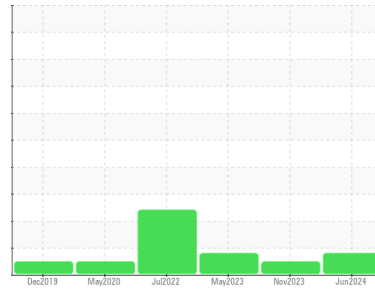




OIL ANALYSIS REPORT

Sample Rating Trend



WEAR



Area

Watkins Block Truck Shop Omaha

Machine Id

75 [Watkins Block Truck Shop Omaha]

Component

Middle Natural Gas Engine

Fluid

PETRO CANADA SUPREME 5W30 (4 QTS)

DIAGNOSIS

▲ Recommendation

Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor.

▲ Wear

The chromium level is abnormal. All other component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		SBP0007738	SBP0005955	SBP0002222
Sample Date	Client Info		17 Jun 2024	21 Nov 2023	03 May 2023
Machine Age	hrs	Client Info	5882	5308	4722
Oil Age	hrs	Client Info	278	310	351
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			ABNORMAL	NORMAL	ABNORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>50	32	14	44
Chromium	ppm	ASTM D5185m	>4	▲ 8	4	▲ 8
Nickel	ppm	ASTM D5185m	>2	<1	0	<1
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>9	6	2	8
Lead	ppm	ASTM D5185m	>30	0	0	0
Copper	ppm	ASTM D5185m	>35	5	12	6
Tin	ppm	ASTM D5185m	>4	1	<1	2
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		0	0	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	186	65	78	55
Barium	ppm	ASTM D5185m	<1	0	2	0
Molybdenum	ppm	ASTM D5185m	79	73	69	78
Manganese	ppm	ASTM D5185m	0	<1	0	<1
Magnesium	ppm	ASTM D5185m	578	606	466	564
Calcium	ppm	ASTM D5185m	1002	1308	1192	1414
Phosphorus	ppm	ASTM D5185m	745	769	564	692
Zinc	ppm	ASTM D5185m	837	907	776	884
Sulfur	ppm	ASTM D5185m	2502	3583	3021	3388

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>+100	14	4	11
Sodium	ppm	ASTM D5185m		3	2	2
Potassium	ppm	ASTM D5185m	>20	4	2	4

INFRA-RED

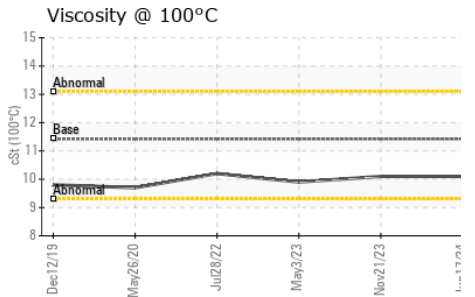
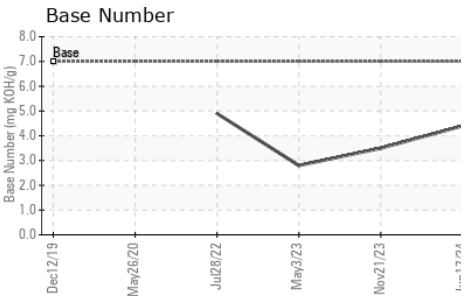
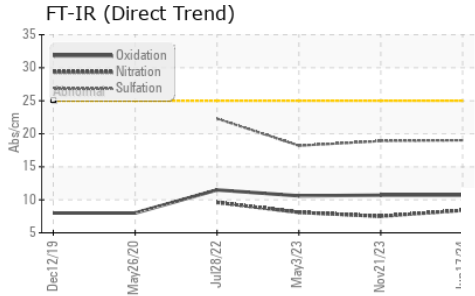
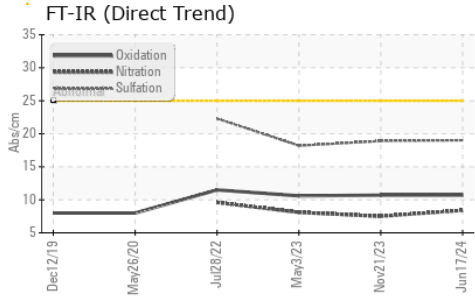
	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844		0.1	0	0
Nitration	Abs/cm	*ASTM D7624	>20	8.4	7.5	8.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.0	18.9	18.2

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	10.7	10.7	10.6
Base Number (BN)	mg KOH/g	ASTM D2896	7.0	4.4	3.5	2.8



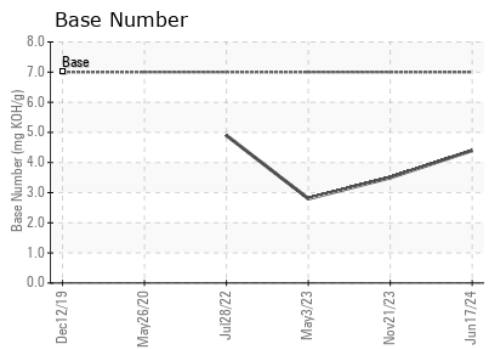
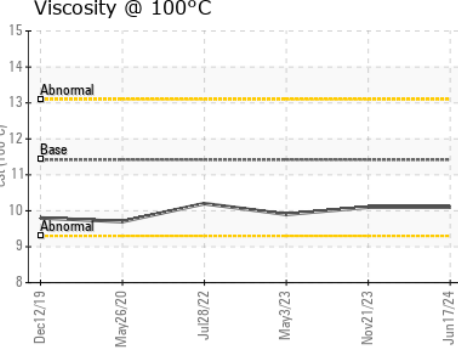
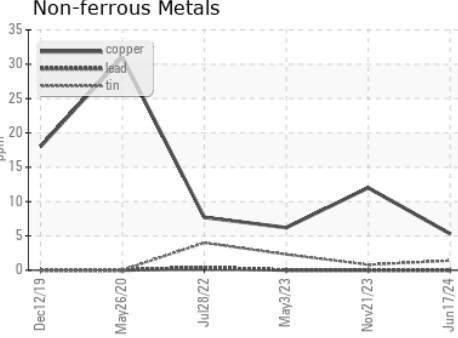
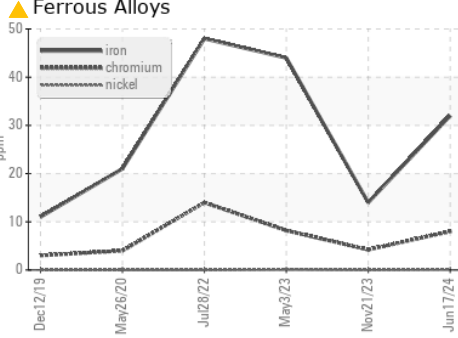
OIL ANALYSIS REPORT



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	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	11.42	10.1	9.9

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : SBP0007738 **Received** : 21 Jun 2024
Lab Number : 06217634 **Tested** : 25 Jun 2024
Unique Number : 11090498 **Diagnosed** : 25 Jun 2024 - Don Baldrige
Test Package : FLEET

Watkins Block Truck Shop Omaha - 602227
 14306 Giles Rd
 Omaha, NE
 US 68138

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)