

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id 322680

SZZOOU Component Diesel Engine Fluid PETRO CANADA DURON SHP 10W30 (--- QTS)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

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.

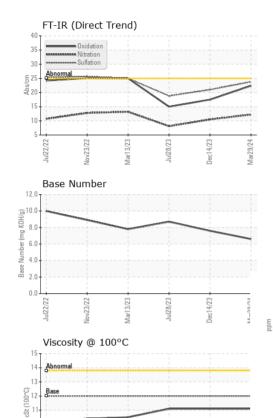
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0120681	PCA0115246	PCA0103000
Sample Date		Client Info		29 Mar 2024	14 Dec 2023	28 Jul 2023
Machine Age	mls	Client Info		50930	46157	38628
Oil Age	mls	Client Info		0	0	0
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	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 METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	42	30	18
Chromium	ppm		>20	1	1	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm		>20	11	9	5
Lead	ppm	ASTM D5185m	>40	0	0	<1
Copper	ppm	ASTM D5185m	>330	12	10	8
Tin	ppm	ASTM D5185m	>15	1	2	2
Vanadium	ppm	ASTM D5185m		0	0	<1
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Deren						
Boron	ppm	ASTM D5185m	2	3	8	7
Barium	ppm ppm	ASTM D5185m ASTM D5185m		3 0	8	7 0
				-		
Barium	ppm	ASTM D5185m	0 50	0	0	0
Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m	0 50	0 69	0 65	0 61
Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0 50 0	0 69 2	0 65 1	0 61 1
Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 50 0 950	0 69 2 978	0 65 1 940	0 61 1 942
Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 50 0 950 1050	0 69 2 978 1308	0 65 1 940 1170	0 61 1 942 1193
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	0 50 0 950 1050 995	0 69 2 978 1308 1013	0 65 1 940 1170 1071 1297 3096	0 61 1 942 1193 1014
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 50 0 950 1050 995 1180	0 69 2 978 1308 1013 1268	0 65 1 940 1170 1071 1297	0 61 1 942 1193 1014 1264
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 50 0 950 1050 995 1180 2600	0 69 2 978 1308 1013 1268 3601 current 4	0 65 1 940 1170 1071 1297 3096 history1 4	0 61 1 942 1193 1014 1264 3634 history2 19
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 50 0 950 1050 995 1180 2600	0 69 2 978 1308 1013 1268 3601 current	0 65 1 940 1170 1071 1297 3096 history1 4 1	0 61 1 942 1193 1014 1264 3634 history2 19 3
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 50 0 950 1050 995 1180 2600 limit/base >25	0 69 2 978 1308 1013 1268 3601 current 4	0 65 1 940 1170 1071 1297 3096 history1 4	0 61 1 942 1193 1014 1264 3634 history2 19
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm	ASTM D5185m ASTM D5185m	0 50 0 950 1050 995 1180 2600 <i>limit/base</i> >25 >20	0 69 2 978 1308 1013 1268 3601 <i>current</i> 4 2 13 <i>current</i>	0 65 1 940 1170 1071 1297 3096 history1 4 1 7 <i>h</i> istory1	0 61 1 942 1193 1014 1264 3634 history2 19 3 7 7 history2
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm	ASTM D5185m ASTM D5185m	0 50 0 950 1050 995 1180 2600 <i>limit/base</i> >25 >20 <i>limit/base</i>	0 69 2 978 1308 1013 1268 3601 <i>current</i> 4 2 13 <i>current</i> 1.1	0 65 1 940 1170 1071 1297 3096 history1 4 1 7 history1 0.7	0 61 1 942 1193 1014 1264 3634 history2 19 3 7 7 history2 0.5
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	0 50 0 950 1050 995 1180 2600 imit/base >25 >20 imit/base >3 >20	0 69 2 978 1308 1013 1268 3601 <u>current</u> 4 2 13 <u>current</u> 1.1 1.22	0 65 1 940 1170 1071 1297 3096 history1 4 1 7 Vistory1 0.7 10.5	0 61 1 942 1193 1014 1264 3634 history2 19 3 7 7 history2 0.5 8.1
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm	ASTM D5185m ASTM D5185m	0 50 0 950 1050 995 1180 2600 <i>limit/base</i> >25 >20 <i>limit/base</i>	0 69 2 978 1308 1013 1268 3601 <i>current</i> 4 2 13 <i>current</i> 1.1	0 65 1 940 1170 1071 1297 3096 history1 4 1 7 history1 0.7	0 61 1 942 1193 1014 1264 3634 history2 19 3 7 7 history2 0.5
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	0 50 0 950 1050 995 1180 2600 imit/base >25 >20 imit/base >3 >20	0 69 2 978 1308 1013 1268 3601 <u>current</u> 4 2 13 <u>current</u> 1.1 1.22	0 65 1 940 1170 1071 1297 3096 history1 4 1 7 Vistory1 0.7 10.5	0 61 1 942 1193 1014 1264 3634 history2 19 3 7 7 history2 0.5 8.1
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m	0 50 950 1050 995 1180 2600 imit/base >25 20 imit/base >3 >20 >30	0 69 2 978 1308 1013 1268 3601 current 4 2 13 current 1.1 12.2 23.8	0 65 1 940 1170 1071 1297 3096 history1 4 1 7 history1 0.7 10.5 21.0	0 61 1 942 1193 1014 1264 3634 history2 19 3 7 19 3 7 history2 0.5 8.1 18.8



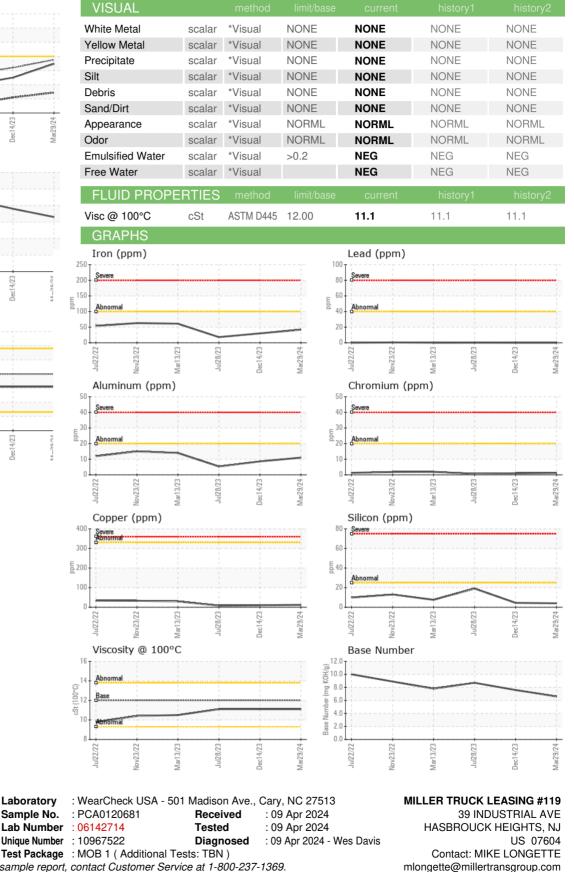
Abnormal

8 Jul22/22

OIL ANALYSIS REPORT



Mar13/23



To discuss this sample report, contact Customer Service at 1-800-237-1369.

250

200

150

100

50

50

40

30

10

0

400

300

la 200

100

Π

16

-St (100°C)

Laboratory

Sample No.

8

Dec14/23

* - 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)

Report Id: MILRUT [WUSCAR] 06142714 (Generated: 04/09/2024 18:34:28) Rev: 1

Certificate 12367

Contact/Location: MIKE LONGETTE - MILRUT

F: (201)528-7053

T: