

OIL ANALYSIS REPORT

Sample Rating Trend

Machine Id

GENERAC RANDCO OFFICE BUILDING

Natural Gas Engine Fluid SHELL ROTELLA T 15W40 (5 QTS)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

🔺 Wear

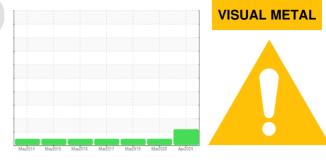
Moderate concentration of visible metal present. All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

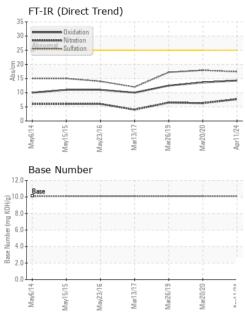
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

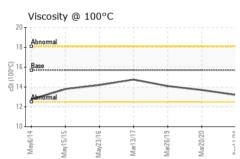


SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0887894	WC0436227	WC0329400
Sample Date		Client Info		11 Apr 2024	20 Mar 2020	26 Mar 2019
Machine Age	hrs	Client Info		0	150	131
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				ABNORMAL	NORMAL	NORMAL
CONTAMINATION	J	method	limit/base	current	history1	history2
Water		WC Method	>0.1	NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	4	5	7
Chromium	ppm	ASTM D5185m	>4	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	0	<1
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>9	2	1	1
Lead	ppm	ASTM D5185m	>30	2	0	0
Copper	ppm	ASTM D5185m	>35	4	2	3
Tin	ppm	ASTM D5185m	>4	1	0	0
Antimony	ppm	ASTM D5185m			0	0
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		2	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	316	103	10	11
Barium	ppm	ASTM D5185m	0.0	<1	0	0
Molybdenum	ppm	ASTM D5185m	1.2	81	60	66
Manganese	ppm	ASTM D5185m		1	<1	<1
Magnesium	ppm	ASTM D5185m	24	152	916	1087
Calcium	ppm	ASTM D5185m	2292	2097	1091	1251
Phosphorus	ppm	ASTM D5185m	1064	1122	983	1065
Zinc	ppm	ASTM D5185m	1160	1139	1121	1279
Sulfur	ppm	ASTM D5185m	4996	4012	3646	2717
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>+100	7	11	10
Sodium	ppm	ASTM D5185m		3	2	2
Potassium	ppm	ASTM D5185m	>20	3	2	0
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		0	0.1	0
Nitration	Abs/cm	*ASTM D7624	>20	7.7	6.3	6.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.4	17.9	17.2
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.3	13.6	12.5
Base Number (BN)	mg KOH/g	ASTM D2896	10.1	6.7		
	- J					



OIL ANALYSIS REPORT





VISUAL		method	limit/base	current	histor	y1	history2
White Metal	scalar	*Visual	NONE		NONE		NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE		NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE		NONE
Silt	scalar	*Visual		NONE	NONE		NONE
Debris	scalar	*Visual	NONE	LIGHT	NONE		NONE
Sand/Dirt	scalar	*Visual					NONE
Appearance		*Visual		NORML			NORML
Odor	scalar	*Visual	NORML	NORML			NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG		NEG
Free Water	scalar	*Visual		NEG	NEG		NEG
		method	limit/base	current		y1	history
_	cSt	ASTM D445	15.7	13.2	13.7		14.09
				Lood (nnm	`		
100 T				⁶⁰ Severe)		
80 - Severe							
40				1			
20-							
16	17	- 19 20	24	15 14	16-1-	19	20
May6/ lay15/	/lar13/	1ar26/	\pr11/	May6/	lay23/	lar26/	Mar20/20
	2	2 2	4			N	N
²⁰				⁸ T	(5611)		
15 Severe				6 - Severe		1	
			E				
			00			1	1
5-				2			
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ny 15/1 vy 15/1 vy 23/1	ar13/1	ar26/1 ar20/2	or11/2	lay6/1	ay23/1 ar13/1	ar26/1	Mar20/20
	W	W	Ag			M	M
80			20		m)		
60				50-			
E 40 - Abnormal			E 10	00 - Abnormal		1	
20 -	1						
		_					
	3/17.	6/19 -	1/24 -		3/16 -	6/19 -	0/20 .
May1: May1: May2:	Marl	Mar2	Apr1	May May1	May2	Mar2	Mar20/20
Viscosity @ 100°C					ber		
20 Abnormal			12 \$	Base	1	1	
			a KOF	.0			
Page 1			per (m	.0			
0 16 - Base			E,	0			
el 14 zg 14		1	N N				
12			(0)H00 8 9 6 9 8 9 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	.0-			
Harronna	Mar13/17+	Mar26/19 Mar20/20	Apr11/24	May6/14	May23/16 +	Mar26/19	Mar20/20 +
	White Metal Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance Odor Emulsified Water Free Water FLUID PROPERT Visc @ 100°C GRAPHS Iron (ppm) Odd Odor Builting Uisc @ 100°C GRAPHS Iron (ppm) Odd Odor Builting Copper (ppm) Odd Odor Graphic Aluminum (ppm) Odd Odor Support Support Support Odor Copper (ppm) Odd Odor Support Suppor	White Metal scalar Yellow Metal scalar Precipitate scalar Silt scalar Debris scalar Sand/Dirt scalar Appearance scalar Odor scalar Emulsified Water scalar Free Water scalar Free Water scalar Visc @ 100°C cSt GRAPHS Iron (ppm) Aluminum (ppm) Copper (ppm) Copper (ppm) Copper (ppm) Copper (ppm) Copper (ppm) Copper (ppm)	White Metal scalar *Visual Yellow Metal scalar *Visual Precipitate scalar *Visual Silt scalar *Visual Debris scalar *Visual Sand/Dirt scalar *Visual Appearance scalar *Visual Codor scalar *Visual Free Water scalar *Visual FLUID PROPERTIES method Visc @ 100°C cSt ASTM D445 GRAPHS Iron (ppm) Aluminum (ppm) Aluminum (ppm) Copper (ppm) Copper (ppm) Copper (ppm) Viscosity @ 100°C Viscosity @ 100°C	White Metal scalar *Visual NONE Yellow Metal scalar *Visual NONE Precipitate scalar *Visual NONE Silt scalar *Visual NONE Sand/Dirt scalar *Visual NONE Sand/Dirt scalar *Visual NONE Appearance scalar *Visual NORML Odor scalar *Visual NORML Emulsified Water scalar *Visual NORML Free Water scalar *Visual NORML Free Water scalar *Visual Sol.1 Free Water scalar *Visual NORML Immit/base Visc @ 100°C cSt ASTM D445 15.7 GRAPHS Iron (ppm) Aluminum (ppm) Copper (ppm) Generation of the scalar	White Metal scalar *Visual NONE MODER Yellow Metal scalar *Visual NONE NONE Precipitate scalar *Visual NONE NONE Silt scalar *Visual NONE NONE Silt scalar *Visual NONE NONE Debris scalar *Visual NONE NONE Appearance scalar *Visual NORML NORML Odor scalar *Visual NORML NORML MORML NORML Odor scalar *Visual NORML NORML MORML NOR	White Metal scalar 'Visual NONE MODER NONE Precipitate scalar 'Visual NONE NONE NONE Debris scalar 'Visual NONE NONE NONE Sand/Dirt scalar 'Visual NONE NONE NONE Sand/Dirt scalar 'Visual NONE NONE NONE Appearance scalar 'Visual NORML NORML NORML MORML NORML NORML NORM More NONE Free Water scalar 'Visual NORML NORML NORM Music @ 100°C cSt ASTM D445 15.7 13.2 13.7 GRAPHS Iron (ppm) Aluminum (ppm) Copper (ppm) Copper (ppm) Viscosity @ 100°C cSt Visual NORM OR MODE Music Water Scalar 'Visual Scalar 'Visual NORML NORM Music @ 100°C cSt ASTM D445 15.7 13.2 13.7 GRAPHS Iron (ppm) Copper (ppm) Music Water Scalar 'Visual NORM OR MODE Music @ 100°C cSt ASTM D445 15.7 13.2 13.7 GRAPHS Iron (ppm) Copper (ppm) Music Water Water Scalar 'Visual NORM OR MODE Music @ 100°C cSt ASTM D445 15.7 13.2 13.7 GRAPHS Iron (ppm) Copper (ppm) Music Water	White Metal scalar *Visual NONE MODER NONE Precipitate scalar *Visual NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual NORML NORML NORML NORML Visc @ 100°C cSt ASTM D445 15.7 13.2 13.7 GRAPHS Tron (ppm)

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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Certificate L2367

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