

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

Area SCHTRUCK 6382 [SCHTRUCK]

Diesel Engine

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

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

Metal levels are typical for a new component breaking in.

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	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		SBP0007239	SBP0006666	SBP0005724
Sample Date		Client Info		24 May 2024	12 Feb 2024	15 Sep 2023
Machine Age	mls	Client Info		217098	180121	141815
Oil Age	mls	Client Info		36977	38306	37420
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATIO	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	16	21	23
Chromium	ppm	ASTM D5185m	>5	1	3	3
Nickel	ppm		>2	0	<1	0
Titanium	ppm	ASTM D5185m	~_	0	<1	0
Silver	ppm	ASTM D5185m	>3	0	<1	<1
Aluminum	ppm	ASTM D5185m	>30	7	11	12
Lead	ppm		>30	0	<1	0
Copper	ppm	ASTM D5185m		5	13	27
Tin	ppm	ASTM D5185m	>5	ر 1	1	<1
Vanadium	ppm	ASTM D5185m	>5	0	<1	0
Cadmium	ppm	ASTM D5185m		0	<1	0
Caumum	ppm	AGTIVI DJTOJIII		0		0
		ام و والدو وور			la la tama d	histow.0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	4	3	3
Boron Barium	ppm ppm		0	4 0	3 0	3 0
Boron Barium Molybdenum		ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60	4 0 61	3 0 60	3 0 65
Boron Barium Molybdenum Manganese	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0	4 0 61 <1	3 0 60 1	3 0 65 <1
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010	4 0 61 <1 965	3 0 60 1 925	3 0 65 <1 1004
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070	4 0 61 <1 965 1071	3 0 60 1 925 1075	3 0 65 <1 1004 1170
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070 1150	4 0 61 <1 965 1071 1016	3 0 60 1 925 1075 935	3 0 65 <1 1004 1170 922
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	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 1270	4 0 61 <1 965 1071	3 0 60 1 925 1075 935 1175	3 0 65 <1 1004 1170 922 1266
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 0 60 0 1010 1070 1150	4 0 61 <1 965 1071 1016	3 0 60 1 925 1075 935	3 0 65 <1 1004 1170 922
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS	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 1010 1070 1150 1270 2060	4 0 61 <1 965 1071 1016 1261 3055 current	3 0 60 1 925 1075 935 1175 3073 history1	3 0 65 <1 1004 1170 922 1266 2922 history2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	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	4 0 61 <1 965 1071 1016 1261 3055 current 4	3 0 60 1 925 1075 935 1175 3073 history1 5	3 0 65 <1 1004 1170 922 1266 2922 history2 7
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m	0 0 60 1010 1070 1150 1270 2060 Limit/base	4 0 61 <1 965 1071 1016 1261 3055 current 4 1	3 0 60 1 925 1075 935 1175 3073 history1 5 0	3 0 65 <1 1004 1170 922 1266 2922 history2 7 2
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	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 0 1010 1070 1150 1270 2060 <i>limit/base</i> >20	4 0 61 <1 965 1071 1016 1261 3055 current 4	3 0 60 1 925 1075 935 1175 3073 history1 5	3 0 65 <1 1004 1170 922 1266 2922 history2 7
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m ASTM D5185m	0 0 60 1010 1070 1150 1270 2060 Limit/base	4 0 61 <1 965 1071 1016 1261 3055 current 4 1	3 0 60 1 925 1075 935 1175 3073 history1 5 0	3 0 65 <1 1004 1170 922 1266 2922 history2 7 2
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 ASTM D5185m	0 0 0 1010 1070 1150 1270 2060 2060 2060 220 20 20 20 20 20	4 0 61 <1 965 1071 1016 1261 3055 current 4 1 2 current 0.6	3 0 60 1 925 1075 935 1175 3073 history1 5 0 8 <u>history1</u> 0.6	3 0 65 <1 1004 1170 922 1266 2922 history2 7 2 11 11 history2 0.8
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	0 0 0 1010 1070 1150 1270 2060 2060 2060 220 20 20 20 20 20	4 0 61 <1 965 1071 1016 1261 3055 current 4 1 2 2 current	3 0 60 1 925 1075 935 1175 3073 history1 5 0 8 8 history1	3 0 65 <1 1004 1170 922 1266 2922 history2 7 2 11 11 history2
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 ASTM D5185m	0 0 0 1010 1070 1150 1270 2060 2060 2060 220 20 20 20 20 20	4 0 61 <1 965 1071 1016 1261 3055 current 4 1 2 current 0.6	3 0 60 1 925 1075 935 1175 3073 history1 5 0 8 <u>history1</u> 0.6	3 0 65 <1 1004 1170 922 1266 2922 history2 7 2 11 11 history2 0.8
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 ASTM D5185m	0 0 0 1010 1070 1150 1270 2060 <i>limit/base</i> >20 <i>limit/base</i> >20	4 0 61 <1 965 1071 1016 1261 3055 <i>current</i> 4 1 2 <i>current</i> 0.6 8.7	3 0 60 1 925 1075 935 1175 3073 history1 5 0 8 <u>history1</u> 0.6 8.8	3 0 65 <1 1004 1170 922 1266 2922 history2 7 2 2 11 11 history2 0.8 9.8
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 ASTM D5185m	0 0 0 1010 1070 1150 1270 2060 2060 200 200 200 200 200 200 200	4 0 61 <1 965 1071 1016 1261 3055 <u>current</u> 4 1 2 <u>current</u> 0.6 8.7 20.2	3 0 60 1 925 1075 935 1175 3073 history1 5 0 8 <u>history1</u> 0.6 8.8 21.1	3 0 65 <1 1004 1170 922 1266 2922 history2 7 2 2 11 1 history2 0.8 9.8 22.1

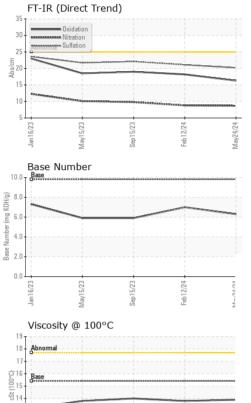


13 Abnormal

12

Jan16/23

OIL ANALYSIS REPORT



Sep15/23

/lav/15/23

Feb12/24.

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	13.8	14.0
GRAPHS						
Ferrous Alloys						
40 35						
30 - chromium						
25		 				
Ē 20-	-					
15-						
10						
5						
0		Andreas and a state of the second sec	ASA SANA			
Jan 16/23 May 15/23	Sep15/23	Feb12/24	May24/24			
Jan j	Sep	Feb	May			
Non-ferrous Metal	s					
⁷⁰ T	s					
60	S					
70 copper	S					
60 50	S					
60 50	s					
70 60 50 40 30	s					
70 60 50 40 30 20	s					
70 60 50 40 30 20	s					
70 60 50 60 50 60 50 50 50 60 50 50 50 50 50 50 50 50 50 50 50 50 50		124	/24 * /			
70 60 50 60 50 60 50 50 50 60 50 50 50 50 50 50 50 50 50 50 50 50 50		teb1224	fay24/24			
70 60 50 40 40 20 50 50 50 50 50 50 50 50 50 50 50 50 50	Sep15/23	Feb1224	Ma/24/24			
70 60 50 40 20 20 10 0 EZ 51 52 52 52 52 52 54 W W Wiscosity @ 100°C	Sep15/23	Feb12/24		Base Number		
70 60 50 40 40 20 20 10 0 50 50 50 50 50 50 50 50 50	Sep15/23	Feb12/24	10.0	Base Number Base		
70 60 50 40 40 20 20 10 0 50 50 50 50 50 50 50 50 50	Sep15/23	Feb12/24	10.0	Base Number		
70 60 50 40 40 20 20 10 0 50 50 50 50 50 50 50 50 50	Sep15/23	Feb12/24	10.0	Base Number		
70 60 50 40 40 20 20 10 0 50 50 50 50 50 50 50 50 50	Sep15/23	Feb12/24	10.0	Base Number		
70 60 50 40 40 20 20 10 0 50 50 50 50 50 50 50 50 50	Sep15/23	Feb12/24	10.0	Base Number		
70 60 50 10 20 10 10 10 10 10 10 10 10 10 1	Sep15/23	Feb12/24	(6, HO) Building (6, 0)	Base Number		
70 60 50 40 20 10 0 EZISINE Viscosity @ 100°C 10 0 EZISINE Wiscosity @ 100°C	Sep15/23	Feb1224	10.0	Base Number		
70 60 50 40 20 10 0 EZISINE EXIST E	Sep15/23		10.0- (0,0-HO) & 8.0- (0,0-HO)			
70 60 50 10 20 10 0 10 0 10 10 10 10 10 10	Sep15/23	reb12/24	10.0- (6)HOV BU Jun 4.0- 9 2.0-	Base Number	Sep15/23	Feb12/24

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 **SCHMIDT TRANSPORTATION - 605449** Laboratory Sample No. : SBP0007239 Received : 31 May 2024 108 E Bay Road Lab Number : 06196455 Tested : 03 Jun 2024 Plattsmouth, NE Unique Number : 11058578 : 03 Jun 2024 - Wes Davis US 68048 Diagnosed Test Package : FLEET Contact: NICK DOTY Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369. doty@liquidtrucking.com T: (402)949-9398 * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. F:

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Submitted By: CASEY WILKIE

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