its comparison to the reference Petroleum at 35.5 degree gravity. The adjustment to the test sulfur content shall be made by establishing a ratio of weight per gallon for the gravity of the sample to weight per gallon for the gravity of the reference Petroleum of 35.5 degree gravity. The Table of Ratio Factors for Sulfur Adjustments is attached hereto as Exhibit "C" and is made a part of these Rules and Regulations.

The ratio thus obtained will be applied against the tested sulfur content of the sample to obtain the adjusted sulfur content (gravity ratio x tested sulfur content = adjusted sulfur content). The adjusted sulfur content will then be used to obtain the sulfur differential value per Barrel from the table of sulfur differential values per Barrel (Exhibit "B").

I. Adjustment between Shippers, for both receipt volumes and delivery volumes, shall be computed as follows:

A. Compute the weighted average gravity differential value per Barrel of the Barrels received from/delivered to each Shipper.

B. Compute the weighted average sulfur differential value per Barrel of the Barrels received from/delivered to each Shipper. Sulfur differential values from 0 to 0.75 will be considered 0.75.

II. Compute the weighted average gravity differential value per Barrel of the composite common stream Petroleum for receipts and deliveries.

Receipt Calculation:

A. If the weighted average gravity differential value per Barrel of a Shipper as so determined under Paragraph I above shall be greater than the weighted average gravity differential value per Barrel of the aforementioned common stream Petroleum as determined under Paragraph II, the difference in cents per Barrel shall be calculated and Shipper shall be credited (receives from the bank) an amount calculated by multiplying said difference in gravity differential value per Barrel by the applicable Barrels.

B. If the weighted average gravity differential value per Barrel of a Shipper is less than the weighted average gravity differential value per Barrel of the aforementioned common stream Petroleum, the difference shall be calculated as above outlined and a Shipper debited (pays to the bank) for such difference.

Delivery Calculation:

A. If the weighted average gravity differential value per Barrel of a Shipper as so determined under Paragraph I above shall be greater than the weighted average gravity differential value per Barrel of the aforementioned common stream Petroleum as determined under Paragraph II, the difference in cents per Barrel shall be calculated and Shipper shall be debited (pays the bank) an amount calculated by multiplying said difference in gravity differential value per Barrel by the applicable Barrels.

B. If the weighted average gravity differential value per Barrel of a Shipper is less than the weighted average gravity differential value per Barrel of the aforementioned common stream Petroleum, the difference shall be calculated as above outlined and a Shipper credited (receives from the bank) for such difference.

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III. Compute the weighted average sulfur differential value per Barrel of the composite common stream Petroleum for receipts and deliveries.

Receipt Calculation:

A. If the weighted average sulfur differential value per Barrel of a Shipper as so determined under Paragraph I above shall be greater than the weighted average sulfur differential value per Barrel of the aforementioned common stream Petroleum as determined under Paragraph III, the difference in cents per Barrel shall be calculated and Shipper shall be debited (pays the bank) an amount calculated by multiplying said difference in sulfur differential value per Barrel by the applicable Barrels.

B. If the weighted average sulfur differential value per Barrel of a Shipper is less than the weighted average sulfur differential value per Barrel of the aforementioned common stream Petroleum, the difference shall be calculated as above outlined and Shipper shall be credited (receives from the bank) for such difference.

Delivery Calculation:

A. If the weighted average sulfur differential value per Barrel of a Shipper as so determined under Paragraph I above shall be greater than the weighted average sulfur differential value per Barrel of the aforementioned common stream Petroleum as determined under Paragraph III, the difference in cents per Barrel shall be calculated and Shipper shall be credited (receives from the bank) an amount calculated by multiplying said difference in sulfur differential value per Barrel by the applicable Barrels.

B. If the weighted average sulfur differential value per Barrel of a Shipper is less than the weighted average sulfur differential value per Barrel of the aforementioned common stream Petroleum, the difference shall be calculated as above outlined and Shipper shall be debited (pays the bank) for such difference.

A sample calculation is attached as Exhibit "D".

These calculations shall be made for each calendar month and the algebraic sum of the adjustments for the system shall be zero \pm One Dollar. If a Shipper shall have a net debit balance when netting the two adjustments made on receipts and deliveries above, the balance shall be remitted to the clearinghouse within fifteen (15) days from receipt of statement of such debit. If Shipper shall have a credit, the clearinghouse shall remit the amount thereof after receipt by the clearinghouse of the sums from those Shippers having debits as calculated above.

