

OIL ANALYSIS REPORT

Sample Rating Trend



North Big Ridge 2 Component

Compressor Fluid

PETRO CANADA TURBOFLO R&O 150 (55 GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

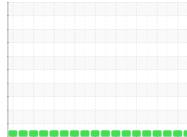
All component wear rates are normal.

Contamination

There is no indication of any contamination in the component.

Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.



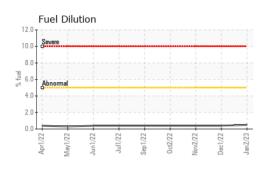


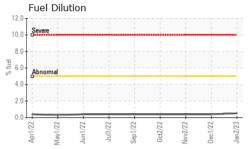
Int/027 Jun/027 Sep/027 Nov/027 Jan/023 Mar/023 Mar/023 Int-2024

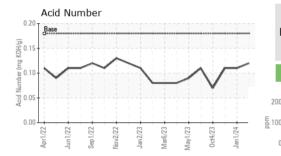
SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		PCA0103445	PCA0103444	PCA0103443
Sample Date		Client Info		01 Feb 2024	01 Jan 2024	01 Dec 2023
Machine Age	hrs	Client Info		101576	100860	100136
Oil Age	hrs	Client Info		12902	12186	11462
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINAT	ION	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	NEG
WEAR METAL	S	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	0	0	0
Chromium	ppm	ASTM D5185m	>10	0	0	0
Nickel	ppm	ASTM D5185m		<1	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	0	2	0
Lead	ppm	ASTM D5185m	>25	<1	0	0
Copper	ppm	ASTM D5185m	>50	0	0	0
Tin	ppm	ASTM D5185m	>15	0	0	0
Vanadium	ppm	ASTM D5185m		0	0	0
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		0	0	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		0	0	0
Magnesium	ppm	ASTM D5185m		1	0	<1
Calcium	ppm	ASTM D5185m	0	3	1	5
Phosphorus	ppm	ASTM D5185m	4	4	33	7
Zinc	ppm	ASTM D5185m	0	0	0	0
Sulfur	ppm	ASTM D5185m		619	677	675
CONTAMINAN	TS	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	0	0	0
Sodium	ppm	ASTM D5185m		1	0	0
Potassium	ppm	ASTM D5185m	>20	2	1	0
FLUID DEGRAD	DATION	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.18	0.12	0.11	0.11



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VISU	۹L				me	thod	limit/ba	.se	curre	ent		histo	ory1		hist	ory2
Nhite Me	etal		SCa	alar	*Visu	ual	NONE		NONE		Ν				NON	E
Yellow N	letal		SCa	alar	*Visu	ual	NONE		NONE		Γ		-		NON	E
Precipita	te		SCa	lar	*Visu	ual	NONE		NONE		ľ	IONE	-		NON	E
Silt			SCa	alar	*Visu	ıal	NONE		NONE		Ν	IONE	-		NON	E
Debris			SCa	alar	*Visu	Jal	NONE		NONE		Γ	IONE	-		NON	E
Sand/Dir	t		SCa	alar	*Visu	ual	NONE		NONE		N	IONE	-		NON	E
Appeara	nce		SCa	alar	*Visu	ual	NORML		NORN	L	ľ	JORN	ΛL		NOR	ML
Odor			SCa	lar	*Visu	ual	NORML		NORM	L	ľ	JORN	ΛL		NOR	ML
Emulsifie	d Wa	ter	sca	ılar	*Visu	ual	>0.1		NEG		Γ	IEG			NEG	
- ree Wa	ter		SCa	alar	*Visu	Jal			NEG		Ν	IEG			NEG	
FLUI) PR	OPE	RTI	ES	me	thod	limit/bas	se	curre	ent		histo	ory1		hist	ory2
/isc @ 4			cSt		ASTN	/I D445	137.1		144		1	42.9			143	
SAMF	PLE I	MAC	GES		me	thod	limit/ba	.se	curre	ent		histo	ory1		hist	ory2
Color											a.			•	no im	age
Bottom															no im	age
														1		
GRAF	PHS													1		
								l	_ead (p	pm)				1		
GRAF Iron (p								100 T	_ead (p	pm)						
GRAF								100 E 50		pm)						
GRAF Iron (p		Nov2/22	Jan2/23	Mar6/23	May1/23	0ct4/23	Jan 1/24	100 E 50	Severe Abnormal	Sep1/22	Nov2/22	Jan2/23	Mar6/23	May1/23	Oct4/23	Jan 1/24
GRAF Iron (p	Sep1/22		Jan 2/23	Mar6/23	May1/23	0ct4/23			Approximate 22/1 unf	Sep1/22	_	Jan2/23	Mar6/23	May1/23	0ct4/23	Jan1/24
GRAF Iron (p Severe Abnomal 227/uny Alumin	Sep1/22		Jan 2/23	Mar6/23	May1/23	0ct4/23			Severe Abnormal	Sep1/22	_	Jan2/23	Mar6/23	May1/23	0ct4/23	Jan 1/24
GRAF Iron (p Severe Abnormal ZZ/Juby Alumin	Sep1/22		Jan2/23	Mar6/23	May1/23	0ct4/23			Abnormal 22/1unr Chromit Severe	Sep1/22	_	Jan2/23	Mar6/23	May1/23	0ct4/23	Jan1/24
GRAF Iron (p Severe Abnormal Alumin Severe Abnormal	Sep1/22		Jan 2/23	Mar6/23		0ct4/23			Abnormal 22/1 unf Chromi	Sep1/22	_	Jan 2/23	Mar6/23	May1/23		Jan 1/24
GRAF Iron (p Abnomal 2011/dy Alumin Severe Abnomal	pm) Sep1/22 um (p	opm)					Jan 1/24		Severe Abnormal ZZ/Junn Chromiu Severe Abnormal	1) ur Sep1/22	opm)					
GRAF	ap1/22	opm)	Jan2/23 Jan2/23	Mar6/23 Mar6/23	May1/23 May1/23	0ct4/23 0ct4/23			Abnormal 27/10/2007	Sep1/22	00v2/22	Jan2/23 Jan2/23	Mar6/23 Mar6/23	May1/23 May1/23	0ct4/23 0ct4/23	Jan 1/24 Jan 1/24
GRAF Iron (p Abnomal 2011/dy Alumin Severe Abnomal	ap1/22	opm)					Jan 1/24		Severe Abnormal ZZ/Junn Chromiu Severe Abnormal	Sep1/22	00v2/22					
GRAF Iron (p Severe Abnomal Alumin Alumin Abnomal Copper Severe Copper	ap1/22	opm)					Jan1/24 Jan1/24		Abnormal 27/100 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/200 20/2000	Sep1/22	00v2/22					
GRAF Iron (p Severe Abnomal Abnomal Copper Severe Abnomal Copper Severe Abnomal Abnomal Copper Severe Abnomal Abnomal Copper Severe Abnomal Copper Severe Abnomal Copper Severe Abnomal Copper Severe Abnomal Copper Severe Abnomal Copper Severe Abnomal Copper Severe Abnomal Copper Severe Abnomal Copper	ap1/22	opm)					Jan1/24 Jan1/24		Abnomal Abnomi Chromit Severe Abnomal Selicon (Sep1/22	00v2/22					
GRAF Iron (p Abnomal Abnomal Abnomal Abnomal Copper Abnomal	pm) um (p c (ppn	ppm) איזגער איזגער איזגער איזגער	Jan2/23	Mar6/23	May1/23		Jan1/24 Jan1/24		Abnomal Abnomal 27/10/2 20/	(jmp) (mmp)) (mmp) (mmp) (mmp)) (mmp) (mmp)) (mmp	Nov2/22		Mar6/23	May1/23		Jan 1/24
GRAF Iron (p <u>Severe</u> <u>Abnomal</u> <u>Copper</u> <u>Abnomal</u> <u>Copper</u> <u>Abnomal</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u>	bw) amiliz2 (bbu (bbu (bbu	المركزي (سرام المركزي المركز الم				0ct4/23	Jan1/24 Jan1/24 Jan1/24		Abnormal Chromiu Severe Abnormal Silicon (Severe Abnormal Chromiu Severe Abnormal Chromiu Savere	Sep1/22 (unded Sep1/22) unded (1/22) (1/22)	Nov2/22 Nov2/22	Jan2/23			0ct4/23	
GRAF Iron (p Abnomal Abnomal Abnomal Copper Copper C	bw) amiliz2 (bbu (bbu (bbu	المركزي (سرام المركزي المركز الم	Jan2/23	Mar6/23	May1/23	0ct4/23	Jan1/24 Jan1/24 Jan1/24		Severe Abnormal Chromiu Severe Abnormal Silicon (Severe Abnormal C2/Iun Silicon (Severe	Sep1/22 (unded Sep1/22) unded (1/22) (1/22)	Nov2/22 Nov2/22	Jan2/23	Mar6/23	May1/23	0ct4/23	Jan 1/24
GRAF Iron (p Abnomal ZZIJudy Alumin Alumin ZZIJudy Coppel Abnomal ZZIJudy Coppel Abnomal ZZIJudy Viscosi	bw) amiliz2 (bbu (bbu (bbu	المركزي (سرام المركزي المركز الم	Jan2/23	Mar6/23	May1/23	0ct4/23	Jan1/24 Jan1/24 Jan1/24		Abnormal Chromiu Severe Abnormal Silicon (Severe Abnormal Chromiu Severe Abnormal Chromiu Savere	Sep1/22 (unded Sep1/22) unded (1/22) (1/22)	Nov2/22 Nov2/22	Jan2/23	Mar6/23	May1/23	0ct4/23	Jan 1/24
GRAF Iron (p <u>Severe</u> <u>Abnomal</u> <u>Copper</u> <u>Abnomal</u> <u>Copper</u> <u>Abnomal</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u> <u>Copper</u>	bw) amiliz2 (bbu (bbu (bbu	المركزي (سرام المركزي المركز الم	Jan2/23	Mar6/23	May1/23	0ct4/23	Jan1/24 Jan1/24		Abnormal Zorlun Severe Abnormal Zorlun Severe Abnormal Zorlun Severe Abnormal Zorlun Chromiu Severe Abnormal Zorlun Chromiu Severe Abnormal Zorlun Chromiu Severe Abnormal Corlun Chromiu Severe Chromiu Severe Chromiu Severe Chromiu Severe Chromiu Severe Chromiu Severe Chromiu Chromi	Sep1/22 (unded Sep1/22) unded (1/22) (1/22)	Nov2/22 Nov2/22	Jan2/23	Mar6/23	May1/23	0ct4/23	Jan 1/24

Unique Number : 10885269 Diagnosed : 20		US 24226
Certificate 12367 Test Package : MOB 2 (Additional Tests: FuelDilution) To discuss this sample report, contact Customer Service at 1-800-237-136 * - Denotes test methods that are outside of the ISO 17025 scope of accre Statements of conformity to specifications are based on the simple accept.	reditation.	Contact: Service Manager T: