

## **OIL ANALYSIS REPORT**

# (P1021279) Dixon Transport-Tractor [Dixon Transport-Tractor] 325A325540

Diesel Engine

PETRO CANADA DURON SHP 10W30 (11 GAL)

### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

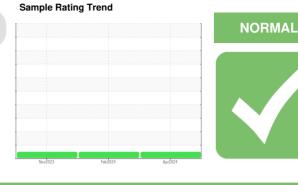
All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil.

#### Fluid Condition

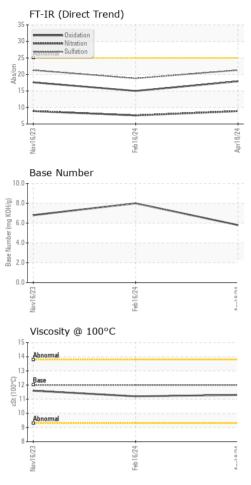
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.



SAMPLE INFOR	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0121207	PCA0114346	PCA0109477
Sample Date		Client Info		18 Apr 2024	16 Feb 2024	16 Nov 2023
Machine Age	mls	Client Info		475831	460226	440819
Oil Age	mls	Client Info		35012	19407	35092
Oil Changed		Client Info		Changed	Not Changd	Changed
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	>80	29	12	18
Chromium	ppm	ASTM D5185m	>5	4	3	3
Nickel	ppm	ASTM D5185m	>2	2	2	1
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>30	11	8	4
Lead	ppm	ASTM D5185m	>30	0	1	0
Copper	ppm		>150	7	4	6
Tin	ppm	ASTM D5185m	>5	1	<1	<1
Vanadium	ppm	ASTM D5185m		0	<1	<1
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
ADDITIVES Boron	ppm	method ASTM D5185m	limit/base	current 4	history1 8	history2 2
	ppm ppm					
Boron		ASTM D5185m	2	4	8	2
Boron Barium Molybdenum	ppm	ASTM D5185m ASTM D5185m ASTM D5185m	2 0	4 0	8	2 0
Boron Barium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50	4 0 62	8 0 60	2 0 52
Boron Barium Molybdenum Manganese	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0	4 0 62 <1	8 0 60 <1	2 0 52 0
Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950	4 0 62 <1 996	8 0 60 <1 1010	2 0 52 0 920
Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050	4 0 62 <1 996 1128	8 0 60 <1 1010 1131	2 0 52 0 920 1118
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995	4 0 62 <1 996 1128 1018	8 0 60 <1 1010 1131 1043	2 0 52 0 920 1118 1038
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	2 0 50 950 1050 995 1180	4 0 62 <1 996 1128 1018 1251	8 0 60 <1 1010 1131 1043 1275	2 0 52 0 920 1118 1038 1212
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600	4 0 62 <1 996 1128 1018 1251 3095 current	8 0 60 <1 1010 1131 1043 1275 2900	2 0 52 0 920 1118 1038 1212 2526
Boron 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 ASTM D5185m	2 0 50 950 1050 995 1180 2600	4 0 62 <1 996 1128 1018 1251 3095 current 5	8 0 60 <1 1010 1131 1043 1275 2900 history1 4	2 0 52 0 920 1118 1038 1212 2526 history2
Boron 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 ASTM D5185m	2 0 50 950 1050 995 1180 2600 <b>limit/base</b> >20	4 0 62 <1 996 1128 1018 1251 3095 current	8 0 60 <1 1010 1131 1043 1275 2900 history1	2 0 52 0 920 1118 1038 1212 2526 history2 4
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	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 ASTM D5185m	2 0 50 950 1050 995 1180 2600 <b>limit/base</b> >20	4 0 62 <1 996 1128 1018 1251 3095 current 5 2	8 0 60 <1 1010 1131 1043 1275 2900 history1 4 2	2 0 52 0 920 1118 1038 1212 2526 history2 4 1
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 <b>Imit/base</b> >20	4 0 62 <1 996 1128 1018 1251 3095 current 5 2 0 0	8 0 60 <1 1010 1131 1043 1275 2900 history1 4 2 2 2 history1	2 0 52 0 920 1118 1038 1212 2526 history2 4 1 0 0 history2
Boron 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	2 0 50 0 950 1050 995 1180 2600 limit/base >20 20 limit/base >20	4 0 62 <1 996 1128 1018 1251 3095 <i>current</i> 5 2 0 <i>current</i> 0.6	8 0 60 <1 1010 1131 1043 1275 2900 history1 4 2 2 2 history1 0.3	2 0 52 0 920 1118 1038 1212 2526 history2 4 1 0 <i>history2</i> 0.5
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m	2 0 50 0 950 1050 995 1180 2600 <b>Imit/base</b> >20	4 0 62 <1 996 1128 1018 1251 3095 current 5 2 0 0	8 0 60 <1 1010 1131 1043 1275 2900 history1 4 2 2 2 history1	2 0 52 0 920 1118 1038 1212 2526 history2 4 1 0 0 history2
Boron 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	2 0 50 950 1050 995 1180 2600 <i>imit/base</i> >20 <i>imit/base</i> >3 >20	4 0 62 <1 996 1128 1018 1251 3095 current 5 2 0 0 current 0.6 8.9	8 0 60 <1 1010 1131 1043 1275 2900 history1 4 2 2 2 history1 0.3 7.6	2 0 52 0 920 1118 1038 1212 2526 history2 4 1 0 0 history2 0.5 8.9
Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRAI	ppm ppm ppm ppm ppm ppm ppm ppm TS ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7844 *ASTM D7624	2 0 0 50 0 950 1050 995 1180 2600 2600 20 20 20 20 20 20 20 20 20 20 20 20 2	4 0 62 <1 996 1128 1018 1251 3095 current 5 2 0 current 0.6 8.9 21.3 current	8 0 60 <1 1010 1131 1043 1275 2900 history1 4 2 2 history1 0.3 7.6 18.8 history1	2 0 52 0 920 1118 1038 1212 2526 history2 4 1 0 0 history2 0.5 8.9 21.3 history2
Boron 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	2 0 50 0 950 1050 995 1180 2600 <b>imit/base</b> >20 <b>imit/base</b> >3 >20 >30	4 0 62 <1 996 1128 1018 1251 3095 <u>current</u> 5 2 0 <u>current</u> 0.6 8.9 21.3	8 0 60 <1 1010 1131 1043 1275 2900 history1 4 2 2 2 history1 0.3 7.6 18.8	2 0 52 0 920 1118 1038 1212 2526 <b>history2</b> 4 1 0 <b>history2</b> 0.5 8.9 21.3



# **OIL ANALYSIS REPORT**



Certificate 12367 Certificate 12367 Certificate 2367 Certificate 2367 Ceri		: PCA0121207 Re : 06161163 Te : 10996586 Dia		Received : 26 Apr 2024 Tested : 26 Apr 2024 Diagnosed : 26 Apr 2024 - Wes Davis at 1-800-237-1369. 5 scope of accreditation.			1124 E. River Roac Dixon, Il US 6102 <sup>-</sup> Contact: Mike Shoemake Shop3250@transervice.con	
d	Laboratory	: WearCheck USA - 50	Lep10/24	on Ave., Cary	, NC 27513	Nov16/23	rice - Shop 3250 -	Dixon Transpor
		Base Base JII Abnormal			(0,7. HO) 6. 19. 19. 19. 10. 10. 10. 10. 10. 10. 10. 10. 10. 10			
		Abnomal 13- 2 12 Base			8.	0-		
		Viscosity @ 100°C				Base Number		
		2 0 E2010 1001	Feb16/24	The REAL PROPERTY AND A DESCRIPTION OF THE REAL PROPERTY	Apri 8/24			
		6 4 4	$\smile$					
Feb16/24 -	٨٣.٩٢.٩٨	10 8 8						
		Non-ferrous Meta	Feb16/24 -		Apr18/24			
		10 - 5 -			e e e e e e e e e e e e e e e e e e e			
Feb16/24	A5 8.73	25 - chromium 20 - nickel		/				
		GRAPHS Ferrous Alloys			/			
		Visc @ 100°C	cSt	ASTM D445		11.3	11.2	11.6
		Free Water	scalar	*Visual method	limit/base	NEG	NEG history1	NEG history2
Feb16/24	Apr18/24	Odor Emulsified Water	scalar	*Visual *Visual	NORML >0.2	NORML	NORML	NORML
24 24	24	Sand/Dirt Appearance	scalar scalar	*Visual *Visual	NONE NORML	NONE NORML	NONE	NONE
	Silt Debris	scalar scalar	*Visual *Visual	NONE NONE	NONE NONE	NONE	NONE	
Second and and and a street	379-80-98-99-80-98-98-98-98-98-98-98-98-98-98-98-98-98-	Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
		White Metal Yellow Metal	scalar scalar	*Visual *Visual	NONE NONE	NONE NONE	NONE NONE	NONE NONE

Submitted By: Mike Shoemaker Page 2 of 2