

# OIL ANALYSIS REPORT

Sample Rating Trend



ISO



Machine Id  
**004 - M-DELVAC 1300 10W30**

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

## DIAGNOSIS

### ▲ Recommendation

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

### ▲ Contamination

There is a moderate amount of silt (particulates < 6 microns in size) present in the oil.

## SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>PCA0099968</b>	---	---
Sample Date	Client Info		<b>09 Jul 2023</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>ATTENTION</b>	---	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	<b>1</b>	---	---
Chromium	ppm	ASTM D5185m	<b>0</b>	---	---
Nickel	ppm	ASTM D5185m	<b>&lt;1</b>	---	---
Titanium	ppm	ASTM D5185m	<b>0</b>	---	---
Silver	ppm	ASTM D5185m	<b>&lt;1</b>	---	---
Aluminum	ppm	ASTM D5185m	<b>0</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>86</b>	---	---
Barium	ppm	ASTM D5185m	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m	<b>38</b>	---	---
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	---	---
Magnesium	ppm	ASTM D5185m	<b>443</b>	---	---
Calcium	ppm	ASTM D5185m	<b>1624</b>	---	---
Phosphorus	ppm	ASTM D5185m	<b>696</b>	---	---
Zinc	ppm	ASTM D5185m	<b>818</b>	---	---
Sulfur	ppm	ASTM D5185m	<b>2264</b>	---	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	<b>7</b>	---	---
Sodium	ppm	ASTM D5185m	<b>0</b>	---	---
Potassium	ppm	ASTM D5185m >20	<b>2</b>	---	---

## FLUID CLEANLINESS

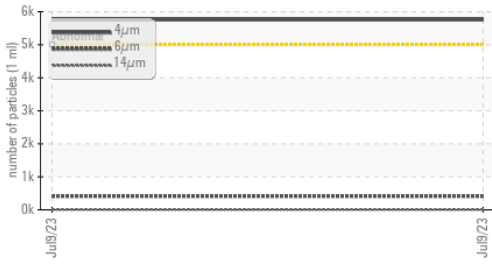
	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>▲ 5756</b>	---	---
Particles >6µm	ASTM D7647	>1300	<b>414</b>	---	---
Particles >14µm	ASTM D7647	>160	<b>9</b>	---	---
Particles >21µm	ASTM D7647	>40	<b>2</b>	---	---
Particles >38µm	ASTM D7647	>10	<b>0</b>	---	---
Particles >71µm	ASTM D7647	>3	<b>0</b>	---	---
Oil Cleanliness	ISO 4406 (c)	>19/17/14	<b>▲ 20/16/10</b>	---	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>1.35</b>	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	<b>10.91</b>	---	---

# OIL ANALYSIS REPORT

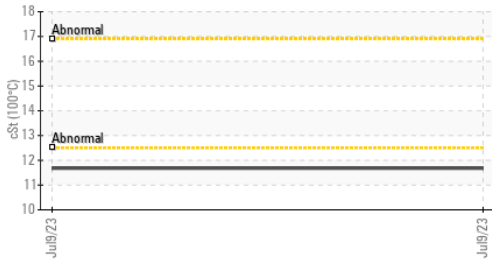
**▲ Particle Trend**



**Base Number**



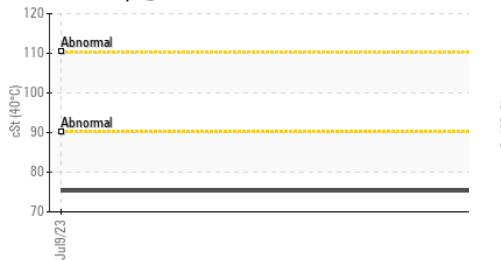
**Viscosity @ 100°C**



**Base Number**



**Viscosity @ 40°C**



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	NEG	---	---
Free Water	scalar	*Visual	NEG	---	---

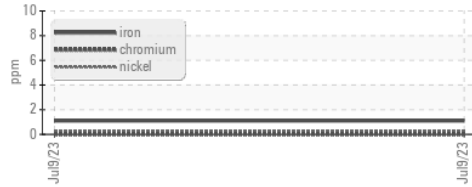
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	75.3	---	---
Visc @ 100°C	cSt	ASTM D445	11.68	---	---
Viscosity Index (VI)	Scale	ASTM D2270	149	---	---

**SAMPLE IMAGES**

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

**GRAPHS**

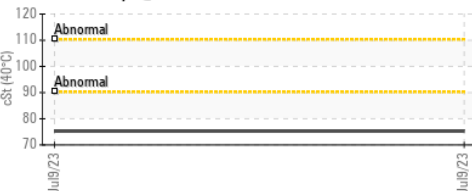
**Ferrous Alloys**



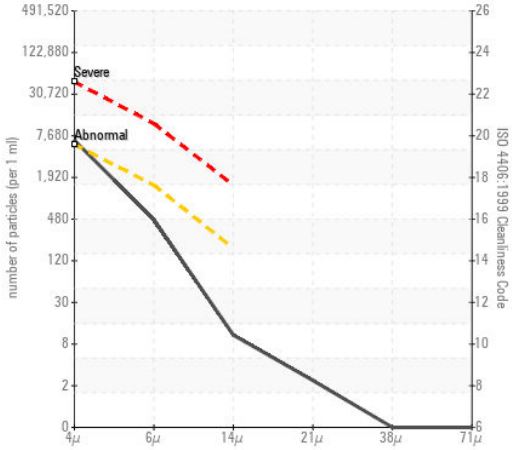
**Non-ferrous Metals**



**Viscosity @ 40°C**



**▲ Particle Count**



**Acid Number**



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0099968 **Received** : 10 Jul 2023  
**Lab Number** : 05894140 **Diagnosed** : 12 Jul 2023  
**Unique Number** : 10549950 **Diagnostician** : Jonathan Hester  
**Test Package** : MOB 2 ( Additional Tests: FT-IR, ICP-NewOil, KV100, PrtCount, TBN, VI )

**MVP INC - MISSOURI VALLEY PETROLEUM**  
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 Contact: RIC ABERLE  
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 T: (701)663-5091  
 F: (701)663-9445

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)