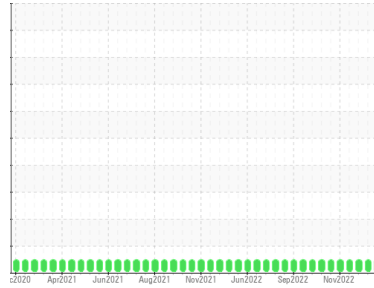




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
Watervliet New Oil

Component
New (Unused) Oil

Fluid
CHEVRON HDAX 6500 LFG GAS ENGINE OIL (--- GAL)

DIAGNOSIS

Recommendation

This is a baseline read-out on the submitted sample. (Customer Sample Comment: New oil delivery)

SAMPLE INFORMATION		method	limit/base	current	history 1	history 2
Sample Number	Client Info			WC0629408	WC0629417	WC0629366
Sample Date	Client Info			10 Mar 2023	13 Feb 2023	23 Jan 2023
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Oil Changed	Client Info			N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR METALS		method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185m	>5	<1	<1	<1
Chromium	ppm	ASTM D5185m	>5	0	0	0
Nickel	ppm	ASTM D5185m	>5	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>5	0	0	0
Aluminum	ppm	ASTM D5185m	>5	1	<1	0
Lead	ppm	ASTM D5185m	>5	0	0	0
Copper	ppm	ASTM D5185m	>5	0	0	0
Tin	ppm	ASTM D5185m	>5	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES		method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185m		<1	0	0
Barium	ppm	ASTM D5185m		0	0	1
Molybdenum	ppm	ASTM D5185m		<1	<1	<1
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		7	5	6
Calcium	ppm	ASTM D5185m		1690	1632	1717
Phosphorus	ppm	ASTM D5185m		243	243	248
Zinc	ppm	ASTM D5185m		287	282	307
Sulfur	ppm	ASTM D5185m		1680	1625	1458

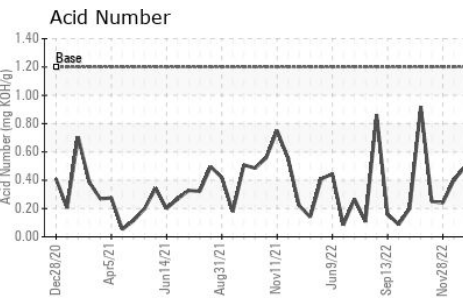
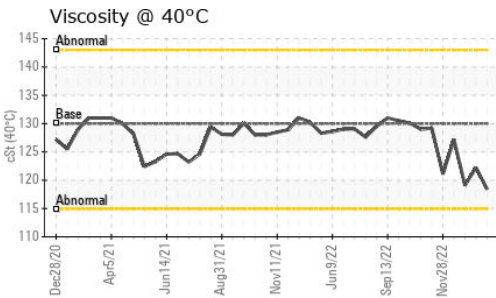
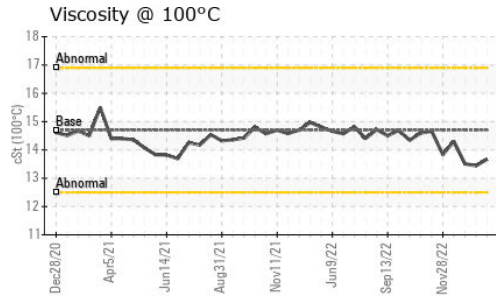
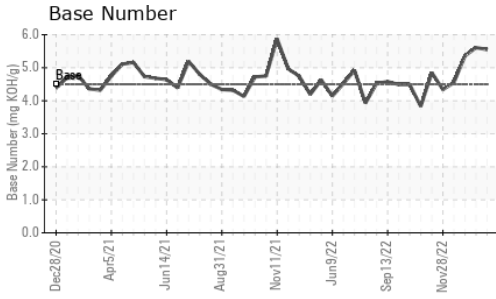
CONTAMINANTS		method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185m	>15	7	5	6
Sodium	ppm	ASTM D5185m		<1	<1	0
Potassium	ppm	ASTM D5185m	>20	<1	0	2

INFRA-RED		method	limit/base	current	history 1	history 2
Soot %	%	*ASTM D7844		---	---	---
Nitration	Abs/cm	*ASTM D7624		---	---	---
Sulfation	Abs/.1mm	*ASTM D7415		---	---	---

FLUID DEGRADATION		method	limit/base	current	history 1	history 2
Oxidation	Abs/.1mm	*ASTM D7414		---	---	---
Acid Number (AN)	mg KOH/g	ASTM D8045	1.2	0.41	0.343	0.494
Base Number (BN)	mg KOH/g	ASTM D2896	4.5	5.55	5.61	5.36



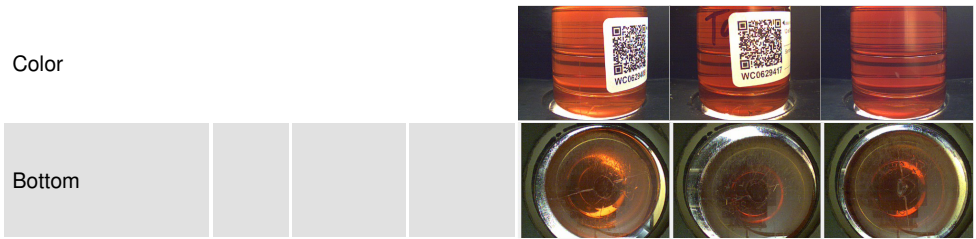
OIL ANALYSIS REPORT



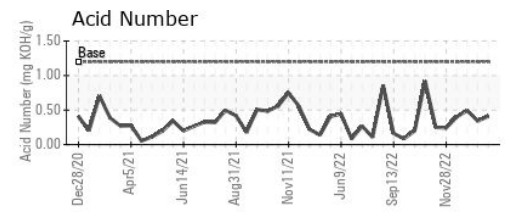
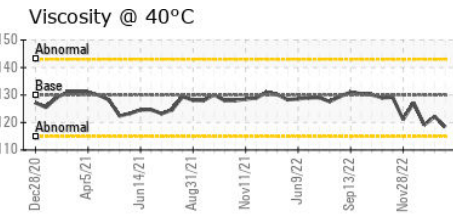
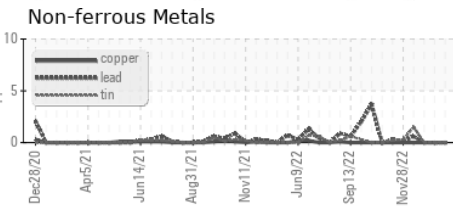
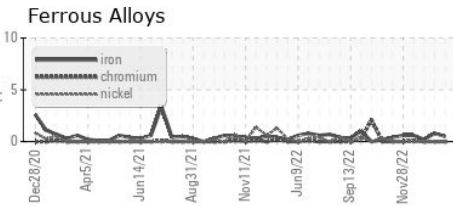
VISUAL	method	limit/base	current	history 1	history 2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	NEG	NEG	NEG
Free Water	scalar	*Visual	NEG	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history 1	history 2
Visc @ 40°C	cSt	ASTM D445	130	118.4	122.2
Visc @ 100°C	cSt	ASTM D445	14.7	13.67	13.44
Viscosity Index (VI)	Scale	ASTM D2270	114	112	105

SAMPLE IMAGES	method	limit/base	current	history 1	history 2
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GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0629408 **Received** : 14 Mar 2023
Lab Number : 05791433 **Diagnosed** : 19 Mar 2023
Unique Number : 10376104 **Diagnostician** : Doug Bogart
Test Package : MOB 2 (Additional Tests: FT-IR, ICP-NewOil, KF, KV100, PrtCount, TBN, VI)
 To discuss this sample report, contact Customer Service at 1-800-237-1369. **Contact:** Scott Eastman
 * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. **scott.eastman@edlenergy.com**
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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