OIL DIAGNOSTICS

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

Machine Id
117 - M-DELVAC 1300 10W30 - PCA0115853
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		**PCA0115853**	---	---
Sample Date		Client Info		**05 Mar 2024**	---	---
Machine Age	hrs	Client Info		**0**	---	---
Oil Age	hrs	Client Info		**0**	---	---
Oil Changed		Client Info		**N/A**	---	---
Sample Status				**NORMAL**	---	---

CONTAMINATION	method	limit/base	current	history1	history2
Water	WC Method		**NEG**	---	---

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

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		**70**	---	---
Barium	ppm	ASTM D5185m		**0**	---	---
Molybdenum	ppm	ASTM D5185m		**34**	---	---
Manganese	ppm	ASTM D5185m		**0**	---	---
Magnesium	ppm	ASTM D5185m		**481**	---	---
Calcium	ppm	ASTM D5185m		**1516**	---	---
Phosphorus	ppm	ASTM D5185m		**733**	---	---
Zinc	ppm	ASTM D5185m		**836**	---	---
Sulfur	ppm	ASTM D5185m		**2216**	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m		**9**	---	---
Sodium	ppm	ASTM D5185m		**1**	---	---
Potassium	ppm	ASTM D5185m	>20	**0**	---	---

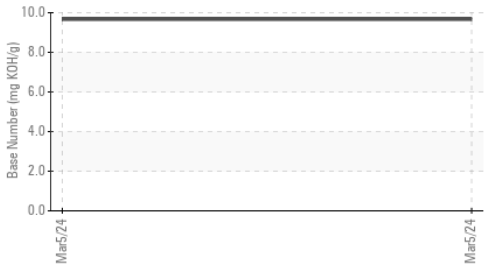
FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647		**222**	---	---
Particles >6µm	ASTM D7647	>640	**53**	---	---
Particles >14µm	ASTM D7647	>80	**2**	---	---
Particles >21µm	ASTM D7647	>20	**0**	---	---
Particles >38µm	ASTM D7647	>4	**0**	---	---
Particles >71µm	ASTM D7647	>3	**0**	---	---
Oil Cleanliness	ISO 4406 (c)	>--/16/13	**15/13/9**	---	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Base Number (BN)	mg KOH/g	ASTM D2896		**9.67**	---	---

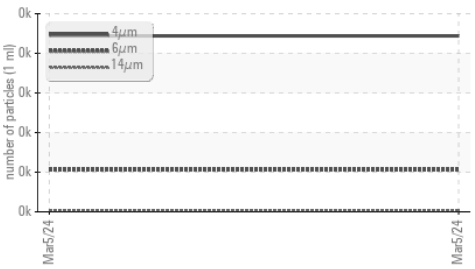
OIL ANALYSIS REPORT

OIL DIAGNOSTICS

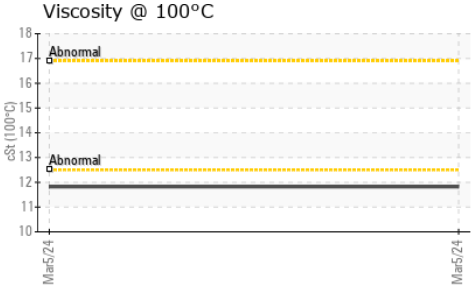
Base Number



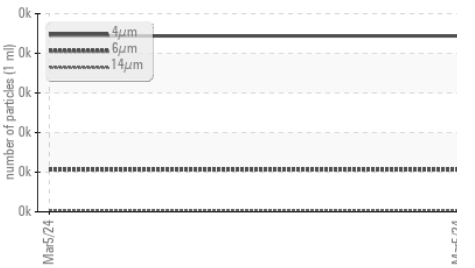
Particle Trend



Viscosity @ 100°C



Particle Trend



Acid Number

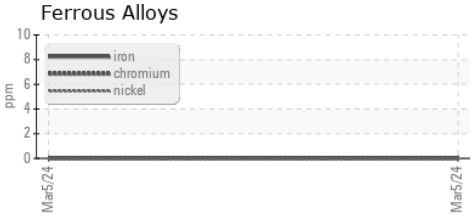
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	---	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	---	---
Precipitate	scalar	*Visual	NONE	**NONE**	---	---
Silt	scalar	*Visual	NONE	**NONE**	---	---
Debris	scalar	*Visual	NONE	**NONE**	---	---
Sand/Dirt	scalar	*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		**76.16**	---	---
Visc @ 100°C	cSt	ASTM D445		**11.82**	---	---
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*

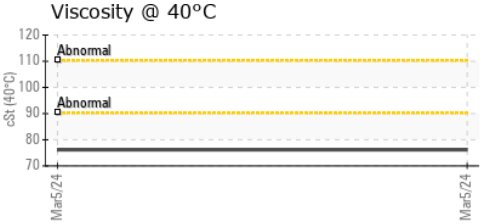
GRAPHS

Ferrous Alloys

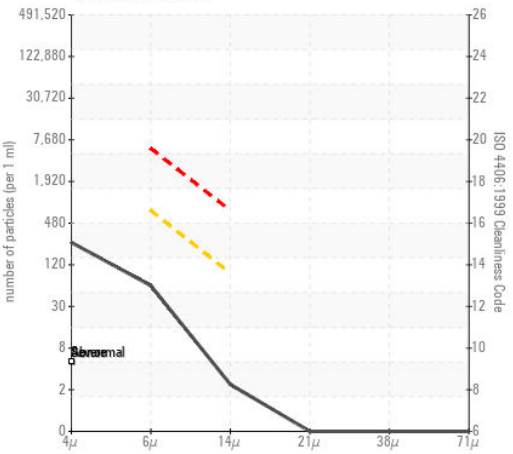


Non-ferrous Metals

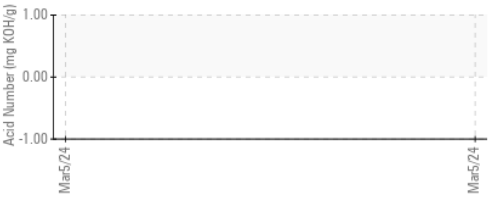
Viscosity @ 40°C



Particle Count



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0115853 **Received** : 06 Mar 2024
Lab Number : 06111004 **Tested** : 11 Mar 2024
Unique Number : 10914501 **Diagnosed** : 11 Mar 2024 - Doug Bogart
Test Package : MOB 2 (Additional Tests: FT-IR, ICP-NewOil, KV100, PrtCount, TBN, VI)

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)

MVP INC - MISSOURI VALLEY PETROLEUM
1722 MANDAN AVE
MANDAN, ND
US 58554
Contact: RIC ABERLE
RICHARD.ABERLE@PARKLANDUSA.COM
T: (701)663-5091
F: (701)663-9445