TESORO LOGISTICS
NORTHWEST PIPELINE LLC

PRODUCT SPECIFICATION MANUAL

EFFECTIVE 1/1/2024
SUPERSEDES AND REPLACES 07/01/2018

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1.0 Product Codes

1.1 Approved Product Codes

Product Code	Description	Allowed Destinations	ASTM Market Specification
R1G	Regular Unleaded Sub-Octane Gasoline (Winter)	Burley/Pocatello	D4814[1] Area V[2]
R1F	Regular Unleaded Sub-Octane Gasoline (Summer)		
R4G	Regular Unleaded Sub-Octane Gasoline (Winter)	Boise/Pasco/Spokane	ASTM D4814[1]
R4F	Regular Unleaded Sub-Octane Gasoline (Summer)		
P0G	Premium Unleaded Sub- Octane Gasoline (Winter)	Pasco/Spokane	ASTM D4814[1]
P0F	Premium Unleaded Sub-Octane Gasoline (Summer)		
P8G	Premium Unleaded Sub-Octane Gasoline (Winter)	Burley/Pocatello/ Boise	D4814[1] Area V[2]
P8F	Premium Unleaded Sub-Octane Gasoline (Summer)		
XUB	Ultra-Low Sulfur Diesel #1	All	D975[1]
XUD	Ultra-Low Sulfur Diesel #2	All	D975[1]
JET	Commercial Jet Fuel	All	D1655 (latest Edition)

Note: Winter Gasoline: Greater than 9# RVP and Summer Gasoline: 9# or less RVP.

[1] Idaho adopts the 2016 versions of ASTM standards, whereas Washington adopts with the latest modifications.
[2] Area V denotes a high elevation region in ASTM D4814 with adjusted property limits for octane and vapor lock protection classes.

1.2 Additives

Pursuant to F.E.R.C. Tariff No. 5.6.0 (Rule 70) and successive issues thereof, Tesoro Logistics Northwest Pipeline (TLNP) reserves the right to require, approve, limit or reject the injection of all corrosion

inhibitors, viscosity or pour point depressants, drag reducing agents or other such additives in the petroleum products to be transported before such petroleum products will be accepted for transportation and may restrict delivery of petroleum products to destination points based on the actual concentration of such additives upon delivery.

Gasolines containing MMT ferrocene, or any other metallic octane booster as well as oxygenates such as methanol, ethanol, TAME, or MTBE as blending components will not be accepted for shipment.

TLNP must be notified of any additives in products prior to shipment. Should a Shipper desire to transport any additives in products not previously approved, Shipper must provide written request to the contact in Section 1.3 below for TLNP review and consideration. Testing is conducted at the receiving facility to identify any additives not allowed on the pipeline or any contamination. If such additives or contamination are identified, the batch will be stopped, and the Shipper/Supplier will be contacted to address the issue (refer to Section 2.1).

1.3 New Product Approval Process

Should a Shipper desire to transport a product that is not listed in the approved product list above, the Shipper must provide a written request to the contact below for TLNP review and consideration.

Contact:

Scheduling
Alan Allen
(210) 626-6729
amallen@marathonpetroleum.com

The written request shall include:

- A detailed description of product
- Applicable ASTM specifications for the product
- A laboratory Certificate of Analysis for the product
- An initial estimate of batch size and frequency

1.4 Quality Related Issues

For all quality related issues or concerns, please contact the San Antonio Control Center via one of the following numbers:

Console 2
Desk Phone: (419) 672-7952
Cell Phone: (210) 527-3885

2.0 Supplier Certifications

2.1 Supplier Pre-Certification

TLNP requires the Shipper to provide a signed Supplier Pre-Certification Form, if the supporting Certification of Analysis is not complete, at least one (1) hour prior to the batch entering the pipeline.

If sampling and testing performed by TLNP at the pipeline origin determines a given batch fails to meet the Pipeline Specifications contained herein, the pipeline will be shut down, the batch (or the applicable portion thereof) will be noted as “off spec” and the Shipper of record will be notified. Once notified, the Shipper of record shall be accountable for developing a plan for the disposition of the off-spec product inclusive of, but not limited to, the costs of additional sampling/testing, trucking, product downgrading (re-designation), tank cleaning, pipeline down-time, alternate storage and barge demurrage.

2.2 Gasoline Pre-Certification Form

Tesoro Logistics Northwest Pipeline LLC
Supplier Pre-Certification
(Use for R1G, R1F, R4G, R4F, P0G, P0F, P8G, or P8F Gasoline)

Shipper: _____

Batch Number: _____

Product Code: _____

Destination: _____

Date Tested: _____

Product Property	Test Method	Results	*TLNP Use Only Results*
Appearance			
API Gravity			
Octane, (R+M/2)[1]			
Vapor Pressure, psi			
Oxygen[2], wt. %			
Sulfur, ppm			

[1]Octane shall be reported after blending with 9-10 vol% ethanol.
[2]In lieu of testing, shipper may certify that no oxygenate are present in gasoline.

Shipper hereby certifies that this product meets applicable TLNP pipeline entry specifications.

Authorized Signature: _____ Date: _____

Please email signed Supplier Pre-Certification to the following parties at least one (1) hour in advance of the scheduled batch start time:

Marathon Pipeline Operations Center (San Antonio)
lccrconsole2@marathonpetroleum.com

2.3 Diesel Pre-Certification Form

Tesoro Logistics Northwest Pipeline LLC
Supplier Pre-Certification
(Use for XUB or XUD Diesel)

Shipper: _____

Batch Number: _____

Product Code: _____

Destination: _____

Date Tested: _____

Product Property	Test Method	Results	*TLNP Use Only Results*
Appearance			
API Gravity			
Flash, °F			
Color			
Sulfur, ppm			

Shipper hereby certifies that this product meets applicable TLNP pipeline entry specifications.

Authorized Signature: _____ Date: _____

Please email signed Supplier Pre-Certification to the following parties at least one (1) hour in advance of the scheduled batch start time:

Marathon Pipeline Operations Center (San Antonio)
lccrconsole2@marathonpetroleum.com

2.4 Jet Fuel Pre-Certification Form

Tesoro Logistics Northwest Pipeline LLC
Supplier Pre-Certification
(Use for JET – Commercial Jet Fuel)

Shipper: _____

Batch Number: _____

Product Code: _____

Destination: _____

Date Tested: _____

Product Property	Test Method	Results	*TLNP Use Only Results*
Appearance			
API Gravity			
Saybolt Color			
Flash Point, °F			
Distillation 10% Point, °F			
Distillation End Point, °F			
Freeze Point, °F			
MSEP			
Cu Strip			
E. Gum, mg/100 ml			
JFTOT @ 275° C (527° F)			

Shipper hereby certifies that this product meets applicable TLNP pipeline entry specifications.
Authorized Signature: _____ Date: _____

Please email signed Supplier Pre-Certification to the following parties at least one (1) hour in advance of the scheduled batch start time:

Marathon Pipeline Operations Center (San Antonio)
lccrconsole2@marathonpetroleum.com

