

OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id

SJB720 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

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

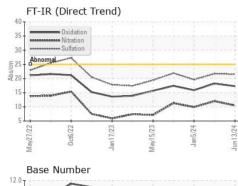
Fluid Condition

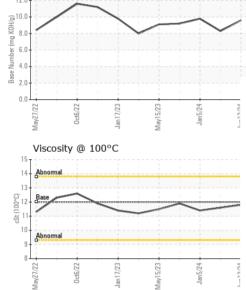
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0120990	PCA0116914	PCA0113622
Sample Date		Client Info		13 Jun 2024	04 Apr 2024	05 Jan 2024
Machine Age	mls	Client Info		121895	0	99894
Oil Age	mls	Client Info		93952	12606	4486
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATI	ON	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	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	24	35	24
Chromium	ppm	ASTM D5185m	>20	<1	1	0
Nickel	ppm	ASTM D5185m	>4	<1	1	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	3	4	2
Lead	ppm	ASTM D5185m	>40	3	4	0
Copper	ppm	ASTM D5185m	>330	2	3	1
Tin	ppm	ASTM D5185m	>15	1	2	0
Vanadium	ppm	ASTM D5185m		<1	<1	0
Cadmium	ppm	ASTM D5185m		<1	<1	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	2	2	2	7
	ppin					
Barium	ppm	ASTM D5185m	0	<1	<1	0
Barium Molybdenum			0 50	<1 68	<1 67	0 66
	ppm	ASTM D5185m				
Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m	50	68	67	66
Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	50 0	68 <1	67 1	66 0
Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 0 950	68 <1 955	67 1 919	66 0 1074
Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 0 950 1050	68 <1 955 1125	67 1 919 1170	66 0 1074 1348
Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 0 950 1050 995	68 <1 955 1125 1018	67 1 919 1170 1159	66 0 1074 1348 1197
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	50 0 950 1050 995 1180	68 <1 955 1125 1018 1245	67 1 919 1170 1159 1229	66 0 1074 1348 1197 1511
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	50 0 950 1050 995 1180 2600	68 <1 955 1125 1018 1245 2635	67 1 919 1170 1159 1229 3221	66 0 1074 1348 1197 1511 4001
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	50 0 950 1050 995 1180 2600 limit/base	68 <1 955 1125 1018 1245 2635 current	67 1 919 1170 1159 1229 3221 history1	66 0 1074 1348 1197 1511 4001 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 0 950 1050 995 1180 2600 limit/base	68 <1 955 1125 1018 1245 2635 current 4	67 1 919 1170 1159 1229 3221 history1 5	66 0 1074 1348 1197 1511 4001 history2 4
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	50 0 950 1050 995 1180 2600 limit/base >25	68 <1 955 1125 1018 1245 2635 <u>current</u> 4 <1	67 1 919 1170 1159 1229 3221 history1 5 2	66 0 1074 1348 1197 1511 4001 history2 4 3
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm	ASTM D5185m ASTM D5185m	50 0 950 1050 995 1180 2600 limit/base >25	68 <1 955 1125 1018 1245 2635 <u>current</u> 4 <1 2 <u>current</u> 1.4	67 1 919 1170 1159 1229 3221 history1 5 2 2 2 history1 1.5	66 0 1074 1348 1197 1511 4001 history2 4 3 0 history2 1.1
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	50 0 950 1050 995 1180 2600 limit/base >25 >20 limit/base	68 <1 955 1125 1018 1245 2635 current 4 <1 2 current	67 1 919 1170 1159 1229 3221 history1 5 2 2 2 history1 1.5 12.0	66 0 1074 1348 1197 1511 4001 history2 4 3 0 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINAN Silicon Sodium Potassium INFRA-RED Soot %	ppm	ASTM D5185m ASTM D5185m	50 0 950 1050 995 1180 2600 limit/base >25 >20 limit/base >3	68 <1 955 1125 1018 1245 2635 <u>current</u> 4 <1 2 <u>current</u> 1.4	67 1 919 1170 1159 1229 3221 history1 5 2 2 2 history1 1.5	66 0 1074 1348 1197 1511 4001 history2 4 3 0 history2 1.1
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	50 0 950 1050 995 1180 2600 limit/base >25 >20 limit/base >3 >20	68 <1 955 1125 1018 1245 2635 <u>current</u> 4 <1 2 2 <u>current</u> 1.4 10.5	67 1 919 1170 1159 1229 3221 history1 5 2 2 2 history1 1.5 12.0	66 0 1074 1348 1197 1511 4001 history2 4 3 0 history2 1.1 9.9
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	50 0 950 1050 995 1180 2600 imit/base >25 >20 imit/base >3 >20 >30	68 <1 955 1125 1018 1245 2635 current 4 <1 2 current 1.4 10.5 21.5	67 1 919 1170 1159 1229 3221 history1 5 2 2 history1 1.5 12.0 21.7	66 0 1074 1348 1197 1511 4001 history2 4 3 0 history2 1.1 9.9 19.6



