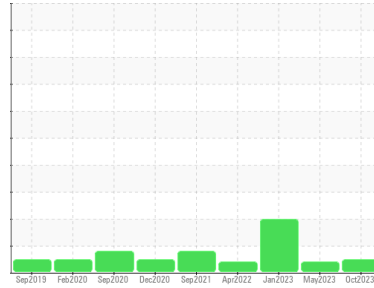




# OIL ANALYSIS REPORT

Sample Rating Trend



**NORMAL**



Machine Id  
**ELION P3-OHIO (S/N 2017014501)**

Component  
**Hydraulic System**

Fluid  
**PETRO CANADA PURITY FG HYDRAULIC AW 68 (600 LTR)**

## DIAGNOSIS

### Recommendation

Resample at the next service interval to monitor.

### Wear

All component wear rates are normal.

### Contamination

MPC (Membrane Patch Colorimetry) test indicates acceptable levels of varnish present. There is no indication of any contamination in the oil. The amount and size of particulates present in the system are acceptable.

### Fluid Condition

Linear Sweep Voltammetry (RULER – ASTM D6971) testing indicates normal levels of anti-oxidants present 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	<b>WC0699218</b>	WC0699214	WC0699213
Sample Date	Client Info	<b>10 Oct 2023</b>	16 May 2023	30 Jan 2023
Machine Age	hrs	<b>0</b>	0	0
Oil Age	hrs	<b>13640</b>	12800	11700
Oil Changed	Client Info	<b>Filtered</b>	Filtered	Filtered
Sample Status		<b>NORMAL</b>	MARGINAL	MARGINAL

## WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >20	<b>0</b>	0	0
Chromium	ppm	ASTM D5185m >20	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m >20	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m >20	<b>0</b>	0	0
Lead	ppm	ASTM D5185m >20	<b>0</b>	0	0
Copper	ppm	ASTM D5185m >20	<b>0</b>	0	0
Tin	ppm	ASTM D5185m >20	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

## ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	<b>0</b>	0	0
Barium	ppm	ASTM D5185m	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	<b>0</b>	0	0
Manganese	ppm	ASTM D5185m	<b>0</b>	0	0
Magnesium	ppm	ASTM D5185m	<b>0</b>	<1	<1
Calcium	ppm	ASTM D5185m	<b>1</b>	<1	2
Phosphorus	ppm	ASTM D5185m	<b>354</b>	405	400
Zinc	ppm	ASTM D5185m	<b>2</b>	0	4
Sulfur	ppm	ASTM D5185m	<b>890</b>	1212	1024

## CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >15	<b>2</b>	1	3
Sodium	ppm	ASTM D5185m	<b>0</b>	<1	<1
Potassium	ppm	ASTM D5185m >20	<b>0</b>	<1	<1
Water	%	ASTM D6304 >0.05	<b>0.002</b>	0.001	---
ppm Water	ppm	ASTM D6304 >500	<b>20.8</b>	1.3	---

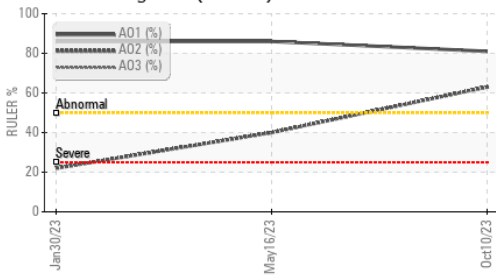
## FLUID CLEANLINESS

method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647 >5000	<b>268</b>	49	91
Particles >6µm	ASTM D7647 >1300	<b>103</b>	19	32
Particles >14µm	ASTM D7647 >160	<b>17</b>	2	3
Particles >21µm	ASTM D7647 >40	<b>5</b>	1	1
Particles >38µm	ASTM D7647 >10	<b>0</b>	0	0
Particles >71µm	ASTM D7647 >3	<b>0</b>	0	0
Oil Cleanliness	ISO 4406 (c) >19/17/14	<b>15/14/11</b>	13/11/9	14/12/9

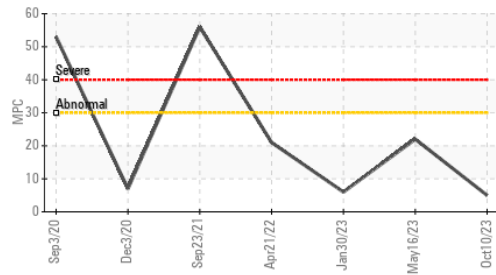


# OIL ANALYSIS REPORT

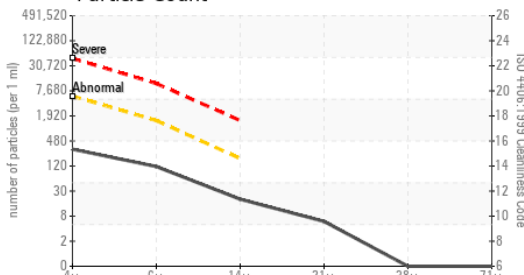
Remaining Life (RULER)



