

Bengal Pipeline Company

Product Codes and Specifications

Section 3

Effective Date 07-11-2026

QUALITY ASSURANCE MANUAL

PRODUCT SPECIFICATIONS

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This Section contains specifications for products that are handled on a segregated and fungible basis.

Fungible Batch – A batch of petroleum product meeting the Carrier’s established specifications that may be commingled with other quantities of petroleum product meeting the same specifications.

Segregated Batch – A batch of petroleum product being the property of a single Shipper and meeting the Carrier’s established specifications.

Denatured Fuel Ethanol – (DFE) Ethanol intended for blending with gasolines meeting ASTM D4806 specifications and 40 CFR § 1090.270.

Delivery Location Restrictions – Not all products are delivered to all locations. Please see each product specification for delivery restrictions. Additionally, some grades may only be transported seasonally. Seasonal restrictions are set forth in the RVP calendar, found in Quality Assurance Section 4 of the Shipper Manual.

Delivery Test Results – Results may vary by the smaller of ASTM reproducibility for a given test or any test tolerance as allowed by state or EPA regulations at the point of delivery.

Specification Conformance – For purposes of determining conformance with these specifications, an observed value or a calculated value shall be rounded “to the nearest unit” in the last right-hand digit used in expressing the specification limit, in accordance with the rounding method of ASTM Practice E29, for Using Significant Digits in Test Data to Determine Conformance with Specifications.

Additive and Alternative Fuels Requirements/Restrictions

Bengal will permit only the types and concentrations of additives detailed below in products shipped on its system. All others are prohibited.

Approved Fuel Additives

Afton Chem 4875	Mobil C-605	Sulfix 9272M
Afton Chem HiTEC 6455	Nalco 5400-A	Tolad 245
Aqua Process 11CH77	Nalco 5403	Tolad 249
Athlon 611	Nalco 5405	Tolad 3005R
DCI-11 Plus ClearTrak	Nalco 5406	Tolad 3232
DCI-30.n	Nalco EC5012A	Tolad 3232D
DCI-4A	Nalco EC5407A	Tolad 351
DCI-6A	Nalco EC5491A	Tolad 4410
Dupont AFA-1	Nalco EC5624A	Tolad 9719
Ethyl HiTec 580	Nalco EC5626A	Unichem 7500
Innospec DMA-4	Nalco EC5627A	Unichem 7501
Lubrizol 541	Spec-Aid 8Q110ULS	Unichem 7510
Lubrizol 8014	Spec-Aid 8Q112ULS	UOP Unicor
Lubrizol 8017	Spec-Aid 8Q123ULS	UOP Unicor J
MidContinental MCC5001	Spec-Aid 8Q22	UOP Unicor PL

Prohibited Fuel Additives

Prohibited additives include, but are not limited to, the following:

- Intake Valve Detergent additives
- Lubricity additives
- Marker Solvent Yellow 124
- Phosphorus containing additives
- Port Fuel Injector (PFI) additives

Additive Documentation Requirements

If present, the type and concentration of approved additives must be clearly indicated on the Certificate of Analysis (CoA) for all batches moved on the Bengal system. Additive treat rates are acceptable for concentration reporting. Carrier may request review of volume reconciliation data to verify actual treat rates.

Aviation Turbine Fuel Additives

Product may only contain antioxidants and metal deactivators specified and within the concentration noted in Table 2: *Detailed Requirements for Additives in Aviation Turbine Fuels* of latest ASTM D-1655 with advance approval from Bengal prior to shipment.

Grade 54 - Fungible 3000 ppm Sulfur – Jet Fuel (Aviation Turbine Fuel Containing Synthesized Hydrocarbons) shipments may, but are not required to, contain a maximum of 8.4 pounds per 1,000 barrels (not including weight of solvent) of the following antioxidants:

- N, N-diisopropylparaphenylene diamine
- 75% (min) of 2, 6-ditertiary-butyl phenol plus 25% (max) of tertiary and tritertiary butyl phenols
- 72% (min) 2, 4-dimethyl-6-tertiary-butyl phenol plus 28% (max) of monomethyl and dimethyl tertiary-butyl phenols

- 55% (min) 2, 4-dimethyl-6-tertiary-butyl phenol plus 45% (max) of mixed tertiary and ditertiary butyl phenols.

All other additives are prohibited. Use of these additives must be clearly indicated on CoA. Bengal reserves the right to deny shipment of product containing these additives.

Cetane Improver Additives

Product may only contain 2-ethyl hexyl nitrate or t-butyl peroxide based cetane improver additives only upon advance approval from Bengal prior to shipment. Use of these additives is expected to be short term at reasonable treat levels. Bengal reserves the right to deny shipment of product containing cetane improver additives.

Cloud and Pour Point Depressant Additives

Product may only contain ethylene vinyl acetate copolymer-based cloud and pour point depressant additives only upon approval from Bengal prior to shipment. Use of these additives is expected to be short term at reasonable treat levels. Bengal reserves the right to deny shipment of product containing cloud and pour point depressant additives.

Corrosion Inhibitors

All products shipped on Bengal, except for all grades of aviation turbine fuel, are required to meet a minimum level of corrosion protection prior to shipment. The concentration of inhibitor dosage will be controlled to meet a minimum rating of B+ (less than 5% of test surface rusted) as determined by NACE Standard TM0172-2001, Test Method – Antitrust Properties of Petroleum Products Pipeline Cargos.

Dyes

Dyes are not allowed in any product moved on the Bengal system.

Gum Inhibitors and Metal Deactivators

Gasoline shipments may, but are not required to, contain the following:

- | | |
|--|--|
| • N, N'di-secondary butyl para-phenylenediamine | • Ortho-tertiary butylphenol |
| • N, N'disalicylidene-l, 2 propanediamine | • 2,4-diamethyl-6-tertiary-butylphenol |
| • N, N'di (l-ethyl-2-methylpentyl) para-phenylenediamine | • 2,4-di-tertiary butylphenol |
| • 2, 6-di-tertiary butyl 4 methyl phenol | • 2,6-tertiary butylphenol |
| • N, N'di-isopropyl-para-phenylenediamine | • N,secondary butyl, N' phenyl-para-phenylenediamine |
| • n-Butyl para-aminophenol | • Mixed propylated and butylated phenols |
| • N, N'bis-(l, 4-diamethylpentyl)-p-phenylenediamine | • Butylated ethyl,methyl and dimethyl phenols |
| • 2,4,6 - tritertiary butylphenol | • 2,4,6 tri-isopropylphenol |

Hydrogen Sulfide

Bengal does not accept product containing H₂S in the liquid or vapor phase. “No H₂S” is defined as <1 ppm H₂S in the liquid per ASTM D7621 or UOP 163 and <10 ppm H₂S in the vapor space per ASTM D5705. The use of H₂S scavengers must be approved by Bengal prior to use. Any products treated with H₂S scavenger must be

resampled and tested post treatment and a CoA showing the H₂S has been successfully mitigated must be submitted and reviewed by Bengal prior to the product being lifted into the system.

Renewable Diesel

Renewable diesel is a liquid fuel derived from 100% hydrotreated bio-mass feedstocks that meets the registration requirements for fuels and fuel additives established by the EPA under section 211 of the Clean Air Act and the requirements of ASTM D975. Renewable diesel containing fatty acid esters (FAME, FAEE, or other esters) is prohibited in all distillate grades.

Bengal assumes no responsibility as a blender and all Renewable Identification Numbers (RINs) must be separated before entering the system. The volume of renewable diesel must be disclosed on the CoA.

Static Dissipator Additive (SDA) or Conductivity Improver

Product shipments may, but are not required to, contain Static Dissipator Additive (SDA). The only approved SDAs for use on Bengal Pipeline are Innospec Stadis® 450 and AvGuard. The maximum concentration at origin of Stadis® 450 and AvGuard is 0.75 mg/L. The maximum conductivity at origin allowed is 250 pS/m at 21°C (70°F) by ASTM D2624.

SDA is prohibited from all aviation kerosene grades.

Sustainable Aviation Fuel (SAF)

SAF is defined as the portion of synthetic paraffinic kerosene (SPK) volume in a blend of fuel meeting ASTM D7566 *Standard Specification for Aviation Turbine Fuels Containing Synthesized Hydrocarbons*. ASTM D7566 provides the requirements for blends of crude based kerosene and SPK to be classified as fuel meeting the D1655 Standard Specification for Aviation Turbine Fuels. The specific SPK as detailed in D7566 annexes - (A1) FISCHER TROPSCH SPK, (A2) HEFA SPK, and (A5) Alcohol-to-Jet Synthetic Paraffinic Kerosene (Ethanol derived only) are the only allowable SPK that may be shipped on Bengal's pipeline. Grade 47 specification for Synthesized Blending Components is created for tracking the SPK volume of the blended fuel for blending services provided by Bengal and is not for shipment.

PRODUCT SPECIFICATIONS

GASOLINES

Gasolines

Below are grade codes and descriptions for fungible and segregated gasoline products.

Fungible Code	Segregated Code	Description
		CBOB – 87 Octane after blended with 10% DFE
	1A	Summer 8.8 psi RVP
A2	2A	Summer 10.0 psi RVP
A3	3A	Winter 12.5 psi RVP
A4	4A	Winter 14.5 psi RVP
A5	5A	Winter 15.5 psi RVP
		CBOB – 93 Octane after blended with 10% DFE
D2	2D	Summer 10.0 psi RVP
D3	3D	Winter 12.5 psi RVP
D4	4D	Winter 14.5 psi RVP
D5	5D	Winter 15.5 psi RVP
		RBOB – 87 Octane after blended with 10% DFE
F1	1F	Summer 7.4 psi RVP
F3	3F	Winter 11.5 psi RVP
F4	4F	Winter 13.5 psi RVP
F5	5F	Winter 15.0 psi RVP
		RBOB – 93 Octane after blended with 10% DFE
H1	1H	Summer 7.4 psi RVP
H3	3H	Winter 11.5 psi RVP
H4	4H	Winter 13.5 psi RVP
H5	5H	Winter 15.0 psi RVP
		Gasoline Blendstocks
	1L	Low Octane (<83)
	2L	Regular Octane (<87)
	3L	Mid-Grade Octane (<93)
	4L	Premium Octane (>93)
		Conventional Gasoline – 87 Octane
M2	2M	Summer 9.0 psi RVP
M3	3M	Winter 11.5 psi RVP
M4	4M	Winter 13.5 psi RVP
M5	5M	Winter 15.0 psi RVP
		Conventional Gasoline – 93 Octane
V2	2V	Summer 9.0 psi RVP
V3	3V	Winter 11.5 psi RVP
V4	4V	Winter 13.5 psi RVP
V5	5V	Winter 15.0 psi RVP
	BU	Butane

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PRODUCT SPECIFICATIONS

A-GRADE

Conventional Regular Gasoline Before Oxygenate Blending (CBOB) 87 Octane after blending with 10% DFE

This CBOB may not be combined with any other CBOB except a CBOB having the same requirements for oxygenate type and amount.

All parameters must be met before blending with DFE unless noted.

Product Property	ASTM Test Method	Test Results	
		Minimum	Maximum
Appearance	D4176, Proc. 1	Clear and bright. Free of visible water and particulate matter	
Gravity, API @ 60°F	D4052	48	
NACE	TM0172	B+	
Oxidation Stability, minutes	D525 or D7525	240 31	
Oxygen Content, wt %	D5599 or D4815		0.1
Phosphorus, g/gal	D3231		0.004
Sulfur, ppm wt.	D2622 or D5453 or D7039		80

All parameters must be met after blending with DFE unless noted.

Product Property	ASTM Test Method	Test Results	
		Minimum	Maximum
Benzene, vol %	D5769 or D3606		3.8
Corrosion (Cu), 3 hrs. @ 122°F (50°C)	D130		1
Corrosion (Ag), 3 hrs. @ 122°F (50°C)	D7671		1
Doctor Test OR Mercaptan Sulfur, wt %	D4952 D3227	Negative (sweet) 0.002	
Octane RON MON Antiknock Index	D2699 D2700 D4814	Report 82.0 87.0	
Solvent Washed Gum, mg/100mL	D381		4

All parameters must be met after blending with DFE unless noted.

Grade	D4814	D86, °F (% Evaporated)					D5188, °F	D5191, psi	
	Driveability Index	10 Vol %	50 Vol %		90 Vol %	End Pt.	V/L @ 20	RVP	
	Max	Max	Min	Max	Max	Max	Min	Max w/ Ethanol	Max w/o Ethanol
1A	1250	158.0	150.0	250.0	374.0	430.0	122	8.8	7.8
A2/2A	1250	158.0	150.0	250.0	374.0	430.0	122	10.0	9.0
A3/3A	1230	140.0	150.0	240.0	365.0	430.0	116	12.5	-
A4/4A	1220	131.0	145.0	235.0	365.0	430.0	107	14.5	-
A5/5A	1200	122.0	145.0	230.0	365.0	430.0	102	15.5	-

- (a) May not contain oxygenates, such as ethers and alcohols. The use of non-hydrocarbon blending components in these grades is prohibited.
- (b) Any gasoline exhibiting an offensive odor will not be accepted for shipment.
- (c) All EPA test methods must be performed in accordance with 40 CFR 1090 Subpart C standards and procedures set forth in Subpart N.
- (d) All test methods listed in ASTM D4814 are acceptable. Referee methods are listed first in the table above and will be considered for disputes.
- (e) Summertime RVP must be checked using EPA formula as per 40 CFR 1090.1355.
- (f) Heavy metals, including lead, are not allowed to be present.
- (g) For the 145°F minimum 50% evaporation distillation temperature for Class D and E gasoline, no allowance will be made for the precision of test methods.

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PRODUCT SPECIFICATIONS

D-GRADE

Conventional Premium Gasoline Before Oxygenate Blending (CBOB) 93 Octane after blending with 10% DFE

This CBOB may not be combined with any other CBOB except a CBOB having the same requirements for oxygenate type and amount.

All parameters must be met before blending with denatured fuel ethanol unless noted.

Product Property	ASTM Test Method	Test Results	
		Minimum	Maximum
Appearance	D4176, Proc. 1	Clear and bright. Free of visible water and particulate matter	
Gravity, API @ 60°F	D4052	48	
NACE	TM0172	B+	
Oxidation Stability, minutes	D525 or D7525	240 31	
Oxygen Content, wt %	D5599 or D4815		0.1
Phosphorus, g/gal	D3231		0.004
Sulfur, ppm wt.	D2622 or D5453 or D7039		80

All parameters must be met after blending with DFE unless noted.

Product Property	ASTM Test Method	Test Results	
		Minimum	Maximum
Benzene, vol %	D5769 or D3606		3.8
Corrosion (Cu), 3 hrs. @ 122°F (50°C)	D130		1
Corrosion (Ag), 3 hrs. @ 122°F (50°C)	D7671		1
Doctor Test OR Mercaptan Sulfur, wt %	D4952 D3227	Negative (sweet) 0.002	
Octane RON MON Antiknock Index	D2699 D2700 D4814	Report 82.0 93.0	
Solvent Washed Gum, mg/100 mL	D381		4

All parameters must be met after blending with DFE unless noted.

Grade	D4814	D86, °F (% Evaporated)					D5188, °F	D5191, psi	
	Driveability Index	10 Vol %	50 Vol %		90 Vol %	End Pt.	V/L @ 20	RVP	
	Max	Max	Min	Max	Max	Max	Min	Max w/ Ethanol	Max w/o Ethanol
D2/2D	1250	158.0	150.0	250.0	374.0	430.0	122	10.0	9.0
D3/3D	1230	140.0	150.0	240.0	365.0	430.0	116	12.5	-
D4/4D	1220	131.0	145.0	235.0	365.0	430.0	107	14.5	-
D5/5D	1200	122.0	145.0	230.0	365.0	430.0	102	15.5	-

- (a) May not contain oxygenates, such as ethers and alcohols. The use of non-hydrocarbon blending components in these grades is prohibited.
- (b) Any gasoline exhibiting an offensive odor will not be accepted for shipment.
- (c) All EPA test methods must be performed in accordance with 40 CFR 1090 Subpart C standards and procedures set forth in Subpart N.
- (d) All test methods listed in ASTM D4814 are acceptable. Referee methods are listed first in the table and will be considered for disputes.
- (e) Summertime RVP must be checked using EPA formula as per 40 CFR 1090.1355.
- (f) Heavy metals, including lead, are not allowed to be present.
- (g) For the 145°F minimum 50% evaporation distillation temperature for Class D and E gasoline, no allowance will be made for the precision of test methods.

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PRODUCT SPECIFICATIONS

F-GRADE

Reformulated Regular Gasoline Before Oxygenate Blending (RBOB) 87 Octane after blending with 10% DFE

This RBOB may not be combined with any other RBOB except a RBOB having the same requirements for oxygenate type and amount.

All parameters must be met before blending with denatured fuel ethanol unless noted.

Product Property	ASTM Test Method	Test Results	
		Minimum	Maximum
Appearance	D4176, Proc. 1	Clear and bright. Free of visible water and particulate matter	
Gravity, API @ 60°F	D4052	48	
NACE	TM0172	B+	
Oxidation Stability, minutes	D525 or D7525	240	
		31	
Oxygen Content, wt %	D5599 or D4815		0.1
Phosphorus, g/gal	D3231		0.004
Sulfur, ppm wt.	D2622		80
	or D5453 or D7039		

All parameters must be met after blending with DFE unless noted.

Product Property	ASTM Test Method	Test Results	
		Minimum	Maximum
Benzene, vol %	D5769 or D3606		3.8
Corrosion (Cu), 3 hrs. @ 122°F (50°C)	D130		1
Corrosion (Ag), 3 hrs. @ 122°F (50°C)	D7671		1
Doctor Test OR Mercaptan Sulfur, wt %	D4952	Negative (sweet)	
	D3227		0.002
Octane RON MON Antiknock Index	D2699	Report	
	D2700	82.0	
	D4814	87.0	
Solvent Washed Gum, mg/100 mL	D381		4

All parameters must be met after blending with DFE unless noted.

Grade	D4814	D86, °F (% Evaporated)					D5188, °F	D5191, psi	
	Driveability Index	10 Vol %	50 Vol %		90 Vol %	End Pt.	V/L @ 20	RVP	
	Max	Max	Min	Max	Max	Max	Min	Max w/ Ethanol	Max w/o Ethanol
F1/1F	1250	158.0	150.0	250.0	374.0	430.0	122	7.4	-
F3/3F	1230	140.0	150.0	240.0	365.0	430.0	116	11.5	-
F4/4F	1220	131.0	145.0	235.0	365.0	430.0	107	13.5	-
F5/5F	1200	122.0	145.0	230.0	365.0	430.0	102	15.0	-

- (a) May not contain oxygenates, such as ethers and alcohols. The use of non-hydrocarbon blending components in these grades is prohibited.
- (b) Any gasoline exhibiting an offensive odor will not be accepted for shipment.
- (c) All EPA test methods must be performed in accordance with 40 CFR 1090 Subpart C standards and procedures set forth in Subpart N.
- (d) All test methods listed in ASTM D4814 are acceptable. Referee methods are listed first in the table and will be considered for disputes.
- (e) Summertime RVP must be checked using EPA formula as per 40 CFR 1090.1355.
- (f) Heavy metals, including lead, are not allowed to be present.
- (g) For the 145°F minimum 50% evaporation distillation temperature for Class D and E gasoline, no allowance will be made for the precision of test methods.

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PRODUCT SPECIFICATIONS

H-GRADE

Reformulated Premium Gasoline Before Oxygenate Blending (RBOB) 93 Octane after blending with 10% DFE

This RBOB may not be combined with any other RBOB except a RBOB having the same requirements for oxygenate type and amount.

All parameters must be met before blending with denatured fuel ethanol unless noted.

Product Property	ASTM Test Method	Test Results	
		Minimum	Maximum
Appearance	D4176, Proc. 1	Clear and bright. Free of visible water and particulate matter	
Gravity, API @ 60°F	D4052	48	
NACE	TM0172	B+	
Oxidation Stability, minutes	D525 or D7525	240 31	
Oxygen Content, wt %	D5599 or D4815		0.1
Phosphorus, g/gal	D3231		0.004
Sulfur, ppm wt.	D2622 or D5453 or D7039		80

All parameters must be met after blending with DFE unless noted.

Product Property	ASTM Test Method	Test Results	
		Minimum	Maximum
Benzene, vol %	D5769 or D3606		3.8
Corrosion (Cu), 3 hrs. @ 122°F (50°C)	D130		1
Corrosion (Ag), 3 hrs. @ 122°F (50°C)	D7671		1
Doctor Test OR Mercaptan Sulfur, wt %	D4952 D3227	Negative (sweet) 0.002	
Octane RON MON Antiknock Index	D2699 D2700 D4814	Report 82.0 93.0	
Solvent Washed Gum, mg/100 mL	D381		4

All parameters must be met after blending with DFE unless noted.

Grade	D4814	D86, °F (% Evaporated)					D5188, °F	D5191, psi	
	Driveability Index	10 Vol %	50 Vol %		90 Vol %	End Pt.	V/L @ 20	RVP	
	Max	Max	Min	Max	Max	Max	Min	Max w/ Ethanol	Max w/o Ethanol
H1/1H	1250	158.0	150.0	250.0	374.0	430.0	122	7.4	-
H3/3H	1230	140.0	150.0	240.0	365.0	430.0	116	11.5	-
H4/4H	1220	131.0	145.0	235.0	365.0	430.0	107	13.5	-
H5/5H	1200	122.0	145.0	230.0	365.0	430.0	102	15.0	-

- (a) May not contain oxygenates, such as ethers and alcohols. The use of non-hydrocarbon blending components in these grades is prohibited.
- (b) Any gasoline exhibiting an offensive odor will not be accepted for shipment.
- (c) All EPA test methods must be performed in accordance with 40 CFR 1090 Subpart C standards and procedures set forth in Subpart N.
- (d) All test methods listed in ASTM D4814 are acceptable. Referee methods are listed first in the table and will be considered for disputes.
- (e) Summertime RVP must be checked using EPA formula as per 40 CFR 1090.1355.
- (f) Heavy metals, including lead, are not allowed to be present.
- (g) For the 145°F minimum 50% evaporation distillation temperature for Class D and E gasoline, no allowance will be made for the precision of test methods.

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PRODUCT SPECIFICATIONS

L-GRADE

Segregated Blendstock

To allow for the proper sequence placement, when nominating the batch, the Shipper must supply to the best of their knowledge the following properties. The Certificate of Analysis must be received before shipment.

Product Property	ASTM Test Method	Test Results	
		Minimum	Maximum
Appearance	D4176, Proc. 1	Clear and bright. Free of visible water and particulate matter	
Aromatics, vol %	D1319		50
Benzene, vol %	D5769 or D3606		3.8
Corrosion (Cu) 3 hrs. @122°F (50°C)	D130		
Corrosion (Ag) 3 hrs. @122°F (50°C)	D7671		
Doctor Test OR Mercaptan Sulfur, wt %	D4952 D3227	Negative (sweet) 0.002	
Gravity, API @ 60°F	D4052	48	90
H ₂ S in Liquid, ppm	D7621 or UOP 163		<1
H ₂ S in Vapor, ppm	D5705		<10
Heavy Metals		Not allowed	
NACE	TM0172	B+	
Octane RON MON Antiknock Index	D2699 D2700 D4814	See table below	
Oxidation Stability, minutes	D525 or D7525		
Oxygen Content, wt %	D5599 or D4815		
Phosphorus, g/gal	D3231		
RVP	D5191		
Solvent Washed Gum, mg/100mL	D381		
Sulfur, ppm wt.	D2622 or D5453 or D7039		
Volatility: Distillation, °F @ % Evaporated Driveability Index Vapor/Liquid Ratio (V/L), °F @ 20	D86 D4814 D5188		

Grade	Antiknock Index, D4814	
	Min	Max
1L	-	83.0
2L	83.0	87.0
3L	87.0	93.0
4L	93.0	-

- (a) May not contain oxygenates, such as ethers and alcohols. The use of non-hydrocarbon blending components in these grades is prohibited.
- (b) Any gasoline exhibiting an offensive odor will not be accepted for shipment.
- (c) All EPA test methods must be performed in accordance with 40 CFR 1090 Subpart C standards and procedures set forth in Subpart N.
- (d) All test methods listed in ASTM D4814 are acceptable. Referee methods are listed first in the table and will be considered for disputes.

PRODUCT SPECIFICATIONS

M-GRADE

Conventional Regular Gasoline 87 Octane

This product does not meet requirements for reformulated gasoline and may not be used in any reformulated gasoline covered area.

All parameters must be met on a neat basis.

Product Property	ASTM Test Method	Test Results	
		Minimum	Maximum
Appearance	D4176, Proc. 1	Clear and bright. Free of visible water and particulate matter	
Benzene, vol %	D5769 or D3606		3.8
Corrosion (Cu), 3 hrs. @ 122°F (50°C)	D130		1
Corrosion (Ag), 3 hrs. @ 122°F (50°C)	D7671		1
Doctor Test OR Mercaptan Sulfur, wt %	D4952 D3227	Negative (sweet) 0.002	
Gravity, API @ 60°F	D4052	48	
NACE	TM0172	B+	
Octane RON MON Antiknock Index	D2699 D2700 D4814	Report 82.0 87.0	
Oxidation Stability, minutes	D525 or D7525	240 31	
Oxygen Content, wt %	D5599 or D4815		0.1
Phosphorus, g/gal	D3231		0.004
Solvent Washed Gum, mg/100 mL	D381		4
Sulfur, ppm wt.	D2622 or D5453 or D7039		80

Grade	D4814	D86, °F (% Evaporated)					D5188, °F	D5191, psi
	Driveability Index	10 Vol %	50 Vol %		90 Vol %	End Pt.	V/L @ 20	RVP
	Max	Max	Min	Max	Max	Max	Min	Max w/o Ethanol
M2/2M	1250	158.0	170.0	250.0	374.0	430.0	133	9.0
M3/3M	1230	140.0	170.0	240.0	365.0	430.0	124	11.5
M4/4M	1220	131.0	170.0	235.0	365.0	430.0	116	13.5
M5/5M	1200	122.0	170.0	230.0	365.0	430.0	105	15.0

- (a) May not contain oxygenates, such as ethers and alcohols. The use of non-hydrocarbon blending components in these grades is prohibited.
- (b) Any gasoline exhibiting an offensive odor will not be accepted for shipment.
- (c) All EPA test methods must be performed in accordance with 40 CFR 1090 Subpart C standards and procedures set forth in Subpart N.
- (d) All test methods listed in ASTM D4814 are acceptable. Referee methods are listed first in the table and will be considered for disputes.
- (e) Summertime RVP must be checked using EPA formula as per 40 CFR 1090.1355.
- (f) Heavy metals, including lead, are not allowed to be present.
- (g) Fungible deliveries will be limited to destinations downstream (inclusive) of Meridian, MS. Segregated deliveries will be subject to terms outlined in Bengal's Rules and Regulations tariff.
- (h) Delivery not available for Belton.

PRODUCT SPECIFICATIONS

V-GRADE

Conventional Premium Gasoline 93 Octane

This product does not meet requirements for reformulated gasoline and may not be used in any reformulated gasoline covered area.

All parameters must be met on a neat basis.

Product Property	ASTM Test Method	Test Results	
		Minimum	Maximum
Appearance	D4176, Proc. 1	Clear and bright. Free of visible water and particulate matter	
Benzene, vol %	D5769 or D3606		3.8
Corrosion (Cu), 3 hrs. @ 122°F (50°C)	D130		1
Corrosion (Ag), 3 hrs. @ 122°F (50°C)	D7671		1
Doctor Test OR Mercaptan Sulfur, wt %	D4952 D3227	Negative (sweet) 0.002	
Gravity, API @ 60°F	D4052	48	
NACE	TM0172	B+	
Octane RON MON Antiknock Index	D2699 D2700 D4814	Report 82.0 93.0	
Oxidation Stability, minutes	D525 or D7525	240 31	
Oxygen Content, wt %	D5599 or D4815		0.1
Phosphorus, g/gal	D3231		0.004
Solvent Washed Gum, mg/100 mL	D381		4
Sulfur, ppm wt.	D2622 or D5453 or D7039		80

Grade	D4814	D86, °F (% Evaporated)					D5188, °F	D5191, psi
	Driveability Index	10 Vol %	50 Vol %		90 Vol %	End Pt.	V/L @ 20	RVP
	Max	Max	Min	Max	Max	Max	Min	Max w/o Ethanol
V2/2V	1250	158.0	170.0	250.0	374.0	430.0	133	9.0
V3/3V	1230	140.0	170.0	240.0	365.0	430.0	124	11.5
V4/4V	1220	131.0	170.0	235.0	365.0	430.0	116	13.5
V5/5V	1200	122.0	170.0	230.0	365.0	430.0	105	15.0

- (a) May not contain oxygenates, such as ethers and alcohols. The use of non-hydrocarbon blending components in these grades is prohibited.
- (b) Any gasoline exhibiting an offensive odor will not be accepted for shipment.
- (c) All EPA test methods must be performed in accordance with 40 CFR 1090 Subpart C standards and procedures set forth in Subpart N.
- (d) All test methods listed in ASTM D4814 are acceptable. Referee methods are listed first in the table and will be considered for disputes.
- (e) Summertime RVP must be checked using EPA formula as per 40 CFR 1090.1355.
- (f) Heavy metals, including lead, are not allowed to be present.
- (g) Fungible deliveries will be limited to destinations downstream (inclusive) of Meridian, MS. Segregated deliveries will be subject to terms outlined in Bengal's Rules and Regulations tariff.
- (h) Delivery not available for Belton.

Butane

The purpose of this grade is to allow Bengal to track the volume of Butane. It may not be shipped on Bengal Pipeline.

Synthesized Blending Components

The purpose of this grade is to allow Bengal to track the volume of synthetic paraffinic kerosene. It may not be shipped on Bengal Pipeline at this time.

Segregated 100% Renewable Diesel (R100)

The purpose of this grade is to allow Bengal to track renewable diesel. It may not be shipped on Bengal Pipeline.

Fungible Military Grade (JP-5)

Shipments of grade 52 must meet the latest military specification for JP-5.

(a) Not available for delivery to Line 24, Explorer, Greensboro local lines, and Spartanburg.

Segregated 15 ppm Sulfur – Certified NTDF Jet Fuel (Aviation Turbine Fuel)

To allow for the proper sequence placement, when nominating the batch, the Shipper must supply the product properties required for the fungible grade 54 in addition to these specifications. The Certificate of Analysis must be received before shipment.

Product Property	ASTM Test Method	Test Results	
		Minimum	Maximum
Appearance	D4176, Proc. 1	Clear and bright. Free of visible water and particulate matter	
Electrical Conductivity, pS/m @ 21°C	D2624	Report	
Flash Point, °F	D56	100	
Gravity, API @ 60°F	D4052	37	51
NACE	TM0172	B+	
Sulfur, ppm wt.	D5453 or D2622		15

(a) Refer to Additive section for requirements/restrictions.

(b) All test methods listed in ASTM D1655 are acceptable. Referee methods are listed first in the table and will be considered for disputes.

(c) This fuel is designated for non-transportation use (Certified NTDF – 15 ppm sulfur max).

Fungible 3000 ppm Sulfur – Jet Fuel (Aviation Turbine Fuel)

Product Property	ASTM Test Method	Test Results	
		Minimum	Maximum
Composition			
Acidity, mg KOH/g	D3242		0.1
Appearance	D4176, Proc. 1	Clear and bright. Free of visible water and particulate matter	
Aromatics, vol %	D1319 or D6379		25 26.5
Doctor Test OR	D4952	Negative	
Mercaptan Sulfur, wt %	D3227		0.003
Haze rating @ 25°C (77°F)	D4176, Proc. 2		2
Sulfur, ppm wt.	D4294 or D5453 or D2622		3000
Volatility			
Density at 15°C, kg/m³	D4052	775	840
Distillation, °F	D86		
10% Recovered		-	400
50% Recovered		Report	-
90% Recovered		Report	-
End Point		-	572
Residue, %		-	1.5
Loss, %		-	1.5
Flash Point, °F	D56	105	
Gravity, API @ 60°F	D4052	37	51
Fluidity			
Freezing Point, °C	D2386 or D5972		-40
Viscosity, cSt @ -20°C (-4°F)	D445		8.0
Combustion			
Net Heat of Combustion, BTU/lb	D4809 or D3338	18,400	
Smoke Point, mm OR	D1322	25	3.0
Smoke Point, mm AND	D1322	18	
Naphthalenes, vol %	D1840		
Corrosion			
Corrosion, 2hrs @ 100°C (212°F)	D130		1

PRODUCT SPECIFICATIONS

GRADE 54

Product Property	ASTM Test Method	Test Results	
		Minimum	Maximum
Stability			
Thermal Oxidation Stability Test/Control Temp. (Origin 275°C, Del. 260 °C) Pressure Drop, mm/Hg Tube Rating, one of the following shall be met: (1) Annex A1 VTR, VTR color code OR (2) Annex A2 ITR or Annex A3 ETR, nm avg. over area of 2.5mm	D3241		25 <3 (no peacock or abnormal color) 85
Contaminants			
Existent Gum, mg/100mL	D381		7.0
MSEP	D3948	85 (origin) 75 (delivery)	
Conductivity			
Electrical Conductivity, pS/m @ 21°C	D2624	Report	

- (a) Delivered products meet all applicable requirements at time and place of delivery.
- (b) Bengal filters the product downstream before delivery to the airport at the following locations: Atlanta, Dorsey, Greensboro, Raleigh Durham. The minimum MSEP specification downstream of the filtration system 85. All other deliveries will meet Bengal's delivery specification of 75 (MSEP by ASTM D7224).
- (c) Refer to Additive section for requirements/restrictions.
- (d) This product may contain synthetic blending components and meets ASTM D7566 Standard Specification for Aviation Turbine Fuels Containing Synthesized Hydrocarbons. Only the specific SBCs as detailed in D7566 annexes – (A1) Fischer Tropsch SPK, (A2) HEFA SPK, or (A5) Ethanol derived ATJ are allowed to be present. If the product contains SBC, the supplier must report the type and volume percent present.
- (e) In accordance with 40 CFR § 80.1453, This volume of blended renewable fuel is designated and intended to be used as transportation fuel, heating oil, or jet fuel in the 48 U.S. contiguous states and Hawaii. Any person exporting this fuel is subject to the requirements of 40 CFR § 80.1430.
- (f) Carrier shall be deemed to have no title to any Renewable Identification Number (RIN) as defined by 40 C.F.R. Part 80, Subpart M, or any other federal or state tax credits or associated value related to renewable fuel.
- (g) Carrier makes no claim or representation with respect to the environmental, sustainability, or carbon reduction attributes of any product pursuant to 16 C.F.R. § 260.15.
- (h) Grade 56 will be comingled with grade 54 in the pipeline and within tankage.
- (i) All test methods listed in ASTM D1655 are acceptable. Referee methods are listed first in the table and will be considered for disputes.
- (j) Simulated distillation, D2887, can be ran in lieu of D86. If ran, it must be correlated to D86.
- (k) This product is not allowed on line 24 or to Spartanburg.
- (l) This product may contain up to 5% by volume co-hydroprocessed synthesized kerosene. If co-processing the manufacturing site MUST run the following additional tests consistent with D1655 Annex A1, Table A1:1. (i) Test Thermal Stability and pass at 280°C. (ii) Test viscosity and pass at -40°C; 12.0 cSt maximum. (iii) Test for unconverted esters/fatty acids using ASTM D7797; 15 mg/kg maximum.

Bonded Aviation Turbine Fuel

Shipments of grade 56 must meet the specification for Fungible Aviation Turbine Fuel (Grade 54).

- (a) Not available for delivery to Line 22, 24, Greensboro local lines, and Spartanburg.

Fungible Military Grade (JP-8)

Shipments of grade 58 must meet the latest military specification for JP-8.

Segregated Distillate Blendstock

To allow for the proper sequence placement, when nominating the batch, the Shipper must supply the product properties required for the fungible grade 54 in addition to these specifications. The Certificate of Analysis must be received before shipment.

Product Property	ASTM Test Method	Test Results	
		Minimum	Maximum
Appearance	D4176, Proc. 1	Clear and bright. Free of visible water and particulate matter	
Electrical Conductivity, pS/m @ 21°C	D2624		250
Flash Point, °F	D56	100	
Gravity, API @ 60°F	D4052	37	51
NACE	TM0172	B+	
Sulfur, ppm wt.	D5453 or D2622		3000

(a) Refer to Additive section for requirements/restrictions.

(b) All test methods listed in ASTM D1655 are acceptable. Referee methods are listed first in the table and will be considered for disputes.

PRODUCT SPECIFICATIONS

GRADE 62

Fungible 15ppm Ultra Low Sulfur Diesel Fuel

Product Property	ASTM Test Method	Test Results	
		Minimum	Maximum
Appearance	D4176, Proc. 1	Clear and bright. Free of visible water and particulate matter	
Ash, wt %	D482		0.01
BS&W, vol %	D2709		0.05
Cetane Number	D613	40	
Aromatics, vol % OR Cetane Index	D1319 D976	40	35
Cloud Point, °F August 1 – March 14 March 15 – July 31	D2500 or D5773		15.8 19.4
Color	D6045		2.5
Corrosion, 3hrs @ 50°C (122°F)	D130		1
Distillation, °F 50% 90% End Point	D86	540	Report 640 700
Electrical Conductivity, pS/m @ 21°C (70°F)	D2624		250
Flash Point, °F	D93	130 (origin) 125.8 (delivery)	
Gravity, API @ 60°F	D4052	30	
Haze Rating @ 25°C (77°F)	D4176, Proc. 2		2
NACE	TM0172	B+	
Pour Point, °F August 1 – March 14 March 15 – July 31	D97		0 10.4
Ramsbottom Carbon Residue on 10% distillation residue, wt %	D524		0.35
Sulfur, ppm wt.	D5453 or D2622 or D7039		11 (origin) 15 (delivery)
Thermal Stability, 90min @ 150°C, Pad Rating OR Oxidation Stability, mg/100mL OR Thermal Stability, % Reflectance Y Unit / Green Filter OR W Unit	DuPont F-21 D2274 D6468	73% 68%	7 2.5
Viscosity, cSt @ 40°C (104°F)	D445	1.9	4.1

- (a) Delivered products meet all applicable requirements at time and place of delivery.
- (b) Refer to Additive section for requirements/restrictions.
- (c) All test methods listed in ASTM D975 are acceptable. Referee methods are listed first in the table and will be considered for disputes.
- (d) Sulfur and cetane index results shall be obtained in compliance with 40 CFR1090 Subpart N.
- (e) Either physical or simulated distillation, D2887, can be used. D2887 MUST be correlated to D86.
- (f) Grade 62 deliveries at the following locations may contain up to 5% Renewable Diesel: Atlanta, Belton, Charlotte, Pelham, Spartanburg, and Greensboro deliveries.
- (g) Grade 62 originations are not allowed to contain Renewable diesel fuels.
- (h) In accordance with 40 CFR § 80.1453, This volume of blended renewable fuel is designated and intended to be used as transportation fuel, heating oil, or jet fuel in the 48 U.S. contiguous states and Hawaii. Any person exporting this fuel is subject to the requirements of 40 CFR § 80.1430.