OIL ANALYSIS REPORT





VISUAL		method				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	20.L	NEG	NEG	NEG
FLUID PROPE		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	12.00	11.8	11.6	11.4
GRAPHS						
Iron (ppm)				Lead (ppm)		
⁵⁰			10	T :: T		
00 - Severe			- 8) - Gevere		
Abnormal			6 8	Abnormal		
00 - Abnormal			- 4	Abnormal		
50	\wedge		2	•		
		44				24
May27/22 0ct6/22	Jan 17/23 May 15/23	Jan5/24	Jun13/24	May27/22 0ct6/22	Jan 17/23 - May 15/23 -	Jan5/24
2		-	٦٢ ٢	_		-
Aluminum (ppm)			5	Chromium (p	pm)	
Severe	Α		- 4	Severe		
0-	/ \			,		
20 Abnormal	/		³	Abnormal	·	
	/ \			p.		
	/ \					
May27/22 0ct6/22	Jan 17/23 May 15/23	Jan5/24	Jun13/24	May27/22 0ct6/22	Jan 17/23 May 15/23	Jan5/24
May	May	- P	unr	May	Jan	Ja
Copper (ppm)				Silicon (ppm)		
Severe	++		8	Severe		
0			6	D -		
			<u>E</u> 4	D -		
00			2	Abnormal	\wedge	
122	//23	Jan5/24 -		6/22	1/23	Jan5/24 -
May27/22 0ct6/22	Jan 1 //23 Mav 15/23	Jang	Jun13/24	May27/22 0ct6/22	Jan 17/23 May 15/23	Jan5/24
Viscosity @ 100°			-	Base Number		
6])		
4 Abnormal			(¹⁰ H10.) Bu) bay Mumpar Mumpar Bayse R		1-	~
Base			B 8.	1		
			eg 0.	D -		
O Abnormal			2 es 2.	0		
8 12 12		51	0.0) + + + + +	<u></u>	
May27/22	Jan 1 //23 May 15/23	Jan5/24	Jun 13/24	May27/22 0ct6/22	Jan 17/23 May 15/23	Jan5/24
Ma Ma	Ma Ma	7	٦٢	Ma	Ma	
VearCheck USA - 50)1 Madisc	n Ave., Cary	, NC 27513	М	ILLER TRUCK	LEASING #11
PCA0120990	Rece	i ved : 02	2 Jul 2024		63 REPAUPO S	
6225969	Teste		3 Jul 2024		LOGAN ⁻	TOWNSHIP, N
1109462	Diagr		3 Jul 2024 - W	es Davis	~	US 0808
IOB 1 (Additional T			2			tact: ED DAVI
ntact Customer Serv	VICE at 1-8	00-237-1369	1. 11 11		edavis@miller	transgroup.con

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)

Certificate L2367

Laboratory Sample No. Lab Number Unique Number Test Package

Contact/Location: ED DAVIS - MILLOG

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