

OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Area
PONCA CITY
 Machine Id
Unit 01 DB130101E
 Component
Natural Gas Engine
 Fluid
PETRO CANADA DURON MONOGRADE HD 40W (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Light fuel dilution occurring. No other contaminants were detected in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	PCA0100320	---	---
Sample Date	Client Info	14 Sep 2023	---	---
Machine Age	hrs Client Info	1253	---	---
Oil Age	hrs Client Info	1253	---	---
Oil Changed	Client Info	Not Chngd	---	---
Sample Status		MARGINAL	---	---

WEAR METALS

method	limit/base	current	history1	history2
Iron ppm ASTM D5185m	>50	6	---	---
Chromium ppm ASTM D5185m	>4	<1	---	---
Nickel ppm ASTM D5185m	>2	0	---	---
Titanium ppm ASTM D5185m		0	---	---
Silver ppm ASTM D5185m	>3	0	---	---
Aluminum ppm ASTM D5185m	>9	<1	---	---
Lead ppm ASTM D5185m	>30	2	---	---
Copper ppm ASTM D5185m	>35	<1	---	---
Tin ppm ASTM D5185m	>4	<1	---	---
Vanadium ppm ASTM D5185m		0	---	---
Cadmium ppm ASTM D5185m		0	---	---

ADDITIVES

method	limit/base	current	history1	history2
Boron ppm ASTM D5185m		<1	---	---
Barium ppm ASTM D5185m		0	---	---
Molybdenum ppm ASTM D5185m		2	---	---
Manganese ppm ASTM D5185m		<1	---	---
Magnesium ppm ASTM D5185m		942	---	---
Calcium ppm ASTM D5185m		1173	---	---
Phosphorus ppm ASTM D5185m		1082	---	---
Zinc ppm ASTM D5185m		1300	---	---
Sulfur ppm ASTM D5185m		3629	---	---

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon ppm ASTM D5185m	>+100	3	---	---
Sodium ppm ASTM D5185m		2	---	---
Potassium ppm ASTM D5185m	>20	<1	---	---
Fuel % ASTM D3524	>4.0	▲ 3.1	---	---

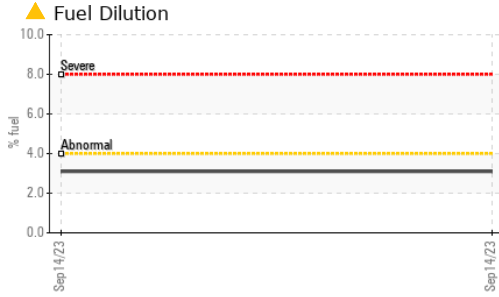
INFRA-RED

method	limit/base	current	history1	history2
Soot % *ASTM D7844		0	---	---
Nitration Abs/cm *ASTM D7624	>20	5.3	---	---
Sulfation Abs/.1mm *ASTM D7415	>30	16.3	---	---

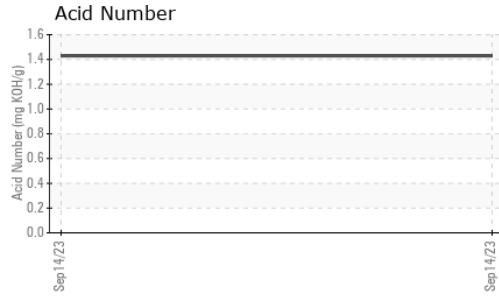
FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation Abs/.1mm *ASTM D7414	>25	9.3	---	---
Acid Number (AN) mg KOH/g ASTM D8045		1.43	---	---
Base Number (BN) mg KOH/g ASTM D2896	8.5	7.54	---	---

