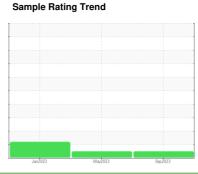


OIL ANALYSIS REPORT

SCHTRUCK 6417 [SCHTRUCK]

Diesel Engine

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





Recommendation

Resample at the next service interval to monitor.

Metal levels are typical for a new component breaking in.

Contamination

There is no indication of any contamination in the

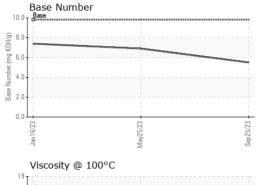
Fluid Condition

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

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		SBP0005731	SBP0004401	SBP0002587
Sample Date		Client Info		25 Sep 2023	25 May 2023	16 Jan 2023
Machine Age	mls	Client Info		145760	108135	70683
Oil Age	mls	Client Info		37625	37452	37658
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	ABNORMAL
CONTAMINATION	٧	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	20	23	28
Chromium	ppm	ASTM D5185m	>5	2	2	3
Nickel	ppm	ASTM D5185m	>2	<1	<1	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	<1	0
Aluminum	ppm	ASTM D5185m	>30	8	13	21
Lead	ppm	ASTM D5185m	>30	0	1	0
Copper	ppm	ASTM D5185m	>150	39	48	69
Tin	ppm	ASTM D5185m	>5	3	4	4
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 1	history1 4	history2 27
	ppm					
Boron		ASTM D5185m	0	1 <1 62	4	27
Boron Barium	ppm	ASTM D5185m ASTM D5185m	0 0 60	1 <1	4 0	27
Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60	1 <1 62	4 0 61	27 0 52
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0	1 <1 62 <1	4 0 61 1	27 0 52 2
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010	1 <1 62 <1 954 1092 923	4 0 61 1 955	27 0 52 2 513
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070	1 <1 62 <1 954 1092 923 1212	4 0 61 1 955 1201	27 0 52 2 513 1703 624 831
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm 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	1 <1 62 <1 954 1092 923	4 0 61 1 955 1201 912	27 0 52 2 513 1703 624
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 1270	1 <1 62 <1 954 1092 923 1212	4 0 61 1 955 1201 912 1238 2754 history1	27 0 52 2 513 1703 624 831 2171 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060	1 <1 62 <1 954 1092 923 1212 2139	4 0 61 1 955 1201 912 1238 2754	27 0 52 2 513 1703 624 831 2171
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060 limit/base	1 <1 62 <1 954 1092 923 1212 2139 current	4 0 61 1 955 1201 912 1238 2754 history1	27 0 52 2 513 1703 624 831 2171 history2 7 26
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060	1 <1 62 <1 954 1092 923 1212 2139 current 4	4 0 61 1 955 1201 912 1238 2754 history1	27 0 52 2 513 1703 624 831 2171 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	1 <1 62 <1 954 1092 923 1212 2139 current 4 3	4 0 61 1 955 1201 912 1238 2754 history1	27 0 52 2 513 1703 624 831 2171 history2 7 26
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060 limit/base >20	1 <1 62 <1 954 1092 923 1212 2139 current 4 3 18	4 0 61 1 955 1201 912 1238 2754 history1 5 7 28 history1 0.6	27 0 52 2 513 1703 624 831 2171 history2 7 26 ▲ 71 history2 0.5
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060 limit/base >20	1 <1 62 <1 954 1092 923 1212 2139 current 4 3 18 current	4 0 61 1 955 1201 912 1238 2754 history1 5 7 28 history1 0.6 9.8	27 0 52 2 513 1703 624 831 2171 history2 7 26 ↑ 71 history2 0.5 11.3
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060 limit/base >20 >20	1 <1 62 <1 954 1092 923 1212 2139 current 4 3 18 current 0.6	4 0 61 1 955 1201 912 1238 2754 history1 5 7 28 history1 0.6	27 0 52 2 513 1703 624 831 2171 history2 7 26 ▲ 71 history2 0.5
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m method *ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060 limit/base >20 >20 limit/base	1 <1 62 <1 954 1092 923 1212 2139 current 4 3 18 current 0.6 9.6	4 0 61 1 955 1201 912 1238 2754 history1 5 7 28 history1 0.6 9.8	27 0 52 2 513 1703 624 831 2171 history2 7 26 ↑ 71 history2 0.5 11.3
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m Method *ASTM D5185m ASTM D7844 *ASTM D7624 *ASTM D7415	0 0 60 0 1010 1070 1150 1270 2060 limit/base >20 >20 limit/base >3 >20 >30	1 <1 62 <1 954 1092 923 1212 2139 current 4 3 18 current 0.6 9.6 21.2	4 0 61 1 955 1201 912 1238 2754 history1 5 7 28 history1 0.6 9.8 22.0	27 0 52 2 513 1703 624 831 2171 history2 7 26 ▲ 71 history2 0.5 11.3 23.5



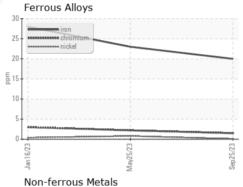
OIL ANALYSIS REPORT

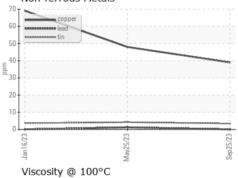


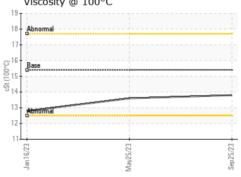
VISUAL		method				history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
ELLID DDODEDI	TIES	mathad	limit/bass	ourront.	hiotomit	history

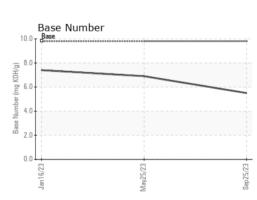
FLUID PROPER	RHES	method			history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	13.8	13.6	12.8

18 () 16 () 15 15 14













Certificate L2367

Laboratory Sample No. Lab Number Unique Number : 10671750

Test Package : FLEET

: SBP0005731 : 05965199

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

Diagnosed : 02 Oct 2023 Diagnostician : Wes Davis

: 29 Sep 2023

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)