

# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**084 - MOBIL AST 20**  
 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>PCA0099965</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>NORMAL</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>&lt;1</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>0</b>	---	---
Barium	ppm	ASTM D5185m	<b>0</b>	---	---
Molybdenum	ppm	ASTM D5185m	<b>&lt;1</b>	---	---
Manganese	ppm	ASTM D5185m	<b>0</b>	---	---
Magnesium	ppm	ASTM D5185m	<b>11</b>	---	---
Calcium	ppm	ASTM D5185m	<b>3135</b>	---	---
Phosphorus	ppm	ASTM D5185m	<b>983</b>	---	---
Zinc	ppm	ASTM D5185m	<b>1159</b>	---	---
Sulfur	ppm	ASTM D5185m	<b>4073</b>	---	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	<b>5</b>	---	---
Sodium	ppm	ASTM D5185m	<b>0</b>	---	---
Potassium	ppm	ASTM D5185m	<b>&gt;20</b>	---	---

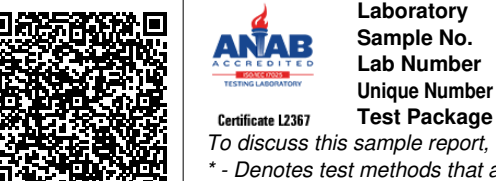
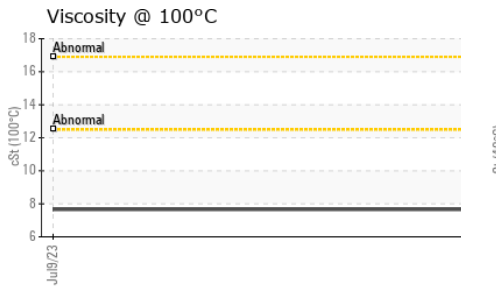
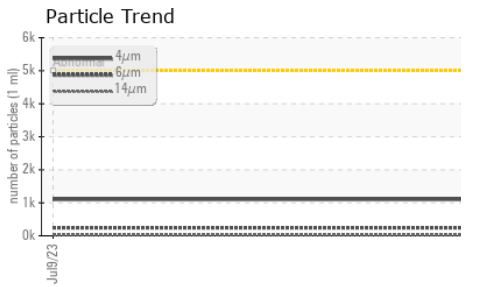
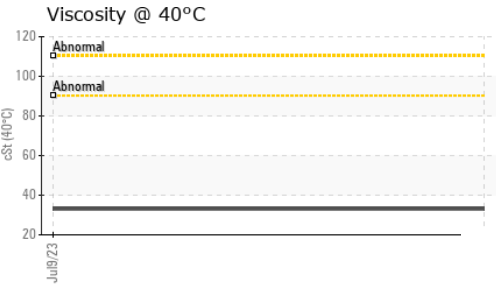
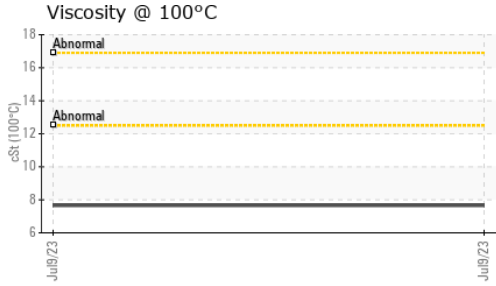
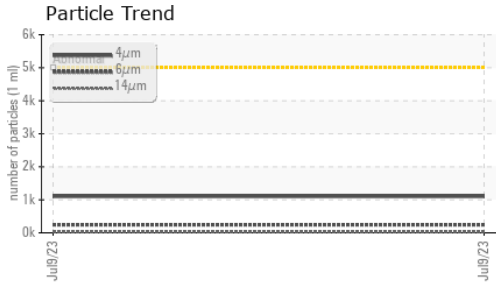
## FLUID CLEANLINESS

	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>5000	<b>1105</b>	---	---
Particles >6µm	ASTM D7647	>1300	<b>243</b>	---	---
Particles >14µm	ASTM D7647	>160	<b>23</b>	---	---
Particles >21µm	ASTM D7647	>40	<b>5</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>17/15/12</b>	---	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	<b>1.66</b>	---	---

# OIL ANALYSIS REPORT

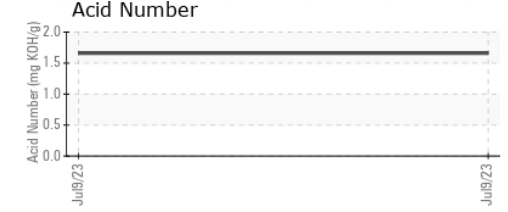
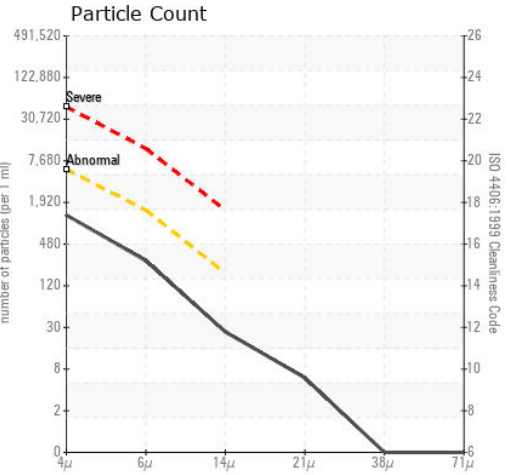
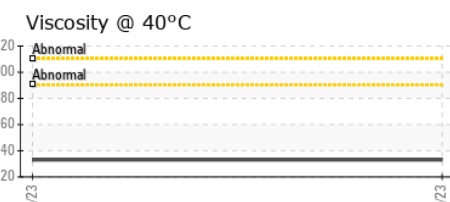
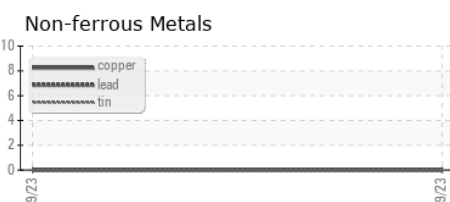
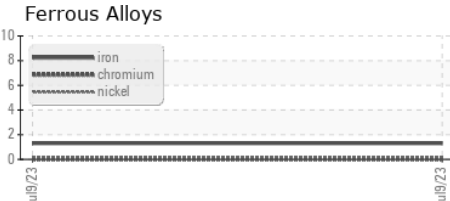


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar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

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	33.07	---	---
Visc @ 100°C	cSt	ASTM D445	7.66	---	---
Viscosity Index (VI)	Scale	ASTM D2270	212	---	---

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

## GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : PCA0099965 **Received** : 10 Jul 2023  
**Lab Number** : 05894135 **Diagnosed** : 12 Jul 2023  
**Unique Number** : 10549945 **Diagnostician** : Jonathan Hester  
**Test Package** : MOB 2 ( Additional Tests: FT-IR, ICP-NewOil, KV100, PrtCount, VI )

**MVP INC - MISSOURI VALLEY PETROLEUM**  
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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)