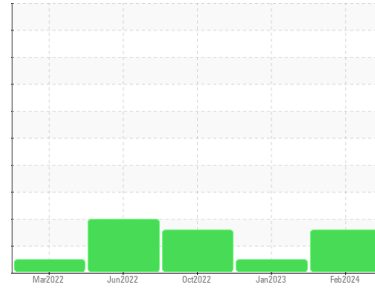


Area
DURON CHALLENGE
 Machine Id
361 (S/N AJ261570)
 Component
Diesel Engine
 Fluid
 DIESEL ENGINE OIL SAE 15W40 (--- GAL)



DIAGNOSIS

Recommendation
 No corrective action is recommended at this time. 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 seal material.

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
Sample Number	Client Info			PCA0082954	PCA0069421	PCA0069316
Sample Date	Client Info			04 Feb 2024	14 Jan 2023	01 Oct 2022
Machine Age	mls Client Info			0	1004877	980941
Oil Age	mls Client Info			0	23980	24544
Oil Changed	Client Info			N/A	Changed	Changed
Sample Status				ABNORMAL	NORMAL	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel	WC Method	>5		<1.0	<1.0	<1.0
Water	WC Method	>0.2		NEG	NEG	NEG
Glycol	WC Method			NEG	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m	>100		11	86	▲ 123
Chromium	ppm ASTM D5185m	>20		<1	3	4
Nickel	ppm ASTM D5185m	>4		<1	<1	<1
Titanium	ppm ASTM D5185m			0	0	<1
Silver	ppm ASTM D5185m	>3		0	0	0
Aluminum	ppm ASTM D5185m	>20		2	7	6
Lead	ppm ASTM D5185m	>40		1	<1	9
Copper	ppm ASTM D5185m	>330		<1	<1	<1
Tin	ppm ASTM D5185m	>15		<1	<1	1
Vanadium	ppm ASTM D5185m			<1	0	<1
Cadmium	ppm ASTM D5185m			0	0	0

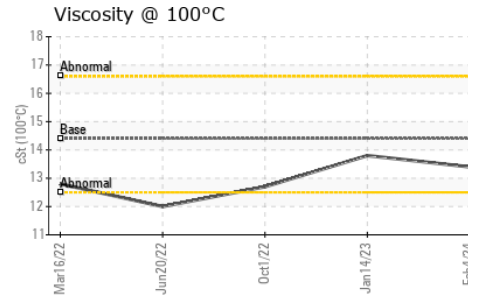
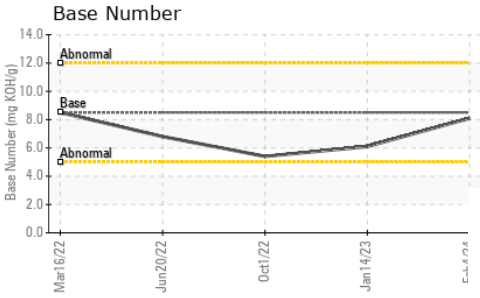
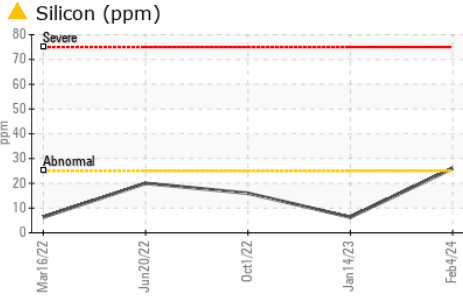
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	250		16	32	89
Barium	ppm ASTM D5185m	10		0	0	0
Molybdenum	ppm ASTM D5185m	100		56	63	70
Manganese	ppm ASTM D5185m			0	1	1
Magnesium	ppm ASTM D5185m	450		960	825	496
Calcium	ppm ASTM D5185m	3000		1035	1093	1244
Phosphorus	ppm ASTM D5185m	1150		1084	985	927
Zinc	ppm ASTM D5185m	1350		1214	1199	1174
Sulfur	ppm ASTM D5185m	4250		2825	3411	2934

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m	>25		▲ 26	6	16
Sodium	ppm ASTM D5185m	>158		<1	5	2
Potassium	ppm ASTM D5185m	>20		4	10	5

INFRA-RED		method	limit/base	current	history1	history2
Soot %	% *ASTM D7844	>3		0.2	1.8	▲ 3
Nitration	Abs/cm *ASTM D7624	>20		8.2	14.5	16.3
Sulfation	Abs/.1mm *ASTM D7415	>30		19.9	28.2	38.7

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414	>25		17.0	29.3	41.7
Base Number (BN)	mg KOH/g ASTM D2896	8.5		8.1	6.1	5.4

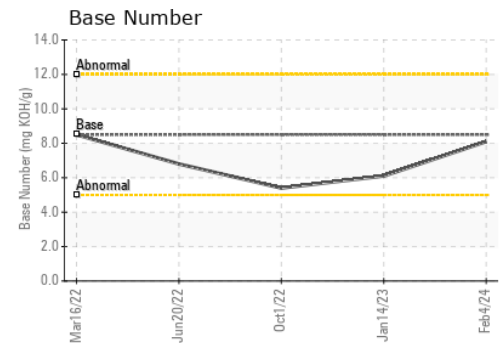
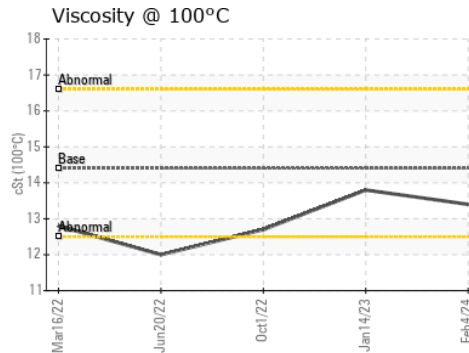
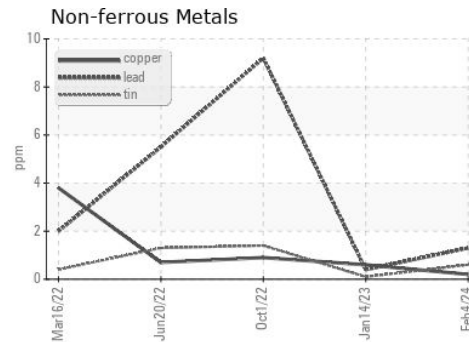
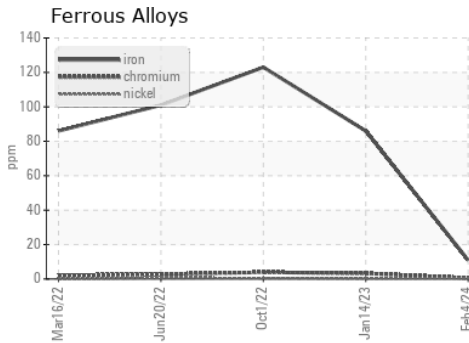
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	14.4	13.4	13.8	12.7

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0082954 **Recieved** : 05 Feb 2024
Lab Number : **06079484** **Diagnosed** : 07 Feb 2024
Unique Number : 10861575 **Diagnostician** : Jonathan Hester
Test Package : FLEET

LEFEBVRE
 10895 171ST AVE NW
 ELK RIVER, MN
 US 55330
 Contact: JAY LEFEBVRE
 jay.lefebvre@letruck.com

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)

T:
F: