

WEAR NORMAL CONTAMINATION ABNORMAL FLUID CONDITION NORMAL

Store 4 - Fairmont [RO# 152037] HAMM HTC15 WGH0H950HHAA00355 Diesel Engine

DIESEL ENGINE OIL SAE 15W40 (3 QTS)

RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

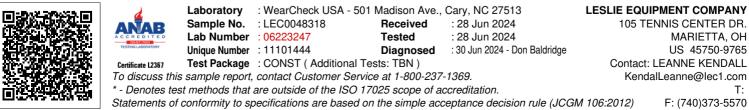
Elemental level of silicon (Si) above normal indicating ingress of dirt/seal material.

FLUID CONDITION

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

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Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0048318		
Sample Date		Client Info		25 Jun 2024		
Machine Age	hrs	Client Info		54		
Oil Age	hrs	Client Info		54		
Filter Age	hrs	Client Info		54		
Oil Changed		Client Info		Changed		
Filter Changed		Client Info		Changed		
Sample Status				ABNORMAL		
Iron	ppm	ASTM D5185m	>100	33		
Chromium	ppm	ASTM D5185m	>20	3		
Nickel	ppm	ASTM D5185m	>4	0		
Titanium	ppm	ASTM D5185m		<1		
Silver	ppm	ASTM D5185m	>3	0		
Aluminum	ppm	ASTM D5185m	>20	7		
Lead	ppm	ASTM D5185m	>40	4		
Copper	ppm	ASTM D5185m	>330	10		
Tin	ppm	ASTM D5185m	>15	0		
Vanadium	ppm	ASTM D5185m		<1		
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Silicon		ASTM D5185m	>!20	<b>2</b> 81		
Potassium	ppm	ASTM D5185m	>!20	4		
Fuel	ppm	WC Method	>20 >5	4 <1.0		
Water		WC Method	>0.2	<1.0 NEG		
Glycol		WC Method	>0.2	NEG		
Soot %	%	*ASTM D7844	>3	0.1		
Nitration	Abs/cm	*ASTM D7624	>20	6.2		
Sulfation	Abs/.1mm	*ASTM D7624	>30	15.6		
Silt	scalar	*Visual	NONE	NONE		
Debris	scalar	*Visual	NONE	NONE		
Sand/Dirt	scalar	*Visual	NONE	NONE		
Appearance	scalar	*Visual	NORML	NORML		
Odor	scalar	*Visual	NORML	NORML		
Emulsified Water	scalar	*Visual	>0.2	NEG		
Sodium	ppm	ASTM D5185m	>158	10		
Boron	ppm	ASTM D5185m	250	18		
Barium	ppm	ASTM D5185m	10	2		
Molybdenum	ppm	ASTM D5185m	100	14		
Manganese	ppm	ASTM D5185m		4		
Magnesium	ppm	ASTM D5185m	450	37		
Calcium	ppm	ASTM D5185m	3000	2766		
Phosphorus	ppm	ASTM D5185m	1150	923		
Zinc	ppm	ASTM D5185m	1350	1137		
Sulfur	ppm	ASTM D5185m	4250	4382		
Oxidation	Abs/.1mm	*ASTM D7414	>25	10.0		
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	7.5		
Visc @ 100°C	cSt	ASTM D445	14.4	13.9		





Submitted By: APRIL TREADWAY Page 2 of 2