EXPLANATION OF REFERENCE MARKS:

[W] Change in Wording Only

[R1] Reissued from Supplement No. 1, effective February 1, 2012.

EXHIBIT "A"
ADJUSTMENT AUTHORIZATION

TABLES OF DIFFERENTIALS FOR USE IN DETERMINING ADJUSTMENTS FOR
 DIFFERENCE IN GRAVITY OF PETROLEUM IN
 CARRIER SYSTEM COMMON STREAM PETROLEUM

<u>API GRAVITY</u>	<u>DIFF PER BBL</u>	<u>API GRAVITY</u>	<u>DIFF PER BBL</u>	<u>API GRAVITY</u>	<u>DIFF PER BBL</u>	<u>API GRAVITY</u>	<u>DIFF PER BBL</u>
20.0	2.750	26.0	3.650	32.0	4.550	38.0	5.060
20.1	2.765	26.1	3.665	32.1	4.565	38.1	5.060
20.2	2.780	26.2	3.680	32.2	4.580	38.2	5.060
20.3	2.795	26.3	3.695	32.3	4.595	38.3	5.060
20.4	2.810	26.4	3.710	32.4	4.610	38.4	5.060
20.5	2.825	26.5	3.725	32.5	4.625	38.5	5.060
20.6	2.840	26.6	3.740	32.6	4.640	38.6	5.060
20.7	2.855	26.7	3.755	32.7	4.655	38.7	5.060
20.8	2.870	26.8	3.770	32.8	4.670	38.8	5.060
20.9	2.885	26.9	3.785	32.9	4.685	38.9	5.060
21.0	2.900	27.0	3.800	33.0	4.700	39.0	5.080
21.1	2.915	27.1	3.815	33.1	4.715	39.1	5.080
21.2	2.930	27.2	3.830	33.2	4.730	39.2	5.080
21.3	2.945	27.3	3.845	33.3	4.745	39.3	5.080
21.4	2.960	27.4	3.860	33.4	4.760	39.4	5.080
21.5	2.975	27.5	3.875	33.5	4.775	39.5	5.080
21.6	2.990	27.6	3.890	33.6	4.790	39.6	5.080
21.7	3.005	27.7	3.905	33.7	4.805	39.7	5.080
21.8	3.020	27.8	3.920	33.8	4.820	39.8	5.080
21.9	3.035	27.9	3.935	33.9	4.835	39.9	5.080
22.0	3.050	28.0	3.950	34.0	4.850	40.0	5.100
22.1	3.065	28.1	3.965	34.1	4.865	40.1	5.100
22.2	3.080	28.2	3.980	34.2	4.880	40.2	5.100
22.3	3.095	28.3	3.995	34.3	4.895	40.3	5.100
22.4	3.110	28.4	4.010	34.4	4.910	40.4	5.100
22.5	3.125	28.5	4.025	34.5	4.925	40.5	5.100
22.6	3.140	28.6	4.040	34.6	4.940	40.6	5.100
22.7	3.155	28.7	4.055	34.7	4.955	40.7	5.100
22.8	3.170	28.8	4.070	34.8	4.970	40.8	5.100
22.9	3.185	28.9	4.085	34.9	4.985	40.9	5.100
23.0	3.200	29.0	4.100	35.0	5.000	41.0	5.100
23.1	3.215	29.1	4.115	35.1	5.000	41.1	5.100
23.2	3.230	29.2	4.130	35.2	5.000	41.2	5.100
23.3	3.245	29.3	4.145	35.3	5.000	41.3	5.100
23.4	3.260	29.4	4.160	35.4	5.000	41.4	5.100
23.5	3.275	29.5	4.175	35.5	5.000	41.5	5.100
23.6	3.290	29.6	4.190	35.6	5.000	41.6	5.100
23.7	3.305	29.7	4.205	35.7	5.000	41.7	5.100
23.8	3.320	29.8	4.220	35.8	5.000	41.8	5.100
23.9	3.335	29.9	4.235	35.9	5.000	41.9	5.100
24.0	3.350	30.0	4.250	36.0	5.020	42.0	5.100
24.1	3.365	30.1	4.265	36.1	5.020	42.1	5.100
24.2	3.380	30.2	4.280	36.2	5.020	42.2	5.100
24.3	3.395	30.3	4.295	36.3	5.020	42.3	5.100
24.4	3.410	30.4	4.310	36.4	5.020	42.4	5.100
24.5	3.425	30.5	4.325	36.5	5.020	42.5	5.100
24.6	3.440	30.6	4.340	36.6	5.020	42.6	5.100
24.7	3.455	30.7	4.355	36.7	5.020	42.7	5.100
24.8	3.470	30.8	4.370	36.8	5.020	42.8	5.100
24.9	3.485	30.9	4.385	36.9	5.020	42.9	5.100
25.0	3.500	31.0	4.400	37.0	5.040	43.0	5.100
25.1	3.515	31.1	4.415	37.1	5.040	43.1	5.100
25.2	3.530	31.2	4.430	37.2	5.040	43.2	5.100
25.3	3.545	31.3	4.445	37.3	5.040	43.3	5.100
25.4	3.560	31.4	4.460	37.4	5.040	43.4	5.100
25.5	3.575	31.5	4.475	37.5	5.040	43.5	5.100
25.6	3.590	31.6	4.490	37.6	5.040	43.6	5.100
25.7	3.605	31.7	4.505	37.7	5.040	43.7	5.100
25.8	3.620	31.8	4.520	37.8	5.040	43.8	5.100
25.9	3.635	31.9	4.535	37.9	5.040	43.9	5.100

EXHIBIT "A" CONTINUED
ADJUSTMENT AUTHORIZATION

TABLES OF DIFFERENTIALS FOR USE IN DETERMINING ADJUSTMENTS FOR
 DIFFERENCE IN GRAVITY OF PETROLEUM IN
 CARRIER SYSTEM COMMON STREAM PETROLEUM

<u>API GRAVITY</u>	<u>DIFF PER BBL</u>	<u>API GRAVITY</u>	<u>DIFF PER BBL</u>
44.0	5.100	50.0	4.350
44.1	5.100	50.1	4.335
44.2	5.100	50.2	4.320
44.3	5.100	50.3	4.305
44.4	5.100	50.4	4.290
44.5	5.100	50.5	4.275
44.6	5.100	50.6	4.260
44.7	5.100	50.7	4.245
44.8	5.100	50.8	4.230
44.9	5.100	50.9	4.215
45.0	5.100	51.0	4.200
45.1	5.085	51.1	4.185
45.2	5.070	51.2	4.170
45.3	5.055	51.3	4.155
45.4	5.040	51.4	4.140
45.5	5.025	51.5	4.125
45.6	5.010	51.6	4.110
45.7	4.995	51.7	4.095
45.8	4.980	51.8	4.080
45.9	4.965	51.9	4.065
46.0	4.950	52.0	4.050
46.1	4.935	52.1	4.035
46.2	4.920	52.2	4.020
46.3	4.905	52.3	4.005
46.4	4.890	52.4	3.990
46.5	4.875	52.5	3.975
46.6	4.860	52.6	3.960
46.7	4.845	52.7	3.945
46.8	4.830	52.8	3.930
46.9	4.815	52.9	3.915
47.0	4.800	53.0	3.900
47.1	4.785	53.1	3.885
47.2	4.770	53.2	3.870
47.3	4.755	53.3	3.855
47.4	4.740	53.4	3.840
47.5	4.725	53.5	3.825
47.6	4.710	53.6	3.810
47.7	4.695	53.7	3.795
47.8	4.680	53.8	3.780
47.9	4.665	53.9	3.765
48.0	4.650	54.0	3.750
48.1	4.635	54.1	3.735
48.2	4.620	54.2	3.720
48.3	4.605	54.3	3.705
48.4	4.590	54.4	3.690
48.5	4.575	54.5	3.675
48.6	4.560	54.6	3.660
48.7	4.545	54.7	3.645
48.8	4.530	54.8	3.630
48.9	4.515	54.9	3.615
49.0	4.500	55.0	3.600
49.1	4.485		
49.2	4.470		
49.3	4.455		
49.4	4.440		
49.5	4.425		
49.6	4.410		
49.7	4.395		
49.8	4.380		
49.9	4.365		

For API GRAVITY values
 above 55.0° API, the
 differential continues to
 decline .015/bbl per 0.1°
 API GRAVITY

EXHIBIT "B"
ADJUSTMENT AUTHORIZATION

TABLES OF DIFFERENTIALS FOR USE IN DETERMINING ADJUSTMENTS FOR
DIFFERENCE IN SULFUR CONTENT OF PETROLEUM IN
CARRIER SYSTEM COMMON STREAM PETROLEUM

<u>PERCENT</u> <u>SULFUR</u>	<u>DIFF</u> <u>PER BBL</u>	<u>PERCENT</u> <u>SULFUR</u>	<u>DIFF</u> <u>PER BBL</u>	<u>PERCENT</u> <u>SULFUR</u>	<u>DIFF</u> <u>PER BBL</u>	<u>PERCENT</u> <u>SULFUR</u>	<u>DIFF</u> <u>PER BBL</u>	<u>PERCENT</u> <u>SULFUR</u>	<u>DIFF</u> <u>PER BBL</u>
0.75	1.750	1.35	2.350	1.95	2.950	2.55	3.550	3.15	4.150
0.76	1.760	1.36	2.360	1.96	2.960	2.56	3.560	3.16	4.160
0.77	1.770	1.37	2.370	1.97	2.970	2.57	3.570	3.17	4.170
0.78	1.780	1.38	2.380	1.98	2.980	2.58	3.580	3.18	4.180
0.79	1.790	1.39	2.390	1.99	2.990	2.59	3.590	3.19	4.190
0.80	1.800	1.40	2.400	2.00	3.000	2.60	3.600	3.20	4.200
0.81	1.810	1.41	2.410	2.01	3.010	2.61	3.610	3.21	4.210
0.82	1.820	1.42	2.420	2.02	3.020	2.62	3.620	3.22	4.220
0.83	1.830	1.43	2.430	2.03	3.030	2.63	3.630	3.23	4.230
0.84	1.840	1.44	2.440	2.04	3.040	2.64	3.640	3.24	4.240
0.85	1.850	1.45	2.450	2.05	3.050	2.65	3.650	3.25	4.250
0.86	1.860	1.46	2.460	2.06	3.060	2.66	3.660	3.26	4.260
0.87	1.870	1.47	2.470	2.07	3.070	2.67	3.670	3.27	4.270
0.88	1.880	1.48	2.480	2.08	3.080	2.68	3.680	3.28	4.280
0.89	1.890	1.49	2.490	2.09	3.090	2.69	3.690	3.29	4.290
0.90	1.900	1.50	2.500	2.10	3.100	2.70	3.700	3.30	4.300
0.91	1.910	1.51	2.510	2.11	3.110	2.71	3.710	3.31	4.310
0.92	1.920	1.52	2.520	2.12	3.120	2.72	3.720	3.32	4.320
0.93	1.930	1.53	2.530	2.13	3.130	2.73	3.730	3.33	4.330
0.94	1.940	1.54	2.540	2.14	3.140	2.74	3.740	3.34	4.340
0.95	1.950	1.55	2.550	2.15	3.150	2.75	3.750	3.35	4.350
0.96	1.960	1.56	2.560	2.16	3.160	2.76	3.760	3.36	4.360
0.97	1.970	1.57	2.570	2.17	3.170	2.77	3.770	3.37	4.370
0.98	1.980	1.58	2.580	2.18	3.180	2.78	3.780	3.38	4.380
0.99	1.990	1.59	2.590	2.19	3.190	2.79	3.790	3.39	4.390
1.00	2.000	1.60	2.600	2.20	3.200	2.80	3.800	3.40	4.400
1.01	2.010	1.61	2.610	2.21	3.210	2.81	3.810	3.41	4.410
1.02	2.020	1.62	2.620	2.22	3.220	2.82	3.820	3.42	4.420
1.03	2.030	1.63	2.630	2.23	3.230	2.83	3.830	3.43	4.430
1.04	2.040	1.64	2.640	2.24	3.240	2.84	3.840	3.44	4.440
1.05	2.050	1.65	2.650	2.25	3.250	2.85	3.850	3.45	4.450
1.06	2.060	1.66	2.660	2.26	3.260	2.86	3.860	3.46	4.460
1.07	2.070	1.67	2.670	2.27	3.270	2.87	3.870	3.47	4.470
1.08	2.080	1.68	2.680	2.28	3.280	2.88	3.880	3.48	4.480
1.09	2.090	1.69	2.690	2.29	3.290	2.89	3.890	3.49	4.490
1.10	2.100	1.70	2.700	2.30	3.300	2.90	3.900	3.50	4.500
1.11	2.110	1.71	2.710	2.31	3.310	2.91	3.910	3.51	4.510
1.12	2.120	1.72	2.720	2.32	3.320	2.92	3.920	3.52	4.520
1.13	2.130	1.73	2.730	2.33	3.330	2.93	3.930	3.53	4.530
1.14	2.140	1.74	2.740	2.34	3.340	2.94	3.940	3.54	4.540
1.15	2.150	1.75	2.750	2.35	3.350	2.95	3.950	3.55	4.550
1.16	2.160	1.76	2.760	2.36	3.360	2.96	3.960	3.56	4.560
1.17	2.170	1.77	2.770	2.37	3.370	2.97	3.970	3.57	4.570
1.18	2.180	1.78	2.780	2.38	3.380	2.98	3.980	3.58	4.580
1.19	2.190	1.79	2.790	2.39	3.390	2.99	3.990	3.59	4.590
1.20	2.200	1.80	2.800	2.40	3.400	3.00	4.000	3.60	4.600
1.21	2.210	1.81	2.810	2.41	3.410	3.01	4.010	3.61	4.610
1.22	2.220	1.82	2.820	2.42	3.420	3.02	4.020	3.62	4.620
1.23	2.230	1.83	2.830	2.43	3.430	3.03	4.030	3.63	4.630
1.24	2.240	1.84	2.840	2.44	3.440	3.04	4.040	3.64	4.640
1.25	2.250	1.85	2.850	2.45	3.450	3.05	4.050	3.65	4.650
1.26	2.260	1.86	2.860	2.46	3.460	3.06	4.060	3.66	4.660
1.27	2.270	1.87	2.870	2.47	3.470	3.07	4.070	3.67	4.670
1.28	2.280	1.88	2.880	2.48	3.480	3.08	4.080	3.68	4.680
1.29	2.290	1.89	2.890	2.49	3.490	3.09	4.090	3.69	4.690
1.30	2.300	1.90	2.900	2.50	3.500	3.10	4.100	3.70	4.700
1.31	2.310	1.91	2.910	2.51	3.510	3.11	4.110	3.71	4.710
1.32	2.320	1.92	2.920	2.52	3.520	3.12	4.120	3.72	4.720
1.33	2.330	1.93	2.930	2.53	3.530	3.13	4.130	3.73	4.730
1.34	2.340	1.94	2.940	2.54	3.540	3.14	4.140	3.74	4.740

See NOTE at bottom of page.

EXHIBIT "B" CONTINUED
ADJUSTMENT AUTHORIZATION

TABLES OF DIFFERENTIALS FOR USE IN DETERMINING ADJUSTMENTS FOR
 DIFFERENCE IN SULFUR CONTENT OF PETROLEUM IN
 CARRIER SYSTEM COMMON STREAM PETROLEUM

<u>PERCENT SULFUR</u>	<u>DIFF PER BBL</u>
3.75	4.750
3.76	4.760
3.77	4.770
3.78	4.780
3.79	4.790
3.80	4.800
3.81	4.810
3.82	4.820
3.83	4.830
3.84	4.840
3.85	4.850
3.86	4.860
3.87	4.870
3.88	4.880
3.89	4.890
3.90	4.900
3.91	4.910
3.92	4.920
3.93	4.930
3.94	4.940
3.95	4.950
3.96	4.960
3.97	4.970
3.98	4.980
3.99	4.990
4.00	5.000

For Sulfur Values above
 4.00%, the differential
 continues to increase
 0.01 /BBL per 0.01 Percent
 Sulfur

[EXHIBIT "B" has merely been expanded to show sulfur values
 through 4.00%, and to explain how the differential per barrel is
 determined for sulfur contents above 4.00%.]

EXHIBIT "C"
ADJUSTMENT AUTHORIZATION

RATIO FACTORS FOR SULFUR ADJUSTMENT
 WEIGHT OF PETROLEUM BY GRAVITY TO REFERENCE BASE OF 35.5° API GRAVITY
 CARRIER SYSTEM COMMON STREAM PETROLEUM

<u>API GRAVITY</u>	<u>RATIO TO 35.5° WT.</u>	<u>API GRAVITY</u>	<u>RATIO TO 35.5° WT.</u>	<u>API GRAVITY</u>	<u>RATIO TO 35.5° WT.</u>	<u>API GRAVITY</u>	<u>RATIO TO 35.5° WT.</u>
20.0	1.10248	26.0	1.06038	32.0	1.02140	38.0	0.98526
20.1	1.10177	26.1	1.05967	32.1	1.02084	38.1	0.98469
20.2	1.10106	26.2	1.05911	32.2	1.02013	38.2	0.98412
20.3	1.10021	26.3	1.05840	32.3	1.01956	38.3	0.98356
20.4	1.09950	26.4	1.05769	32.4	1.01899	38.4	0.98285
20.5	1.09880	26.5	1.05698	32.5	1.01828	38.5	0.98228
20.6	1.09809	26.6	1.05641	32.6	1.01772	38.6	0.98172
20.7	1.09738	26.7	1.05571	32.7	1.01715	38.7	0.98115
20.8	1.09667	26.8	1.05500	32.8	1.01644	38.8	0.98058
20.9	1.09596	26.9	1.05443	32.9	1.01588	38.9	0.98001
21.0	1.09525	27.0	1.05372	33.0	1.01517	39.0	0.97945
21.1	1.09454	27.1	1.05301	33.1	1.01460	39.1	0.97888
21.2	1.09383	27.2	1.05245	33.2	1.01403	39.2	0.97831
21.3	1.09313	27.3	1.05174	33.3	1.01332	39.3	0.97775
21.4	1.09242	27.4	1.05103	33.4	1.01276	39.4	0.97718
21.5	1.09171	27.5	1.05046	33.5	1.01219	39.5	0.97661
21.6	1.09086	27.6	1.04975	33.6	1.01148	39.6	0.97605
21.7	1.09015	27.7	1.04904	33.7	1.01091	39.7	0.97548
21.8	1.08944	27.8	1.04848	33.8	1.01035	39.8	0.97491
21.9	1.08873	27.9	1.04777	33.9	1.00964	39.9	0.97434
22.0	1.08802	28.0	1.04706	34.0	1.00907	40.0	0.97378
22.1	1.08731	28.1	1.04649	34.1	1.00850	40.1	0.97321
22.2	1.08661	28.2	1.04578	34.2	1.00780	40.2	0.97264
22.3	1.08590	28.3	1.04507	34.3	1.00723	40.3	0.97208
22.4	1.08519	28.4	1.04451	34.4	1.00666	40.4	0.97151
22.5	1.08448	28.5	1.04380	34.5	1.00609	40.5	0.97094
22.6	1.08377	28.6	1.04323	34.6	1.00539	40.6	0.97038
22.7	1.08320	28.7	1.04252	34.7	1.00482	40.7	0.96981
22.8	1.08249	28.8	1.04181	34.8	1.00425	40.8	0.96924
22.9	1.08179	28.9	1.04125	34.9	1.00369	40.9	0.96867
23.0	1.08108	29.0	1.04054	35.0	1.00298	41.0	0.96811
23.1	1.08037	29.1	1.03997	35.1	1.00241	41.1	0.96754
23.2	1.07966	29.2	1.03926	35.2	1.00184	41.2	0.96697
23.3	1.07895	29.3	1.03855	35.3	1.00128	41.3	0.96641
23.4	1.07824	29.4	1.03799	35.4	1.00057	41.4	0.96584
23.5	1.07753	29.5	1.03728	35.5	1.00000	41.5	0.96527
23.6	1.07682	29.6	1.03671	35.6	0.99943	41.6	0.96471
23.7	1.07612	29.7	1.03600	35.7	0.99887	41.7	0.96414
23.8	1.07541	29.8	1.03544	35.8	0.99816	41.8	0.96357
23.9	1.07470	29.9	1.03473	35.9	0.99759	41.9	0.96300
24.0	1.07413	30.0	1.03416	36.0	0.99702	42.0	0.96244
24.1	1.07342	30.1	1.03345	36.1	0.99646	42.1	0.96187
24.2	1.07271	30.2	1.03288	36.2	0.99589	42.2	0.96145
24.3	1.07201	30.3	1.03218	36.3	0.99518	42.3	0.96088
24.4	1.07130	30.4	1.03161	36.4	0.99461	42.4	0.96031
24.5	1.07059	30.5	1.03090	36.5	0.99405	42.5	0.95974
24.6	1.06988	30.6	1.03033	36.6	0.99348	42.6	0.95918
24.7	1.06931	30.7	1.02962	36.7	0.99291	42.7	0.95861
24.8	1.06860	30.8	1.02906	36.8	0.99220	42.8	0.95804
24.9	1.06790	30.9	1.02835	36.9	0.99164	42.9	0.95748
25.0	1.06719	31.0	1.02778	37.0	0.99107	43.0	0.95691
25.1	1.06648	31.1	1.02707	37.1	0.99050	43.1	0.95648
25.2	1.06577	31.2	1.02651	37.2	0.98994	43.2	0.95592
25.3	1.06520	31.3	1.02580	37.3	0.98937	43.3	0.95535
25.4	1.06449	31.4	1.02523	37.4	0.98880	43.4	0.95478
25.5	1.06378	31.5	1.02452	37.5	0.98809	43.5	0.95422
25.6	1.06308	31.6	1.02395	37.6	0.98753	43.6	0.95365
25.7	1.06237	31.7	1.02339	37.7	0.98696	43.7	0.95308
25.8	1.06180	31.8	1.02268	37.8	0.98639	43.8	0.95266
25.9	1.06109	31.9	1.02211	37.9	0.98583	43.9	0.95209

EXHIBIT "C" CONTINUED
ADJUSTMENT AUTHORIZATION

RATIO FACTORS FOR SULFUR ADJUSTMENT
 WEIGHT OF PETROLEUM BY GRAVITY TO REFERENCE BASE OF 35.5° API GRAVITY
 CARRIER SYSTEM COMMON STREAM PETROLEUM

<u>API GRAVITY</u>	<u>RATIO TO 35.5° WT.</u>	<u>API GRAVITY</u>	<u>RATIO TO 35.5° WT.</u>
44.0	0.95152	50.0	0.92006
44.1	0.95096	50.1	0.91949
44.2	0.95039	50.2	0.91892
44.3	0.94982	50.3	0.91850
44.4	0.94940	50.4	0.91793
44.5	0.94883	50.5	0.91751
44.6	0.94826	50.6	0.91694
44.7	0.94770	50.7	0.91651
44.8	0.94713	50.8	0.91595
44.9	0.94670	50.9	0.91552
45.0	0.94614	51.0	0.91495
45.1	0.94557	51.1	0.91439
45.2	0.94500	51.2	0.91396
45.3	0.94444	51.3	0.91339
45.4	0.94401	51.4	0.91297
45.5	0.94344	51.5	0.91240
45.6	0.94288	51.6	0.91198
45.7	0.94231	51.7	0.91141
45.8	0.94189	51.8	0.91099
45.9	0.94132	51.9	0.91042
46.0	0.94075	52.0	0.90999
46.1	0.94018	52.1	0.90943
46.2	0.93976	52.2	0.90900
46.3	0.93919	52.3	0.90843
46.4	0.93863	52.4	0.90801
46.5	0.93806	52.5	0.90744
46.6	0.93763	52.6	0.90702
46.7	0.93707	52.7	0.90645
46.8	0.93650	52.8	0.90602
46.9	0.93607	52.9	0.90546
47.0	0.93551	53.0	0.90503
47.1	0.93494	53.1	0.90446
47.2	0.93437	53.2	0.90404
47.3	0.93395	53.3	0.90361
47.4	0.93338	53.4	0.90305
47.5	0.93281	53.5	0.90262
47.6	0.93239	53.6	0.90206
47.7	0.93182	53.7	0.90163
47.8	0.93125	53.8	0.90106
47.9	0.93083	53.9	0.90064
48.0	0.93026	54.0	0.90007
48.1	0.92970	54.1	0.89965
48.2	0.92927	54.2	0.89922
48.3	0.92870	54.3	0.89865
48.4	0.92814	54.4	0.89823
48.5	0.92771	54.5	0.89766
48.6	0.92714	54.6	0.89724
48.7	0.92672	54.7	0.89681
48.8	0.92615	54.8	0.89624
48.9	0.92558	54.9	0.89582
49.0	0.92516	55.0	0.89525
49.1	0.92459		
49.2	0.92403		
49.3	0.92360		
49.4	0.92303		
49.5	0.92261		
49.6	0.92204		
49.7	0.92147		
49.8	0.92105		
49.9	0.92048		

