

OIL ANALYSIS REPORT

Area IBACO [CONHER] Machine lo BM JLV II Component

Bottom Diesel Engine Fluid RALOY 15W40 (160 LTR)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor. (Customer Sample Comment: Fluid: Raloy 15W40)

Wear

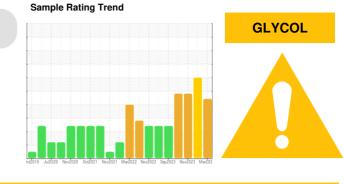
All component wear rates are normal.

Contamination

Sodium and/or potassium levels are high. There is a moderate amount of particulates present in the oil. Light fuel dilution occurring. Test for glycol is negative.

Fluid Condition

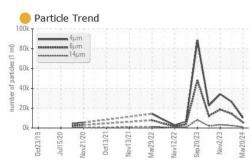
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

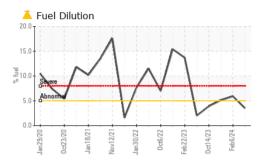


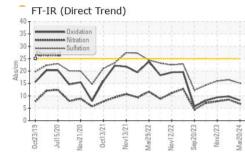
Sample Date Ins Client Info 20 Mar 2024 06 Feb 2024 02 Nov 2023 Machine Age hrs Client Info 13526 12867 0 Oil Age hrs Client Info 519 780 258 Oil Changed Client Info Not Changd Changd Not Changd ABNORMAL ABNORMAL ABNORMAL CONTAMINATION method imit/base current history1 history2 Water WC Method 0.2 NEG NEG NEG VEAR METALS method imit/base current history1 nistory2 Iron ppm ASTM D5185m >20 current inistory2 inistory2 Irianium ppm ASTM D5185m >20 0 0 0 Sliver ppm ASTM D5185m >2 0 0 0 Sliver ppm ASTM D5185m >2 0 0 0 Sliver ppm ASTM D5185m <t< th=""><th>SAMPLE INFORM</th><th>IATION</th><th>method</th><th>limit/base</th><th>current</th><th>history1</th><th>history2</th></t<>	SAMPLE INFORM	IATION	method	limit/base	current	history1	history2		
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Soot % % *ASTM D7844 >3 0.3 0.4 0.3 Nitration Abs/cm *ASTM D7624 >20 6.8 8.5 7.8	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20	0 0 6 <1 4 2770 1139 1308 4042 <u>current</u> 8 20 ▲ 93	2 0 23 <1 6 2507 996 1208 3094 history1 13 13 ▲ 56 ▲ 226	0 0 15 <1 0 2502 1061 1258 3280 history2 25 29 ▲ 107		
Nitration Abs/cm *ASTM D7624 >20 6.8 8.5 7.8	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel	ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20	0 0 6 <1 4 2770 1139 1308 4042 <u>current</u> 8 20 ≥0 93 ▲ 93 ▲ 3.5	2 0 23 <1 6 2507 996 1208 3094 history1 13 13 56 226 ▲ 226 ▲ 5.9	0 0 15 <1 0 2502 1061 1258 3280 history2 25 29 ▲ 107 ▲ 5.1		
Nitration Abs/cm *ASTM D7624 >20 6.8 8.5 7.8	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel Glycol	ppm	ASTM D5185m ASTM D3524	limit/base >25 >20 >5	0 0 6 <1 4 2770 1139 1308 4042 <u>current</u> 8 20 ▲ 93 ▲ 3.5 NEG	2 0 23 <1 6 2507 996 1208 3094 history1 13 13 13 56 ▲ 226 ▲ 5.9 NEG	0 0 15 <1 0 2502 1061 1258 3280 history2 25 29 ▲ 107 ▲ 5.1 NEG		
	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel Glycol INFRA-RED	ppm	ASTM D5185m ASTM D5185m	limit/base >25 >20 >5	0 0 6 <1 4 2770 1139 1308 4042 current 8 20 ▲ 93 ▲ 93 ▲ 3.5 NEG current	2 0 23 <1 6 2507 996 1208 3094 1208 3094 13 13 13 ▲ 56 226 ▲ 226 ▲ 5.9 NEG	0 0 15 <10 2502 1061 1258 3280 history2 25 29 ▲ 107 ▲ 5.1 NEG		
	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel Glycol	ppm ppm %	ASTM D5185m ASTM D3524 *ASTM D2982 method *ASTM D7844	limit/base >25 >20 >5 limit/base >3	0 0 6 <1 4 2770 1139 1308 4042 current 8 20 ▲ 93 3.5 NEG current 0.3	2 0 23 <1 6 2507 996 1208 3094 history1 13 ▲ 56 ▲ 226 ▲ 5.9 NEG history1 0.4	0 0 15 <10 2502 1061 1258 3280 history2 25 29 ▲ 107 ▲ 5.1 NEG history2 0.3		

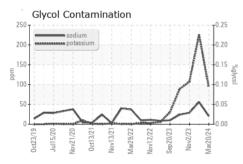


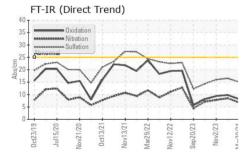
OIL ANALYSIS REPORT





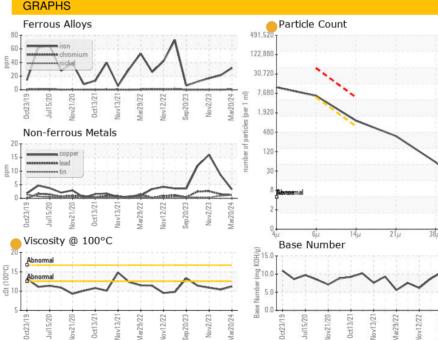






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FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647		10283	26465	34198
Particles >6µm		ASTM D7647	>5000	<u> </u>	1 4417	1 8630
Particles >14µm		ASTM D7647	>640	953	<u> </u>	A 3171
Particles >21µm		ASTM D7647	>160	<mark> </mark> 321	<u> </u>	<u> </u>
Particles >38µm		ASTM D7647	>40	6 50	1 28	🔺 165
Particles >71µm		ASTM D7647	>10	5	1 3	1 7
Oil Cleanliness		ISO 4406 (c)	>19/16	0/17	1 /18	🔺 21/19
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	8.2	9.8	9.4
Base Number (BN)	mg KOH/g	ASTM D2896		9.54	10.25	10.21
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
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
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445		11.2	1 0.4	▲ 10.9
GRAPHS						



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 CONOR Sample No. : KL0014212 Received : 18 Apr 2024 JUAREZ 348 Lab Number : 06153318 Tested : 23 Apr 2024 HERMOSILLO, Unique Number : 10983396 Diagnosed : 23 Apr 2024 - Jonathan Hester MX 83140 Test Package : MOB 2 (Additional Tests: Glycol, PercentFuel, PrtCount) Contact: EDUARDO GARCIA Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369. egarcia.comsa@gmail.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (526)622-1581 x:81 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: x:

Report Id: CONHERKL [WUSCAR] 06153318 (Generated: 04/23/2024 16:16:02) Rev: 1

Submitted By: EDUARDO GARCIA

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