

## **OIL ANALYSIS REPORT**

Sample Rating Trend







PROTO 5 Component Steering

#### Fluid PETRO CANADA ATF D3M (--- GAL)

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

The system cleanliness is acceptable for your target ISO 4406 cleanliness code. The system and fluid cleanliness is acceptable.

### Fluid Condition

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

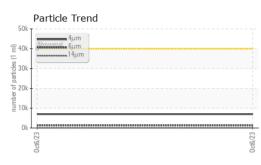
SAMPLE INFORM	<b>MATION</b>	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0604320		
Sample Date		Client Info		06 Oct 2023		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>60	4		
Chromium	ppm	ASTM D5185(m)	>12	0		
Nickel	ppm	ASTM D5185(m)	>6	<1		
Titanium	ppm	ASTM D5185(m)		0		
Silver	ppm	ASTM D5185(m)		<1		
Aluminum	ppm	ASTM D5185(m)	>4	<1		
Lead	ppm	ASTM D5185(m)	>12	<1		
Copper	ppm	ASTM D5185(m)	>30	<1		
Tin	ppm	ASTM D5185(m)		0		
Antimony	ppm	ASTM D5185(m)		0		
Vanadium	ppm	ASTM D5185(m)		0		
Beryllium	ppm	ASTM D5185(m)		0		
Cadmium	ppm	ASTM D5185(m)		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	98	118		
Barium	ppm	ASTM D5185(m)	< 0.00	<1		
Molybdenum	ppm	ASTM D5185(m)		0		
Manganese	ppm	ASTM D5185(m)		0		
Magnesium	ppm	ASTM D5185(m)	<1	<1		
Calcium	ppm	ASTM D5185(m)	70	59		
Phosphorus	ppm	ASTM D5185(m)	220	256		
Zinc	ppm	ASTM D5185(m)		14		
Sulfur	ppm	ASTM D5185(m)	710	745		
Lithium	ppm	ASTM D5185(m)		<1		
CONTAMINANTS	\$	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>10	7		
Sodium	ppm	ASTM D5185(m)		1		
Potassium	ppm	ASTM D5185(m)	>20	<1		
FLUID CLEANLIN	IESS	method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>40000	6980		
Particles >6µm		ASTM D7647	>2500	1287		
Particles >14µm		ASTM D7647	>80	27		
Particles >21µm		ASTM D7647	>20	4		
Particles >38µm		ASTM D7647	>4	2		
Particles >71µm		ASTM D7647		-		
Oil Cleanliness		ISO 4406 (c)	>22/18/13	20/17/12		
FLUID DEGRADA	TION_	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D974*	0.81	1.09		
	iiiy NOA/g	ASTIVI D9/4	0.01	1.09		

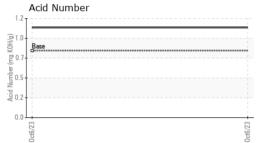
Report Id: SKYGUE [WCAMIS] 02590263 (Generated: 10/22/2023 09:26:07) Rev: 1

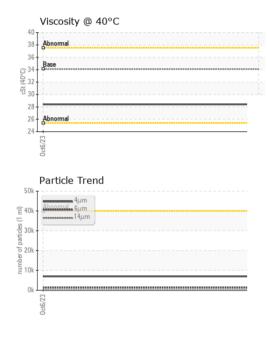
Contact/Location: Vishal Kanwar - SKYGUE



# **OIL ANALYSIS REPORT**







VISUAL		method				history2
White Metal	scalar	Visual*	NONE	NONE		
Yellow Metal	scalar	Visual*	NONE	NONE		
Precipitate	scalar	Visual*	NONE	NONE		
Silt	scalar	Visual*	NONE	NONE		
Debris	scalar	Visual*	NONE	NONE		
Sand/Dirt	scalar	Visual*	NONE	NONE		
Appearance	scalar	Visual*	NORML	NORML		
Ddor	scalar	Visual*	NORML	NORML		
Emulsified Water	scalar	Visual*		NEG		
Free Water	scalar	Visual*		NEG		
FLUID PROPERT	IES	method	limit/base	current	history1	history2
/isc @ 40°C	cSt	ASTM D7279(m)	34.11	28.4		
SAMPLE IMAGES	6	method	limit/base	current	history1	history2
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Color					no image	no image
					_	_
				0		
Bottom					no image	no image
Jolioni						
GRAPHS				Particle Count		
			491,520	Particle Count		T <sup>26</sup>
GRAPHS				Particle Count		[26
GRAPHS Ferrous Alloys			122,880	Severe Abnormal		
GRAPHS Ferrous Alloys				Severe Abnormal		-24 -24 -22
GRAPHS Ferrous Alloys			122,880 30,720 7,680	Severe Abnormal		-24
GRAPHS Ferrous Alloys			122,880 30,720 7,680	Severe Abnormal		-24 -22 -20
GRAPHS Ferrous Alloys			122,880 30,720 7,680	Severe Abnormal		-24 -22 -20
GRAPHS Ferrous Alloys	5		122,880 30,720 7,680	Severe Abnormal		-24 -22 -20
GRAPHS Ferrous Alloys	5		122,880 30,720 7,680	Severe Abnormal		-24 -22 -20 -18 -16
GRAPHS Ferrous Alloys	5		122,880 30,720 7,680 E E E B B B B B B B B B B B B B B B B	Severe Abnormal		-24 -22 -20 -18 -16
GRAPHS Ferrous Alloys	5		122,880 30,720 7,680	Severe Abnormal		-24 -22 -20 -18 -16 -14
GRAPHS Ferrous Alloys	5		122,880 30,720 7,680 200 200 200 200 200 200 200 200 200 2	Severe Abnormal		-24 -22 -20 -18 -16 -14
GRAPHS Ferrous Alloys	5		122.880 30.720 7.680 7.680 7.680 1.920 90 90 90 90 90 90 90 90 90 90 90 90 90	Severe Abnormal		-24 -22 -20 -18 -16 -14 -12
GRAPHS Ferrous Alloys	5		122.880 30.720 7.680 7.680 7.680 1.920 90 90 90 90 90 90 90 90 90 90 90 90 90	Severe Abnormal		-24 -22 -20 -18 -16 -14 -12
GRAPHS Ferrous Alloys	5		الكريمة المراجع المراجع مراجع المراجع ال مراجع المراجع ال مراجع المراجع ال مراجع المراجع المراجع مراجع المراجع المراج مراجع المراجع المراجع المراجع المراجع المراج	Abnormal	t	-24 -22 -20 -18 -16 -14 -12 -10 -8 -6
GRAPHS Ferrous Alloys	5		الكريمة المراجع المراجع مراجع المراجع ال مراجع المراجع ال مراجع المراجع ال مراجع المراجع ال مراجع المراجع ال مراجع المراجع الم مراجع المراجع ال مماطع المراجع المراجع المراجع المراجع المراج	Abnormal		-24 -22 -20 -18 -16 -14 -12
GRAPHS Ferrous Alloys	5		الكريمة المراجع المراجع مراجع المراجع ال مراجع المراجع ال مراجع المراجع ال مراجع المراجع ال مراجع المراجع ال مراجع المراجع الم مراجع المراجع ال مماطع المراجع المراجع المراجع المراجع المراج	Abnormal Abnormal	t	-24 -22 -20 -18 -16 -14 -12 -10 -8 -6
GRAPHS Ferrous Alloys	S		الكريمة المراجع المراجع مراجع المراجع ال مراجع المراجع ال مراجع المراجع ال مراجع المراجع ال مراجع المراجع ال مراجع المراجع الم مراجع المراجع ال مماطع المراجع المراجع المراجع المراجع المراج	Abnormal Abnormal	t	-24 -22 -20 -18 -16 -14 -12 -10 -8 -6
GRAPHS Ferrous Alloys	5		الكريمة المراجع المراجع مراجع المراجع ال مراجع المراجع ال مراجع المراجع ال مراجع المراجع ال مراجع المراجع ال مراجع المراجع الم مراجع المراجع ال مماطع المراجع المراجع المراجع المراجع المراج	Abnormal Abnormal	t	-24 -22 -20 -18 -16 -14 -12 -10 -8 -6
GRAPHS Ferrous Alloys	5		الكريمة المراجع المراجع مراجع المراجع ال مراجع المراجع ال مراجع المراجع ال مراجع المراجع ال مراجع المراجع ال مراجع المراجع الم مراجع المراجع ال مماطع المراجع المراجع المراجع المراجع المراج	Abnormal Abnormal	t	-24 -22 -20 -18 -16 -14 -12 -10 -8 -6
GRAPHS Ferrous Alloys	5		122,880 30,720 7,680 7,680 7,680 190 480 120 30 30 30 30 30 30 30 480 30 30 30 480 30 30 480 30 30 480 30 30 480 30 30 480 30 20 30 480 30 480 30 480 30 20 30 480 30 480 30 480 30 480 30 480 30 480 30 480 30 480 30 480 30 480 30 480 30 480 480 30 480 480 30 480 480 480 30 480 480 480 480 480 480 480 480 480 48	Abnomil Abnomil Acid Number	t	-24 -22 -20 -18 -16 -14 -14 -12 -10 
GRAPHS Ferrous Alloys	5		122,880 30,720 7,680 7,680 7,680 7,680 1,920 9,0 9,0 9,0 9,0 9,0 9,0 9,0 9,0 9,0 9,	Abnormal Abnormal	t	-24 -22 -20 -18 -16 -14 -12 -10 -8 -6

 Accredited Laboratory
 Unique Number
 : 5659329
 Diagnostician
 : Kevin Marson

 Test Package
 : IND 2 (Additional Tests: PrtCount, TAN Man)

 To discuss this sample report, contact Customer Service at 1-800-268-2131.

 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.

 Validity of results and interpretation are based on the sample and information as supplied.

CALA

ISO 17025:2017

Laboratory

Sample No. Lab Number

Contact: Vishal Kanwar

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