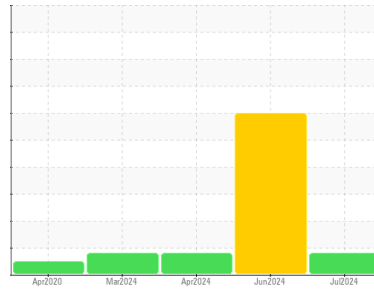


OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Machine Id
L-56
Component
Front Left Final Drive

Fluid
PETRO CANADA PRODURO TO-4 SAE 50 (--- GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

Wear

Gear wear is indicated.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

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		PCA0128759	PCA0128794	PCA0118474
Sample Date	Client Info		09 Jul 2024	27 Jun 2024	30 Apr 2024
Machine Age	hrs	Client Info	18037	17836	16917
Oil Age	hrs	Client Info	500	500	500
Oil Changed	Client Info		Not Chngd	Not Chngd	Not Chngd
Sample Status			ABNORMAL	SEVERE	ABNORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >500	▲ 1322	▲ 1610	▲ 1360
Chromium	ppm	ASTM D5185m >10	3	4	3
Nickel	ppm	ASTM D5185m >10	1	2	<1
Titanium	ppm	ASTM D5185m	<1	1	<1
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >25	29	31	23
Lead	ppm	ASTM D5185m >25	0	0	0
Copper	ppm	ASTM D5185m >50	17	14	12
Tin	ppm	ASTM D5185m >10	0	<1	0
Vanadium	ppm	ASTM D5185m	0	<1	0
Cadmium	ppm	ASTM D5185m	0	<1	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 2	225	207	235
Barium	ppm	ASTM D5185m 0	0	0	0
Molybdenum	ppm	ASTM D5185m 0	<1	0	0
Manganese	ppm	ASTM D5185m 0	18	23	19
Magnesium	ppm	ASTM D5185m 9	35	44	36
Calcium	ppm	ASTM D5185m 3114	278	247	403
Phosphorus	ppm	ASTM D5185m 1099	941	1028	983
Zinc	ppm	ASTM D5185m 1245	60	38	111
Sulfur	ppm	ASTM D5185m 7086	17464	22668	20310

CONTAMINANTS

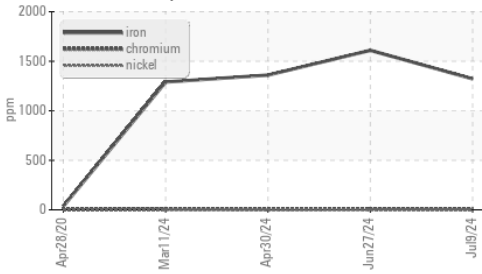
	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >75	37	43	29
Sodium	ppm	ASTM D5185m	0	2	<1
Potassium	ppm	ASTM D5185m >20	1	<1	<1

FLUID DEGRADATION

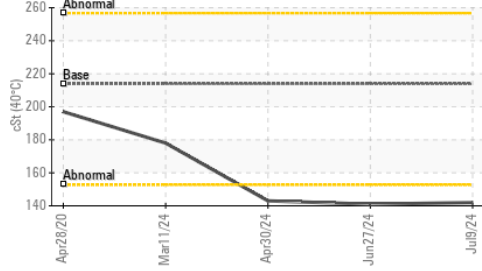
	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045 3.27	1.24	1.24	1.08

OIL ANALYSIS REPORT

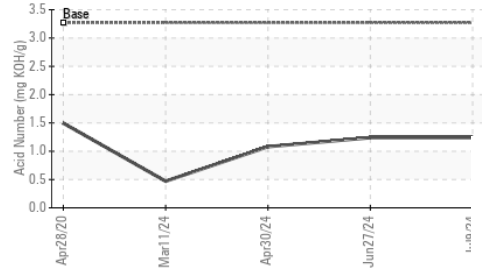
▲ Ferrous Alloys



Viscosity @ 40°C



Acid Number



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

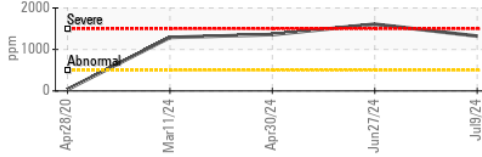
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	213.9	142	141

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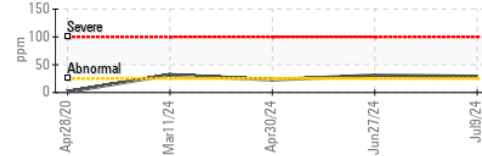
Color				no image	no image	no image
Bottom				no image	no image	no image

GRAPHS

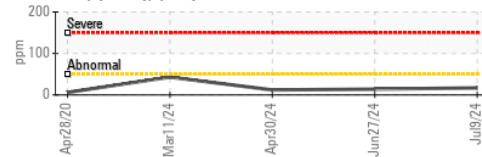
▲ Iron (ppm)



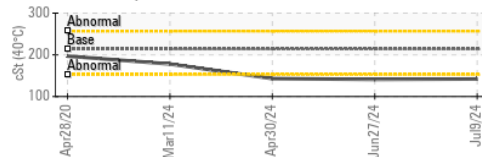
Aluminum (ppm)



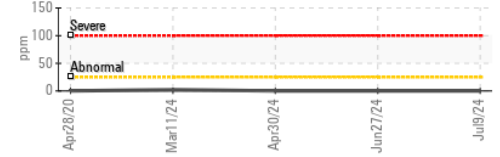
Copper (ppm)



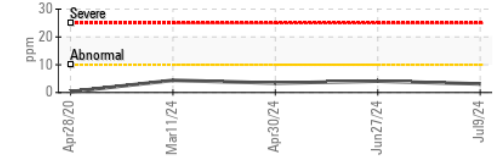
Viscosity @ 40°C



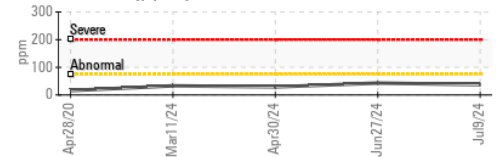
Lead (ppm)



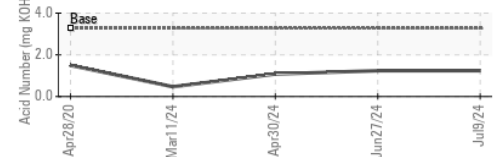
Chromium (ppm)



Silicon (ppm)



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : PCA0128759

Lab Number : 06237127

Unique Number : 11125961

Test Package : MOB 2

Received : 15 Jul 2024

Tested : 19 Jul 2024

Diagnosed : 19 Jul 2024 - Jonathan Hester

SCRAP METAL SERVICES (SMS Mill Services LLC)

1500 COMMERCIAL AVE

MINGO JUNCTION, OH

US 43938

Contact: STAN MANN

smann@scrapmetalservices.com

T:

F:

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)