3.0 RVP Compliance

3.1 RVP/Volatility Schedule

Ship Dates	Idaho Terminals		Washington Terminals	
	Class at P/L origin at Salt Lake Station	Class at Terminal Specification per ASTM D4814 ‡	Class at P/L origin at Salt Lake Station	Class at Terminal Specification per ASTM D4814 ‡
Jan 1–15	E-5 (15.0)	E-5 (15.0)	E–5 (15.0)	E–5 (15.0)
Jan 16–31	E-5 (15.0)	E-5 (15.0)	E–5 (15.0)	E–5 (15.0)
Feb 1–15	E-5 (15.0)	E-5 (15.0)	E–5 (15.0)	E–5 (15.0)
Feb 16–28	D-4 (13.5)	E-5 (15.0)	D–4 (13.5)	E-5 (15.0)
Mar 1–15	D-4 (13.5)	D-4 (13.5) **	A-4 (9.0)	E-5 (15.0)
Mar 16–31	A-4 (9.0)	D-4 (13.5) **	A–4 (9.0)	E-5 (15.0)
Apr 1–15	A-3 (9.0)	D-4 (13.5) **	A–4 (9.0)	D-4 (13.5)
Apr 16–30	A-3 (9.0)	D-4 (13.5) **	A–4 (9.0)	D-4 (13.5)
May 1–15	A-3 (9.0)	A-3 (9.0)	A–4 (9.0)	A–4 (9.0)
May 16–31	A-2 (9.0)	A-3 (9.0)	A–3 (9.0)	A–4 (9.0)
June 1–15	A-2 (9.0)	A-2 (9.0)	A–3 (9.0)	A–3 (9.0)
June 16–30	A-2 (9.0)	A-2 (9.0)	A–2 (9.0)	A–3 (9.0)
July 1–15	A-2 (9.0)	A-2 (9.0)	A–2 (9.0)	A–2 (9.0)
July 16–31	A-2 (9.0)	A-2 (9.0)	A–2 (9.0)	A–2 (9.0)
Aug 1–15	A-2 (9.0)	A-2 (9.0)	A–2 (9.0)	A–2 (9.0)
Aug 16–31	A-2 (9.0)	A-2 (9.0)	A–2 (9.0)	A–2 (9.0)
Sept 1–15	A-2 (9.0)	A-2 (9.0)	A–2 (9.0)	A–2 (9.0)
Sept 16–30	B-2 (10.0)	B-2 (10.0)	C-3 (11.5)	C-3 (11.5) *
Oct 1–15	C-3 (11.5)	C-3 (11.5)	D-4 (13.5)	D-4 (13.5) *
Oct 16–31	C-3 (11.5)	C-3 (11.5)	D-4 (13.5)	D-4 (13.5) *
Nov 1–15	D-4 (13.5)	D-4 (13.5)	E–5 (15.0)	E–5 (15.0) *
Nov 16–30	D-4 (13.5)	D-4 (13.5)	E–5 (15.0)	E–5 (15.0) *
Dec 1–15	E-5 (15.0)	E-5 (15.0)	E–5 (15.0)	E–5 (15.0)
Dec 16–31	E-5 (15.0)	E-5 (15.0)	E–5 (15.0)	E–5 (15.0)

‡ Refers to Class designation as specified in ASTM D4814

* Washington Gasolines not to be delivered into Idaho during these periods.

** Idaho Gasolines not to be delivered into Washington during these periods.

3.2 Gasoline Volatility Requirements

Shippers must certify gasoline using one of the two available volatility options below.

Vapor Pressure, Distillation Class and Vapor Lock Protection Class properties as described in ASTM D4814, Tables 1 and 3.

3.2.1 Option 1: Base Gasoline Compliance (prior to blending with ethanol)

Gasoline RVP / Volatility Requirements

Vapor Pressure and Distillation Class Requirements									**Vapor Lock Class, T V/L °F Min ****		
Class	RVP Max. psi	T V/L F Min	50% Dist. Pt. °F Min	50% Dist. Pt. °F Max	90% Dist. Pt. °F Max	Dist. End Pt. °F Max	Dist. Residue Vol.	DI Max *	Class	**Areas except Region Five [W]**	**Region Five** *Pocatello & Burley Idaho Only*
A	9.0	158	170	250	374	437	2	1250	1	129	129
B	10.0	149	170	245	374	437	2	1240	2	122	122
C	11.5	140	170	240	365	437	2	1230	3	116	116
D	13.5	131	170	235	365	437	2	1220	4	107	116
E	15.0	122	170	230	365	437	2	1200	5	102	105

Note: Product must not contain MTBE.

3.2.2 Option 2: Blended Gasoline Compliance (with 9-10 vol% ethanol)

This table is provided for certification purposes only. For avoidance of doubt, ethanol blended gasoline is not accepted for shipment per Section 1.2.

Vapor Pressure and Distillation Class Requirements									**Vapor Lock Class, T V/L Min °F**		
Class	RVP Max psi	10% Dist. Max °F	50% Dist. Min °F	50% Dist. Max °F	90% Dist. Max °F	Dist. End Pt. Max °F	Dist. Residue Vol%	DI Max	Class	Areas except Area V	Area V *Pocatello & Burley Idaho Only*
A	10.0	158	150	250	374	437	2	1250	1	129	129
B	11.0	149	150	245	374	437	2	1240	2	122	122
C	12.5	140	150	240	365	437	2	1230	3	116	116
D	14.5	131	150	235	365	437	2	1220	4	107	116
E	16.0	122	150	230	365	437	2	1200	5	102	105

4.0 Pipeline Entry Specifications

4.1 R1G and R1F - Regular Unleaded Sub-Octane Conventional Gasoline

Property	ASTM Test Method	Specification Limits
Appearance (Visual)	D4176	Clear & Bright
API Gravity at 60°F	D4052	Report
Octane, Anti-Knock Index (*after addition of 9-10% ethanol*)	D4814	85.0 min *Note 1
RVP	D5191, D6378	Note 2
Distillation		
10% evaporated at °F	D86	Note 2
50% evaporated at °F	D86	Note 2
90% evaporated at °F	D86	Note 2
End Point at °F	D86	Note 2
Residue, vol%	D86	Note 2
Driveability Index, °F	D86	Note 2
V/L Ratio	D5188	Note 2, Note 3
Sulfur, ppm	D2622, D5453, D7039, D7220	80 max
Sulfur, Mercaptan mass %	D3227	0.002 max Note 4
Copper Strip Corrosion	D130	No. 1b max
Silver Strip Corrosion	D7671, D7667	No. 1 max
Solvent Washed Gum, mg/100ml	D381	5 max
Oxidation Stability, minutes	D525	240 min
Benzene, wt. %	D3606	4.9 max Note 5
Oxygenates, wt. %	D4815, D5599	0.1 max
Lead, g/gal	D3237	0.05
Phosphorus, g/gal	D3231	0.005

Note 1: The Supplier Pre-Certification form must contain the supplier's attestation that the finished gasoline has been certified to meet the stated pump octane.

Note 2: Refer to the RVP/Volatility Schedule in Section 3.1.

Note 3: ASTM D5188 is the referee test method. The alternative equations in D4814 may also be used.

Note 4: Mercaptan sulfur determination is waived if the result of the Doctor Test ASTM D4952 is negative.

Note 5: Benzene specification may be met after the addition of 9-10% ethanol.

4.2 R4G and R4F - Regular Unleaded Sub-Octane Conventional Gasoline

Property	ASTM Test Method	Specification Limits
Appearance (Visual)	D4176	Clear & Bright
API Gravity at 60°F	D4052	Report
Octane, Anti-Knock Index (*after addition of 9-10% ethanol*)	D4814	87.0 min *Note 1
RVP	D5191, D6378	Note 2
Distillation		
10% evaporated at °F	D86	Note 2
50% evaporated at °F	D86	Note 2
90% evaporated at °F	D86	Note 2
End Point at °F	D86	Note 2
Residue, vol%	D86	Note 2
Driveability Index, °F	D86	Note 2
V/L Ratio	D5188	Note 2, Note 3
Sulfur, ppm	D2622, D5453, D7039, D7220	80 max
Sulfur, Mercaptan mass %	D3227	0.002 max Note 4
Copper Strip Corrosion	D130	No. 1b max
Silver Strip Corrosion	D7671, D7667	No. 1 max
Solvent Washed Gum, mg/100 ml	D381	5 max
Oxidation Stability, minutes	D525	240 min
Benzene, wt. %	D3606	4.9 max Note 5
Oxygenates, wt. %	D4815, D5599	0.1 max
Lead, g/gal	D3237	0.05
Phosphorus, g/gal	D3231	0.005

Note 1: The Supplier Pre-Certification form must contain the supplier's attestation that the finished gasoline has been certified to meet the stated pump octane.

Note 2: Refer to the RVP/Volatility Schedule in Section 3.1.

Note 3: ASTM D5188 is the referee test method. The alternative equations in D4814 may also be used.

Note 4: Mercaptan sulfur determination is waived if the result of the Doctor Test ASTM D4952 is negative.

Note 5: Benzene specification may be met after the addition of 9-10% ethanol.

4.3 P0G and P0F - Premium Unleaded Sub-Octane Conventional Gasoline

Property	ASTM Test Method	Specification Limits
Appearance (Visual)	D4176	Clear & Bright
API Gravity at 60°F	D4052	Report
Octane, Anti-Knock Index (*after addition of 9-10% ethanol*)	D4814	92.0 min *Note 1
RVP	D5191, D6378	Note 2
Distillation		
10% evaporated at °F	D86	Note 2
50% evaporated at °F	D86	Note 2
90% evaporated at °F	D86	Note 2
End Point at °F	D86	Note 2
Residue, vol%	D86	Note 2
Driveability Index, °F	D86	Note 2
V/L Ratio	D5188	Note 2, Note 3
Sulfur, ppm	D2622, D5453, D7039, D7220	80 max
Sulfur, Mercaptan mass %	D3227	0.002 max Note 4
Copper Strip Corrosion	D130	No. 1b max
Silver Strip Corrosion	D7671, D7667	No. 1 max
Solvent Washed Gum, mg/100 ml	D381	5 max
Oxidation Stability, minutes	D525	240 min
Benzene, wt. %	D3606	4.9 max Note 5
Oxygenates, wt. %	D4815, D5599	0.1 max
Lead, g/gal	D3237	0.05
Phosphorus, g/gal	D3231	0.005

Note 1: The Supplier Pre-Certification form must contain the supplier's attestation that the finished gasoline has been certified to meet the stated pump octane.

Note 2: Refer to the RVP/Volatility Schedule in Section 3.1.

Note 3: ASTM D5188 is the referee test method. The alternative equations in D4814 may also be used.

Note 4: Mercaptan sulfur determination is waived if the result of the Doctor Test ASTM D4952 is negative.

Note 5: Benzene specification may be met after the addition of 9-10% ethanol.

4.4 P8G and P8F - Premium Unleaded Sub-Octane Conventional Gasoline

Property	ASTM Test Method	Specification Limits
Appearance (Visual)	D4176	Clear & Bright
API Gravity at 60°F	D4052	Report
Octane, Anti-Knock Index (*after addition of 9-10% ethanol*)	D4814	91.0 min *Note 1
RVP	D5191, D6378	Note 2
Distillation		
10% evaporated at °F	D86	Note 2
50% evaporated at °F	D86	Note 2
90% evaporated at °F	D86	Note 2
End Point at °F	D86	Note 2
Residue, vol%	D86	Note 2
Driveability Index, °F	D86	Note 2
V/L Ratio	D5188	Note 2, Note 3
Sulfur, ppm	D2622, D5453, D7039, D7220	80 max
Sulfur, Mercaptan mass %	D3227	0.002 max Note 4
Copper Strip Corrosion	D130	No. 1b max
Silver Strip Corrosion	D7671, D7667	No. 1 max
Solvent Washed Gum, mg/100 ml	D381	5 max
Oxidation Stability, minutes	D525	240 min
Benzene, wt. %	D3606	4.9 max Note 5
Oxygenates, wt. %	D4815, D5599	0.1 max
Lead, g/gal	D3237	0.05
Phosphorus, g/gal	D3231	0.005

Note 1: The Supplier Pre-Certification form must contain the supplier's attestation that the finished gasoline has been certified to meet the stated pump octane.

Note 2: Refer to the RVP/Volatility Schedule in Section 3.1.

Note 3: ASTM D5188 is the referee test method. The alternative equations in D4814 may also be used.

Note 4: Mercaptan sulfur determination is waived if the result of the Doctor Test ASTM D4952 is negative.

Note 5: Benzene specification may be met after the addition of 9-10% ethanol.

4.5 XUB - Ultra-Low Sulfur Diesel #1

Property	ASTM Test Method	Specification Limits
Appearance (Visual)	D4176	Clear & Bright
Water & Sediment, % vol	D2709	0.05 max
Color – Saybolt	D156, D6045	+12 Min
Ash, % mass	D482	0.01 max
Cetane Number	D613, D4737A	40 min
Cetane Index **OR**	D976, D4737A	40 min
Aromatics, vol%	D1319, D5186	35 max
Sulfur, ppm	D2622, D5453, D7039, D7220	12 max
Copper Strip 3 hr. at 50°C (122°F)	D130	No. 3b max
Distillation [1]		
90% recovered at °F	D86, D2887, D7345	550 max
End Point at °F	D86, D2887, D7345	700 Max
Residue, vol%	D86, D2887, D7345	Report
Loss, vol%	D86, D2887, D7345	Report
Flash Point, °F	D93a, D3828, D7094	105 min
API Gravity at 60°F	D4052	Report
Cloud Point, °F	D2500, D5771, D5772, D5773, D7689	-30 max
Viscosity at 40°C (104°F) mm^2/s	D445, D7042 [2]	1.3 min / 2.1 max
Haze (Report Temperature)	D4176	2 max
Ramsbottom Carbon Residue, %mass	D524	0.15 max

Note 1: If using D2887 for distillation, the appropriate correction should be used in D2887 and values reported as "predicted "D86". If using D7345 for distillation, the appropriate correction should be used in D7345 and values reported as "predicted D86".

Note 2: Bias correction should be applied for D7042.

4.6 XUD - Ultra-Low Sulfur Diesel #2

Property	ASTM Test Method	Specification Limits	
Appearance (Visual)	D4176	Clear & Bright	
Water & Sediment, % vol	D2709	0.05 max	
Color – ASTM	D1500, D6045	2.5 max	
Ash, % mass	D482	0.01 max	
Cetane Number	D613, D4737A	40 min	
Cetane Index **OR**	D976, D4737A	40 min	
Aromatics, vol%	D1319, D5186	35 max	
Sulfur, ppm	D2622, D5453, D7039, D7220	12 max	
Copper Strip 3 hr. at 50°C (122°F)	D130	No. 3b max	
Distillation [1]			
90% recovered at °F	D86, D2887, D7345	540 Min / 640 max	
End Point at °F	D86, D2887, D7345	700 max	
Residue, vol%	D86, D2887, D7345	Report	
Loss, vol%	D86, D2887, D7345	Report	
Flash Point, °F	D93a, D3828, D7094	130 min	
API Gravity at 60°F	D4052	Report	
Viscosity at 40°C (104°F), mm^2/s	D445, D7042 [2]	1.9 Min / 4.1 max	
Haze (Report Temperature)	D4176	2 max	
Ramsbottom Carbon Residue, %mass	D524	0.35 max	
Cloud Point, °F	D3117, D5771, D5772, D5773, D7689	Dates	Max
		9/1 - 9/30	+24
		10/1 - 2/28	+6
		3/1 - 3/31	+17
		4/1 - 8/31	+32
Pour Point, °F	D97, D5949, D7346, D6749, D6892, D5950	Dates	Max
		9/1 - 9/30	+15
		10/1 - 2/28	-15
		3/1 - 3/31	0
		4/1 - 8/31	+20

Note 1: If using D2887 for distillation, the appropriate correction should be used in D2887 and values reported as "predicted "D86". If using D7345 for distillation, the appropriate correction should be used in D7345 and values reported as "predicted D86".

Note 2: Bias correction should be applied for D7042.

4.7 JET - Commercial Jet Fuel

Property	ASTM Test Method	Specification Limits
Appearance (Visual)	D4176	Clear & Bright
Color – Saybolt	D156 D6045	+12 min
Acidity, total mg KOH/g	D3242	0.10 max
Aromatics, vol%	D1319	25 max
	D6379	26.5 max
Sulfur, total mass %	D1266, D2622, D4294, 5453	0.30 max
Sulfur, Mercaptan mass %	D3227	0.003 max
Distillation [1]		
10% recovered at °F	D86, D2887, D7345	401 max
50% recovered at °F	D86, D2887, D7345	Report
90% recovered at °F	D86, D2887, D7345	Report
End Point at °F	D86, D2887, D7345	572 max
Residue, vol%	D86, D2887, D7345	1.5 max
Loss, vol%	D86, D2887, D7345	1.5 max
Flash Point, °F	D56, D93, D3828	108 min
Density at 60°F, kg/m³	D4052	775 Min / 840 max
API Gravity at 60°F	D1298	37 Min / 51 max
Freezing Point, °F	D2386, D5972, D7153, D7154	-40 max
Viscosity at 4°F, mm²/s	D445, D7042[2], D7945	8.0 max
Net Heat of Combustion, BTU/lb	D3338, D4529, D4809	18,400 min
Smoke Point, mm **AND**	D1322	18.0 min
Naphthalenes, vol% **OR**	D1840	3.0 max
Smoke Point, mm	D1322	25.0 min
Copper Strip at 212°F	D130	No. 1b max
Thermal Stability (JFTOT at 527°F)		
Differential Pressure, mmHg	D3241	25 max
Tube Deposit Rating Annex A1 **OR**	D3241	<3 max
Tube Deposit Thickness ETR, nm	D3241	85 max
Filter membrane gravimetric, mg/L	D2276, D5452	1.0 max
Existent Gum, mg/100 ml	D381, IP 540	7 max
Microseparometer Rating	D3948, D7224	85 min

Note 1: If using D2887 for distillation, the appropriate correction should be used in D2887 and values reported as "predicted "D86". If using D7345 for distillation, the appropriate correction should be used in D7345 and values reported as "predicted D86".

Note 2: Bias correction should be applied for D7042.