

Store 2 - Beaver [RO#152216] HAMM H12I HAMM H12I WGH0H284JHAA00436 Diesel Engine

WIRTGEN GROUP LOW SAPS 10W30 (4 GAL)

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.

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All component wear rates are normal.

CONTAMINATION

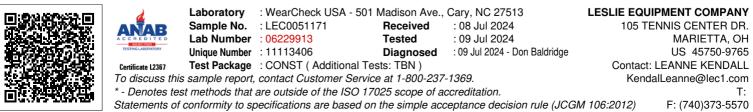
Elemental level of silicon (Si) above normal indicating ingress of dirt/seal material.

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LU				

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.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LEC0051171		
Sample Date		Client Info		03 Jul 2024		
Machine Age	hrs	Client Info		440		
Oil Age	hrs	Client Info		440		
Filter Age	hrs	Client Info		440		
Oil Changed		Client Info		Changed		
Filter Changed		Client Info		Changed		
Sample Status				ABNORMAL		
Iron	ppm	ASTM D5185m	>100	33		
Chromium	ppm	ASTM D5185m	>20	2		
Nickel	ppm	ASTM D5185m	>4	<1		
Titanium	ppm	ASTM D5185m		1		
Silver	ppm	ASTM D5185m	>3	<1		
Aluminum	ppm	ASTM D5185m	>20	6		
Lead	ppm	ASTM D5185m	>40	2		
Copper	ppm	ASTM D5185m	>330	15		
Tin	ppm	ASTM D5185m	>15	1		
Vanadium	ppm	ASTM D5185m		<1		
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Silicon	ppm	ASTM D5185m	>!20	A 31		
Potassium	ppm	ASTM D5185m	>20	5		
Fuel		WC Method	>5	<1.0		
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
Soot %	%	*ASTM D7844	>3	0.3		
Nitration	Abs/cm	*ASTM D7624	>20	8.7		
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.8		
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		4		
Boron	ppm	ASTM D5185m		94		
Barium	ppm	ASTM D5185m		3		
Molybdenum	ppm	ASTM D5185m		99		
Manganese	ppm	ASTM D5185m		3		
Magnesium	ppm	ASTM D5185m		445		
Calcium	ppm	ASTM D5185m		1915		
Phosphorus	ppm	ASTM D5185m		1050		
Zinc	ppm	ASTM D5185m		1307		
Sulfur	ppm	ASTM D5185m		3815		
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.0		
Base Number (BN)	mg KOH/g	ASTM D2896		7.4		
Visc @ 100°C	cSt	ASTM D445		12.6		





Submitted By: STORE 2 - BEAVER - CASEY TONEY Page 2 of 2