

Machine Id FSP135052 Component Diesel Engine Fluid DIESEL ENGINE OIL SAE 15W40 (--- QTS)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0875907	WC0787685	WC0696560
Sample Date		Client Info		20 Feb 2024	25 Sep 2023	26 Sep 2022
Machine Age	mls	Client Info		260323	248748	227502
Oil Age	mls	Client Info		10000	0	0
Filter Age	mls	Client Info		10000	0	0
Oil Changed		Client Info		Changed	N/A	Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL
Iron	nom	ASTM D5185m	>100	19	39	10
						<1
					- 1	0
					0	0
			>3			0
Aluminum				4	6	3
Lead				<1	3	<1
Copper		ASTM D5185m	>330	1	2	<1
Tin		ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	nom	ASTM D5185m	>25	7	7	4
						0
Fuel	1 1-1-				<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	*ASTM D2982		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.6	1	0.5
Nitration	Abs/cm	*ASTM D7624	>20	12.3	14.0	10.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.1	26.9	22.6
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m	>158	4 7	23	0
Boron		ASTM D5185m	250	8	<1	4
Barium	ppm			0	0	0
Molybdenum	ppm	ASTM D5185m	100	65	69	59
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	450	922	978	799
Calcium	ppm	ASTM D5185m	3000	1143	1079	1243
Phosphorus	ppm	ASTM D5185m	1150	1058	1003	949
Zinc	ppm	ASTM D5185m	1350	1271	1298	1158
	Sample Number Sample Date Machine Age Oil Age Filter Age Oil Changed Filter Changed Sample Status Iron Chromium Nickel Titanium Silver Aluminum Lead Copper Tin Vanadium White Metal Yellow Metal Yellow Metal Yellow Metal Silicon Potassium Fuel Water Glycol Soot % Nitration Sulfation Silt Debris Sand/Dirt Appearance Odor Emulsified Water Sodium Boron Barium Manganese Magnesium Calcium	Sample NumberSample DateMachine AgemlsOil AgemlsFilter AgemlsOil ChangedFilter ChangedSample Statussample StatusIronppmChromiumppmNickelppmTitaniumppmSilverppmAluminumppmLeadppmTinppmVanadiumppmWhite MetalscalarYellow MetalscalarSiliconppmFuel%Soot %%NitrationAbs/cmSulfationAbs/lmmSiltscalarDebrisscalarSand/DirtscalarAppearancescalarSodiumppmBariumppmManganeseppmMagnesiumppmPhosphorusppm	Sample NumberClient InfoSample DateClient InfoMachine AgemlsClient InfoOil AgemlsClient InfoFilter AgemlsClient InfoOil ChangedClient InfoFilter ChangedClient InfoSample StatusClient InfoSample StatusSample 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D5185mVanadiumppmASTM D5185mValowMetalscalarVisualNONEYellow MetalscalarSiliconppmASTM D5185mVacMethod>0.2Glycol%*ASTM D7624>20SulfationAbs/:nmAbs/:nm*ASTM D7415Sand/Dirtscalar*VisualNOREAppearancescalar*VisualNOREAppearancescalar*VisualNOREAppearancescalar*VisualNOREAppearancescalar*VisualNOREAppearancescalarSodium <td< th=""><td>Sample NumberClient InfoWC0875907Sample DateClient Info20 Feb 2024Machine AgemlsClient Info10000Filter AgemlsClient Info10000Oil AgemlsClient InfoChangedFilter AgemlsClient InfoChangedFilter ChangedClient InfoChangedSample StatusClient InfoChangedIronppmASTM D5185m>100PhromiumppmASTM D5185m>20NickelppmASTM D5185m>20AluminumppmASTM D5185m>20AluminumppmASTM D5185m>20AluminumppmASTM D5185m>20AluminumppmASTM D5185m>20AluminumppmASTM D5185m>20AluminumppmASTM D5185m>20AluminumppmASTM D5185m>20VanadiumppmASTM D5185m>20VanadiumppmASTM D5185m>20Yellow Metalscalar*VisualNONEVellow Metalscalar*VisualNONESiliconppmASTM D5185m>20▲Yellow Metalscalar*VisualNONESoot %%*ASTM 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Oxidation

Visc @ 100°C cSt

24.4

6.8

13.9

21.1

7.2

13.0

Abs/.1mm *ASTM D7414 >25

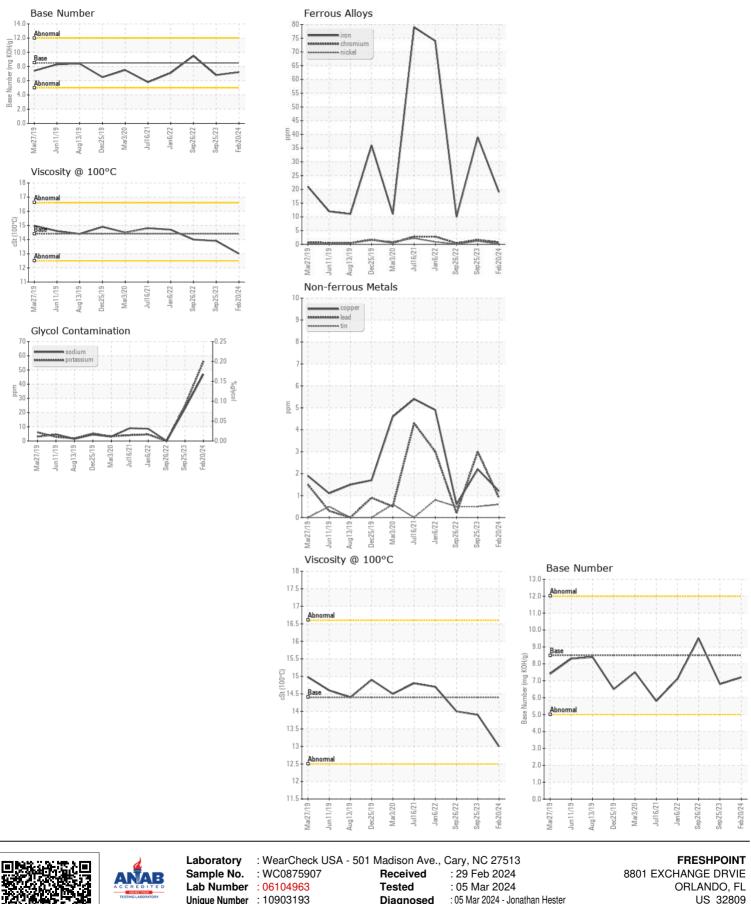
ASTM D445 14.4

Base Number (BN) mg KOH/g ASTM D2896 8.5

19.3

9.5

14.0



Unique Number : 10903193 : 05 Mar 2024 - Jonathan Hester Diagnosed Test Package : FLEET (Additional Tests: Glycol) Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. evans_craig@sbcglobal.net * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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