



WEAR	ATTENTION
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
INGERSOLL RAND SD-70 SDR-2 (S/N 155148)

Component
Diesel Engine

Fluid
DIESEL ENGINE OIL SAE 15W40 (3 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.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		CL0005255	CL0004079	CL0001749
Sample Date		Client Info		13 Mar 2024	01 Mar 2023	20 Nov 2020
Machine Age	hrs	Client Info		5880	5642	5420
Oil Age	hrs	Client Info		238	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	SEVERE	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	87	▲ 330	22
Chromium	ppm	ASTM D5185m	>20	16	▲ 81	2
Nickel	ppm	ASTM D5185m	>4	<1	2	2
Titanium	ppm	ASTM D5185m		2	8	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	36	● 120	4
Lead	ppm	ASTM D5185m	>40	<1	1	3
Copper	ppm	ASTM D5185m	>330	39	15	2
Tin	ppm	ASTM D5185m	>15	<1	2	0
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

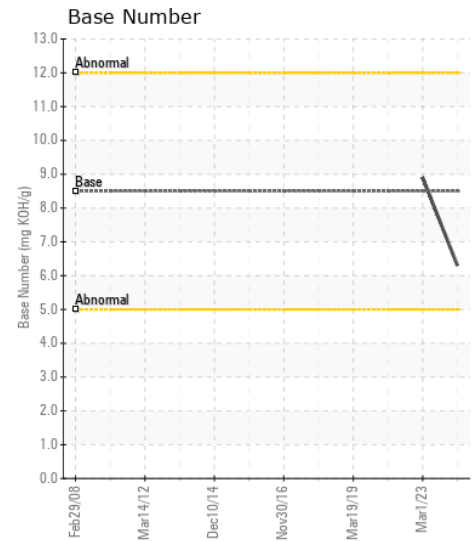
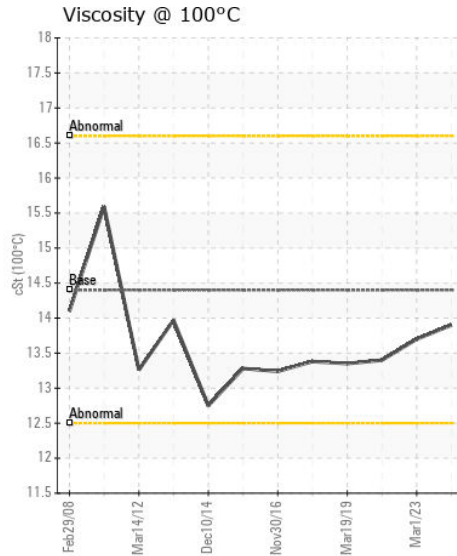
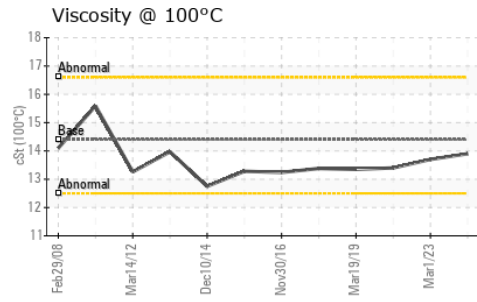
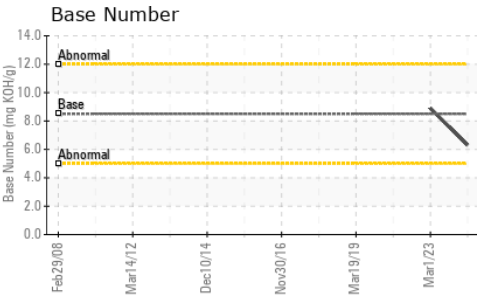
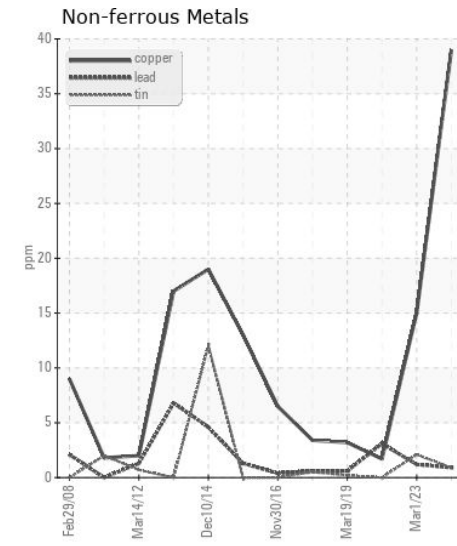
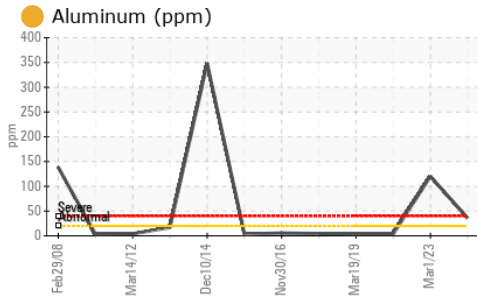
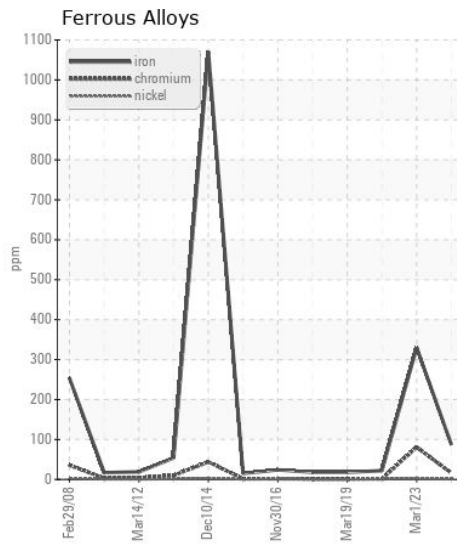
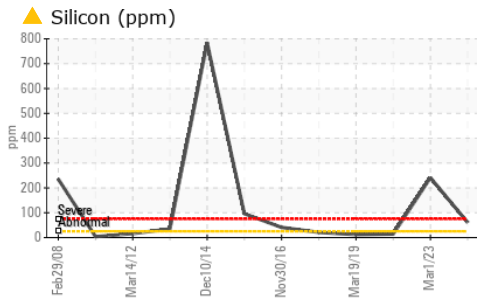
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>25	▲ 61	▲ 241	14
Potassium	ppm	ASTM D5185m	>20	3	11	0
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.6	0.5	0.3
Nitration	Abs/cm	*ASTM D7624	>20	11.1	8.8	7.9
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.5	21.9	20.6
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

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.

Sodium	ppm	ASTM D5185m	>158	5	10	3
Boron	ppm	ASTM D5185m	250	58	92	3
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	99	63	63
Manganese	ppm	ASTM D5185m		1	5	<1
Magnesium	ppm	ASTM D5185m	450	80	473	1068
Calcium	ppm	ASTM D5185m	3000	2482	1886	1164
Phosphorus	ppm	ASTM D5185m	1150	1194	1005	978
Zinc	ppm	ASTM D5185m	1350	1384	1286	1214
Sulfur	ppm	ASTM D5185m	4250	4204	3409	2622
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.5	18.0	15.8
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	6.3	8.9	---
Visc @ 100°C	cSt	ASTM D445	14.4	13.9	13.7	13.4



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : CL0005255 **Received** : 18 Mar 2024
Lab Number : 06121428 **Tested** : 19 Mar 2024
Unique Number : 10930261 **Diagnosed** : 20 Mar 2024 - Don Baldrige
Test Package : CONST (Additional Tests: TBN)

PEDULLA
 146 MCLELLAND
 MOORESVILLE, NC
 US 28115
 Contact: LARRY

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: