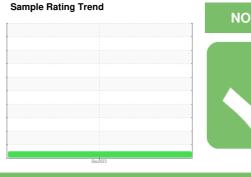


OIL ANALYSIS REPORT

(TEMP) Dixon Transport-Tractor [Dixon Transport-Tractor] 325A325504

Diesel Engine

PETRO CANADA DURON SHP 10W30 (11 GAL)





DIAGNOSIS

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

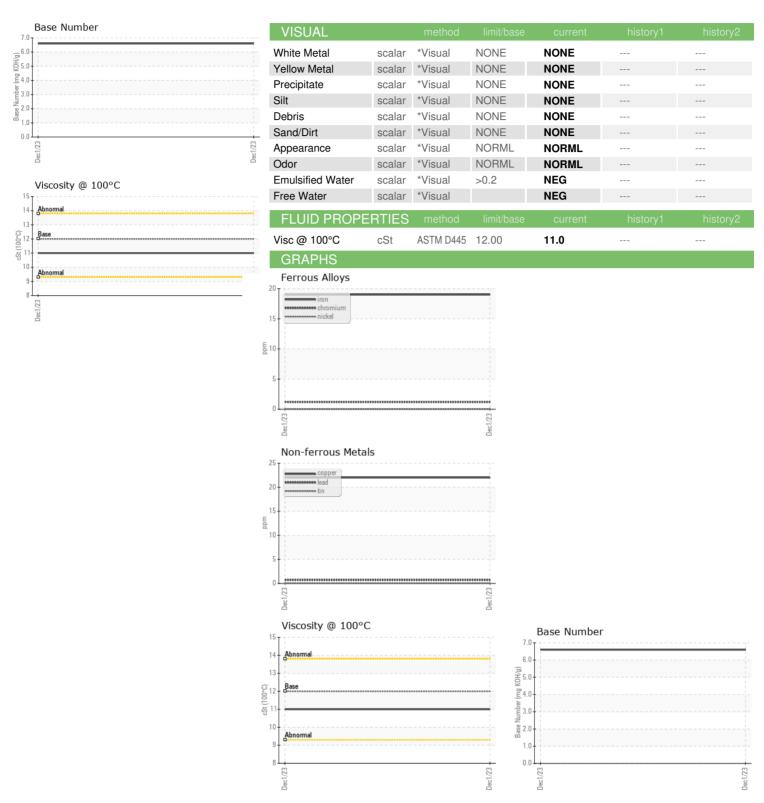
Fluid Condition

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

Sample Number Client Info PCA0114320	Sample Number Sample Date Machine Age Oil Age Oil Changed Sample Status CONTAMINAT	mls mls	Client Info Client Info Client Info Client Info Client Info		PCA0114320 01 Dec 2023 189812 35394 Changed		
Sample Date Client Info 189812	Sample Date Machine Age Oil Age Oil Changed Sample Status CONTAMINATI	mls	Client Info Client Info Client Info Client Info		01 Dec 2023 189812 35394 Changed		
Sample Date Client Info 189812	Sample Date Machine Age Oil Age Oil Changed Sample Status CONTAMINATI	mls	Client Info Client Info Client Info		189812 35394 Changed		
Machine Age mls Client Info 189812	Machine Age Oil Age Oil Changed Sample Status CONTAMINATI	mls	Client Info Client Info		35394 Changed		
Contact	Oil Changed Sample Status CONTAMINATI		Client Info		Changed		
Contact	Oil Changed Sample Status CONTAMINATI	ON			_		
CONTAMINATION method limit/base current history1 history1 Fuel WC Method >5 <1.0	CONTAMINATI Fuel	ON	method		NORMAL		
Fuel WC Method >5 <1.0	Fuel	ON	method		HOHIMAL		
Water WC Method >0.2 NEG Glycol WC Method NEG WEAR METALS method limit/base current history1 history Iron ppm ASTM D5185m >5 1 Chromium ppm ASTM D5185m >5 1 Nickel ppm ASTM D5185m >2 0 Titanium ppm ASTM D5185m >3 0 Silver ppm ASTM D5185m >30 6 Aluminum ppm ASTM D5185m >30 6 Lead ppm ASTM D5185m >150 22 Copper ppm ASTM D5185m >5 0 Vanadium ppm ASTM D5185m 0 Vanad				limit/base	current	history1	history2
Section WC Method NEG	Matar		WC Method	>5	<1.0		
WEAR METALS method limit/base current history1 history Iron ppm ASTM D5185m >80 19 Chromium ppm ASTM D5185m >5 1 Nickel ppm ASTM D5185m >2 0 Titanium ppm ASTM D5185m 3 0 Silver ppm ASTM D5185m >30 6 Aluminum ppm ASTM D5185m >30 6 Lead ppm ASTM D5185m >30 <1	water		WC Method	>0.2	NEG		
Iron	Glycol		WC Method		NEG		
Chromium ppm ASTM D5185m >5 1 Nickel ppm ASTM D5185m >2 0 Titanium ppm ASTM D5185m >3 0 Silver ppm ASTM D5185m >30 6 Aluminum ppm ASTM D5185m >30 6 Lead ppm ASTM D5185m >30 <1	WEAR METALS	S	method	limit/base	current	history1	history2
Nickel ppm ASTM D5185m >2 0 Titanium ppm ASTM D5185m 0 Silver ppm ASTM D5185m >3 0 Aluminum ppm ASTM D5185m >30 6 Lead ppm ASTM D5185m >30 <1	Iron	ppm	ASTM D5185m	>80	19		
Titanium ppm ASTM D5185m 0 Silver ppm ASTM D5185m >3 0 Aluminum ppm ASTM D5185m >30 6 Lead ppm ASTM D5185m >30 <1	Chromium	ppm	ASTM D5185m	>5	1		
Silver ppm ASTM D5185m >3 0 Aluminum ppm ASTM D5185m >30 6 Lead ppm ASTM D5185m >30 <1	Nickel	ppm	ASTM D5185m	>2	0		
Aluminum ppm ASTM D5185m >30 6 Lead ppm ASTM D5185m >30 <1	Titanium	ppm	ASTM D5185m		0		
Lead ppm ASTM D5185m >30 <1 Copper ppm ASTM D5185m >150 22 Tin ppm ASTM D5185m >5 0 Vanadium ppm ASTM D5185m 0 Cadmium ppm ASTM D5185m 0 Cadmium ppm ASTM D5185m 2 <1 Boron ppm ASTM D5185m 0 0 Barium ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 0 0 Manganese ppm ASTM D5185m 0 0 Magnesium ppm ASTM D5185m 950 1076 Calcium ppm ASTM D5185m 995 1089 <	Silver	ppm	ASTM D5185m	>3	0		
Copper ppm ASTM D5185m >150 22 Tin ppm ASTM D5185m >5 0 Vanadium ppm ASTM D5185m 0 Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history Boron ppm ASTM D5185m 2 <1	Aluminum	ppm	ASTM D5185m	>30	6		
Tin ppm ASTM D5185m >5 0 Vanadium ppm ASTM D5185m 0 Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history Boron ppm ASTM D5185m 2 <1 Barium ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 0 0 Manganese ppm ASTM D5185m 0 0 Magnesium ppm ASTM D5185m 950 1076 Calcium ppm ASTM D5185m 1050 1227 Phosphorus ppm ASTM D5185m 995 1089 Zinc ppm ASTM D5185m 2600 2426	Lead	ppm	ASTM D5185m	>30	<1		
Vanadium ppm ASTM D5185m 0 Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history Boron ppm ASTM D5185m 2 <1 Barium ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 50 59 Manganese ppm ASTM D5185m 0 0 Magnesium ppm ASTM D5185m 950 1076 Calcium ppm ASTM D5185m 1050 1227 Phosphorus ppm ASTM D5185m 995 1089 Zinc ppm ASTM D5185m 2600 2426 Sulfur ppm ASTM D5185m >20 5	Copper	ppm	ASTM D5185m	>150	22		
Cadmium ppm ASTM D5185m 0 ADDITIVES method limit/base current history1 history Boron ppm ASTM D5185m 2 <1	Tin	ppm	ASTM D5185m	>5	0		
ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 2 <1	Vanadium	ppm	ASTM D5185m		0		
Boron ppm ASTM D5185m 2 <1 Barium ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 50 59 Manganese ppm ASTM D5185m 0 0 Magnesium ppm ASTM D5185m 950 1076 Calcium ppm ASTM D5185m 1050 1227 Phosphorus ppm ASTM D5185m 995 1089 Zinc ppm ASTM D5185m 2600 2426 Sulfur ppm ASTM D5185m 2600 2426 Silicon ppm ASTM D5185m >20 5 Sodium ppm ASTM D5185m >20 9 INFRA-RED method limit/base	Cadmium	ppm	ASTM D5185m		0		
Barium ppm ASTM D5185m 0 0 Molybdenum ppm ASTM D5185m 50 59 Manganese ppm ASTM D5185m 0 0 Magnesium ppm ASTM D5185m 950 1076 Calcium ppm ASTM D5185m 1050 1227 Phosphorus ppm ASTM D5185m 995 1089 Zinc ppm ASTM D5185m 995 1089 Sulfur ppm ASTM D5185m 2600 2426 Sulfur ppm ASTM D5185m >20 5 Sodium ppm ASTM D5185m >20 5 Potassium ppm ASTM D5185m >20 9 INFRA-RED method limit/base	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 50 59 Manganese ppm ASTM D5185m 0 0 Magnesium ppm ASTM D5185m 950 1076 Calcium ppm ASTM D5185m 1050 1227 Phosphorus ppm ASTM D5185m 995 1089 Zinc ppm ASTM D5185m 2600 1246 Sulfur ppm ASTM D5185m 2600 2426 Silicon ppm ASTM D5185m >20 5 Sodium ppm ASTM D5185m >20 9 INFRA-RED method limit/base current history1 history1	Boron	ppm	ASTM D5185m	2	<1		
Manganese ppm ASTM D5185m 0 0 Magnesium ppm ASTM D5185m 950 1076 Calcium ppm ASTM D5185m 1050 1227 Phosphorus ppm ASTM D5185m 995 1089 Zinc ppm ASTM D5185m 1180 1246 Sulfur ppm ASTM D5185m 2600 2426 CONTAMINANTS method limit/base current history1 history Silicon ppm ASTM D5185m >20 5 Sodium ppm ASTM D5185m >20 9 INFRA-RED method limit/base current history1 history1	Barium	ppm	ASTM D5185m	0	0		
