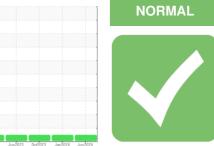


OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

206960 Component Diesel Engine Fluid PETRO CANADA DURON SHP 10W30 (--- GAL)

DIAGNOSIS

Recommendation

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

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

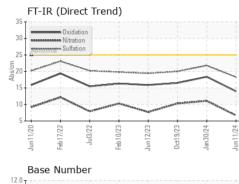
Fluid Condition

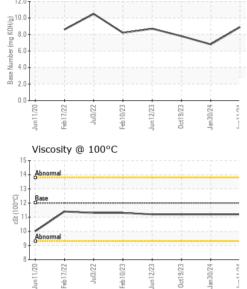
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0128896	PCA0117051	PCA0110429
Sample Date		Client Info		11 Jun 2024	30 Jan 2024	19 Oct 2023
Machine Age	mls	Client Info		79229	76154	0
Oil Age	mls	Client Info		0	0	0
Oil Changed		Client Info		N/A	Changed	N/A
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	6	34	26
Chromium	ppm	ASTM D5185m	>20	0	1	1
Nickel	ppm	ASTM D5185m	>4	0	<1	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	4	15	13
Lead	ppm	ASTM D5185m	>40	0	<1	0
Copper	ppm	ASTM D5185m	>330	<1	3	3
Tin	ppm	ASTM D5185m	>15	<1	2	1
Vanadium	ppm	ASTM D5185m		0	<1	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	4	5	8
Boron Barium	ppm ppm	ASTM D5185m ASTM D5185m	2 0	4 0	5	
			_			8
Barium	ppm	ASTM D5185m	0 50	0	0	8 0
Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m	0 50	0 60	0 67	8 0 65
Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	0 50 0	0 60 <1	0 67 <1	8 0 65 <1
Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	0 50 0 950	0 60 <1 953	0 67 <1 932	8 0 65 <1 890
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 60 <1 953 1065	0 67 <1 932 1245	8 0 65 <1 890 1097
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 50 0 950 1050 995	0 60 <1 953 1065 1136	0 67 <1 932 1245 1033	8 0 65 <1 890 1097 1070
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	0 50 0 950 1050 995 1180	0 60 <1 953 1065 1136 1279	0 67 <1 932 1245 1033 1214	8 0 65 <1 890 1097 1070 1222
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 ASTM D5185m ASTM D5185m	0 50 0 950 1050 995 1180 2600	0 60 <1 953 1065 1136 1279 3694	0 67 <1 932 1245 1033 1214 3087	8 0 65 <1 890 1097 1070 1222 2920
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 60 <1 953 1065 1136 1279 3694 current	0 67 <1 932 1245 1033 1214 3087 history1	8 0 65 <1 890 1097 1070 1222 2920 history2
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 Limit/base >25	0 60 <1 953 1065 1136 1279 3694 current 4	0 67 <1 932 1245 1033 1214 3087 history1 3	8 0 65 <1 890 1097 1070 1222 2920 history2 3
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 method ASTM D5185m	0 50 0 950 1050 995 1180 2600 Limit/base >25	0 60 <1 953 1065 1136 1279 3694 current 4 2	0 67 <1 932 1245 1033 1214 3087 history1 3 1	8 0 65 <1 890 1097 1070 1222 2920 history2 3 <1 5 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	ASTM D5185m ASTM D5185m	0 50 950 1050 995 1180 2600 <i>limit/base</i> >25 >20 <i>limit/base</i> >3	0 60 <1 953 1065 1136 1279 3694 <u>current</u> 4 2 4 <u>current</u> 0.3	0 67 <1 932 1245 1033 1214 3087 history1 3 1 6 history1 0.9	8 0 65 <1 890 1097 1070 1222 2920 history2 3 <1 5 history2 0.7
Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm TS	ASTM D5185m ASTM D5185m	0 50 950 1050 995 1180 2600 <i>limit/base</i> >25 >20 <i>limit/base</i> >3	0 60 <1 953 1065 1136 1279 3694 <u>current</u> 4 2 4 2	0 67 <1 932 1245 1033 1214 3087 history1 3 1 6 kistory1	8 0 65 <1 890 1097 1070 1222 2920 history2 3 <1 5 history2 0.7 10.3
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 50 950 1050 995 1180 2600 <i>limit/base</i> >25 >20 <i>limit/base</i> >3	0 60 <1 953 1065 1136 1279 3694 <u>current</u> 4 2 4 <u>current</u> 0.3	0 67 <1 932 1245 1033 1214 3087 history1 3 1 6 history1 0.9	8 0 65 <1 890 1097 1070 1222 2920 history2 3 <1 5 history2 0.7
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 50 950 1050 995 1180 2600 <i>limit/base</i> >25 >20 <i>limit/base</i> >3 >20	0 60 <1 953 1065 1136 1279 3694 <u>current</u> 4 2 4 2 4 0.3 6.7	0 67 <1 932 1245 1033 1214 3087 history1 3 1 6 <i>history1</i> 0.9 11.1	8 0 65 <1 890 1097 1070 1222 2920 history2 3 <1 5 history2 0.7 10.3
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 60 <1 953 1065 1136 1279 3694 <u>current</u> 4 2 4 <u>current</u> 0.3 6.7 18.3	0 67 <1 932 1245 1033 1214 3087 history1 3 1 6 <u>history1</u> 0.9 11.1 21.8	8 0 65 <1 890 1097 1070 1222 2920 history2 3 <1 5 <u>history2</u> 0.7 10.3 20.0

