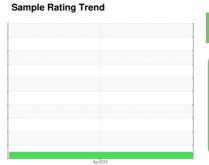


OIL ANALYSIS REPORT

Area **Pumping** H02

Rear Differential

MOBIL 75W90 (18 LTR)





Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

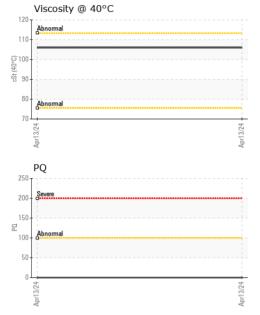
Fluid Condition

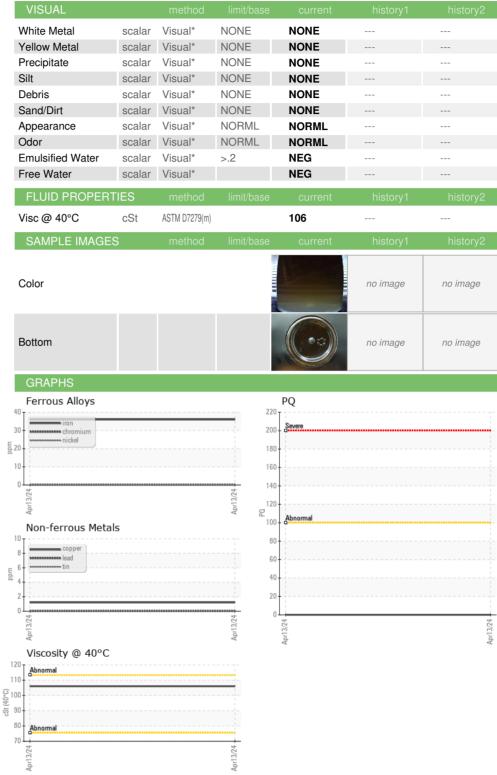
The condition of the oil is acceptable for the time in service.

