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Analysis Report

Report number : 12004/00127295.2/L/20 Date of sampling : 11-11-2020

Main Object : HAVVA ANA Place of sampling : Vopak Terminal Vlaardingen

Report Date : 12-11-2020 Date received : 12-11-2020 Date of issue : 12-11-2020 Date completed : 12-11-2020 Sample object : HAVVA ANA Sample number : 10764770

Sample type : Sampled
Sample submitted as : AP/E Core 150

Marked : Vessel HAVVA ANA P2 lower before discharge into Shore tank 5016, 5015

NAME	METHOD	UNIT	RESULT
Appearance	Visual	-	Clear and Bright
Kinematic Viscosity at 100 °C	ASTM D 7042	mm²/s	5.240

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 Report Date
 : 12-11-2020
 Date received
 : 12-11-2020

 Date of issue
 : 12-11-2020
 Date completed
 : 12-11-2020

 Sample object
 : HAVVA ANA
 Sample number
 : 10764777

Sample type : Sampled
Sample submitted as : AP/E Core 150

Marked : Vessel HAVVA ANA manifold before discharge into Shore tank 5016, 5015

NAME	METHOD	UNIT	RESULT
Appearance	Visual	-	Clear and Bright
Kinematic Viscosity at 100 °C	ASTM D 7042	mm²/s	5.268

With reference to API MPMS 12.11 it should be noted that when taking vessel samples, it may not be possible to obtain representative samples of nonhomogeneous cargoes due to the inherent nature of the cargo and the sampling restrictions.

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[~] Due to restrictions enforced by terminal/refinery/vessels management and/or local laws and regulations, samples of concerned object have been taken via a closed/restricted sampling system.



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Main Object : HAVVA ANA Place of sampling : Vopak Terminal Vlaardingen

Report Date : 12-11-2020 Date received : 12-11-2020 Date of issue : 12-11-2020 Date completed : 12-11-2020 Sample object : 25 Sample number : 10765057

Sample type : Sampled Sample submitted as : AP/E Core 150

Marked : Shore line 25 near shoretank 5015 during discharge from Vessel HAVVA ANA

NAME	METHOD	UNIT	RESULT
Appearance	Visual	-	Clear and Bright
Kinematic Viscosity at 100 °C	ASTM D 7042	mm²/s	5.339

With reference to API MPMS 12.11 it should be noted that when taking vessel samples, it may not be possible to obtain representative samples of nonhomogeneous cargoes due to the inherent nature of the cargo and the sampling restrictions.

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Analysis Report

Report number : 12004/00127295.2/L/20 Composite prep date : 11-11-2020

Main Object : HAVVA ANA Place of sampling : Vopak Terminal Vlaardingen

Report Date : 12-11-2020 Date received : 11-11-2020 Date of issue : 12-11-2020 Date completed : 12-11-2020 Sample object : 5015 Sample number : 10769028

Sample type : Composite Sample submitted as : AP/E Core 150

Marked : Shore tank 5015 single tank composite prepared from upper, middle, lower after discharge

from Vessel HAVVA ANA

Composite (10769028)			
SAMPLE NR	OBJECT	DESCRIPTION	RATIO
10767828	5015	Shore tank 5015 upper after discharge from Vessel HAVVA ANA	
10767829	5015	Shore tank 5015 middle after discharge from Vessel HAVVA ANA	
10767830	5015	Shore tank 5015 lower after discharge from Vessel HAVVA ANA	

NAME	METHOD	UNIT	RESULT
Density at 15 °C	ASTM D 4052	kg/L	0.8699
Appearance	Visual	-	Clear & Bright
Color ASTM	ASTM D 1500	-	L 0.5
CCS Viscosity at -15 °C	ASTM D 5293	mPa.s	1108
Flash Point (COC)	ASTM D 92	°C	216
Kinematic Viscosity at 40 °C	ASTM D 445	mm²/s	30.7
Kinematic Viscosity at 100 °C	ASTM D 445	mm²/s	5.230
Noack Evaporation Loss - Method B	ASTM D 5800	mass %	15.0
Pour Point	ASTM D 5950	°C	-12
Viscosity Index	ASTM D 2270	-	100

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Analysis Report

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Main Object : HAVVA ANA Place of sampling : Vopak Terminal Vlaardingen

Report Date : 12-11-2020 Date received : 11-11-2020 Date of issue : 12-11-2020 Date completed : 12-11-2020 Sample object : 5016 Sample number : 10769029

Sample type : Composite Sample submitted as : AP/E Core 150

Marked : Shore tank 5016 single tank composite prepared from upper, middle, lower after discharge

from Vessel HAVVA ANA

Composite (10769029)			
SAMPLE NR	OBJECT	DESCRIPTION	RATIO
10768447	5016	Shore tank 5016 upper after discharge from Vessel HAVVA ANA	
10768448	5016	Shore tank 5016 middle after discharge from Vessel HAVVA ANA	
10768449	5016	Shore tank 5016 lower after discharge from Vessel HAVVA ANA	

NAME	METHOD	UNIT	RESULT
Density at 15 °C	ASTM D 4052	kg/L	0.8698
Appearance	Visual	-	Clear & Bright
Color ASTM	ASTM D 1500	-	L 0.5
CCS Viscosity at -15 °C	ASTM D 5293	mPa.s	1079
Flash Point (COC)	ASTM D 92	°C	213
Kinematic Viscosity at 40 °C	ASTM D 445	mm²/s	30.7
Kinematic Viscosity at 100 °C	ASTM D 445	mm²/s	5.231
Noack Evaporation Loss - Method B	ASTM D 5800	mass %	14.9
Pour Point	ASTM D 5950	°C	-12
Viscosity Index	ASTM D 2270	-	100

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