



# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**003 - M-1300 10W30 - PCA0115871**

Component  
**New (Unused) Oil**  
Fluid  
**{not provided} (--- GAL)**

## DIAGNOSIS

### Recommendation

This is a baseline read-out on the submitted sample.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>PCA0115871</b>	---	---
Sample Date	Client Info			<b>05 Mar 2024</b>	---	---
Machine Age	hrs	Client Info		<b>0</b>	---	---
Oil Age	hrs	Client Info		<b>0</b>	---	---
Oil Changed	Client Info			<b>N/A</b>	---	---
Sample Status				<b>NORMAL</b>	---	---

CONTAMINATION		method	limit/base	current	history1	history2
Water	WC Method			<b>NEG</b>	---	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m		<b>0</b>	---	---
Chromium	ppm	ASTM D5185m		<b>0</b>	---	---
Nickel	ppm	ASTM D5185m		<b>0</b>	---	---
Titanium	ppm	ASTM D5185m		<b>0</b>	---	---
Silver	ppm	ASTM D5185m		<b>0</b>	---	---
Aluminum	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Lead	ppm	ASTM D5185m		<b>0</b>	---	---
Copper	ppm	ASTM D5185m		<b>0</b>	---	---
Tin	ppm	ASTM D5185m		<b>0</b>	---	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	---	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	---	---

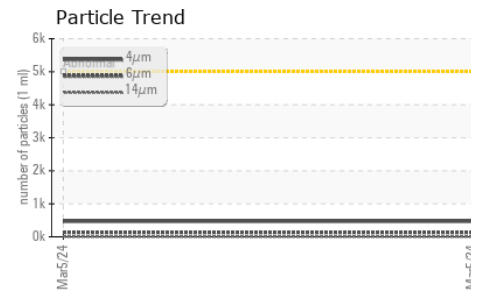
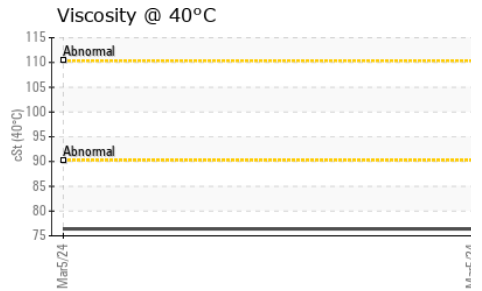
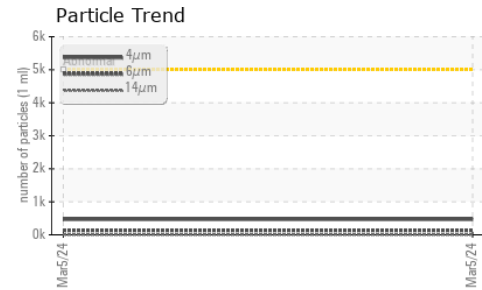
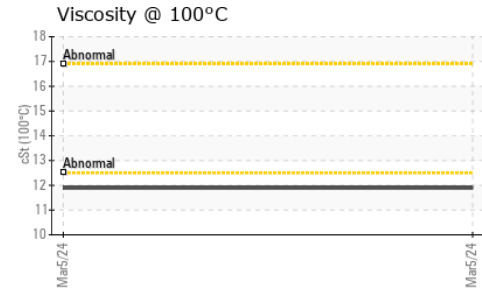
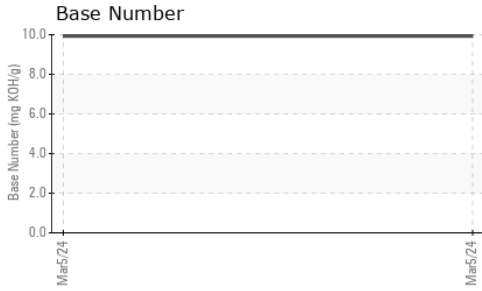
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>71</b>	---	---
Barium	ppm	ASTM D5185m		<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m		<b>34</b>	---	---
Manganese	ppm	ASTM D5185m		<b>0</b>	---	---
Magnesium	ppm	ASTM D5185m		<b>476</b>	---	---
Calcium	ppm	ASTM D5185m		<b>1501</b>	---	---
Phosphorus	ppm	ASTM D5185m		<b>737</b>	---	---
Zinc	ppm	ASTM D5185m		<b>828</b>	---	---
Sulfur	ppm	ASTM D5185m		<b>2238</b>	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m		<b>8</b>	---	---
Sodium	ppm	ASTM D5185m		<b>&lt;1</b>	---	---
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	---	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	<b>470</b>	---	---
Particles >6µm		ASTM D7647	>1300	<b>132</b>	---	---
Particles >14µm		ASTM D7647	>160	<b>5</b>	---	---
Particles >21µm		ASTM D7647	>40	<b>1</b>	---	---
Particles >38µm		ASTM D7647	>10	<b>0</b>	---	---
Particles >71µm		ASTM D7647	>3	<b>0</b>	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>16/14/10</b>	---	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Base Number (BN)	mg KOH/g	ASTM D2896		<b>9.93</b>	---	---

# OIL ANALYSIS REPORT



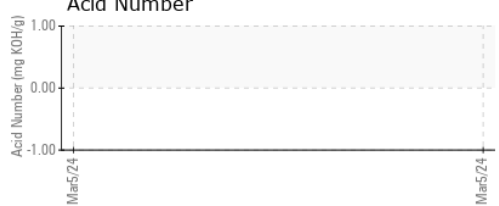
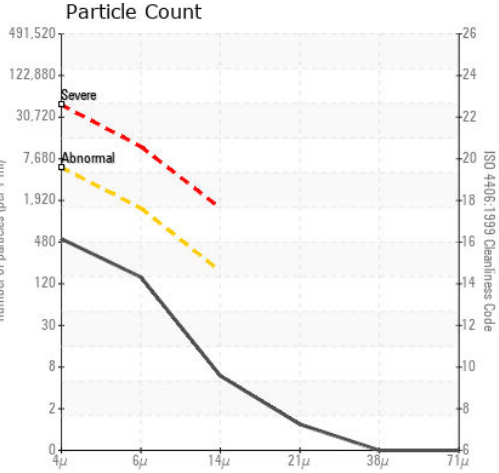
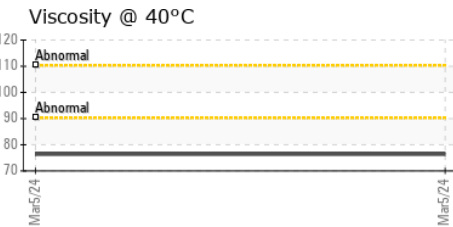
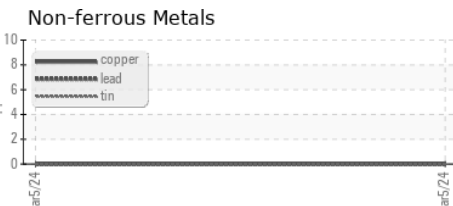
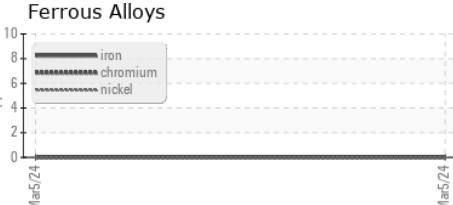
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	<b>NONE</b>	---
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	---
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	---
Silt	scalar	*Visual	NONE	<b>NONE</b>	---
Debris	scalar	*Visual	NONE	<b>NONE</b>	---
Sand/Dirt	scalar	*Visual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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	<b>76.4</b>	---	---
Visc @ 100°C	cSt	ASTM D445	<b>11.89</b>	---	---
Viscosity Index (VI)	Scale	ASTM D2270	<b>150</b>	---	---

## SAMPLE IMAGES

	method	limit/base	current	history1	history2
Color				no image	no image
Bottom				no image	no image

## GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0115871  
**Lab Number** : **06110999**  
**Unique Number** : 10914496  
**Test Package** : MOB 2 ( Additional Tests: FT-IR, ICP-NewOil, KV100, PrtCount, TBN, VI )

**Received** : 06 Mar 2024  
**Tested** : 11 Mar 2024  
**Diagnosed** : 11 Mar 2024 - Doug Bogart

**MVP INC - MISSOURI VALLEY PETROLEUM**  
 1722 MANDAN AVE  
 MANDAN, ND  
 US 58554

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)

Contact: RIC ABERLE  
 RICHARD.ABERLE@PARKLANDUSA.COM  
 T: (701)663-5091  
 F: (701)663-9445