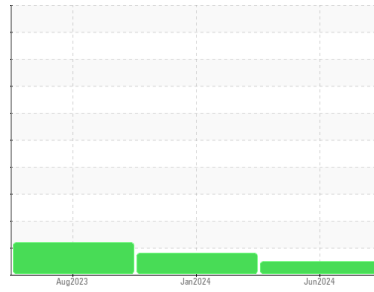




# OIL ANALYSIS REPORT

## Sample Rating Trend



**NORMAL**



Area  
**SCHTRUCK**  
 Machine Id  
**6395 [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>SBP0007746</b>	SBP0006524	SBP0005084
Sample Date	Client Info		<b>13 Jun 2024</b>	05 Jan 2024	15 Aug 2023
Machine Age	hrs	Client Info	<b>111147</b>	74012	38473
Oil Age	hrs	Client Info	<b>37135</b>	35539	38473
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>57</b>	48	79
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	3	4
Nickel	ppm	ASTM D5185m	>2	<b>1</b>	<1	2
Titanium	ppm	ASTM D5185m	>2	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	<1
Aluminum	ppm	ASTM D5185m	>30	<b>14</b>	17	49
Lead	ppm	ASTM D5185m	>30	<b>0</b>	0	3
Copper	ppm	ASTM D5185m	>30	<b>25</b>	▲ 39	▲ 286
Tin	ppm	ASTM D5185m	>15	<b>1</b>	2	5
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	<1
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	25
Barium	ppm	ASTM D5185m	0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	60	<b>64</b>	62	46
Manganese	ppm	ASTM D5185m	0	<b>2</b>	2	6
Magnesium	ppm	ASTM D5185m	1010	<b>1043</b>	936	590
Calcium	ppm	ASTM D5185m	1070	<b>1194</b>	1316	1747
Phosphorus	ppm	ASTM D5185m	1150	<b>1093</b>	952	732
Zinc	ppm	ASTM D5185m	1270	<b>1379</b>	1224	909
Sulfur	ppm	ASTM D5185m	2060	<b>2871</b>	2128	2101

### CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>30	<b>6</b>	6	8
Sodium	ppm	ASTM D5185m		<b>3</b>	3	8
Potassium	ppm	ASTM D5185m	>20	<b>42</b>	46	140

### INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>3	<b>0.5</b>	0.5	0.5
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.6</b>	10.4	11.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.2</b>	22.4	22.7

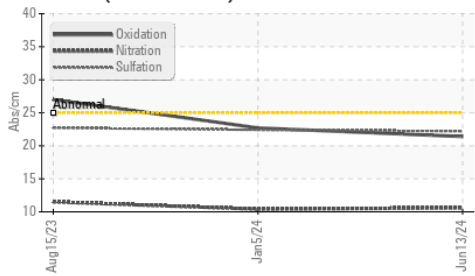
### FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>21.4</b>	22.7	27.0
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	<b>6.1</b>	6.2	6.2

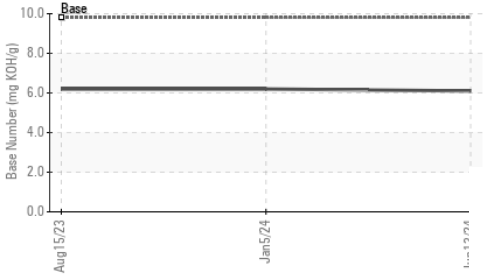


# OIL ANALYSIS REPORT

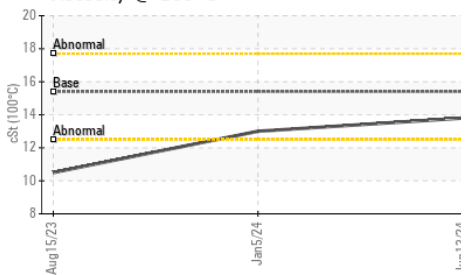
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C

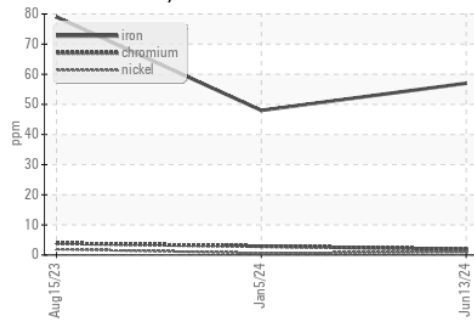


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

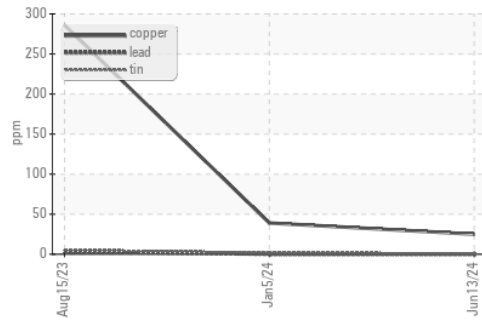
FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	15.4	<b>13.8</b>	13.0	10.5

## GRAPHS

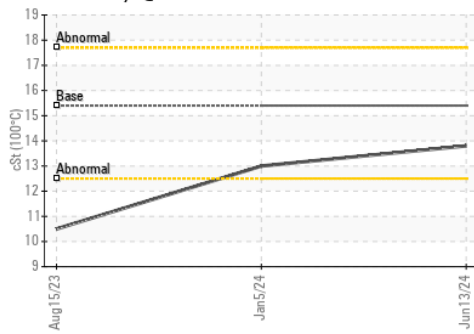
Ferrous Alloys



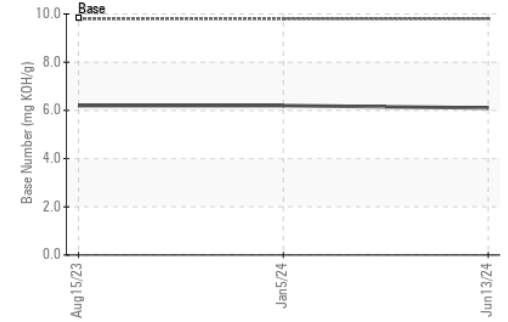
Non-ferrous Metals



Viscosity @ 100°C



Base Number



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : SBP0007746      **Received** : 21 Jun 2024  
**Lab Number** : **06217505**      **Tested** : 24 Jun 2024  
**Unique Number** : 11090369      **Diagnosed** : 24 Jun 2024 - Wes Davis  
**Test Package** : FLEET

**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)