



WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ABNORMAL

Machine Id
72222

Component
Diesel Engine

Fluid
CHEVRON DELO 400 MULTIGRADE 15W40 (--- GAL)

RECOMMENDATION

We advise that you check for the source of the coolant leak. Check for low coolant level. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0680981	WC0681185	WC0528563
Sample Date		Client Info		09 Jan 2024	13 Aug 2022	10 May 2022
Machine Age	hrs	Client Info		10403	6355	5006
Oil Age	hrs	Client Info		690	607	749
Filter Age	hrs	Client Info		690	607	749
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	39	44	29
Chromium	ppm	ASTM D5185m	>20	3	6	3
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m		19	17	18
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	17	59	26
Lead	ppm	ASTM D5185m	>40	0	<1	<1
Copper	ppm	ASTM D5185m	>330	14	10	12
Tin	ppm	ASTM D5185m	>15	2	<1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

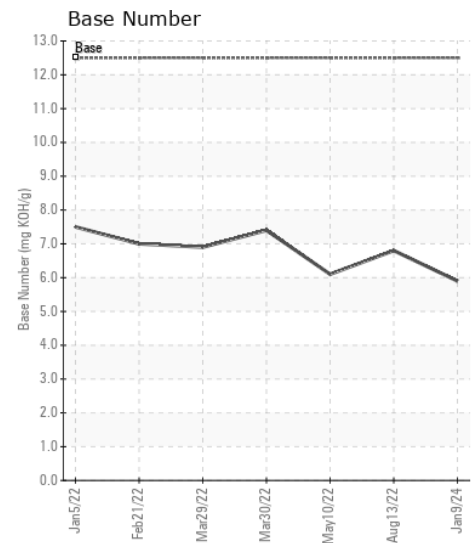
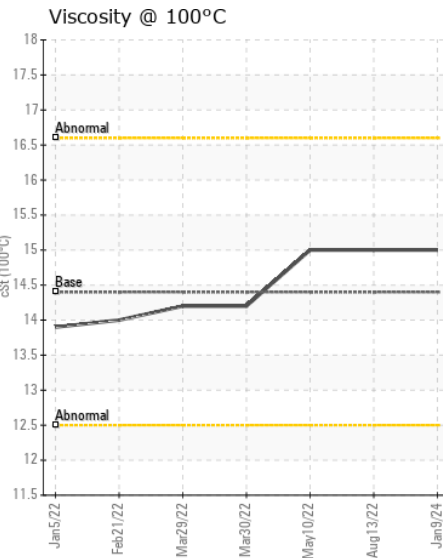
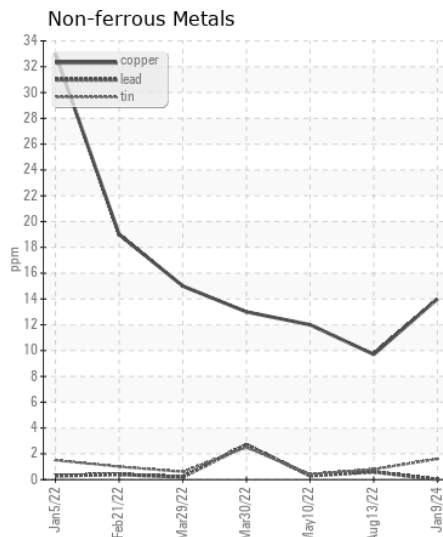
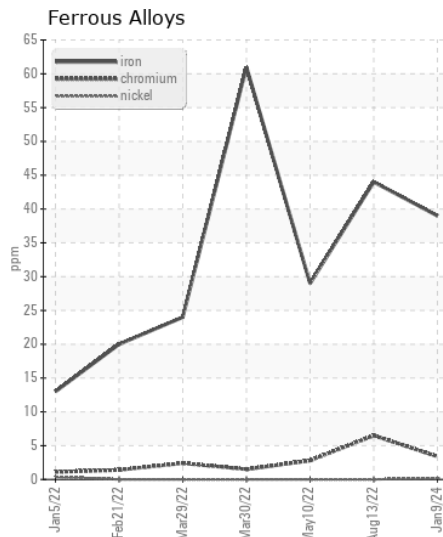
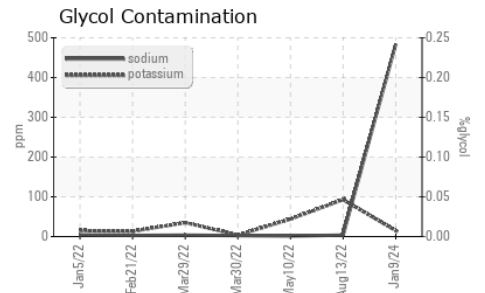
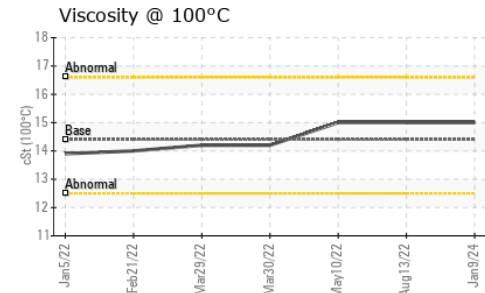
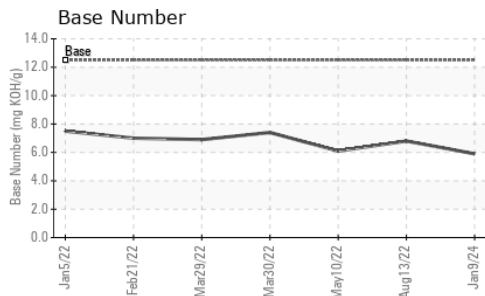
Sodium and/or potassium levels are high.

Silicon	ppm	ASTM D5185m	>25	12	7	7
Potassium	ppm	ASTM D5185m	>20	15	93	44
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	*ASTM D2982		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.7	0.7	0.6
Nitration	Abs/cm	*ASTM D7624	>20	12.4	13.0	11.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	26.5	28.3	24.3
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.

Sodium	ppm	ASTM D5185m		▲ 484	4	2
Boron	ppm	ASTM D5185m	151	25	25	24
Barium	ppm	ASTM D5185m	0.4	0	0	0
Molybdenum	ppm	ASTM D5185m	250	103	33	35
Manganese	ppm	ASTM D5185m		1	1	1
Magnesium	ppm	ASTM D5185m	0	828	804	768
Calcium	ppm	ASTM D5185m	2046	1675	1764	1760
Phosphorus	ppm	ASTM D5185m	1043	781	764	766
Zinc	ppm	ASTM D5185m	943	918	860	937
Sulfur	ppm	ASTM D5185m	5012	3155	3063	3342
Oxidation	Abs/.1mm	*ASTM D7414	>25	23.1	25.7	20.6
Base Number (BN)	mg KOH/g	ASTM D2896	12.5	5.9	6.8	6.1
Visc @ 100°C	cSt	ASTM D445	14.4	15.0	15.0	15.0



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0680981 **Received** : 08 Feb 2024
Lab Number : 06084188 **Tested** : 12 Feb 2024
Unique Number : 10871633 **Diagnosed** : 12 Feb 2024 - Jonathan Hester
Test Package : FLEET (Additional Tests: Glycol)

NANA LYNDEN LOGISTICS
P.O. BOX 570
KOTZEBUE, AK
US 99752

Contact: Mark Tatlow
nanalynden@lynden.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: (907)754-5551
F: (800)418-0974