



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
STERLING OT71
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 40 (12 GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		CL0005364	CL0004909	CL0004391
Sample Date		Client Info		20 Apr 2024	19 Nov 2023	20 Jun 2023
Machine Age	mls	Client Info		497832	484095	473650
Oil Age	mls	Client Info		13737	0	0
Filter Age	mls	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	14	12	15
Chromium	ppm	ASTM D5185m	>20	<1	1	<1
Nickel	ppm	ASTM D5185m	>4	0	<1	<1
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	4	3
Lead	ppm	ASTM D5185m	>40	<1	<1	1
Copper	ppm	ASTM D5185m	>330	<1	1	2
Tin	ppm	ASTM D5185m	>15	0	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

There is no indication of any contamination in the oil.

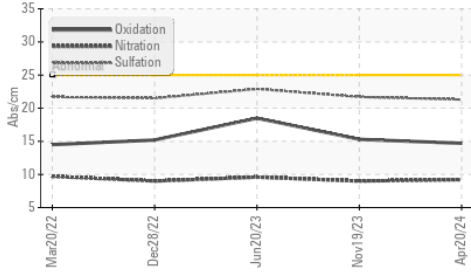
Silicon	ppm	ASTM D5185m	>25	4	7	4
Potassium	ppm	ASTM D5185m	>20	0	2	3
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	1.3	1.4	1.2
Nitration	Abs/cm	*ASTM D7624	>20	9.2	9.0	9.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.3	21.7	22.9
Silt	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

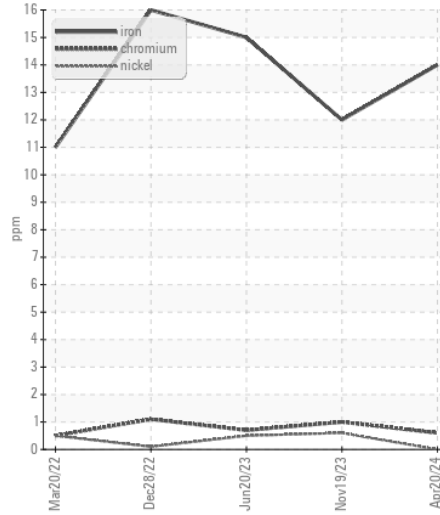
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>216	2	3	0
Boron	ppm	ASTM D5185m	250	16	20	35
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	65	71	77
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m	450	421	512	481
Calcium	ppm	ASTM D5185m	3000	2187	1652	2001
Phosphorus	ppm	ASTM D5185m	1150	1056	1133	1186
Zinc	ppm	ASTM D5185m	1350	1385	1254	1429
Sulfur	ppm	ASTM D5185m	4250	4413	3383	3997
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.7	15.3	18.5
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	8.1	8.7	8.0
Visc @ 100°C	cSt	ASTM D445	14.4	14.4	14.7	14.4

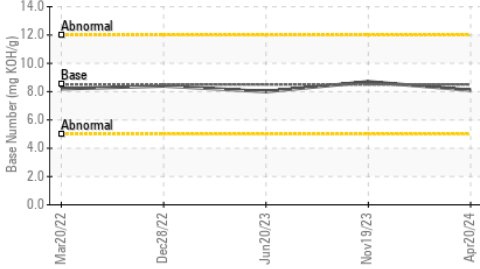
FT-IR (Direct Trend)



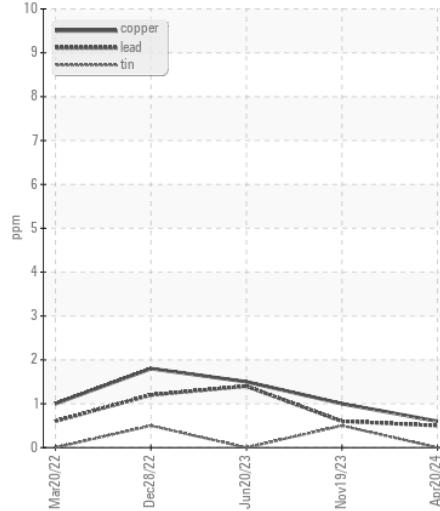
Ferrous Alloys



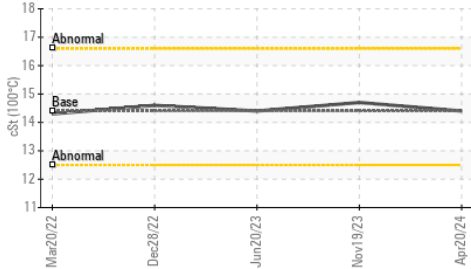
Base Number



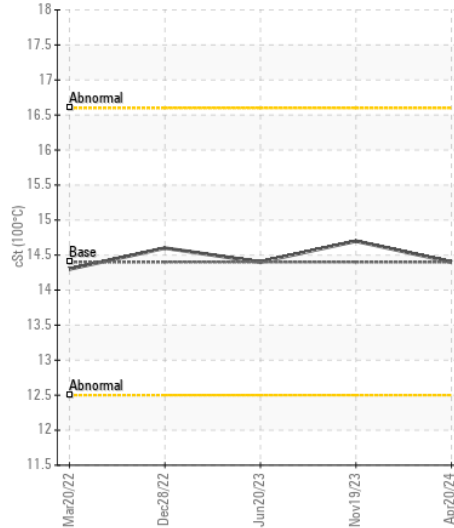
Non-ferrous Metals



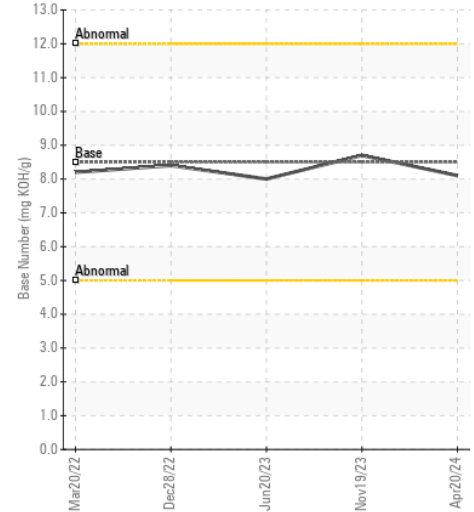
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : CL0005364
Lab Number : 06159648
Unique Number : 10995071
Test Package : CONST (Additional Tests: TBN)

Received : 24 Apr 2024
Tested : 25 Apr 2024
Diagnosed : 25 Apr 2024 - Wes Davis

PURCELL CONSTRUCTION
 3100 HIGH RIDGE RD
 CHARLOTTE, NC
 US 28270
 Contact: BEN MILKE
 ben@purcellconst.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)

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F: