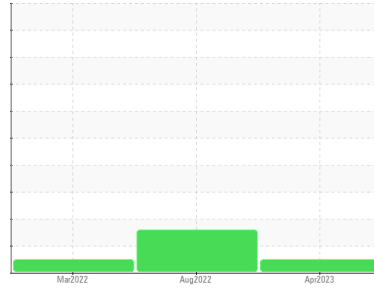


# OIL ANALYSIS REPORT



Area  
**Scoop 6 Yard**  
Machine Id  
**LHD6027**  
Component  
**Diesel Engine**  
Fluid  
**PETRO CANADA DURON HP 15W40 (18 LTR)**

Sample Rating Trend



**NORMAL**

## DIAGNOSIS

- Recommendation**  
Resample at the next service interval to monitor.
- Wear**  
All component wear rates are normal.
- Contamination**  
There is no indication of any contamination in the oil.
- Fluid Condition**  
The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION		method	limit/base	current	history 1	history 2
Sample Number	Client Info			<b>PC0048005</b>	PC0048525	PC0046591
Sample Date	Client Info			<b>22 Apr 2023</b>	15 Aug 2022	31 Mar 2022
Machine Age	hrs Client Info			<b>5260</b>	3697	0
Oil Age	hrs Client Info			<b>0</b>	0	0
Oil Changed	Client Info			<b>N/A</b>	Changed	N/A
Sample Status				<b>NORMAL</b>	ABNORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history 1	history 2
Fuel	WC Method	>5		<b>&lt;1.0</b>	<1.0	<1.0
Glycol	WC Method			<b>NEG</b>	NEG	NEG

WEAR METALS		method	limit/base	current	history 1	history 2
Iron	ppm	ASTM D5185(m)	>100	<b>67</b>	71	43
Chromium	ppm	ASTM D5185(m)	>20	<b>2</b>	3	2
Nickel	ppm	ASTM D5185(m)	>4	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185(m)		<b>&lt;1</b>	2	<1
Silver	ppm	ASTM D5185(m)	>3	<b>&lt;1</b>	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	<b>4</b>	16	5
Lead	ppm	ASTM D5185(m)	>40	<b>4</b>	12	1
Copper	ppm	ASTM D5185(m)	>330	<b>25</b>	13	6
Tin	ppm	ASTM D5185(m)	>15	<b>3</b>	2	<1
Antimony	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	<1	0
Beryllium	ppm	ASTM D5185(m)		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185(m)		<b>0</b>	0	0

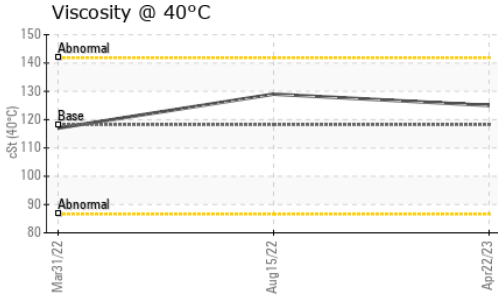
ADDITIVES		method	limit/base	current	history 1	history 2
Boron	ppm	ASTM D5185(m)	0	<b>1</b>	1	3
Barium	ppm	ASTM D5185(m)	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	60	<b>67</b>	72	65
Manganese	ppm	ASTM D5185(m)	0	<b>&lt;1</b>	1	<1
Magnesium	ppm	ASTM D5185(m)	1010	<b>1122</b>	1204	1122
Calcium	ppm	ASTM D5185(m)	1070	<b>1188</b>	1355	1207
Phosphorus	ppm	ASTM D5185(m)	1150	<b>1132</b>	1243	1141
Zinc	ppm	ASTM D5185(m)	1270	<b>1335</b>	1443	1371
Sulfur	ppm	ASTM D5185(m)	2060	<b>2669</b>	2754	2648
Lithium	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1

CONTAMINANTS		method	limit/base	current	history 1	history 2
Silicon	ppm	ASTM D5185(m)	>25	<b>10</b>	▲ 44	15
Sodium	ppm	ASTM D5185(m)		<b>4</b>	11	5
Potassium	ppm	ASTM D5185(m)	>20	<b>&lt;1</b>	5	1

INFRA-RED		method	limit/base	current	history 1	history 2
Soot %	%	ASTM D7844*	>3	<b>0.5</b>	0.2	0.3
Nitration	Abs/cm	ASTM D7624*	>20	<b>12.6</b>	12.1	10.3
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>26.2</b>	25.9	24.1