Magnesium ppm ASTM D5185m 950 1076 Calcium ppm ASTM D5185m 1050 1227 Phosphorus ppm ASTM D5185m 995 1089 Zinc ppm ASTM D5185m 1180 1246 Sulfur ppm ASTM D5185m 2600 2426 CONTAMINANTS method limit/base current history1 history Silicon ppm ASTM D5185m >20 5 Sodium ppm ASTM D5185m >20 9 INFRA-RED method limit/base current history1 history1 history	Molybdenum	ppm	ASTM D5185m	50	59		
Calcium ppm ASTM D5185m 1050 1227 Phosphorus ppm ASTM D5185m 995 1089 Zinc ppm ASTM D5185m 1180 1246 Sulfur ppm ASTM D5185m 2600 2426 CONTAMINANTS method limit/base current history1 history1 Silicon ppm ASTM D5185m >20 5 Sodium ppm ASTM D5185m >20 9 INFRA-RED method limit/base current history1 history1	Manganese	ppm	ASTM D5185m	0	0		
Phosphorus ppm ASTM D5185m 995 1089 Zinc ppm ASTM D5185m 1180 1246 Sulfur ppm ASTM D5185m 2600 2426 CONTAMINANTS method limit/base current history1 history Silicon ppm ASTM D5185m >20 5 Sodium ppm ASTM D5185m >20 9 INFRA-RED method limit/base current history1 history1	Magnesium	ppm	ASTM D5185m	950	1076		
Zinc ppm ASTM D5185m 1180 1246 Sulfur ppm ASTM D5185m 2600 2426 CONTAMINANTS method limit/base current history1 history Silicon ppm ASTM D5185m >20 5 Sodium ppm ASTM D5185m <1	Calcium	ppm	ASTM D5185m	1050	1227		
Sulfur ppm ASTM D5185m 2600 2426 CONTAMINANTS method limit/base current history1 history Silicon ppm ASTM D5185m >20 5 Sodium ppm ASTM D5185m <1	Phosphorus	ppm	ASTM D5185m	995	1089		
CONTAMINANTS method limit/base current history1 history Silicon ppm ASTM D5185m >20 5 Sodium ppm ASTM D5185m <1	Zinc	ppm	ASTM D5185m	1180	1246		
Silicon ppm ASTM D5185m >20 5 Sodium ppm ASTM D5185m <1 Potassium ppm ASTM D5185m >20 9 INFRA-RED method limit/base current history1 history1	Sulfur	ppm	ASTM D5185m	2600	2426		
Sodium ppm ASTM D5185m <1 Potassium ppm ASTM D5185m >20 9 INFRA-RED method limit/base current history1 history	CONTAMINAN	TS	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 9 INFRA-RED method limit/base current history1 history	Silicon	ppm	ASTM D5185m	>20	5		
INFRA-RED method limit/base current history1 history	Sodium	ppm	ASTM D5185m		<1		
	Potassium	ppm	ASTM D5185m	>20	9		
Soot %	INFRA-RED		method	limit/base	current	history1	history2
	Soot %	%	*ASTM D7844	>3	0.7		
Nitration Abs/cm *ASTM D7624 >20 9.2	Nitration	Abs/cm	*ASTM D7624	>20	9.2		
Sulfation Abs/.1mm *ASTM D7415 >30 21.5	Sulfation	Abs/.1mm	*ASTM D7415	>30	21.5		
FLUID DEGRADATION method limit/base current history1 history	FLUID DEGRAD	ATION	method	limit/base	current	history1	history2
Oxidation	Oxidation	Abs/.1mm	*ASTM D7414	>25	18.7		
Page Number (PN) mg VOU/g ACTM DOOG	Base Number (BN)	mg KOH/g	ASTM D2896		6.6		



OIL ANALYSIS REPORT







Laboratory Sample No. Lab Number Unique Number

: PCA0114320 : 06035653 : 10790882 Test Package : FLEET

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

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : 15 Dec 2023 Recieved Diagnosed : 18 Dec 2023

: Wes Davis Diagnostician

Transervice - Shop 3250 - Dixon Transport

1124 E. River Road Dixon, IL US 61021

Contact: Mike Shoemaker Shop3250@transervice.com T:

* - 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: TSV3250 [WUSCAR] 06035653 (Generated: 12/18/2023 10:16:01) Rev: 1

Submitted By: Mike Shoemaker

F: