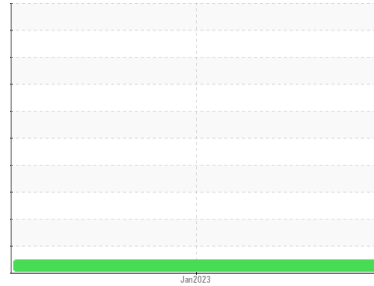


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
TOTE 084 - M-TRANS AST 20

Component
New (Unused) Oil
Fluid
MOBIL MOBILTRANS AST 20 (--- 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			PCA0075535	---	---
Sample Date	Client Info			08 Jan 2023	---	---
Machine Age	hrs	Client Info		0	---	---
Oil Age	hrs	Client Info		0	---	---
Oil Changed	Client Info			N/A	---	---
Sample Status				NORMAL	---	---

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

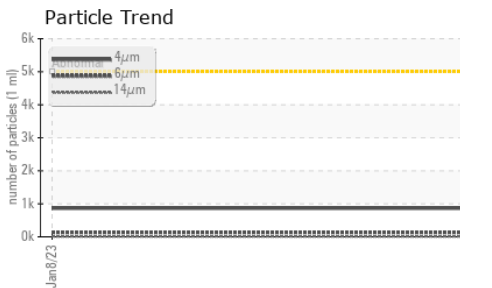
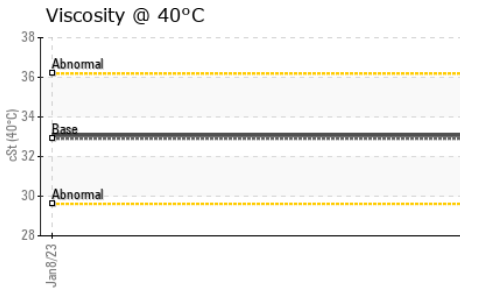
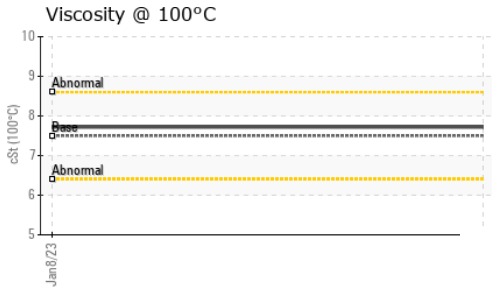
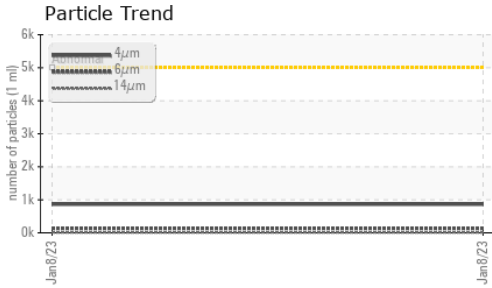
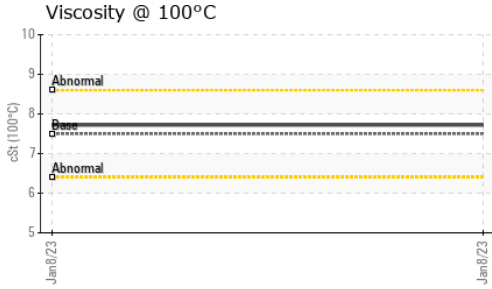
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	---	---
Barium	ppm	ASTM D5185m		0	---	---
Molybdenum	ppm	ASTM D5185m		<1	---	---
Manganese	ppm	ASTM D5185m		<1	---	---
Magnesium	ppm	ASTM D5185m		12	---	---
Calcium	ppm	ASTM D5185m		3179	---	---
Phosphorus	ppm	ASTM D5185m		1018	---	---
Zinc	ppm	ASTM D5185m		1243	---	---
Sulfur	ppm	ASTM D5185m		4938	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m		4	---	---
Sodium	ppm	ASTM D5185m		1	---	---
Potassium	ppm	ASTM D5185m	>20	0	---	---

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	865	---	---
Particles >6µm		ASTM D7647	>1300	132	---	---
Particles >14µm		ASTM D7647	>160	11	---	---
Particles >21µm		ASTM D7647	>40	4	---	---
Particles >38µm		ASTM D7647	>10	0	---	---
Particles >71µm		ASTM D7647	>3	0	---	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	17/14/11	---	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		2.27	---	---

OIL ANALYSIS REPORT

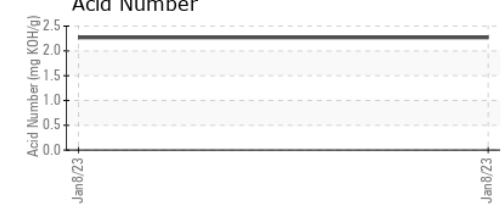
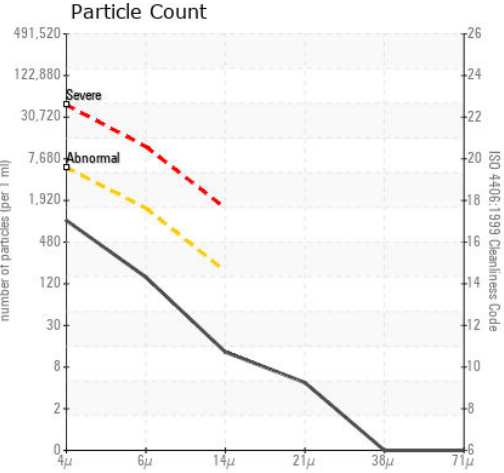
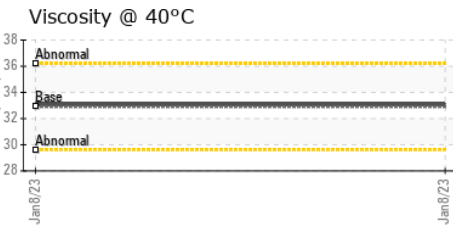
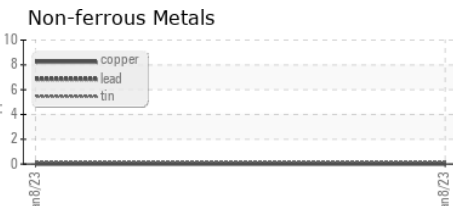
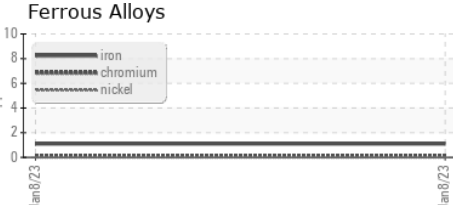


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*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	32.9	33.07	---
Visc @ 100°C	cSt	ASTM D445	7.5	7.72	---
Viscosity Index (VI)	Scale	ASTM D2270	206	215	---

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. : PCA0075535 **Received** : 06 Jan 2023
Lab Number : **05733095** **Diagnosed** : 10 Jan 2023
Unique Number : 10282693 **Diagnostician** : Jonathan Hester
Test Package : MOB 2 (Additional Tests: FT-IR, ICP-NewOil, KF, KV100, PrtCount, VI)

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

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)