

CAPLINE PIPELINE LIGHT LOUISIANA SWEET (LLS) COMMON STREAM QUALITY PROGRAM

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1. DEFINITIONS

“LLS” shall mean Light Louisiana Sweet crude oil.

“Operator” shall mean the operator of record for the Capline Pipeline System.

2. CAPLINE PIPELINE LLS COMMON STREAM QUALITY SPECIFICATIONS

The specifications are contained in the table below. These specifications will be dynamic to respond to changing crude oil quality as new production is brought on stream and older wells decline. The process for changing these specifications remains the same and is included in Section 5.

TABLE 1. CAPLINE PIPELINE COMMON STREAM QUALITY LLS SPECIFICATIONS

Property	Test Method	Specification
API Gravity	ASTM D-5002	34 - 41.0
Sulfur, % w	ASTM D-4294	0.40 max
Vanadium + Nickel, ppm w	ASTM D-5708A	8.0 max
Microcarbon Residue (MCRT), % w	ASTM D-4530	2.0 max
Light Ends (C ₂ – nC ₅), % v	Intertek In House	6.0 max
Total Acid Number (TAN), mg KOH/g	ASTM D-664	0.70 max
High Temperature Simulated Distillation (HTSD)	ASTM D-7169	-
20 % w Distilled, deg F		280 - 380
50 % w Distilled, deg F		510 - 610
1020+ deg F Residue, % w		4.0 - 12.5

3. TESTING

All incoming batches of LLS crude will be sampled at St. James and the samples sent to an independent, third party, laboratory. The samples will be retained for 90 days in the event that complaints are received. Testing of samples will be conducted as follows:

ALL RECEIPTS

The API gravity of all batches will be tested at St. James. The sulfur content of all batches will be tested at the third party laboratory. If the tests at St. James or the third party laboratory indicate that a batch does not meet specifications, the Operator will request the third party laboratory to test the sample from that specific batch, in addition to the testing schedule discussed below. If at any time a batch does not meet specifications, that carrier's batches immediately before and after the out-of-spec batch will be tested.

PIPELINE (Non Gathering System) AND TERMINAL RECEIPTS

Samples to be tested will be selected on a random basis at the discretion of the Operator. Approximately thirty percent of all samples will be tested. At least one sample from each connecting carrier will be tested per month.

GATHERING SYSTEM RECEIPTS (Example: Ship Shoal Pipeline)

Samples will be taken approximately (depending on when month end falls) weekly for all receipts during the week. All weekly samples will be analyzed.

MARINE RECEIPTS

All samples will be tested.

NEW SOURCES

All samples from new connecting carriers, existing connecting carriers that have not previously delivered LLS, and new terminals will be tested until the Operator is assured that the receipts are consistently meeting LLS specifications. New connecting carriers will be given the same four month grace period to comply with specifications as was given to all connecting carriers in the initial program starting September, 1998.

4. ENFORCEMENT

As a basis for enforcement, all shippers will be requested to include in their purchase contracts a statement that LLS crude delivered must meet "current Capline specifications for LLS crude".

Notification of non-compliance will be communicated to the operators of terminals and connecting carriers, who will be expected to deal with the source of the problem in their own system. For marine receipts, the shipper will be notified directly. In addition, notification of the receipt of an off-specification batch will be communicated to all Capline owner representatives, Measurement and Quality Committee representatives and Oil Movements Committee representatives.

Each Common Stream receipt of an off-specification batch will be counted as a violation. The total violation count for each terminal or connecting carrier will be based on a rolling twelve-month period. The first four violations (in the rolling twelve month period) will result in a warning letter and testing of the batches immediately before and after the off-specification receipt.

The fifth violation will result in a suspension letter and a one-year exclusion from the common stream. For one year following re-admittance, all batches will be tested at the shipper's expense. The third violation during this probationary one-year period will result in a two-year exclusion. Re-admittance will be at the Operator's discretion.

5. PROCEDURE FOR EXCLUSION

Any connecting carrier or terminal that receives five violations within a rolling twelve month period will be excluded from delivery of LLS to the Capline common stream for one year. The carrier or terminal will be notified of the fifth violation and will be given ninety days from the date of notification until the actual time of exclusion. Following re-admittance, all batches from that carrier/terminal will be tested for one year and if more than two violations are received within that year, the carrier/terminal will be excluded from delivery of LLS to the Capline common stream for two years. The carrier/terminal will be notified of the third violation and will again have ninety days from the date of notification until the actual time of exclusion.

6. SPECIFICATION CHANGE PROCESS

Change can take place in the following ways:

Operator discretion: Operator shall monitor overall crude stream quality and/or changes to specifications of downstream connecting carriers and make recommendations to Capline Pipeline Owner Representatives as necessary.

Request of one or more shippers: Operator shall review any shipper requests and available data and, if appropriate, make a recommendation to the Capline Pipeline Owner Representatives. If necessary, the Capline Pipeline Owner Representatives will canvas shippers for approval.