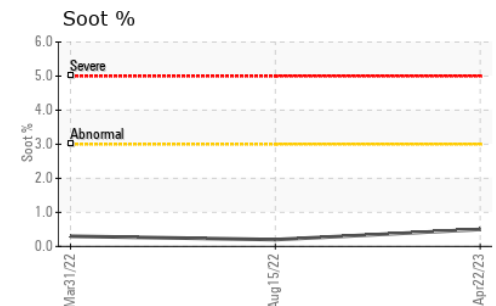
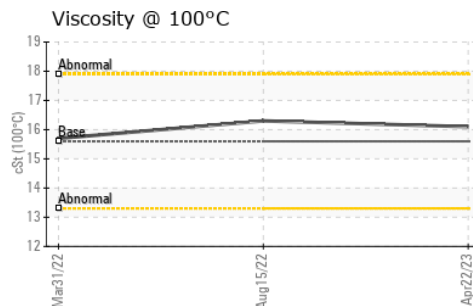
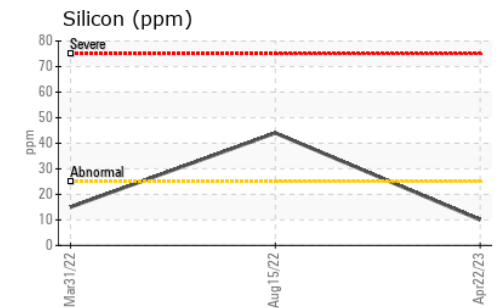
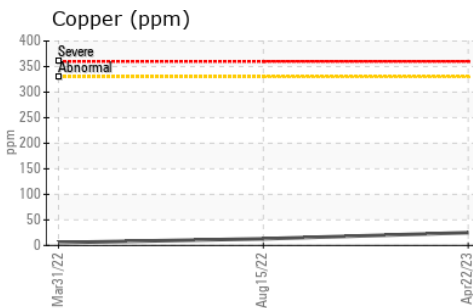
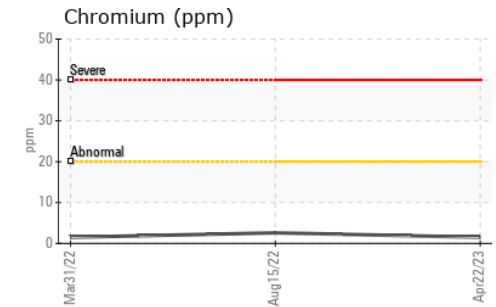
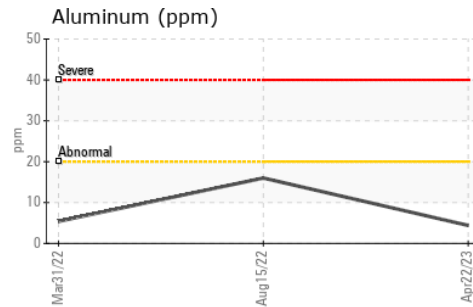
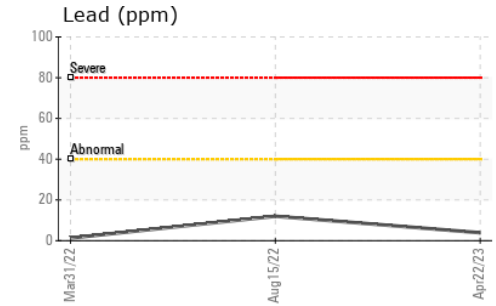
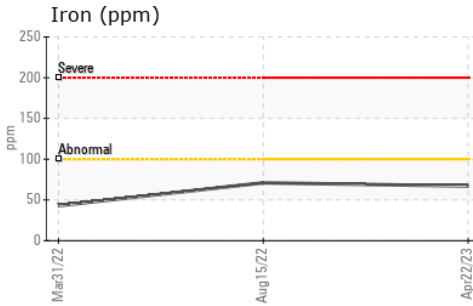
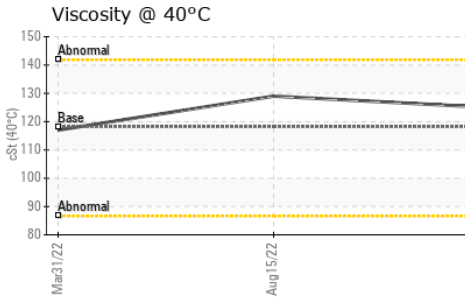
FLUID DEGRADATION		method	limit/base	current	history 1	history 2
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>24.8</b>	23.5	19.9

# OIL ANALYSIS REPORT



VISUAL		method	limit/base	current	history 1	history 2
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG
Free Water	scalar	Visual*		<b>NEG</b>	NEG	NEG
FLUID PROPERTIES		method	limit/base	current	history 1	history 2
Visc @ 40°C	cSt	ASTM D7279(m)	118.2	<b>125</b>	129	117
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	<b>16.1</b>	16.3	15.7
Viscosity Index (VI)	Scale	ASTM D2270*	139	<b>137</b>	135	141

## GRAPHS



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : PC0048005 **Received** : 04 Jul 2023  
**Lab Number** : **02567679** **Diagnosed** : 04 Jul 2023  
**Unique Number** : 5604725 **Diagnostician** : Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: KV40, VI )

**Lakeshore Gold Timmins West**  
 Timmins, ON  
 CA  
 Contact: Adam Koscielak  
 adam.koscielak@HFSinclair.com  
 T:  
 F:

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.