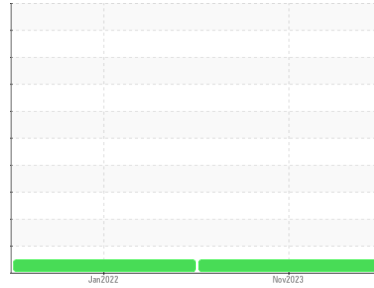


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
192517

Component
Diesel Engine

Fluid
DISEL ENGINE OIL SAE 10W30 (--- QTS)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

Metal levels are typical for a components first oil change.

Contamination

There is no indication of any contamination in the oil.

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.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		PCA0057266	PCA0020944	---
Sample Date	Client Info		28 Nov 2023	24 Jan 2022	---
Machine Age	mls	Client Info	361180	22735	---
Oil Age	mls	Client Info	17550	22735	---
Oil Changed	Client Info		Changed	Changed	---
Sample Status			NORMAL	NORMAL	---

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	<1.0	---
Water	WC Method	>0.2	NEG	NEG	---
Glycol	WC Method		NEG	NEG	---

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	9	2	---
Chromium	ppm	ASTM D5185m >20	<1	<1	---
Nickel	ppm	ASTM D5185m >4	0	<1	---
Titanium	ppm	ASTM D5185m	<1	0	---
Silver	ppm	ASTM D5185m >3	0	0	---
Aluminum	ppm	ASTM D5185m >20	2	3	---
Lead	ppm	ASTM D5185m >40	0	<1	---
Copper	ppm	ASTM D5185m >330	2	1	---
Tin	ppm	ASTM D5185m >15	0	0	---
Antimony	ppm	ASTM D5185m	---	<1	---
Vanadium	ppm	ASTM D5185m	0	0	---
Cadmium	ppm	ASTM D5185m	0	0	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 250	15	2	---
Barium	ppm	ASTM D5185m 10	10	0	---
Molybdenum	ppm	ASTM D5185m 100	42	64	---
Manganese	ppm	ASTM D5185m	0	<1	---
Magnesium	ppm	ASTM D5185m 450	504	1073	---
Calcium	ppm	ASTM D5185m 3000	1359	1146	---
Phosphorus	ppm	ASTM D5185m 1150	708	1069	---
Zinc	ppm	ASTM D5185m 1350	806	1344	---
Sulfur	ppm	ASTM D5185m 4250	2508	2841	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	17	7	---
Sodium	ppm	ASTM D5185m	7	1	---
Potassium	ppm	ASTM D5185m >20	5	8	---

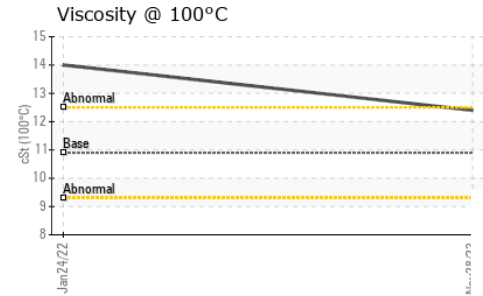
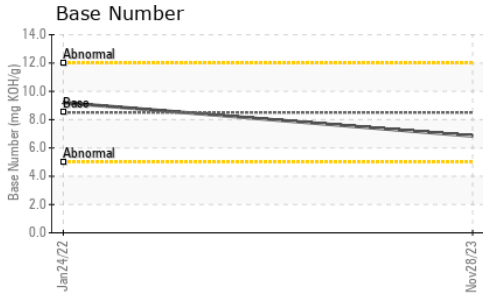
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.2	0.3	---
Nitration	Abs/cm	*ASTM D7624 >20	10.2	8.6	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	26.2	21.1	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	29.9	17.7	---
Base Number (BN)	mg KOH/g	ASTM D2896 8.5	6.84	9.2	---

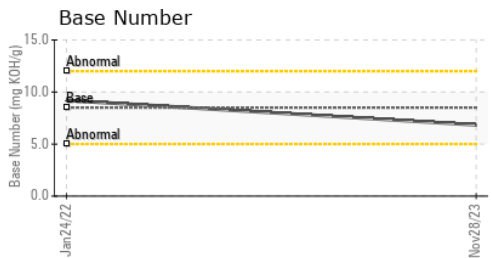
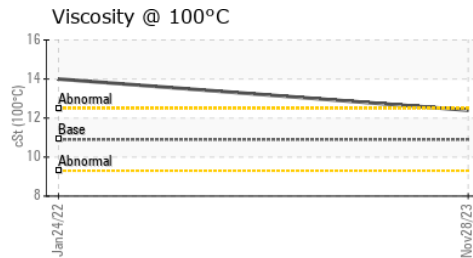
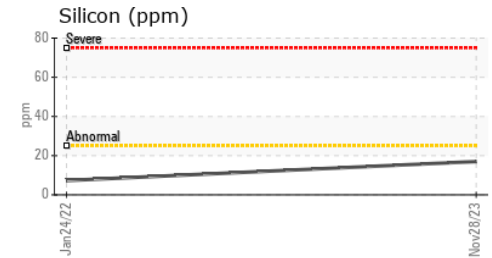
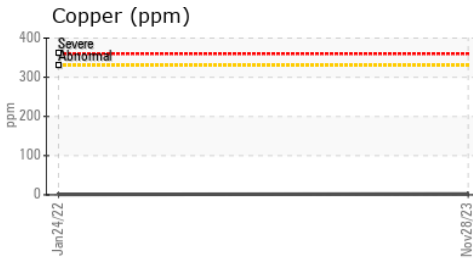
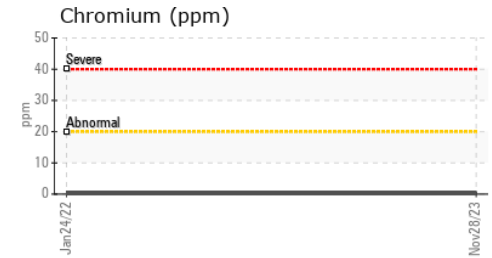
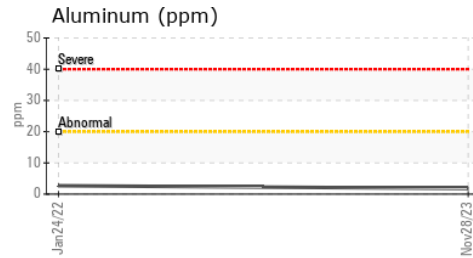
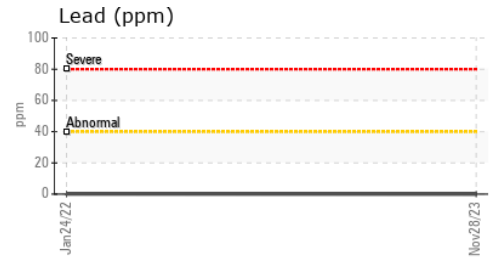
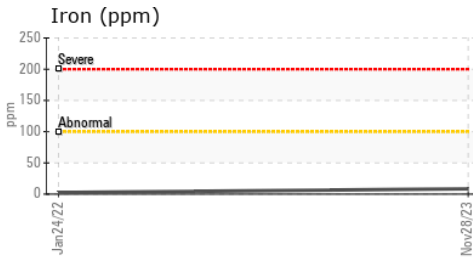
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	10.9	12.4	14.0	---

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0057266 **Received** : 19 Feb 2024
Lab Number : **06093191** **Tested** : 20 Feb 2024
Unique Number : 10886044 **Diagnosed** : 20 Feb 2024 - Sean Felton
Test Package : MOB 2

VALLEY PACIFIC PETROLEUM SERVICES
 152 FRANK WEST CIRCLE
 STOCKTON, CA
 US 95206
 Contact: OMAR VALVERDE
 omar.valverde@vpps.net

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: