

OIL ANALYSIS REPORT

Area SCHTRUCK 6381 [SCHTRUCK]

Diesel Engine

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

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

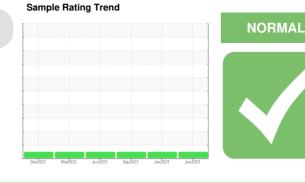
All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

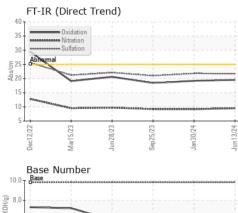
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.



SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		SBP0007715	SBP0006481	SBP0005727
Sample Date		Client Info		13 Jun 2024	30 Jan 2024	25 Sep 2023
Machine Age	mls	Client Info		264679	223201	183103
Oil Age	mls	Client Info		41478	40098	37379
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATION	N	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>80	17	10	13
Chromium	ppm	ASTM D5185m	>5	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>30	4	4	4
Lead	ppm	ASTM D5185m	>30	0	<1	0
Copper	ppm	ASTM D5185m	>150	8	12	26
Tin	ppm	ASTM D5185m	>5	<1	<1	1
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
Cadmium ADDITIVES	ppm	ASTM D5185m method	limit/base	0 current	0 history1	0 history2
	ppm ppm		limit/base	-	-	
ADDITIVES		method ASTM D5185m		current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	0	current 3	history1 3	history2 <1
ADDITIVES Boron Barium	ppm ppm	method ASTM D5185m ASTM D5185m	0 0 60	current 3 0	history1 3 0	history2 <1 <1
ADDITIVES Boron Barium Molybdenum	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60	current 3 0 64	history1 3 0 62	history2 <1 <1 62
ADDITIVES Boron Barium Molybdenum Manganese	ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0	current 3 0 64 <1	history1 3 0 62 <1	history2 <1 <1 62 <1
ADDITIVES Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010	current 3 0 64 <1 1051	history1 3 0 62 <1 988	history2 <1 <1 62 <1 961
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070	current 3 0 64 <1 1051 1164	history1 3 0 62 <1 988 1087	history2 <1 <1 62 <1 961 1134
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070 1150	Current 3 0 64 <1 1051 1164 1107	history1 3 0 62 <1 988 1087 998	<1 <1 62 <1 961 1134 996
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 60 0 1010 1070 1150 1270	current 3 0 64 <1 1051 1164 1107 1391	history1 3 0 62 <1 988 1087 998 1286	<1 <1 62 <1 961 1134 996 1266
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	method 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	Current 3 0 64 <1 1051 1164 1107 1391 3078	history1 3 0 62 <1 988 1087 998 1286 2342	<1 <1 62 <1 961 1134 996 1266 2293
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 1010 1070 1150 1270 2060	current 3 0 64 <1 1051 1164 1107 1391 3078 current	history1 3 0 62 <1 988 1087 998 1286 2342 history1	<1 <1 62 <1 961 1134 996 1266 2293 history2
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060 limit/base	current 3 0 64 <1 1051 1164 1107 1391 3078 current 4	history1 3 0 62 <1 988 1087 998 1286 2342 history1 2	<1 <1 62 <1 961 1134 996 1266 2293 history2 3
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060 limit/base	current 3 0 64 <1 1051 1164 1107 1391 3078 current 4 2	history1 3 0 62 <1 988 1087 998 1286 2342 history1 2 0	<1 <1 62 <1 961 1134 996 1266 2293 history2 3 1
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 60 0 1010 1070 1150 1270 2060 limit/base >20	current 3 0 64 <1 1051 1164 1107 1391 3078 current 4 2 4 2 4	history1 3 0 62 <1 988 1087 998 1286 2342 history1 2 0 2 0 2 0 2 0 2	<1 <1 62 <1 961 1134 996 1266 2293 history2 3 1 6
ADDITIVES Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm	method ASTM D5185m	0 0 0 1010 1070 1150 1270 2060 2060 220 220	current 3 0 64 <1 1051 1164 1107 1391 3078 current 4 2 4 2 4 current	history1 3 0 62 <1 988 1087 998 1286 2342 history1 2 0 2 0 2 0 2 history1	<1 <1 62 <1 961 1134 996 1266 2293 history2 3 1 6 history2
ADDITIVES 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	method ASTM D5185m	0 0 0 1010 1070 1150 1270 2060 limit/base >20 20 limit/base	current 3 0 64 <1 1051 1164 1107 1391 3078 current 4 2 4 2 4 0.7	history1 3 0 62 <1 988 1087 998 1286 2342 history1 2 0 2 0 2 0.2 history1 0.8	<1 <1 62 <1 961 1134 996 1266 2293 history2 3 1 6 history2 0.7
ADDITIVES 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	method ASTM D5185m	0 0 0 1010 1070 1150 1270 2060 2060 2060 200 200 200 200 200 200	current 3 0 64 <1 1051 1164 1107 1391 3078 current 4 2 4 2 4 0.7 9.5	history1 3 0 62 <1 988 1087 998 1286 2342 history1 2 0 2 0 2 0 2 0.8 9.2	<1 <1 62 <1 961 1134 996 1266 2293 history2 3 1 6 history2 0.7 9.2
ADDITIVES 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	method ASTM D5185m ASTM D5185m	0 0 0 1010 1070 1150 1270 2060 2060 220 20 20 3 20 3 20 3 20 3 3 20 20 20 20 20 20 20 20 20 20 20 20 20	current 3 0 64 <1 1051 1164 1107 1391 3078 current 4 2 4 0.7 9.5 21.7	history1 3 0 62 <1 988 1087 998 1286 2342 history1 2 0 2 history1 0.8 9.2 21.8	<1 <1 62 <1 961 1134 996 1266 2293 history2 3 1 6 history2 0.7 9.2 21.0



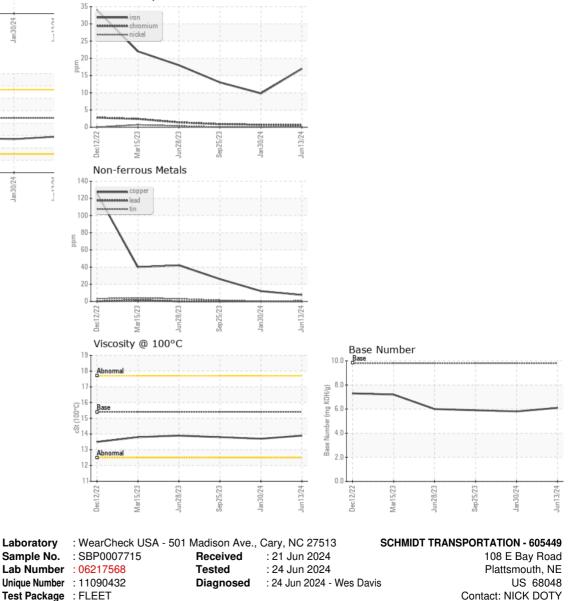
OIL ANALYSIS REPORT



10.0 T Base			**************		*********
8.0-					
8.0		-			
4.0-					
2.0					
0.0					
/22	3/23	3/23	5/23	0/24	10.01-
Dec12/22	Mar15/23	Jun28/23	Sep 25/23	Jan30/24	1
Visc	osity @ 1		Sep 2	Jan3	1
	osity @ 1		Sep 2	Jan3	t and
Visc 19 18 4bno 17	osity @ 1		Sep2	Jan3	1 mil
Visc 19 18 4bno 17	osity @ 1		Sep2	Cine L	line 1
Visc 19 18 Abno 17 17 16 Base 15 14	osity @ 1 mal		Sep2	Cinel.	
Visc 19 18 Abno 17 17 16 Base 15 314 13 Abno 12	osity @ 1 mal		Sep2	Enel	L
Visc 19 18 Abno 17 0.016 Base 314 13 Abno	osity @ 1 mal		Sep25/23	Creck	Paral Acce

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
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	13.9	13.7	13.8
GRAPHS						

Ferrous Alloys



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)

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Certificate 12367

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