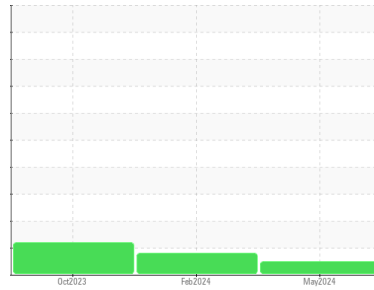




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Area  
**SCHTRUCK**  
 Machine Id  
**6433 [SCHTRUCK]**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (10 GAL)**

### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. 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 suitable for further service.

### SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>SBP0007238</b>	SBP0006668	SBP0005685
Sample Date	Client Info		<b>24 May 2024</b>	21 Feb 2024	02 Oct 2023
Machine Age	hrs	Client Info	<b>114255</b>	77293	37278
Oil Age	hrs	Client Info	<b>36962</b>	40015	37278
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>NORMAL</b>	ABNORMAL	ABNORMAL

### CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<b>&lt;1.0</b>	<1.0	0.2
Water	WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol	WC Method		<b>NEG</b>	NEG	NEG

### WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>200	<b>36</b>	44	75
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	4	5
Nickel	ppm	ASTM D5185m	>2	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	0
Aluminum	ppm	ASTM D5185m	>30	<b>20</b>	41	91
Lead	ppm	ASTM D5185m	>30	<b>0</b>	1	<1
Copper	ppm	ASTM D5185m	>30	<b>26</b>	▲ 35	▲ 229
Tin	ppm	ASTM D5185m	>15	<b>1</b>	2	4
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

### ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	0	<b>3</b>	4	24
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>59</b>	61	48
Manganese	ppm	ASTM D5185m	0	<b>1</b>	2	3
Magnesium	ppm	ASTM D5185m	1010	<b>951</b>	977	589
Calcium	ppm	ASTM D5185m	1070	<b>1143</b>	1259	1663
Phosphorus	ppm	ASTM D5185m	1150	<b>1022</b>	982	713
Zinc	ppm	ASTM D5185m	1270	<b>1269</b>	1270	912
Sulfur	ppm	ASTM D5185m	2060	<b>2572</b>	2135	1739

### CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>30	<b>5</b>	6	9
Sodium	ppm	ASTM D5185m		<b>2</b>	5	5
Potassium	ppm	ASTM D5185m	>20	<b>41</b>	92	225

### INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	<b>0.6</b>	0.7	0.6
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.5</b>	10.5	11.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>21.3</b>	22.2	23.2

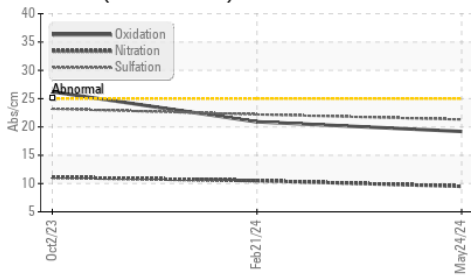
### FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>19.2</b>	20.9	26.2
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>6.1</b>	6.0	6.5

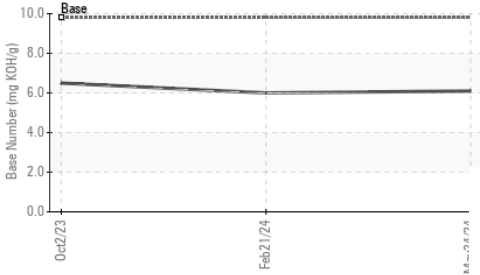


# OIL ANALYSIS REPORT

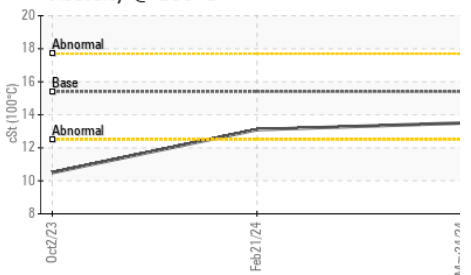
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

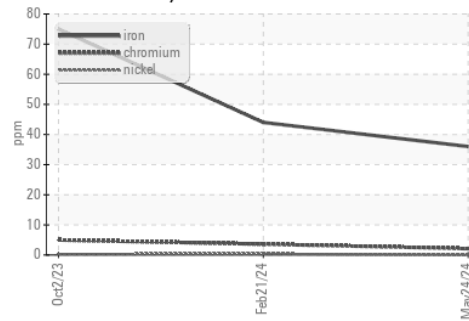


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	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

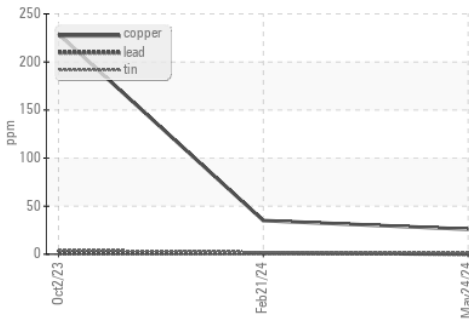
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	13.5	13.1

GRAPHS

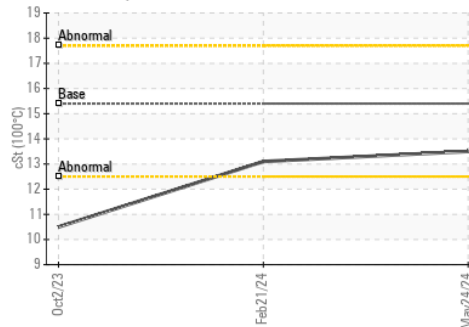
Ferrous Alloys



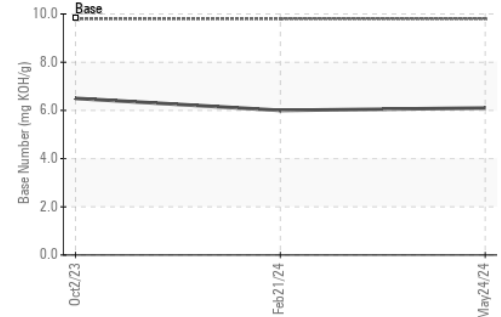
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : SBP0007238  
**Lab Number** : 06196456  
**Unique Number** : 11058579  
**Test Package** : FLEET

**Received** : 31 May 2024  
**Tested** : 03 Jun 2024  
**Diagnosed** : 03 Jun 2024 - Wes Davis

**SCHMIDT TRANSPORTATION - 605449**  
 108 E Bay Road  
 Plattsmouth, NE  
 US 68048  
 Contact: NICK DOTY  
 doty@liquidtrucking.com  
 T: (402)949-9398  
 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)