Sample Date					Apr2024		
Sample Number Client Info WC0925774	OAMBLE INCOR	AATION		12 24 //		111	1::
Sample Date Client Info 13 Apr 2024	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine Age hrs Client Info 169430	Sample Number						
Oil Age hrs Client Info 0 Oil Changed Client Info Changed Sample Status NORMAL CONTAMINATION method limit/base current history1 history2 Water WC Method 2 NEG WEAR METALS method limit/base current history1 history2 PQ ASTM D8184* 0 Iron ppm ASTM D5185(m) >500 36 Chromium ppm ASTM D5185(m) >10 <1 Nickel ppm ASTM D5185(m) >10 <1 Titanium ppm ASTM D5185(m) >10 <1 Aluminum ppm ASTM D5185(m) >0 Copper ppm ASTM D5185(m)	Sample Date				13 Apr 2024		
Contained Sample Status		hrs					
NORMAL NORMAL NORMAL NORMAL NORMAL NORMATION Method Minit/Dase Current Mistory1 Mistory2 NEG Nickel NORMATION Mistory2 NEG Nickel NORMATION NICKER NORMATION NICKER NORMATION NICKER NORMATION NICKER NORMATION NICKER NORMATION NICKER NICKER	-	hrs			-		
Water WC Method Society Society Water WC Method Society WEAR METALS method Ilmil/base current history1 history2			Client Info				
Water WC Method >.2 NEG WEAR METALS method limit/base current history1 history2 PQ ASTM D8184* 0 Iron ppm ASTM D5185(m) >500 36 Chromium ppm ASTM D5185(m) >10 <1	Sample Status				NORMAL		
WEAR METALS method limit/base current history1 history2 PQ ASTM D8184* 0	CONTAMINATION	N	method	limit/base	current	history1	history2
PQ	Water		WC Method	>.2	NEG		
Iron	WEAR METALS		method	limit/base	current	history1	history2
Chromium ppm ASTM D5185(m) > 1 0 < 1 Nickel ppm ASTM D5185(m) > 10 < 1 Titanium ppm ASTM D5185(m) 0 Silver ppm ASTM D5185(m) 25 < 1 Aluminum ppm ASTM D5185(m) > 25 0 Lead ppm ASTM D5185(m) > 10 0 1 Copper ppm ASTM D5185(m) > 10 0 Antimony 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) 193	PQ		ASTM D8184*		0		
Nickel	Iron	ppm	ASTM D5185(m)	>500	36		
Titanium	Chromium	ppm	ASTM D5185(m)	>10	<1		
Silver	Nickel	ppm	ASTM D5185(m)	>10	<1		
Aluminum	Titanium	ppm	ASTM D5185(m)		0		
Lead	Silver	ppm	ASTM D5185(m)		0		
Copper ppm ASTM D5185(m) >100 1 Tin ppm ASTM D5185(m) >10 0 Antimony ppm ASTM D5185(m) >5 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) 193 Barium ppm ASTM D5185(m) 0 Molybdenum ppm ASTM D5185(m) 0 Manganese ppm ASTM D5185(m) 1 Magnesium ppm ASTM D5185(m) 1268 Zinc <td>Aluminum</td> <td>ppm</td> <td>ASTM D5185(m)</td> <td>>25</td> <td><1</td> <td></td> <td></td>	Aluminum	ppm	ASTM D5185(m)	>25	<1		
Tin ppm ASTM D5185(m) >10 0 Antimony ppm ASTM D5185(m) >5 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) 193 Barium ppm ASTM D5185(m) <1	Lead	ppm	ASTM D5185(m)	>25	0		
Antimony ppm ASTM D5185(m) >5 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) 193 Barium ppm ASTM D5185(m) <1 Molybdenum ppm ASTM D5185(m) 0 Magnesium ppm ASTM D5185(m) 1 Calcium ppm ASTM D5185(m) 1 Phosphorus ppm ASTM D5185(m) 2 Sulfur ppm ASTM D5185(m) 21079 CO	Copper	ppm	ASTM D5185(m)	>100	1		
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) 193 Barium ppm ASTM D5185(m) <1	Tin	ppm	ASTM D5185(m)	>10	0		
Beryllium	Antimony	ppm	ASTM D5185(m)	>5	0		
Cadmium ppm ASTM D5185(m) 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 193 Barium ppm ASTM D5185(m) <1	Vanadium	ppm	ASTM D5185(m)		0		
ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185(m) 193 Barium ppm ASTM D5185(m) <1	Beryllium	ppm	ASTM D5185(m)		0		
Boron ppm ASTM D5185(m) 193	Cadmium	ppm	ASTM D5185(m)		0		
Barium	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185(m) 0 Manganese ppm ASTM D5185(m) 1 Magnesium ppm ASTM D5185(m) <1 Calcium ppm ASTM D5185(m) 1 Phosphorus ppm ASTM D5185(m) 1268 Zinc ppm ASTM D5185(m) 2 Sulfur ppm ASTM D5185(m) 21079 Lithium ppm ASTM D5185(m) <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) 2 Sodium ppm ASTM D5185(m) 2	Boron	ppm	ASTM D5185(m)		193		
Manganese ppm ASTM D5185(m) 1 Magnesium ppm ASTM D5185(m) <1	Barium	ppm	ASTM D5185(m)		<1		
Manganese ppm ASTM D5185(m) 1 Magnesium ppm ASTM D5185(m) <1	Molybdenum	ppm	ASTM D5185(m)		0		
Magnesium ppm ASTM D5185(m) <1 Calcium ppm ASTM D5185(m) 1 Phosphorus ppm ASTM D5185(m) 1268 Zinc ppm ASTM D5185(m) 2 Sulfur ppm ASTM D5185(m) 21079 Lithium ppm ASTM D5185(m) <1	Manganese		ASTM D5185(m)		1		
Phosphorus ppm ASTM D5185(m) 1268 Zinc ppm ASTM D5185(m) 2 Sulfur ppm ASTM D5185(m) 21079 Lithium ppm ASTM D5185(m) <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >75 3 Sodium ppm ASTM D5185(m) 2	Magnesium		ASTM D5185(m)		<1		
Zinc ppm ASTM D5185(m) 2 Sulfur ppm ASTM D5185(m) 21079 Lithium ppm ASTM D5185(m) <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >75 3 Sodium ppm ASTM D5185(m) 2	Calcium	ppm	ASTM D5185(m)		1		
Sulfur ppm ASTM D5185(m) 21079 Lithium ppm ASTM D5185(m) <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >75 3 Sodium ppm ASTM D5185(m) 2	Phosphorus	ppm	ASTM D5185(m)		1268		
Lithium ppm ASTM D5185(m) <1 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >75 3 Sodium ppm ASTM D5185(m) 2	Zinc	ppm	ASTM D5185(m)		2		
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185(m) >75 3 Sodium ppm ASTM D5185(m) 2	Sulfur	ppm	ASTM D5185(m)		21079		
Silicon ppm ASTM D5185(m) >75 3 Sodium ppm ASTM D5185(m) 2	Lithium	ppm	ASTM D5185(m)		<1		
Sodium ppm ASTM D5185(m) 2	CONTAMINANTS	;	method	limit/base	current	history1	history2
	Silicon	ppm	ASTM D5185(m)	>75	3		
	Sodium	ppm	ASTM D5185(m)		2		
	Potassium		ASTM D5185(m)	>20	0		



OIL ANALYSIS REPORT









Laboratory

Sample No. Unique Number : 5763830

Lab Number : 02630698

: WC0925774

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 Received

Tested Diagnosed

: 22 Apr 2024 : 23 Apr 2024

: 23 Apr 2024 - Wes Davis

Test Package : FLEET (Additional Tests: PQ) 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.

GOLIATH ENERGY GROUP

3277 PARSONS RD NW EDMONTON, AB **CA T6N 1B4** Contact: Kurt Bromling kurt@goliathenergy.com T: (780)897-6262