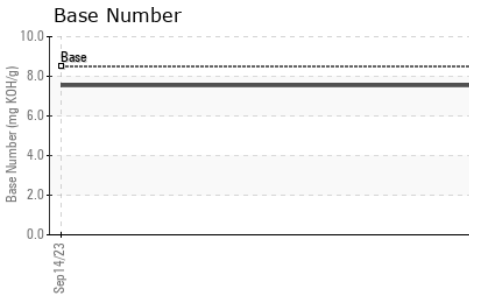
OIL ANALYSIS REPORT



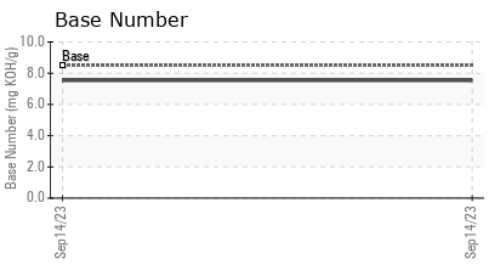
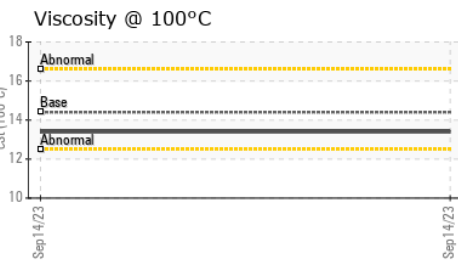
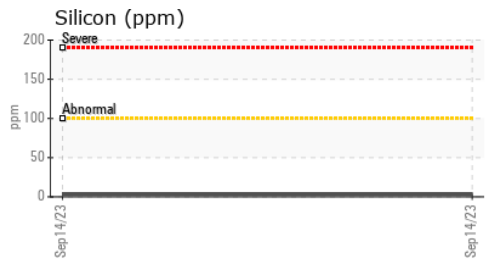
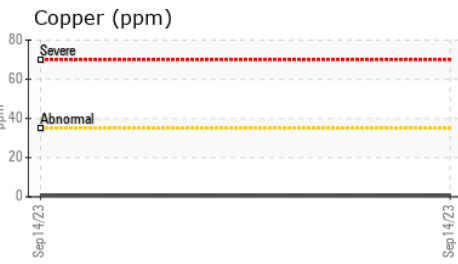
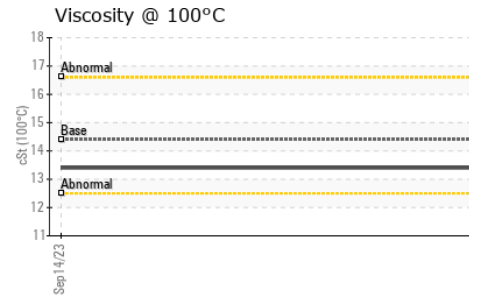
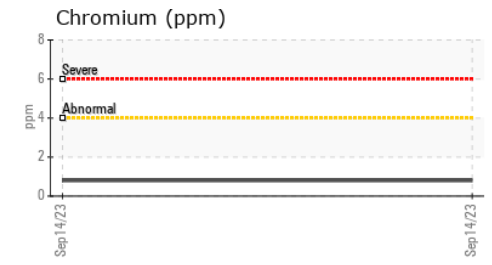
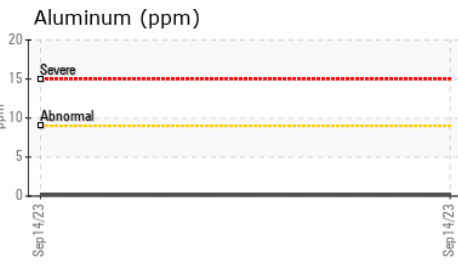
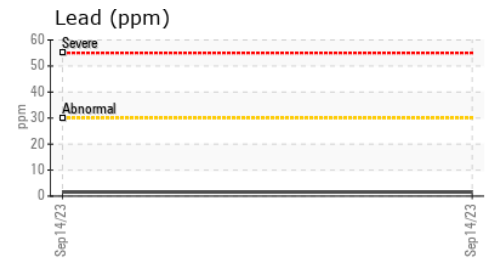
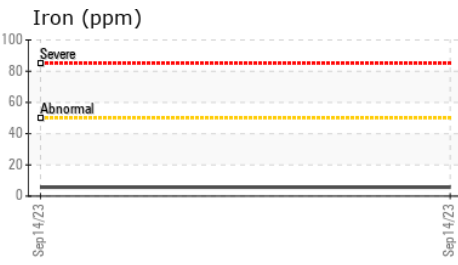
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual NONE	NONE	---	---
Yellow Metal	scalar	*Visual NONE	NONE	---	---
Precipitate	scalar	*Visual NONE	NONE	---	---
Silt	scalar	*Visual NONE	NONE	---	---
Debris	scalar	*Visual NONE	NONE	---	---
Sand/Dirt	scalar	*Visual NONE	NONE	---	---
Appearance	scalar	*Visual NORML	NORML	---	---
Odor	scalar	*Visual NORML	NORML	---	---
Emulsified Water	scalar	*Visual >0.1	NEG	---	---
Free Water	scalar	*Visual	NEG	---	---



FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445 14.4	13.4	---	---



GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0100320 **Received** : 20 Sep 2023
Lab Number : **05957107** **Diagnosed** : 22 Sep 2023
Unique Number : 10658320 **Diagnostician** : Don Baldrige
Test Package : MOB 2 (Additional Tests: FuelDilution, PercentFuel)

Magellan Midstream LP - Ponca City
 3990 South Union Street
 Ponca City, OK
 US 74601
 Contact: Jake Daniel
 Jacob.Daniel@magellanlp.com

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)