

OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



1469
Component
Diesel Engine
Fluid
{not provided} (47 QTS)

DIAGNOSIS

Machine Id

Recommendation

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

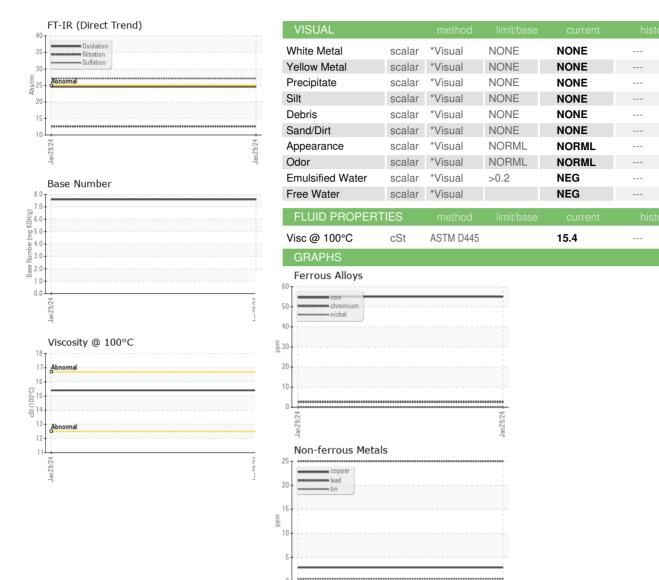
Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION method limit/base current history1 history2					Jan2024		
Sample Number Client Info WC0847913					Janzuza		
Client Info 29 Jan 2024	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Date Client Info 29 Jan 2024 Machine Age hrs Client Info 10965	Sample Number		Client Info		WC0847913		
Oil Changed	Sample Date		Client Info		29 Jan 2024		
Contamped Client Info Changed Client Info NORMAL Contamped Conta	Machine Age	hrs	Client Info		10965		
CONTAMINATION	Oil Age	hrs	Client Info		0		
CONTAMINATION method limit/base current history1 history2	Oil Changed		Client Info		Changed		
Fuel	Sample Status				NORMAL		
Water Glycol WC Method >0.2 NEG	CONTAMINATION	١	method	limit/base	current	history1	history2
WEAR METALS	Fuel		WC Method	>3.0	<1.0		
WEAR METALS	Water		WC Method	>0.2	NEG		
Description	Glycol		WC Method		NEG		
Chromium	WEAR METALS		method	limit/base	current	history1	history2
Nickel	Iron	ppm	ASTM D5185m	>165	55		
Titanium	Chromium	ppm	ASTM D5185m	>5	3		
Silver	Nickel	ppm	ASTM D5185m	>4	0		
Aluminum	Titanium	ppm	ASTM D5185m	>2	0		
Lead	Silver	ppm	ASTM D5185m	>2	0		
Copper ppm ASTM D5185m >90 3 Tin ppm ASTM D5185m >5 <1	Aluminum	ppm	ASTM D5185m	>20	3		
Tin	Lead	ppm	ASTM D5185m	>150	25		
Vanadium ppm ASTM D5185m 0 Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 3 Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m 77 Manganese ppm ASTM D5185m 1119 Magnesium ppm ASTM D5185m 1469 Phosphorus ppm ASTM D5185m 1243 Zinc ppm ASTM D5185m 1479 Sulfur ppm ASTM D5185m 3687 CONTAMINANTS method limit/base current history1 history2 Sodium ppm ASTM D5185m 37 <td>Copper</td> <td>ppm</td> <td>ASTM D5185m</td> <td>>90</td> <th>3</th> <td></td> <td></td>	Copper	ppm	ASTM D5185m	>90	3		
Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 3 Barium ppm ASTM D5185m 0 Molybdenum ppm ASTM D5185m 77 Manganese ppm ASTM D5185m 1119 Magnesium ppm ASTM D5185m 1469 Calcium ppm ASTM D5185m 1243 Phosphorus ppm ASTM D5185m 1479 Sulfur ppm ASTM D5185m 3687 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >35 4 Sodium ppm ASTM D5185m >20		ppm	ASTM D5185m	>5	<1		
ADDITIVES	Vanadium	ppm	ASTM D5185m		0		
Boron	Cadmium	ppm	ASTM D5185m		0		
Barium	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 77 Manganese ppm ASTM D5185m 1119 Magnesium ppm ASTM D5185m 1119 Calcium ppm ASTM D5185m 1469 Phosphorus ppm ASTM D5185m 1243 Zinc ppm ASTM D5185m 3687 Sulfur ppm ASTM D5185m 3687 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m 35 4 Sodium ppm ASTM D5185m 37 Potassium ppm ASTM D5185m 20 11 INFRA-RED method limit/base current history1 history2 Soot % *ASTM D7624 <th< td=""><td>Boron</td><td>ppm</td><td>ASTM D5185m</td><td></td><th>3</th><td></td><td></td></th<>	Boron	ppm	ASTM D5185m		3		
Manganese ppm ASTM D5185m <1 Magnesium ppm ASTM D5185m 1119 Calcium ppm ASTM D5185m 1469 Phosphorus ppm ASTM D5185m 1243 Zinc ppm ASTM D5185m 3687 Sulfur ppm ASTM D5185m 3687 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >35 4 Sodium ppm ASTM D5185m 37 Potassium ppm ASTM D5185m >20 11 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >7.5 0.6 Nitration Abs/:1mm	Barium	ppm	ASTM D5185m		0		
Magnesium ppm ASTM D5185m 1119 Calcium ppm ASTM D5185m 1469 Phosphorus ppm ASTM D5185m 1243 Zinc ppm ASTM D5185m 1479 Sulfur ppm ASTM D5185m 3687 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >35 4 Sodium ppm ASTM D5185m 37 Potassium ppm ASTM D5185m >20 11 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >7.5 0.6 Nitration Abs/cm *ASTM D7624 >20 12.6 Sulfation	Molybdenum	ppm	ASTM D5185m		77		
Calcium ppm ASTM D5185m 1469 Phosphorus ppm ASTM D5185m 1243 Zinc ppm ASTM D5185m 1479 Sulfur ppm ASTM D5185m 3687 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m 37 Sodium ppm ASTM D5185m 37 Potassium ppm ASTM D5185m >20 11 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >7.5 0.6 Nitration Abs/cm *ASTM D7624 >20 12.6 Sulfation Abs/.1mm *ASTM D7415 >30 27.1 FLU	Manganese	ppm	ASTM D5185m		<1		
Phosphorus ppm ASTM D5185m 1243 Zinc ppm ASTM D5185m 1479 Sulfur ppm ASTM D5185m 3687 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >35 4 Sodium ppm ASTM D5185m 37 Potassium ppm ASTM D5185m >20 11 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >7.5 0.6 Nitration Abs/cm *ASTM D7624 >20 12.6 Sulfation Abs/.1mm *ASTM D7415 >30 27.1 FLUID DEGRADATION method limit/base current history1 his	Magnesium	ppm	ASTM D5185m		1119		
Zinc	Calcium	ppm	ASTM D5185m		1469		
Sulfur ppm ASTM D5185m 3687 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >35 4 Sodium ppm ASTM D5185m 37 Potassium ppm ASTM D5185m >20 11 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >7.5 0.6 Nitration Abs/.1mm *ASTM D7624 >20 12.6 Sulfation Abs/.1mm *ASTM D7415 >30 27.1 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 24.6	Phosphorus	ppm	ASTM D5185m		1243		
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >35 4 Sodium ppm ASTM D5185m 37 Potassium ppm ASTM D5185m >20 11 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >7.5 0.6 Nitration Abs/cm *ASTM D7624 >20 12.6 Sulfation Abs/.1mm *ASTM D7415 >30 27.1 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 24.6	Zinc	ppm	ASTM D5185m		1479		
Silicon ppm ASTM D5185m >35 4	Sulfur	ppm	ASTM D5185m		3687		
Sodium ppm ASTM D5185m 37 Potassium ppm ASTM D5185m >20 11 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >7.5 0.6 Nitration Abs/cm *ASTM D7624 >20 12.6 Sulfation Abs/.1mm *ASTM D7415 >30 27.1 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 24.6	CONTAMINANTS		method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 11 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >7.5 0.6 Nitration Abs/cm *ASTM D7624 >20 12.6 Sulfation Abs/.1mm *ASTM D7415 >30 27.1 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 24.6	Silicon	ppm	ASTM D5185m	>35	4		
INFRA-RED	Sodium	ppm	ASTM D5185m		37		
Soot % % *ASTM D7844 > 7.5 0.6 Nitration Abs/cm *ASTM D7624 > 20 12.6 Sulfation Abs/.1mm *ASTM D7415 > 30 27.1 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 > 25 24.6	Potassium	ppm	ASTM D5185m	>20	11		
Nitration Abs/cm *ASTM D7624 >20 12.6 Sulfation Abs/.1mm *ASTM D7415 >30 27.1 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 24.6	INFRA-RED		method	limit/base	current	history1	history2
Sulfation Abs/.1mm *ASTM D7415 >30 27.1 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 24.6	Soot %	%	*ASTM D7844	>7.5	0.6		
FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 24.6	Nitration	Abs/cm	*ASTM D7624	>20	12.6		
Oxidation	Sulfation	Abs/.1mm	*ASTM D7415	>30	27.1		
	FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Base Number (BN) mg KOH/g ASTM D2896 7.6	Oxidation	Abs/.1mm	*ASTM D7414	>25	24.6		
	Base Number (BN)	mg KOH/g	ASTM D2896		7.6		



OIL ANALYSIS REPORT







Laboratory Sample No.

Lab Number : 06198890 Unique Number : 11061013

cSt (100°C)

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0847913

Received **Tested** Diagnosed

: 04 Jun 2024 : 05 Jun 2024 : 05 Jun 2024 - Wes Davis

Base Number

4.0

0.0

Apple Valley Waste - Chambersburg Location

5436 Sunset Pike Chambersburg, PA US 17202

Contact: Service Manager

Test Package : CONST (Additional Tests: TBN) Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369.

 st - 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)

Viscosity @ 100°C

Report Id: AVWCHA [WUSCAR] 06198890 (Generated: 06/05/2024 05:25:01) Rev: 1

Submitted By: BOB MCQUADE

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