Segregated 15 ppm Ultra Low Sulfur Diesel Fuel Containing up to 5% Renewable Hydrotreated Diesel Fuel

Product Property	ASTM Test Method	Test Results	
		Minimum	Maximum
Appearance	D4176, Proc. 1	Clear and bright. Free of visible water and particulate matter	
Ash, wt %	D482		0.01
BS&W, vol %	D2709		0.05
Cetane Number	D613	40	
Aromatics, vol % OR Cetane Index	D1319 D976	40	35
Cloud Point, °F August 1 – March 14 March 15 – July 31	D2500 or D5773		15.8 19.4
Color	D6045		2.5
Corrosion, 3hrs @ 50°C (122°F)	D130		1
Distillation, °F 50% 90% End Point	D86	540	Report 640 700
Electrical Conductivity, pS/m @ 21°C (70°F)	D2624		250
Flash Point, °F	D93	130 (origin) 125.8 (delivery)	
Gravity, API @ 60°F	D4052	30	
Haze Rating @ 25°C (77°F)	D4176, Proc. 2		2
NACE	TM0172	B+	
Pour Point, °F August 1 – March 14 March 15 – July 31	D97		0 10.4
Ramsbottom Carbon Residue on 10% distillation residue, wt %	D524		0.35
Renewable Fuel, vol %	D7371		5
Sulfur, ppm wt.	D5453 or D2622 or D7039		11 (origin) 15 (delivery)
Thermal Stability, 90min @ 150°C, Pad Rating OR Oxidation Stability, mg/100mL OR Thermal Stability, % Reflectance Y Unit / Green Filter OR W Unit	DuPont F-21 D2274 D6468	73% 68%	7 2.5
Viscosity, cSt @ 40°C (104°F)	D445	1.9	4.1

- (a) Delivered products meet all applicable requirements at time and place of delivery.
- (b) Refer to Additive section for requirements/restrictions.
- (c) All test methods listed in ASTM D975 are acceptable. Referee methods are listed first in the table and will be considered for disputes.
- (d) Sulfur and cetane index results shall be obtained in compliance with 40 CFR1090 Subpart N.
- (e) Either physical or simulated distillation, D2887, can be used. D2887 MUST be correlated to D86.
- (f) May contain up to 5% renewable diesel.
- (g) In accordance with 40 CFR § 80.1453, This volume of blended renewable fuel is designated and intended to be used as transportation fuel, heating oil, or jet fuel in the 48 U.S. contiguous states and Hawaii. Any person exporting this fuel is subject to the requirements of 40 CFR § 80.1430.

Fungible 15 ppm Sulfur (Certified NTDF) – Heating Oil/Fuel Oil

Product Property	ASTM Test Method	Test Results	
		Minimum	Maximum
Appearance	D4176, Proc. 1	Clear and bright. Free of visible water and particulate matter	
Ash, wt %	D482		0.01
BS&W, vol %	D2709		0.05
Cetane Number	D613	40	
Aromatics, vol % OR Cetane Index	D1319 D976	40	35
Cloud Point, °F August 1 – March 14 March 15 – July 31	D2500 or D5773		15.8 19.4
Color	D6045		2.5
Corrosion, 3hrs @ 50°C (122°F)	D130		1
Distillation, °F 50% 90% End Point	D86	540	Report 640 700
Electrical Conductivity, pS/m @ 21°C (70°F)	D2624		250
Flash Point, °F	D93	130 (origin) 125.8 (delivery)	
Gravity, API @ 60°F	D4052	30	
Haze Rating @ 25°C (77°F)	D4176, Proc. 2		2
NACE	TM0172	B+	
Pour Point, °F August 1 – March 14 March 15 – July 31	D97		0 10.4
Ramsbottom Carbon Residue on 10% distillation residue, wt %	D524		0.35
Sulfur, ppm wt.	D5453 or D2622 or D7039		11 (origin) 15 (delivery)
Thermal Stability, 90min @ 150°C, Pad Rating OR Oxidation Stability, mg/100mL OR Thermal Stability, % Reflectance Y Unit / Green Filter OR W Unit	DuPont F-21 D2274 D6468	73% 68%	7 2.5
Viscosity, cSt @ 40°C (104°F)	D445	1.9	4.1

- (a) Delivered products meet all applicable requirements at time and place of delivery.
 (b) Refer to Additive section for requirements/restrictions.
 (c) All test methods listed in ASTM D975 are acceptable. Referee methods are listed first in the table and will be considered for disputes.
 (d) Sulfur and cetane index results shall be obtained in compliance with 40 CFR1090 Subpart N.
 (e) Either physical or simulated distillation, D2887, can be used. D2887 MUST be correlated to D86.
 (f) This fuel is designated for non-transportation use (Certified NTDF – 15 ppm sulfur max).

Segregated 15 ppm Sulfur Distillate Blendstock

To allow for the proper sequence placement, when nominating the batch, the Shipper must supply the product properties required for the fungible grade 62 in addition to these specifications. The Certificate of Analysis must be received before shipment.

Product Property	ASTM Test Method	Test Results	
		Minimum	Maximum
Electrical Conductivity, pS/m @ 21°C (70°F)	D2624		250
Flash Point, °F	D93	100	
Gravity, API @ 60°F	D4052	30	
NACE	TM0172	B+	
Sulfur, ppm wt.	D5453 or D2622 or D7039		15

(a) Refer to Additive section for requirements/restrictions.

(b) All test methods listed in ASTM D975 are acceptable. Referee methods are listed first in the table and will be considered for disputes.

Fungible 2000 ppm Sulfur Heating Oil

Product Property	ASTM Test Method	Test Results	
		Minimum	Maximum
Appearance	D4176, Proc. 1	Clear and bright. Free of visible water and particulate matter	
Ash, wt %	D482		0.01
BS&W, vol %	D2709		0.05
Cloud Point, °F August 1 – March 14 March 15 – July 31	D2500 or D5773		15.8 19.4
Color	D6045		2.5
Corrosion, 3hrs @ 50°C (122°F)	D130		1
Distillation, °F 50% 90% End Point	D86	540	Report 640 700
Electrical Conductivity, pS/m @ 21°C (70°F)	D2624		250
Flash Point, °F	D93	124	
Gravity, API @ 60°F	D4052	30.0	
Haze Rating @ 25°C (77°F)	D4176, Proc. 2		2
NACE	TM0172	B+	
Pour Point, °F August 1 – March 14 March 15 – July 31	D97		0 10.4
Ramsbottom Carbon Residue on 10% distillation residue, wt %	D524		0.35
Sulfur, ppm wt.	D2622 or D5453 or D7039		2000
Thermal Stability, 90min., 150°C Pad Rating OR Oxidation Stability, mg/100mL OR Thermal Stability Reflectance Y Unit / Green Filter OR W Unit	DuPont F-21 D2274 D6468	73% 68%	7 2.5
Viscosity, cSt @ 40°C (104°F)	D445	1.9	4.1

- (a) Delivered products meet all applicable requirements at time and place of delivery.
 (b) Refer to Additive section for requirements/restrictions.
 (c) All test methods listed in ASTM D975 are acceptable. Referee methods are listed first in the table above and will be considered for disputes.
 (d) Either physical or simulated distillation, D2887, can be used. D2887 should be correlated to D86.

Fungible Military Diesel Fuel (Marine Grade F76)

Shipments of grade 78 must meet the latest military specification for DFM.

- (a) Interface may result in trace amounts of Renewable Diesel in the product depending on delivery location.

Segregated 10,000 ppm Sulfur Distillate Blendstock

To allow for the proper sequence placement, when nominating the batch, the Shipper must supply the product properties required for the fungible grade 77 in addition to these specifications. The Certificate of Analysis must be received before shipment.

Product Property	ASTM Test Method	Test Results	
		Minimum	Maximum
Electrical Conductivity, pS/m @ 21°C (70°F)	D2624		250
Flash Point, °F	D93	100	
Gravity, API @ 60°F	D4052	30	42
NACE	TM0172	B+	
Sulfur, ppm wt.	D2622 or D5453 or D7039		10000

(a) Refer to Additive section for requirements/restrictions.

(b) All test methods listed in ASTM D975 are acceptable. Referee methods are listed first in the table above and will be considered for disputes.

Fungible Transmix

Each grade can consist of varying concentrations of the following Distillate and Gasoline.

Grade	Distillate Type	Gasoline Type
90	Distillate	CBOB / RBOB / Conventional
93	Distillate	RBOB
96	ULSD / Kerosene	-

This Section contains specifications for products that are handled on a segregated and fungible (common stream) basis.

Product Grade(s)	Product Designation and PTD Language
1A	Summer 7.8 psi CBOB. This product does not meet the requirements for summer reformulated gasoline. This gasoline requires 10 vol % ethanol. Non detergent additized gasoline. 8.8 psi after blending with 10% denatured fuel ethanol.
A2/2A , D2/2D	Summer 9.0 psi CBOB. This product does not meet the requirements for summer reformulated gasoline. This gasoline requires 10 vol % ethanol. Non detergent additized gasoline. 10.0 psi after blending with 10% denatured fuel ethanol.
F1/1F , H1/1H	Summer RBOB. This product meets the requirements for summer reformulated or conventional gasoline. This gasoline requires 10 vol % ethanol. Non detergent additized gasoline. 7.4 psi RVP with 10% denatured fuel ethanol.
M2/2M , V2/2V	Summer 9.0 psi CG. This product does not meet the requirements for summer reformulated gasoline. Non detergent additized gasoline. E0: Contains no ethanol.
A3/3A , D3/3D A4/4A , D4/4D A5/5A , D5/5D	Winter CBOB. This gasoline requires 10 vol % ethanol. Non detergent additized gasoline.
F3/3F , H3/3H F4/4F , H4/4H F5/5F , H5/5H	Winter RBOB. This gasoline requires 10 vol % ethanol. Non detergent additized gasoline.
M3/3M , V3/3V M4/4M , V4/4V M5/5M , V5/5V	Winter CG. E0: Contains no ethanol. Non detergent additized gasoline.
1L / 2L / 3L / 4L	Gasoline Blendstock. Part 79, 80 & 1090 responsibilities (including any RVO) for any gasoline or BOB produced from this blendstock are the responsibility of the party producing the fuel.
47	Synthetic paraffinic kerosene not for shipment. Grade is for blending only. This volume of neat renewable fuel is designated and intended to be blended into jet fuel in the 48 U.S. contiguous states and Hawaii. Any person exporting this fuel is subject to the requirements of 40 CFR 80.1430. This fuel is for aviation use only.
48	R100. 100% bio-mass based diesel fuel. MVNRLM 15 ppm (maximum) sulfur diesel fuel. Renewable diesel. "This volume of neat or blended renewable diesel is designated and intended for use as transportation fuel, heating oil or jet fuel in the 48 U.S. contiguous states and Hawaii. Any person exporting this fuel is subject to the requirements of 40 CFR 80.1430."
53	Certified NTDF-Jet Fuel. 15 ppm sulfur (maximum)-This fuel is designated for non-transportation use.
52	Jet Fuel. National Security Exempt Fuel. This fuel is for use in vehicles, engines, or equipment under an EPA-approved national security exemption only. Not for use in highway vehicles or engines or nonroad, locomotive, or marine engines.
54 / 56	Jet Fuel. 3000 ppm sulfur maximum. Not for use in highway vehicles or engines or nonroad, locomotive or marine engines. This fuel is for aviation use only. Contains a maximum of 50% renewable fuel. This volume of neat or blended renewable fuel is designated and intended to be used as transportation fuel, heating oil, or jet fuel in the 48 U.S. contiguous states and Hawaii. Any person exporting this fuel is subject to the requirements of 40 CFR 80.1430.
58	Jet Fuel/Exempt Distillate. Not for use in highway vehicles or engines or nonroad, locomotive, or marine engines. This fuel is for use in vehicles, engines, or equipment under an EPA-approved national security exemption only.

QUALITY ASSURANCE MANUAL

PRODUCT SPECIFICATIONS

PTD LANGUAGE

59	Distillate Blendstock. 3000 ppm Sulfur maximum. # 1 distillate. This product requires further processing and is not a finished diesel product. The Part 79, 80 & 1090 responsibilities (including any RVO) for any diesel fuel produced from this blendstock are the responsibility of the party producing the MVNRLM or ECA diesel fuel. Contains no known renewable content.
61	Undyed #1 MVNRLM Diesel Fuel. 15 ppm sulfur (maximum) Diesel Fuel.
62	Undyed #2 MVNRLM Diesel Fuel. 15 ppm sulfur (maximum) Diesel Fuel.
63	Undyed #2 MVNRLM Diesel Fuel. 15 ppm sulfur (maximum) Diesel Fuel. Contains up to 5% Renewable Diesel and/or Biodiesel. This volume of neat or blended renewable diesel is designated and intended for use as transportation fuel, heating oil or jet fuel in the 48 U.S. contiguous states and Hawaii. Any person exporting this fuel is subject to the requirements of 40 CFR 80.1430.
67	Certified NTDF - Heating Oil. 15 ppm sulfur (maximum). This fuel is designated for non-transportation use.
69	Distillate blendstock. 15 ppm Sulfur maximum. #2 distillate. This product requires further processing and is not a finished diesel product. The Part 79, 80 & 1090 responsibilities (including any RVO) for any diesel fuel produced from this blendstock are the responsibility of the party producing the MVNRLM or ECA diesel fuel. Contains no known renewable content.
77	Heating Oil. 2000 ppm sulfur maximum. Not for use in highway vehicles or engines or nonroad, locomotive, or marine engines.
78	Exempt Distillate. National Security Exempt Fuel. This fuel is for use in vehicles, engines, or equipment under an EPA-approved national security exemption only. Not for use in highway vehicles or engines or nonroad, locomotive, or marine engines.
79	Distillate blendstock. 10,000 ppm Sulfur maximum. #2 distillate. This product requires further processing and is not a finished diesel product. The Part 79, 80 & 1090 responsibilities (including any RVO) for any diesel fuel produced from this blendstock are the responsibility of the party producing the MVNRLM or ECA diesel fuel. Contains no known renewable content.