EXHIBIT "D"
SAMPLE QUALITY BANK CALCULATION
 CARRIER SYSTEM COMMON STREAM PETROLEUM

Receipt Bank

SHIPPER	BBLs REC'D	% SULFUR	API GRAV	FROM EXH. "C" RATIO TO 35.5° WT.	% SULFUR x RATIO	FROM EXH. "B" SULFUR DIFF	FROM EXH. "A" GRAVITY DIFF	BBLs REC'D. x SULFUR DIFF	BBLs REC'D. x GRAV DIFF
A	100.00	0.92	29.8	1.03544	0.95	1.950	4.220	195.00	422.00
B	150.00	0.36	38.6	0.98172	0.35	1.750	5.060	262.50	759.00
C	100.00	0.42	36.4	0.99461	0.42	1.750	5.020	175.00	502.00
C	<u>200.00</u>	0.78	46.2	0.93976	0.73	1.750	4.920	<u>350.00</u>	<u>984.00</u>
TOTAL	550.00							982.50	2667.00

Common stream weighted average GRAVITY value: $2667.00/550.0 = 4.84909$
 Common stream weighted average SULFUR value: $982.50/550.00 = 1.78636$

Shipper A:

Weighted average GRAVITY value: $422.00/100 = 4.22000$
 Calculation: $(4.84909 - 4.22000) \times 100 =$ \$62.91
 Weighted average SULFUR value: $195.00/100 = 1.95000$
 Calculation: $(1.95000 - 1.78636) \times 100 =$ \$16.36

TOTAL Shipper A pays the bank:

\$79.27

Shipper B:

Weighted average GRAVITY value: $759.00/150 = 5.06000$
 Calculation: $(4.84909 - 5.06000) \times 150 =$ (\$31.64)
 Weighted average SULFUR value: $262.50/150 = 1.75000$
 Calculation: $(1.75000 - 1.78636) \times 150 =$ (\$5.45)

TOTAL Shipper B receives the bank:

(\$37.09)

Shipper C:

Weighted average GRAVITY value: $1486.00/300 = 4.95333$
 Calculation: $(4.84909 - 4.95333) \times 300 =$ (\$31.27)
 Weighted average SULFUR value: $525.00/300 = 1.75000$
 Calculation: $(1.75000 - 1.78636) \times 300 =$ (\$10.91)

TOTAL Shipper C receives from the bank:

(\$42.18)

NET

\$0.00

Delivery Bank

SHIPPER	BBLs REC'D	% SULFUR	API GRAV	FROM EXH. "C" RATIO TO 35.5° WT.	% SULFUR x RATIO	FROM EXH. "B" SULFUR DIFF	FROM EXH. "A" GRAVITY DIFF	BBLs REC'D. x SULFUR DIFF	BBLs REC'D. x GRAV DIFF
A	90.00	0.64	39.0	0.97945	0.63	1.750	5.080	157.50	457.20
B	140.00	0.62	39.6	0.97605	0.61	1.750	5.080	245.00	711.20
C	90.00	0.63	38.4	0.98285	0.62	1.750	5.060	157.50	455.40
C	<u>210.00</u>	0.78	40.1	0.97321	0.76	1.760	5.100	<u>369.60</u>	<u>1071.00</u>
TOTAL	530.00							929.60	2694.80

Common stream weighted average GRAVITY value: $2694.80/530.0 = 5.08453$
 Common stream weighted average SULFUR value: $929.60/530.00 = 1.75396$

Shipper A:

Weighted average GRAVITY value: $457.20/90 = 5.08000$
 Calculation: $(5.08000 - 5.08453) \times 90 =$ (\$0.41)
 Weighted average SULFUR value: $157.50/90 = 1.75000$
 Calculation: $(1.75396 - 1.75000) \times 90 =$ \$0.36

TOTAL Shipper A pays the bank:

(\$0.05)

Shipper B:

Weighted average GRAVITY value: $711.20/140 = 5.08000$
 Calculation: $(5.08000 - 5.08453) \times 140 =$ (\$0.63)
 Weighted average SULFUR value: $245.00/140 = 1.75000$
 Calculation: $(1.75396 - 1.75000) \times 140 =$ \$0.55

TOTAL Shipper B pays the bank:

(\$0.08)

Shipper C:

Weighted average GRAVITY value: $1526.40/300 = 5.08800$
 Calculation: $(5.08800 - 5.08453) \times 300 =$ \$1.04
 Weighted average SULFUR value: $527.10/300 = 1.75700$
 Calculation: $(1.75396 - 1.75700) \times 300 =$ (\$0.91)

TOTAL Shipper C receives from the bank:

\$0.13

NET

\$0.00