

OIL ANALYSIS REPORT

Sample Rating Trend





PETRO CANADA DURON SHP 15W40 (34 QTS)

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

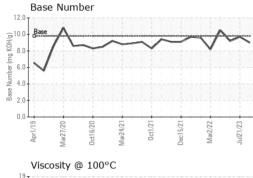
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

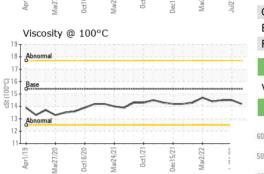
x10)		pr2019 Mar2	020 Oct2020 Mar2021	0ct2021 Dec2021 Mar2022	Jul2023	
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		GFL0103798	GFL0076967	GFL0064942
Sample Date		Client Info		07 Dec 2023	21 Jul 2023	03 Jan 2023
Machine Age	hrs	Client Info		11224	4485	0
Oil Age	hrs	Client Info		688	600	600
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATI	ON	method	limit/base	current	history1	history2
Fuel		WC Method	>3.0	<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	>75	2	2	6
Chromium	ppm	ASTM D5185m	>5	0	0	<1
Nickel	ppm	ASTM D5185m	>4	0	0	<1
Titanium	ppm	ASTM D5185m	>2	0	0	0
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>15	<1	<1	2
Lead	ppm	ASTM D5185m	>25	<1	0	1
Copper	ppm	ASTM D5185m	>100	<1	0	<1
Tin	ppm	ASTM D5185m	>4	0	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	<1
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	4	10	6
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	56	63	61
Manganese	ppm	ASTM D5185m	0	0	<1	<1
Magnesium	ppm	ASTM D5185m	1010	906	1024	1045
Calcium	ppm	ASTM D5185m	1070	1052	1188	1268
Phosphorus	ppm	ASTM D5185m	1150	1010	1135	1088
Zinc	ppm	ASTM D5185m	1270	1268	1360	1421
Sulfur	ppm	ASTM D5185m	2060	2633	4155	4093
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	9	3	8
Sodium	ppm	ASTM D5185m		<1	<1	2
Potassium	ppm	ASTM D5185m	>20	0	0	2
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>6	0.1	0.1	0.2
Nitration	Abs/cm	*ASTM D7624	>20	5.4	4.7	6.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.4	17.2	18.1
FLUID DEGRAD)ATION	method				history2
FLUID DEGRAD Oxidation Base Number (BN)	ATION Abs/.1mm mg KOH/g	*ASTM D7414	>25	current 13.3 9.0	history1 12.9 9.7	history2 13.8 9.2



OIL ANALYSIS REPORT

VISUAL





	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
Dec15/21 Mar2/22 Jul21/23	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Jui Mi	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
	Visc @ 100°C	cSt	ASTM D445	15.4	14.2	14.5	14.5
	GRAPHS						
	Ferrous Alloys						
2/22	50 - iron chromium						
Mar2/22	40 - Nickel						
	튭 30						
		٨					
		Λ_{\sim}	\sim				
				-			
	Apr1/19 Mar27/20 Oct16/20	Mar24/21 0ct1/21	Dec15/21 Mar2/22	Jul21/23			
	≥ ⊂ Non-ferrous Meta						
	400 copper						
	350 - Lead						
	300						
E	250						
Ē	150						
	100						
	50						
		2121	5				
				2			
	Apr1/1 ar27/2 ct16/2	0ct1/21	lec15/2 Mar2/2;	ul21/23			
	—	Σ	Dec15/21 Mar2/22	Jul21/23			
	Viscosity @ 100°(Dec15/2 Mar2/2		Base Number		
	Viscosity @ 100°		Dec15/2 Mar2/2	12.0			
	Viscosity @ 100°		Dec15/2 Mar2/2	12.0	Base Number	~~~~	
	Viscosity @ 100°		Dec15/2 Mar2/2	12.0		~~~~	\sim
	Viscosity @ 100°		Dec15/2 Mar2/2/	12.0		~~~~	
	Viscosity @ 100°		Dec15/2	12.0		~~~~	~~~
	Viscosity @ 100°0		Dec15/2 Mar2/2	12.0- 10.0- (0)HOX 8.0- WW) 10 6.0-		~~~~	
	Viscosity @ 100°0		Dec15/2	12.0 10.0 (0)HOX DU aquumy asses 2.0 0.0	Base	~~~	~~~
	Viscosity @ 100°0			12.0 10.0 (0)HOX 00 adminy according 4.0 2.0 0.0	Base	24/21 tt1/21 15/21	21/23
	Viscosity @ 100°0		Dec15/21Dec15/2 Mat2/22	12.0 10.0 (0)HOX DU aquumy asses 2.0 0.0		Mar24/21	JuE1/23
Laboratory	Viscosity @ 100°0	Mar24/21	Dec15/21	12.0 10.0- (⁰)HOX BW) as fully as f	Apri//19 Mar27/20 Oct16/20	0ct12/1 Dec15/21 ironmental - 020	
Laboratory Sample No.	Viscosity @ 100° Viscosity @ 100° Abnormal	C IZH200 501 Madis Received		12.0 10.0	Apri//19 Mar27/20 Oct16/20	≥ □ ironmental - 020) - Alamance t Gilbreath St
Laboratory Sample No. Lab Number	Viscosity @ 100°0	501 Madia Received Diagnose	Lizzi 27272mw soon Ave., Ca d : 14 l ed : 15 l	12.0 10.0	Apri//19 Mar27/20 Oct16/20	≥ □ ironmental - 020) - Alamance t Gilbreath St Graham, NC
Laboratory Sample No.	Viscosity @ 100° Viscosity @ 100° Abnormal	C IZH200 501 Madis Received	Lizzi 27272mw soon Ave., Ca d : 14 l ed : 15 l	12.0 10.0	Apri//19 Mar27/20 Oct16/20	≥ □ ironmental - 020) - Alamance t Gilbreath St

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

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Page 2 of 2

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