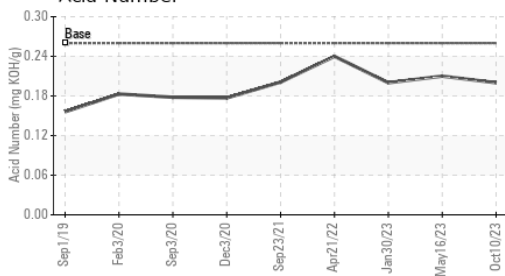
Varnish Potential



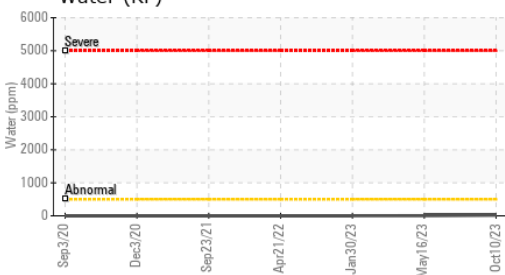
Particle Count



Acid Number



Water (KF)

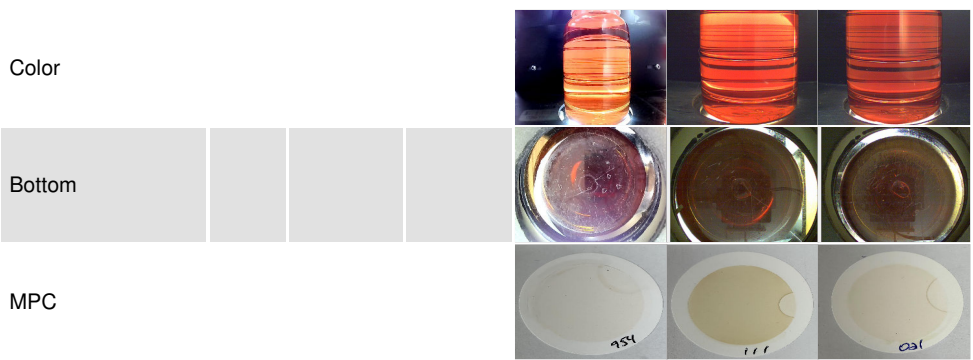


FLUID DEGRADATION	method	limit/base	current	history1	history2	
Acid Number (AN)	mg KOH/g	ASTM D8045	0.26	<b>0.20</b>	0.21	0.20
Anti-Oxidant 1	%	ASTM D6971	<25	<b>81</b>	86	86
Anti-Oxidant 2	%	ASTM D6971	<25	<b>63</b>	40	▲ 22
MPC Varnish Potential	Scale	ASTM D7843	>15	<b>5</b>	▲ 22	6

VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Precipitate	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.05	<b>NEG</b>	NEG	NEG
Free Water	scalar	*Visual		<b>NEG</b>	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 40°C	cSt	ASTM D445	63.34	<b>65.0</b>	71.3	66.0

SAMPLE IMAGES



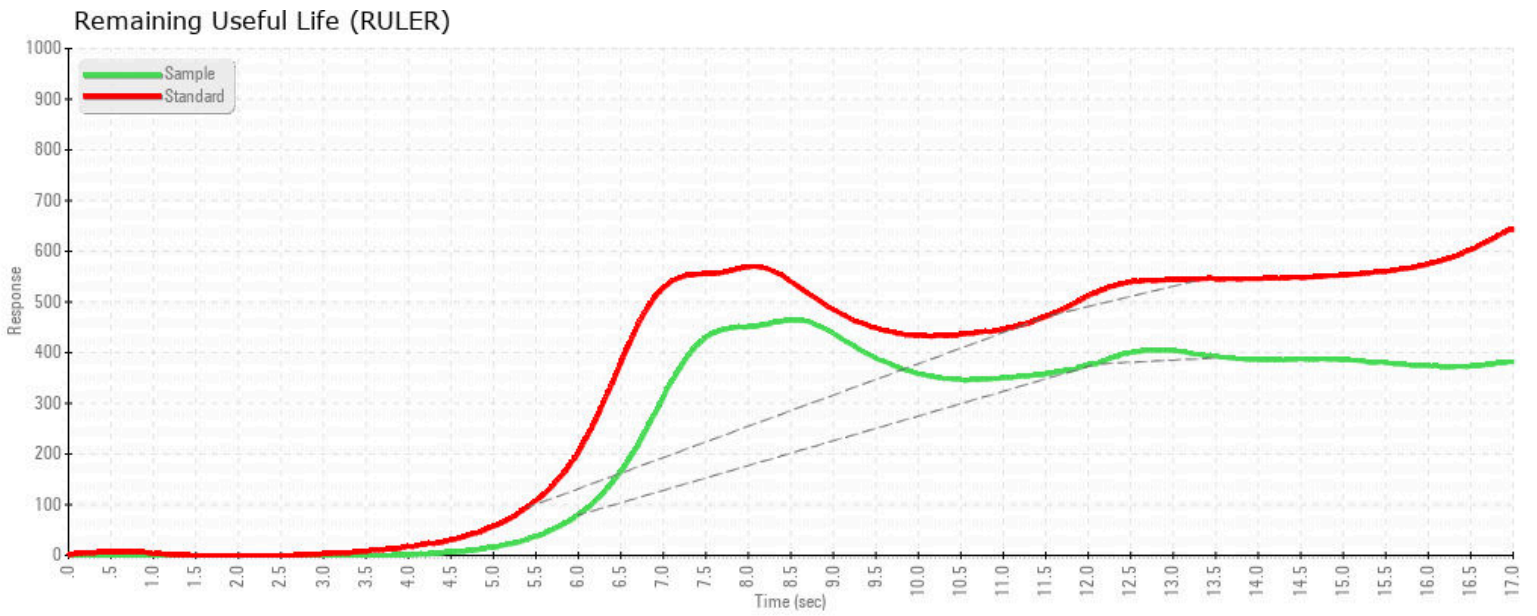
**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0699218 **Received** : 03 Nov 2023  
**Lab Number** : **05997954** **Diagnosed** : 14 Nov 2023  
**Unique Number** : 10726314 **Diagnostician** : Doug Bogart  
**Test Package** : AOM 1 ( Additional Tests: KF )

To discuss this sample report, contact Customer Service at 1-800-237-1369.

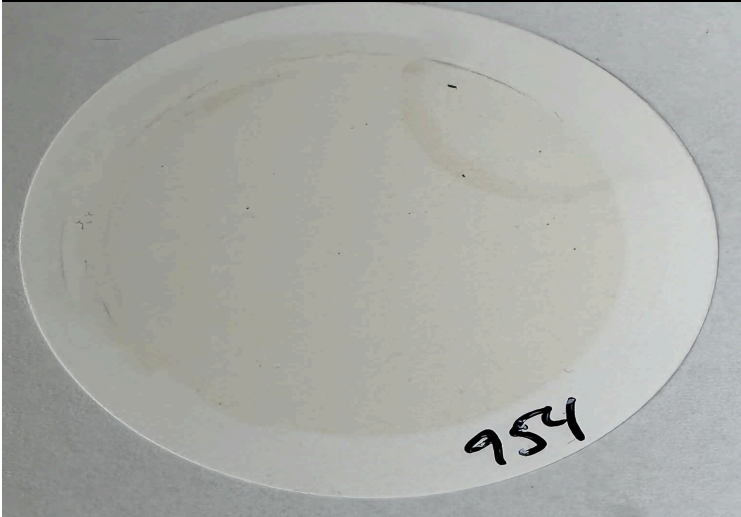
\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

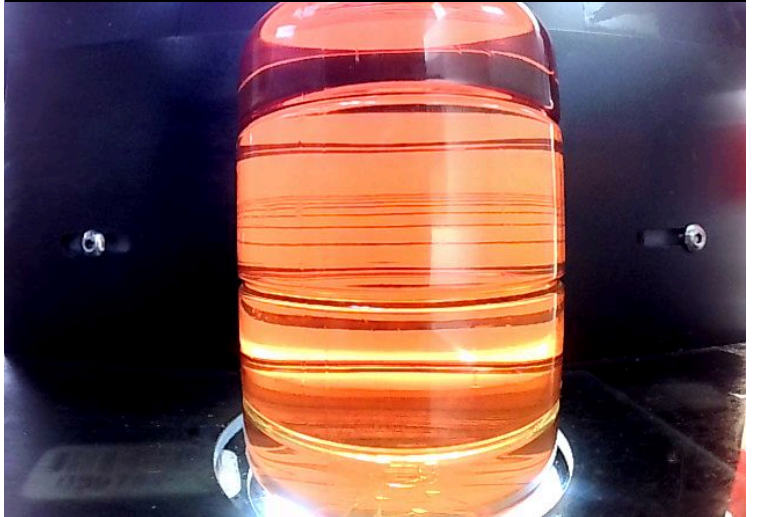
**IML CONTAINERS OHIO**  
 5365 EAST CENTER DRIVE NORTHEAST, Suite D  
 CANTON, OH  
 US 44721  
 Contact: Juliana Nesello  
 sguiraldello@iml.com.br  
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 F:



MPC (Varnish Test)



Sample Color & Clarity



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