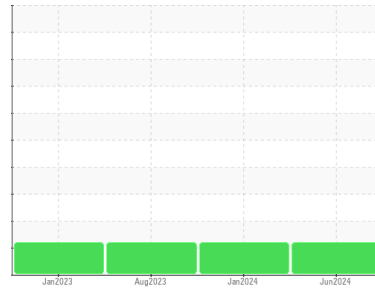




# OIL ANALYSIS REPORT

## Sample Rating Trend



FUEL



Area  
**SCHTRUCK**  
 Machine Id  
**6198 [SCHTRUCK]**  
 Component  
**Diesel Engine**  
 Fluid  
**PETRO CANADA DURON SHP 15W40 (--- GAL)**

### DIAGNOSIS

#### Recommendation

The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

#### Wear

All component wear rates are normal.

#### Contamination

There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

#### Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

### SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		<b>SBP0007713</b>	SBP0006485	SBP0005088
Sample Date	Client Info		<b>13 Jun 2024</b>	30 Jan 2024	15 Aug 2023
Machine Age	mls	Client Info	<b>357036</b>	333415	310794
Oil Age	mls	Client Info	<b>23621</b>	22621	24115
Oil Changed	Client Info		<b>Changed</b>	Changed	Changed
Sample Status			<b>ABNORMAL</b>	ABNORMAL	ABNORMAL

### CONTAMINATION

	method	limit/base	current	history1	history2
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 >80	<b>22</b>	46	29
Chromium	ppm	ASTM D5185m >5	<b>&lt;1</b>	<1	2
Nickel	ppm	ASTM D5185m >2	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m	<b>0</b>	0	<1
Silver	ppm	ASTM D5185m >3	<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m >30	<b>2</b>	1	2
Lead	ppm	ASTM D5185m >30	<b>4</b>	8	5
Copper	ppm	ASTM D5185m >150	<b>1</b>	<1	2
Tin	ppm	ASTM D5185m >5	<b>&lt;1</b>	<1	1
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	<1
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	0

### ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	<b>5</b>	2	3
Barium	ppm	ASTM D5185m 0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m 60	<b>59</b>	57	56
Manganese	ppm	ASTM D5185m 0	<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m 1010	<b>952</b>	923	913
Calcium	ppm	ASTM D5185m 1070	<b>1060</b>	1008	1135
Phosphorus	ppm	ASTM D5185m 1150	<b>1064</b>	966	942
Zinc	ppm	ASTM D5185m 1270	<b>1249</b>	1199	1146
Sulfur	ppm	ASTM D5185m 2060	<b>3509</b>	2788	3314

### CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >20	<b>3</b>	3	3
Sodium	ppm	ASTM D5185m	<b>7</b>	3	7
Potassium	ppm	ASTM D5185m >20	<b>4</b>	0	4
Fuel	%	ASTM D3524 >5	<b>▲ 5.4</b>	▲ 3.6	▲ 5.3

### INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.7</b>	0.3	0.6
Nitration	Abs/cm	*ASTM D7624 >20	<b>8.1</b>	8.3	8.3
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>19.2</b>	19.1	18.9

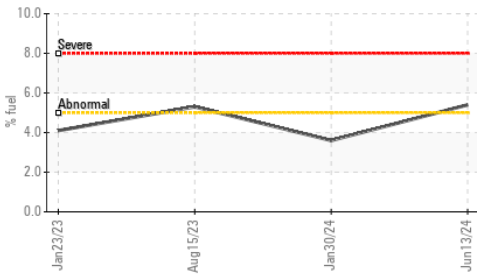
### FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>14.4</b>	15.7	14.6
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	<b>7.1</b>	6.6	6.9

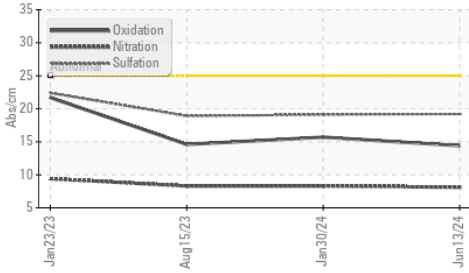


# OIL ANALYSIS REPORT

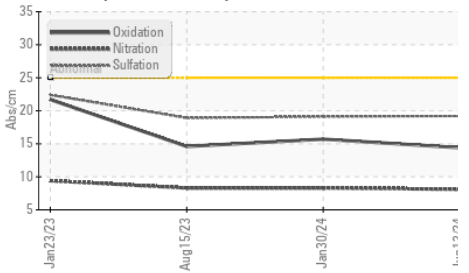
### ▲ Fuel Dilution



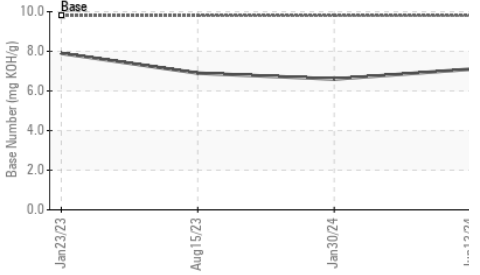
### ● FT-IR (Direct Trend)



### ● FT-IR (Direct Trend)



### Base Number

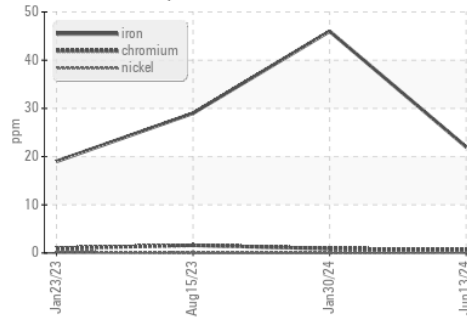


VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance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

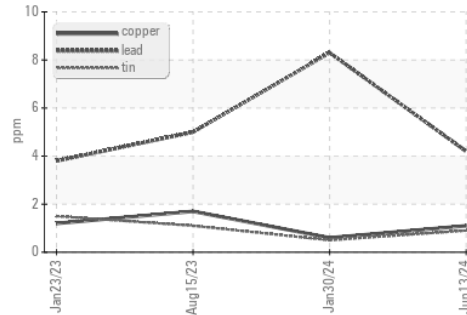
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	▲ 11.6	▲ 11.8

### GRAPHS

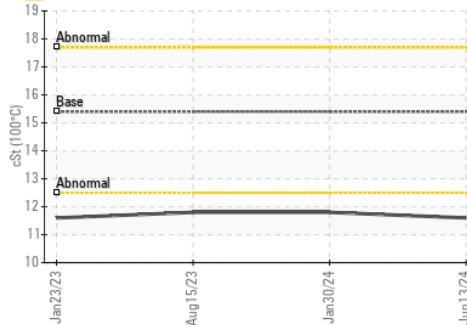
#### Ferrous Alloys



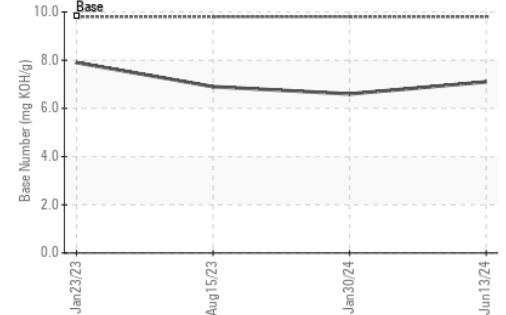
#### Non-ferrous Metals



#### ▲ Viscosity @ 100°C



#### Base Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513

**Sample No.** : SBP0007713

**Lab Number** : 06217569

**Unique Number** : 11090433

**Test Package** : FLEET ( Additional Tests: FUELDILUTION, PercentFuel )

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)

**Received** : 21 Jun 2024

**Tested** : 27 Jun 2024

**Diagnosed** : 27 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: