



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**SPARTAN 4037**  
Component  
**Rear Diesel Engine**  
Fluid  
**SUPREME 15W-40 4-STROKE MOTORCYCLE OIL (6 LTR)**

## RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill.  
Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0777318</b>	WC0777321	WC0702359
Sample Date		Client Info		<b>03 Feb 2023</b>	03 Feb 2023	20 Jul 2022
Machine Age	kms	Client Info		<b>1674</b>	3804	62432
Oil Age	kms	Client Info		<b>28</b>	151	446
Filter Age	kms	Client Info		<b>28</b>	151	446
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>75	<b>4</b>	2	5
Chromium	ppm	ASTM D5185(m)	>5	<b>&lt;1</b>	0	<1
Nickel	ppm	ASTM D5185(m)	>4	<b>&lt;1</b>	<1	1
Titanium	ppm	ASTM D5185(m)	>2	<b>0</b>	0	<1
Silver	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	<1	0
Aluminum	ppm	ASTM D5185(m)	>15	<b>1</b>	2	1
Lead	ppm	ASTM D5185(m)	>25	<b>&lt;1</b>	0	3
Copper	ppm	ASTM D5185(m)	>100	<b>3</b>	<1	9
Tin	ppm	ASTM D5185(m)	>4	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

## CONTAMINATION

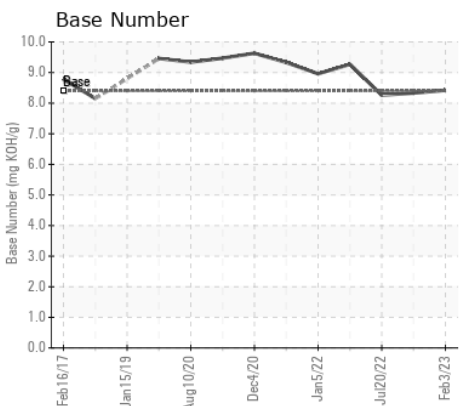
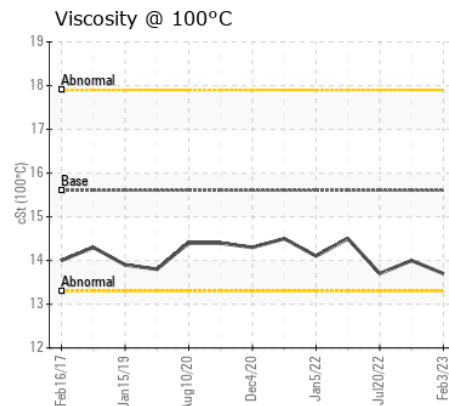
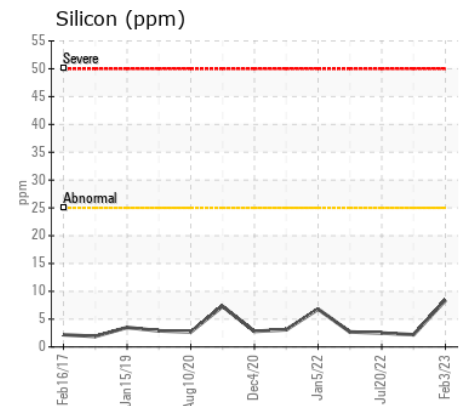
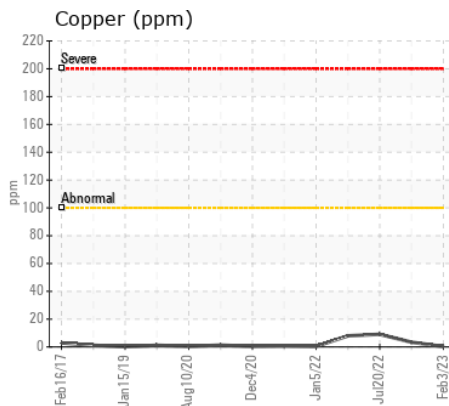
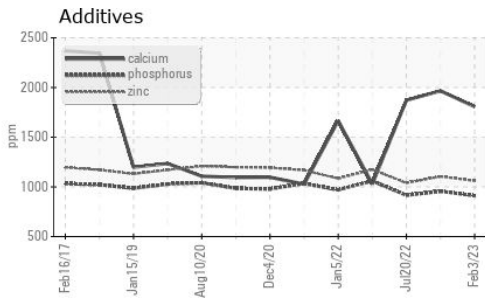
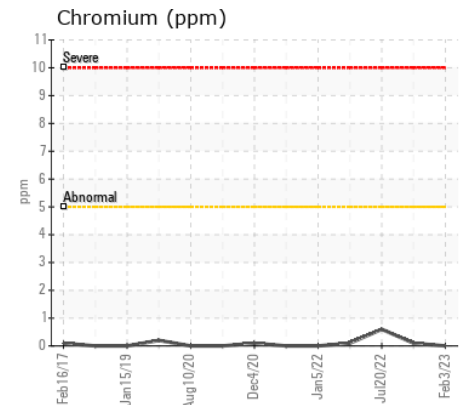
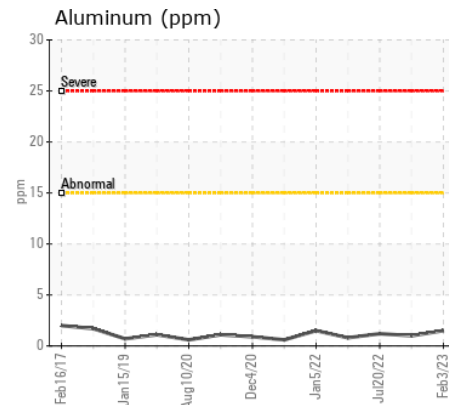
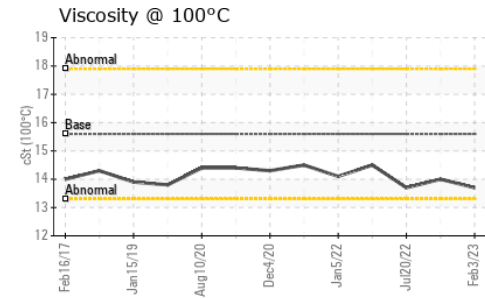
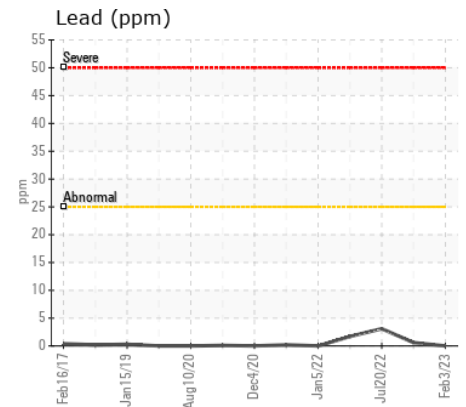
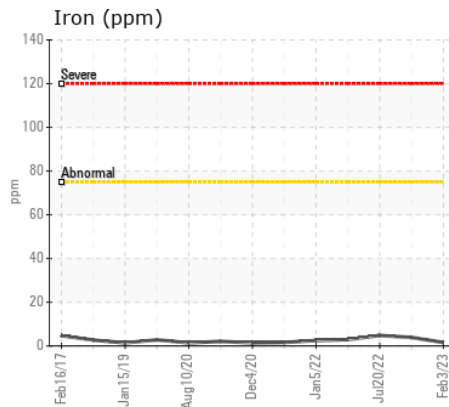
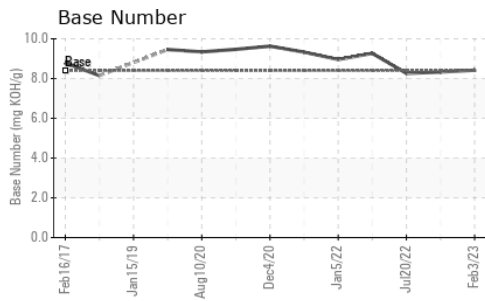
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>2</b>	8	2
Potassium	ppm	ASTM D5185(m)	>20	<b>0</b>	1	<1
Fuel		WC Method	>3.0	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	ASTM D7844*	>6	<b>0</b>	0	0
Nitration	Abs/cm	ASTM D7624*	>20	<b>5.6</b>	7.4	5.7
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>15.9</b>	16.6	16.5
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

Additive levels indicate the addition of a different brand, or type of oil.  
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185(m)		<b>2</b>	2	4
Boron	ppm	ASTM D5185(m)	1	<b>6</b>	87	6
Barium	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	<1	0
Molybdenum	ppm	ASTM D5185(m)	60	<b>21</b>	16	21
Manganese	ppm	ASTM D5185(m)	0	<b>0</b>	0	<1
Magnesium	ppm	ASTM D5185(m)	1010	<b>295</b>	123	297
Calcium	ppm	ASTM D5185(m)	1070	<b>1807</b>	1966	1872
Phosphorus	ppm	ASTM D5185(m)	1150	<b>911</b>	956	916
Zinc	ppm	ASTM D5185(m)	1270	<b>1060</b>	1104	1039
Sulfur	ppm	ASTM D5185(m)	2060	<b>2881</b>	3119	2966
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>10.0</b>	12.0	10.5
Base Number (BN)	mg KOH/g	ASTM D2896*	8.4	<b>8.42</b>	8.33	8.26
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	<b>13.7</b>	14.0	13.7



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0777318 **Received** : 06 Nov 2023  
**Lab Number** : 02594163 **Tested** : 07 Nov 2023  
**Unique Number** : 5671242 **Diagnosed** : 07 Nov 2023 - Wes Davis  
**Test Package** : MOB 2

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To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.