



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
[PMIAS3429606]

Machine Id
4001118 - CALVERT ADVANCED LIFE SUPPORT (S/N P0709240003)

Component
Diesel Engine

Fluid
DURAMAX 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DC0037168	DC0017092	DCM1037906
Sample Date		Client Info		13 Jun 2024	29 Dec 2021	26 Jan 2017
Machine Age	hrs	Client Info		324	294	0
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	N/A
Filter Changed		Client Info		Not Changd	Not Changd	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	0	3	3
Chromium	ppm	ASTM D5185m	>20	0	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	<1	0
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>3	0	<1	0
Aluminum	ppm	ASTM D5185m	>20	2	<1	1
Lead	ppm	ASTM D5185m	>40	0	<1	<1
Copper	ppm	ASTM D5185m	>330	14	2	<1
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

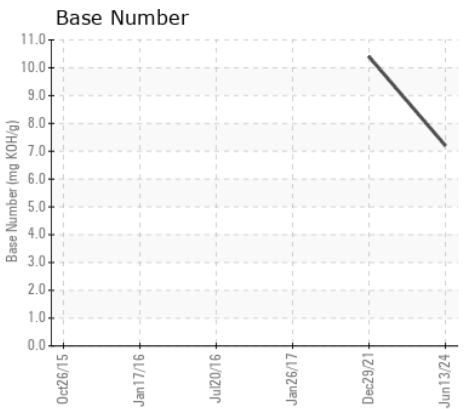
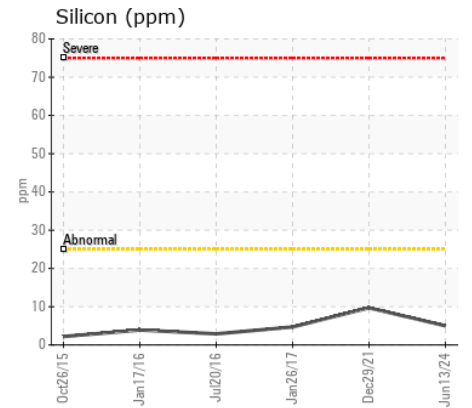
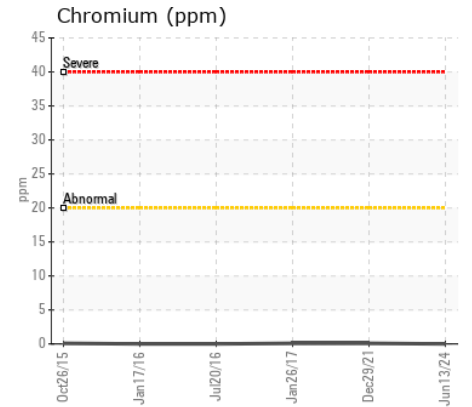
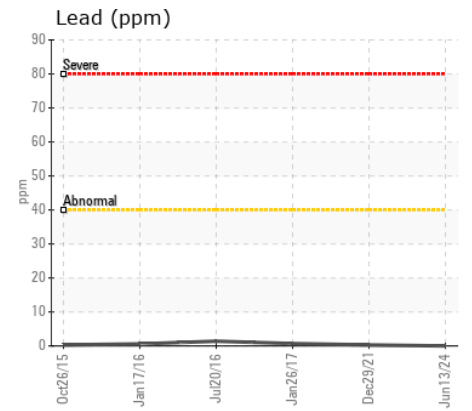
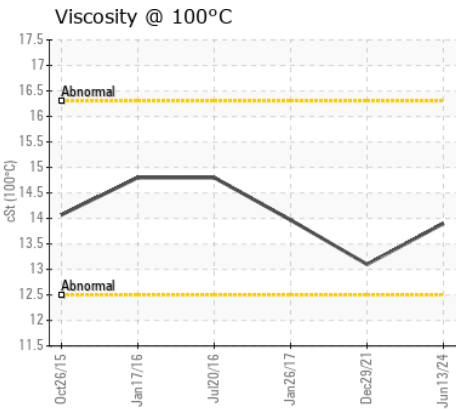
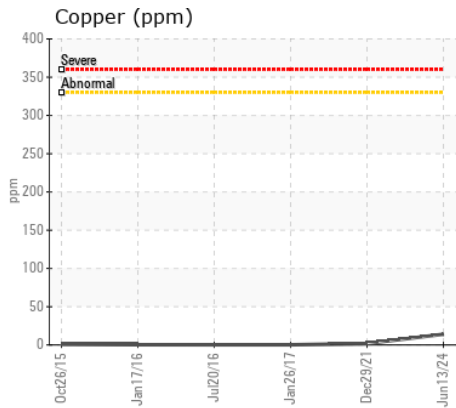
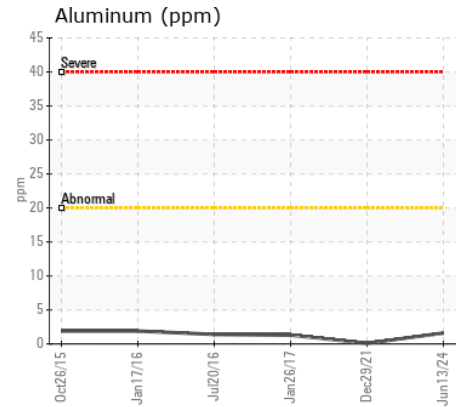
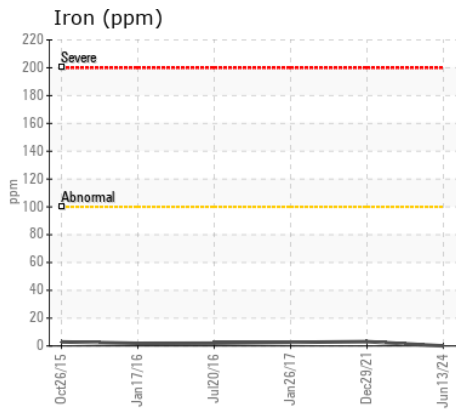
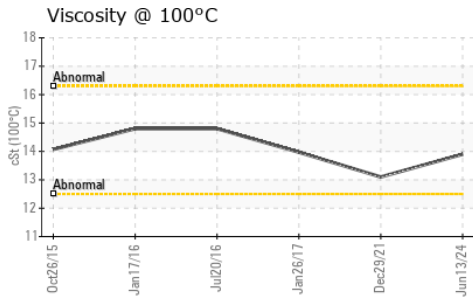
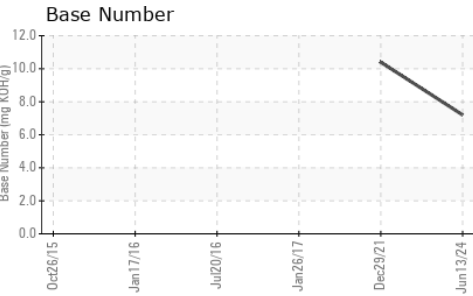
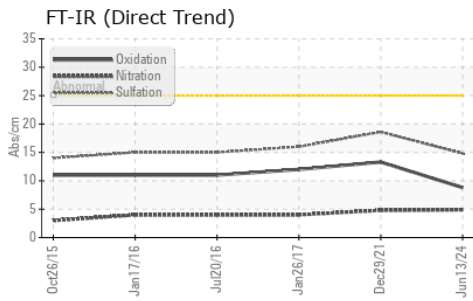
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	5	10	5
Potassium	ppm	ASTM D5185m	>20	2	<1	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	0	0
Nitration	Abs/cm	*ASTM D7624	>20	4.9	4.8	4.
Sulfation	Abs/.1mm	*ASTM D7415	>30	14.8	18.6	16.
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		<1	5	30
Boron	ppm	ASTM D5185m		4	15	2
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		1	57	<1
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		43	837	10
Calcium	ppm	ASTM D5185m		2333	1115	2277
Phosphorus	ppm	ASTM D5185m		943	972	961
Zinc	ppm	ASTM D5185m		1109	1043	1082
Sulfur	ppm	ASTM D5185m		4567	2807	3748
Oxidation	Abs/.1mm	*ASTM D7414	>25	8.8	13.3	12.
Base Number (BN)	mg KOH/g	ASTM D2896		7.2	10.4	---
Visc @ 100°C	cSt	ASTM D445		13.9	13.1	13.97



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DC0037168
Lab Number : 06219363
Unique Number : 11097560
Test Package : MOB 1 (Additional Tests: TBN)
Received : 25 Jun 2024
Tested : 25 Jun 2024
Diagnosed : 25 Jun 2024 - Wes Davis

KELLY GENERATOR & EQUIPMENT INC
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Certificate L2367
 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)