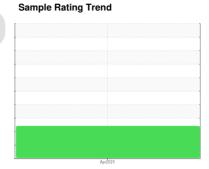


OIL ANALYSIS REPORT







Machine Id 10-596 Component
Diesel Engine

DIESEL ENGINE OIL SAE 15W40 (

DIAGNOSIS

Recommendation

We advise that you check for the source of the coolant leak. Check for low coolant level. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

Sodium and/or potassium levels are high.

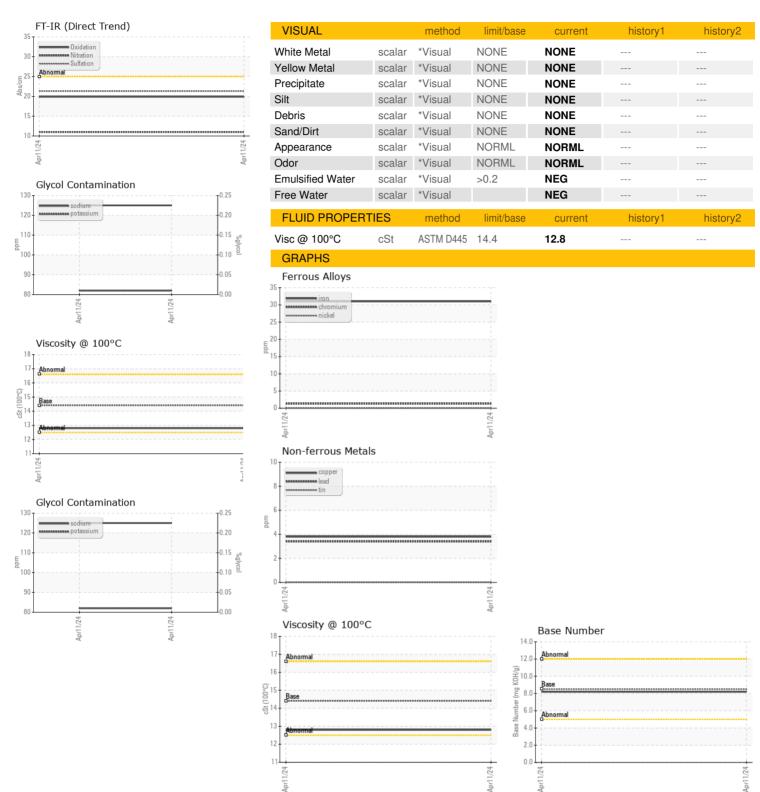
Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil.

AE 15W40 (G/	AL)			Apr2024		
SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0750274		
Sample Date		Client Info		11 Apr 2024		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		Changed		
Sample Status				ABNORMAL		
CONTAMINATION		method	limit/base	current	history1	history2
Fuel		WC Method	>3.0	<1.0		
Water		WC Method	>0.2	NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>90	31		
Chromium	ppm	ASTM D5185m	>20	1		
Nickel	ppm	ASTM D5185m	>2	0		
Titanium	ppm	ASTM D5185m	>2	<1		
Silver	ppm	ASTM D5185m	>2	0		
Aluminum	ppm	ASTM D5185m	>20	5		
Lead	ppm	ASTM D5185m	>40	3		
Copper	ppm	ASTM D5185m	>330	4		
Tin	ppm	ASTM D5185m	>15	0		
Vanadium	ppm	ASTM D5185m		<1		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	13		
Barium	ppm	ASTM D5185m	10	0		
Molybdenum	ppm	ASTM D5185m	100	62		
Manganese	ppm	ASTM D5185m		<1		
Magnesium	ppm	ASTM D5185m	450	621		
Calcium	ppm	ASTM D5185m	3000	1434		
Phosphorus	ppm	ASTM D5185m	1150	980		
Zinc	ppm	ASTM D5185m	1350	1141		
Sulfur	ppm	ASTM D5185m	4250	3389		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	9		
Sodium	ppm	ASTM D5185m	>158	<u> </u>		
Potassium	ppm	ASTM D5185m	>20	<u>^</u> 82		
O	%	*ASTM D2982		NEG		
Glycol	, 0					
INFRA-RED	, 0	method	limit/base	current	history1	history2
INFRA-RED	%		limit/base >6		history1	history2
<i>'</i>		*ASTM D7844		0.4		
INFRA-RED Soot %	%		>6			
INFRA-RED Soot % Nitration	% Abs/cm Abs/.1mm	*ASTM D7844 *ASTM D7624	>6 >20	0.4 11.0		
INFRA-RED Soot % Nitration Sulfation FLUID DEGRADA	% Abs/cm Abs/.1mm	*ASTM D7844 *ASTM D7624 *ASTM D7415 method	>6 >20 >30 limit/base	0.4 11.0 21.3 current	 	
INFRA-RED Soot % Nitration Sulfation	% Abs/cm Abs/.1mm	*ASTM D7844 *ASTM D7624 *ASTM D7415	>6 >20 >30	0.4 11.0 21.3	 history1	history2



OIL ANALYSIS REPORT







Sample No.

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

: WC0750274 Lab Number : 06148027 Unique Number : 10978105

Received : 12 Apr 2024 **Tested** Diagnosed

: 17 Apr 2024 : 17 Apr 2024 - Jonathan Hester

Contact: BEN CALDWELL kevin.marson@wearcheck.com T: (918)728-5749

MANHATTAN ROAD AND BRIDGE

5601 S 122ND E AVE

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

TULSA, OK

US 74146