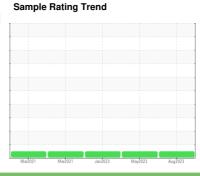


# **OIL ANALYSIS REPORT**

# SCHTRUCK 6348 [SCHTRUCK]

**Front Diesel Engine** 

PETRO CANADA DURON SHP 15W40 (--- GAL)





### Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the

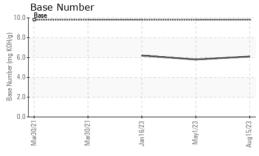
### **Fluid Condition**

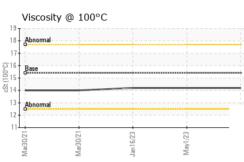
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

··· · <b>-</b> /		Mar2021	Mar2021	Jan 2023 May 2023	Aug2023	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		SBP0005085	SBP0004345	SBP0002585
Sample Date		Client Info		15 Aug 2023	01 May 2023	16 Jan 2023
Machine Age	mls	Client Info		517948	482337	445920
Oil Age	mls	Client Info		35611	36417	37891
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION	J	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>80	16	21	18
Chromium	ppm	ASTM D5185m	>5	2	2	2
Nickel	ppm	ASTM D5185m	>2	<1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>30	9	16	12
Lead	ppm	ASTM D5185m	>30	<1	0	<1
Copper	ppm	ASTM D5185m	>150	6	4	4
Tin	ppm	ASTM D5185m	>5	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES						
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	method ASTM D5185m		current 0	history1	history2 20
	ppm		0			
Boron		ASTM D5185m	0	0	1	20
Boron Barium	ppm	ASTM D5185m ASTM D5185m	0 0 60	0	1	20
Boron Barium Molybdenum	ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60	0 0 63	1 0 56	20 0 41
Boron Barium Molybdenum Manganese	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0	0 0 63 <1	1 0 56 <1	20 0 41 <1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010	0 0 63 <1 1017	1 0 56 <1 912	20 0 41 <1 553
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070	0 0 63 <1 1017 1152	1 0 56 <1 912 1212	20 0 41 <1 553 1729
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070 1150	0 0 63 <1 1017 1152 997	1 0 56 <1 912 1212 969	20 0 41 <1 553 1729 706
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070 1150	0 0 63 <1 1017 1152 997 1272	1 0 56 <1 912 1212 969 1245	20 0 41 <1 553 1729 706 912
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060	0 0 63 <1 1017 1152 997 1272 3112	1 0 56 <1 912 1212 969 1245 2937	20 0 41 <1 553 1729 706 912 2707
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060	0 0 63 <1 1017 1152 997 1272 3112 current	1 0 56 <1 912 1212 969 1245 2937 history1	20 0 41 <1 553 1729 706 912 2707 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060	0 0 63 <1 1017 1152 997 1272 3112 current	1 0 56 <1 912 1212 969 1245 2937 history1	20 0 41 <1 553 1729 706 912 2707 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060 limit/base	0 0 63 <1 1017 1152 997 1272 3112 current 4	1 0 56 <1 912 1212 969 1245 2937 history1 5	20 0 41 <1 553 1729 706 912 2707 history2 10 4
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060 limit/base	0 0 63 <1 1017 1152 997 1272 3112 current 4 2	1 0 56 <1 912 1212 969 1245 2937 history1 5 3	20 0 41 <1 553 1729 706 912 2707 history2 10 4
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Chlorine	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060 limit/base >20	0 0 63 <1 1017 1152 997 1272 3112 current 4 2 3	1 0 56 <1 912 1212 969 1245 2937 history1 5 3 2	20 0 41 <1 553 1729 706 912 2707 history2 10 4 2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Chlorine INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 60 0 1010 1150 1270 2060 limit/base >20 >20	0 0 63 <1 1017 1152 997 1272 3112 current 4 2 3	1 0 56 <1 912 1212 969 1245 2937 history1 5 3 2	20 0 41 <1 553 1729 706 912 2707 history2 10 4 2 
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Chlorine INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060 limit/base >20 >20	0 0 63 <1 1017 1152 997 1272 3112 current 4 2 3 current 0.7	1 0 56 <1 912 1212 969 1245 2937 history1 5 3 2 history1 0.7	20 0 41 <1 553 1729 706 912 2707 history2 10 4 2 history2 0.8
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Chlorine INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  method ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060 limit/base >20 >20	0 0 63 <1 1017 1152 997 1272 3112  current 4 2 3 current 0.7 9.5	1 0 56 <1 912 1212 969 1245 2937 history1 5 3 2 history1 0.7 9.1	20 0 41 <1 553 1729 706 912 2707 history2 10 4 2 history2 0.8 11.9
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Chlorine INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D76145	0 0 60 0 1010 1150 1270 2060 limit/base >20 >20 	0 0 63 <1 1017 1152 997 1272 3112 current 4 2 3 current 0.7 9.5 22.0	1 0 56 <1 912 1212 969 1245 2937 history1 5 3 2 history1 0.7 9.1 20.7	20 0 41 <1 553 1729 706 912 2707 history2 10 4 2 history2 0.8 11.9 24.1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Chlorine INFRA-RED Soot % Nitration Sulfation FLUID DEGRADA	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m  METHOD  ASTM D5185m  METHOD  *ASTM D7624 *ASTM D7624 *ASTM D7415  METHOD	0 0 0 1010 1070 1150 1270 2060 limit/base >20 >20 limit/base >3 >20 >30 limit/base	0 0 63 <1 1017 1152 997 1272 3112 current 4 2 3 current 0.7 9.5 22.0 current	1 0 56 <1 912 1212 969 1245 2937 history1 5 3 2 history1 0.7 9.1 20.7 history1	20 0 41 <1 553 1729 706 912 2707 history2 10 4 2 history2 0.8 11.9 24.1 history2



# **OIL ANALYSIS REPORT**

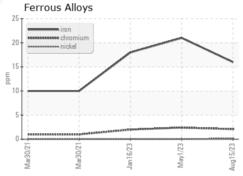


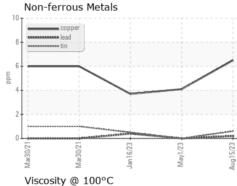


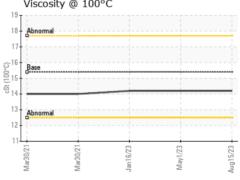
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
<b>Emulsified Water</b>	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

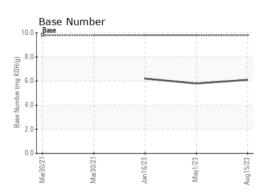
FLUID PROPERTIES		method			riistory i	History2
Visc @ 100°C	cSt	ASTM D445	15.4	14.2	14.2	14.2

### **GRAPHS**













Certificate L2367

Laboratory Sample No. Lab Number Test Package : FLEET

Unique Number : 10608608

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : SBP0005085 : 05928661

Received Diagnosed

: 18 Aug 2023 : 20 Aug 2023 Diagnostician : Wes Davis

**SCHMIDT TRANSPORTATION - 605449** 

108 E Bay Road Plattsmouth, NE US 68048 Contact: NICK DOTY

doty@liquidtrucking.com T: (402)949-9398

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)