

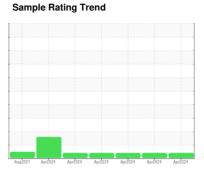
OIL ANALYSIS REPORT

RP-101 [10024147044]

B57006Component

Component **Gearbox**

PETRO CANADA SYNDURO SHB ISO 460 (--- QTS)





DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Fluid Condition

Viscosity of sample indicates oil is within ISO 150 range, advise investigate. Confirm oil type. The AN level is acceptable for this fluid.

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2	
Sample Number		Client Info		WC0907984	WC0923592	WC0923589	
Sample Date		Client Info		21 Apr 2024	20 Apr 2024	19 Apr 2024	
Machine Age	hrs	Client Info		0	0	0	
Oil Age	hrs	Client Info		0	0	0	
Oil Changed		Client Info		N/A	N/A	N/A	
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL	
CONTAMINATIO	V	method	limit/base	current	history1	history2	
Water		WC Method	>0.2	NEG	NEG	NEG	
WEAR METALS		method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>200	<1	3	2	
Chromium	ppm	ASTM D5185m	>15	<1	<1	<1	
Nickel	ppm	ASTM D5185m	>15	<1	<1	<1	
Titanium	ppm	ASTM D5185m		<1	<1	<1	
Silver	ppm	ASTM D5185m		0	0	0	
Aluminum	ppm	ASTM D5185m >25		2	2	2	
Lead	ppm	ASTM D5185m	>100	0	0	0	
Copper	ppm	ASTM D5185m	>200	<1	<1	<1	
Tin	ppm	ASTM D5185m	>25	<1	<1	<1	
Vanadium	ppm	ASTM D5185m		<1	<1	<1	
Cadmium	ppm	ASTM D5185m		<1	<1	<1	
ADDITIVES		method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m		0	0	0	
Barium	ppm	ASTM D5185m	5.0	0	0	0	
Molybdenum	ppm	ASTM D5185m		<1	<1	<1	
Manganese	ppm	ASTM D5185m		0	0	0	
Magnesium	ppm	ASTM D5185m	5.0	0	<1	<1	
Calcium	ppm	ASTM D5185m	5.0	0	0	0	
Phosphorus	ppm	ASTM D5185m	60	296	305	259	
Zinc	ppm	ASTM D5185m	5.0	<1	3	0	
Sulfur	ppm	ASTM D5185m	1900	1097	1285	1444	
CONTAMINANTS	}	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>50	2	10	3	
Sodium	ppm	ASTM D5185m		0	0	0	
Potassium	ppm	ASTM D5185m	>20	1	1	1	
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2	
Particles >4µm		ASTM D7647	>20000	3381	3165	3239	
Particles >6µm		ASTM D7647	>5000	1486	1296	997	
Particles >14µm		ASTM D7647	>640	359	251	134	
Particles >21µm		ASTM D7647	>160	161	99	47	
Particles >38μm		ASTM D7647	>40	17	7	4	
Particles >71µm		ASTM D7647	>10	1	1	1	
Oil Cleanliness		ISO 4406 (c)	>21/19/16	19/18/16	19/17/15	19/17/14	
FLUID DEGRADA	ATION	method	limit/base	current	history1	history2	
A : I N I (ANI)	1/011/	4 OTM D0045	0.0	0.27	0.00	0.40	

Acid Number (AN)

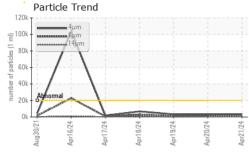
mg KOH/g ASTM D8045 0.3

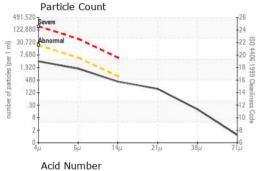
0.37 0.38 0.40

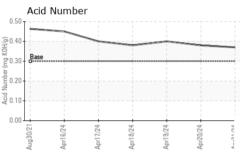
Contact/Location: RYAN LOWE - HORAUS

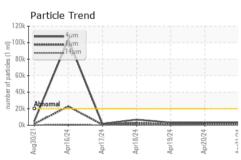


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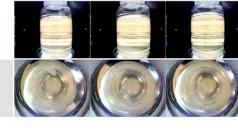




VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	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		NEG	NEG	NEG
FLUID PROPERTIES		method	limit/base	current	history1	history2

Visc @ 40°C	cSt	ASTM D445	452	<u> </u>	1 37	▲ 182
SAMPLE IMAGE	ES	method	limit/base	current	history1	history2
Color						





GR	APHS											
	ous Alloy	/S						icle Co	unt			
10-	iron chromiun	n					491,520 Severe 122,880					726 -24
5-7							30,720 Abnorm	al				-22
210	- 24	4	- 47		45	***	₹ 7,680	-	1			20 🗵
Aug30/21	Apr16/24	Apr17/24	Apr18/24	Apr19/24	Apr20/24	Apr21/24	1.920 - 1.920 - 480 - 480					120 4406:1999 Cleanliness Code
	-ferrous	Metal	S				100 tall (100 ta					16 Clea
8	copper						120 -			1		+14 miness
- 61	tin						30-				1	-12 ^{Co} d
2							8-				,	10
Aug30/21	Apr16/24	Apr17/24	Apr18/24	Apr19/24	Apr20/24	Apr21/24	2-					18
	osity @ 4		Αp	Ą	Ą	Ap		6μ Numb	14μ er	21μ	38μ	71 _µ 6
400 - Abno							Rase (mg KOH/d) Numper (mg KOH/d) Base (mg KOH/d) Numper (mg KOH/d					
200	\	_		_			0.20 Nmp 0.10					
Aug30/21	Apr16/24 -	Apr17/24 -	Apr18/24	Apr19/24 -	Apr20/24 -	Apr21/24	Aug30/21	Apr16/24 -	Apr17/24 -	Apr18/24	Apr19/24	Apr20/24





Certificate 12367

Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0907984

Lab Number : 06157664 Unique Number : 10993087

Received : 23 Apr 2024 **Tested** Diagnosed

: 24 Apr 2024

: 25 Apr 2024 - Angela Borella

Test Package : IND 2 (Additional Tests: PrtCount) 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)

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