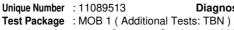


OIL ANALYSIS REPORT





	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	
\sim	Silt	scalar	*Visual	NONE	NONE	NONE	NONE	
and a start barrens	Debris	scalar	*Visual	NONE	NONE	NONE	NONE	
and the second	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE	
Jan30/24 Jun11/24	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML	
Jan3 Jun1	Odor	scalar	*Visual	NORML	NORML	NORML	NORML	
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG	
	Free Water	scalar	*Visual		NEG	NEG	NEG	
	FLUID PROPE	RTIES	method	limit/base	current	history1	history2	
\checkmark	Visc @ 100°C	cSt	ASTM D445	12.00	11.2	11.2	11.2	
	GRAPHS							
	Iron (ppm)				Lead (ppm)			
	250 Severe			10	Severe			
Jan30/24	200	1 I		8				
Lar	E 150 100 - Abnormal			Ed 4	Abaranal			
	100 - 0		******	4				
	50	\sim		2				
	22 +	123	/23 +		72 72	/23	/23 -	
	Jun 11/20 Feb 17/22 Jul3/22	Feb10/23 Jun12/23	0ct19/23 Jan30/24	Jun11/24	Jun11/20 Feb17/22 Jul3/22	Feb10/23 Jun12/23	0ct19/23 Jan30/24 Jun11/24	
	Aluminum (ppm)			7	Chromium (p	,	_ , _	
	50 T			5				
-	40 - Severe			4	0 _ Severe			
	= ³⁰				0			
Jan30/24	20 - Abnormal			³ ط 2	0 Abnormal			
Jan	10			1	0-			
	0	+			0			
	Jun 11/20 Feb 17/22 Jul3/22	Feb10/23 Jun12/23	0ct19/23 - Jan30/24	Jun 11/24	Jun11/20 Feb17/22 Jul3/22	Feb10/23 Jun12/23	0ct19/23 Jan30/24 Jun11/24	
	17 H	Jur Tei	Jar	Jur	7 4		Jar Jur	
	Copper (ppm)				Silicon (ppm)			
	300 Severe			6		1		
	톱 200 -			4 d	Abnormal			
	100			2	0			
					0			
	Jun 11/20 Feb 17/22 Jul3/22	Feb10/23 Jun12/23	0ct19/23 Jan30/24	Jun11/24	Jun11/20 Feb17/22 Jul3/22	Feb 10/23 Jun 12/23	Oct19/23 Jan30/24 Jun11/24	
	Jun Feb	Jun	Jan	ղու	Jun Feb	Jun	Jan Jan	
	Viscosity @ 100°C	2			Base Number	-		
	¹⁶			(D)HOX Bu aquint 4. 200 200 200 200 200 200 200 20				
	14 Abnormal			OX B 8			_ /	
	(2-001) 12 - Base 12 - Base		****	 	0		\sim	
				1 m 4.	0			
				88 2.	0			
	22 + 22 +	723	/23 +			723	/23+	
	Jun 11/20 Feb 17/22 Jul3/22	Feb10/23 Jun12/23	0ct19/23 Jan30/24	Jun 11/24	Jun11/20 Feb17/22 Jul3/22	Feb10/23 Jun12/23	0ct19/23 Jan30/24 Jun11/24	
	-	-,	2	-				
_aboratory	: WearCheck USA - 50	1 Madiso	n Ave Carv	, NC 27513	м	ILLER TRUCI	K LEASING #119	
Sample No.	: PCA0128896	Recei		Jun 2024			NDUSTRIAL AVE	
Lab Number	: 06216649	Teste	e d : 24	l Jun 2024		HASBROU	CK HEIGHTS, NJ	
Jnique Number			Diagnosed : 24 Jun 2024 - Wes Dav			_	US 07604	
Test Package	: MOB 1 (Additional Te					Contact: MIKE LONGETTE		



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) F: (201)528-7053

Report Id: MILRUT [WUSCAR] 06216649 (Generated: 06/24/2024 08:34:26) Rev: 1

Certificate 12367

Contact/Location: MIKE LONGETTE - MILRUT

mlongette@millertransgroup.com

Page 2 of 2

Т: