

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

Machine Id

JACKIE JONES TOWER 0779400

Diesel Engine

Fluid DIESEL ENGINE OIL SAE 15W40 (--- 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 oil.

Fluid Condition

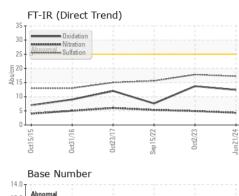
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

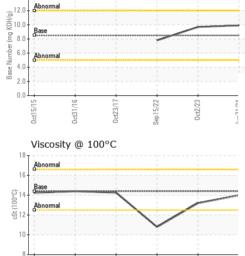
SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0921614	WC0834375	WC0699377
Sample Date		Client Info		21 Jun 2024	02 Oct 2023	15 Sep 2022
Machine Age	hrs	Client Info		1288	0	1189
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	N/A	Changed
Sample Status				NORMAL	NORMAL	ATTENTION
CONTAMINATION	٧	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	0.2
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	<1	4	2
Chromium	ppm	ASTM D5185m	>20	<1	0	3
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		0	0	19
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	3	2	2
Lead	ppm	ASTM D5185m	>40	0	0	8
Copper	ppm	ASTM D5185m	>330	0	1	1
Tin	ppm	ASTM D5185m	>15	0	0	<1
Antimony	ppm	ASTM D5185m				
Vanadium	ppm	ASTM D5185m		0	0	1
Cadmium	ppm	ASTM D5185m		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	250	19	39	134
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	60	66	59
Manganese	ppm	ASTM D5185m		0	0	<1
Magnesium	ppm	ASTM D5185m	450	906	888	204
Calcium	ppm	ASTM D5185m	3000	1038	1108	1937
Phosphorus	ppm	ASTM D5185m	1150	901	1057	748
Zinc	ppm	ASTM D5185m	1350	1216	1255	867
Sulfur	ppm	ASTM D5185m	4250	2948	3739	3125
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	5	3	6
Sodium	ppm	ASTM D5185m	>158	0	<1	1
Potassium	ppm	ASTM D5185m	>20	1	1	2
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	0	0.1	0
Nitration	Abs/cm	*ASTM D7624	>20	4.3	4.9	5.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.2	17.8	15.6
FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.4	13.7	7.6
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	9.9	9.7	7.8
9:10:46) Rev: 1				Contact/Locati	on: Chris Halvor	sen - GENNEW

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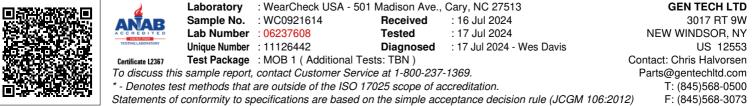
0ct23/17

Dct31/16

Sep15/22

0ct2/23

VISUAL		method	limit/base	current	history	y I	histo	
/hite Metal	scalar	*Visual	NONE	NONE	NONE		NONE	
ellow Metal	scalar	*Visual	NONE	NONE	NONE		NONE	
recipitate	scalar	*Visual	NONE	NONE	NONE		NONE	
ilt	scalar	*Visual	NONE	NONE	NONE		NONE	
ebris	scalar	*Visual	NONE	NONE	NONE		NONE	
and/Dirt	scalar	*Visual	NONE	NONE	NONE		NONE	
ppearance	scalar	*Visual	NORML	NORML	NORML	_	NORM	۱L
dor	scalar	*Visual	NORML	NORML	NORML	-	NORN	1L
mulsified Water	scalar	*Visual	>0.2	NEG	NEG		NEG	
ree Water	scalar	*Visual		NEG	NEG		NEG	
FLUID PROPER	TIES	method	limit/base	current	history	y1	histo	ry2
isc @ 100°C	cSt	ASTM D445	14.4	14.0	13.2		10.8	
GRAPHS								
Iron (ppm)			100	Lead (ppm)				
Severe		1	80	Severe				
			60	,				
Abnormal			4(Abnormal				
			20	,				
0ct15/15 0ct31/16	Sep15/22 -	0ct2/23	Jun21/24	0ct15/15 0ct31/16	0ct23/17	Sep 15/22	0ct2/23	
	Sep	00	Jun	0ct 0ct	Oct	Sep	00	
Aluminum (ppm)				Chromium (p	pm)			
1			50	Savara	pm)			
Aluminum (ppm)			40	Severe	pm)			
Severe			40	Severe	pm)			
1			- 40 	Abnormal	pm)			
Severe			40 토 3 ³ 20 10	Abnormal	pm)			
Abnormal	/22	E2/	40 50 20 10	Abnormal		/22	/23	
Severe	sep 15/22	042/23 +	40 50 20 10	Abnormal	0453/17-	sep 15/22 +	0ct2/23	
Abnormal 91/1812 91/10	Sep 15/22 -	0et2/23 +	40 토 3 ³ 20 10	Abnormal SU/Stippo		Sep15/22 +)	0ct2/23	
Abnormal SUISING Copper (ppm)	Sep15/22	0at2/23 -	40 50 20 10	Abnormal SUS 1151200 Silicon (ppm)		Sep15/22 +	0ct2/23	
Abnormal 91/1812 91/10	Sep 15/22-	042/23	40 wd 20 10 +7/12unr	Abnomal SU/SIPO Silicon (ppm)		Sep15/22 +	0ct2/23	
Abnormal SUISING Copper (ppm)	Sep 15/22 -	0d2/23 +	40 ud 20 10 60 60	Abnormal Severe Stilicon (ppm)		Sep15/22 +	0ct2/23 -	
Abnormal SUISING Copper (ppm)	Sep1522	0et2/23 -	40 wd 20 10 +7/12unr	Abnormal SU(S1) SIlicon (ppm) Severe		Sep15/22 -	0ct2/23	
Abnormal SUISING Copper (ppm)	Sept 15/22	0et2/23 +	40 ud 20 10 60 60	Abnormal SUISING Silicon (ppm)		Sep15/22 +	0ct2/23	
Abnormal			40 40 40 20 40 40 40 40 40 40 40 40 40 4	Severe Abnormal Silicon (ppm)	0ct23/17			
Abnormal			40 40 40 20 40 40 40 40 40 40 40 40 40 4	Severe Abnormal Silicon (ppm)	0ct23/17			
Abnormal gy/gtpo Copper (ppm) Severe Severe Severe Severe Severe Severe Severe	Sep 15/22	0d2/23 0d2/23	40 40 40 40 40 40 40 40 40 40	Abnormal SUSSIPPO Silicon (ppm) Severe		Sep15/22 + Sep15/22 +Sep15/22 +Sep15	0dt2/23 0dt2/23	
Abnormal	Sep 15/22		40 33 40 40 40 40 40 40 40 40 40 40	Abnormal Silicon (ppm) Severe Abnormal Surgition Severe Surgition Surgition Severe Surgition S	0ct23/17			
Abnormal gy/gtpo Copper (ppm) Severe Severe Severe Severe Severe Severe Severe	Sep 15/22		4(ud 2) 1(+72)(7unr 8(6(4(4(4(2)) 4() 4() 4() 4() 4() 4() 4() 4	Abnormal SUISIPO Silicon (ppm) Severe Abnormal SUSIPO Base Number	0ct23/17			
Abnormal Subtraction of the subtraction of the sub	Sep 15/22		4(ud 2) 1(+72)(7unr 8(6(4(4(4(2)) 4() 4() 4() 4() 4() 4() 4() 4	Abnomal SUSTRO Silicon (ppm) Severe Abnomal SUSTRO Base Number	0ct23/17			
Abnomal SUGINO Copper (ppm) Severe Shoomal Viscosity @ 100°C Abnomal	Sep 15/22		4(ud 2) 1(+72)(7unr 8(6(4(4(4(2)) 4() 4() 4() 4() 4() 4() 4() 4	Abnormal SUISITIO Silicon (ppm) Severe Abnormal SUSITIO Base Number	0ct23/17			
Abnomal SUISINO Copper (ppm) Severe Suisino	Sep 15/22		4(ud 2) 1(+72)(7unr 8(6(4(4(4(2)) 4() 4() 4() 4() 4() 4() 4() 4	Abnormal SUSIPO Silicon (ppm) Severe Abnormal SUSIPO Base Number Abnormal Base	0ct23/17			
Abnomal SUISINO Copper (ppm) Severe Suisino	Sep 15/22		40 40 30 40 20 40 40 20 40 40 40 40 40 40 40 40 40 4	Abnormal SUISIPO Silicon (ppm) Severe Abnormal SUSIPO Base Number Abnormal Base Abnormal	0ct23/17			
Abnormal Severe Abnormal Support Severe Severe Support Severe Support Severe Support Severe Support Severe Support Severe Support Severe Support Severe Support Severe Support Severe Support Severe S	Sep 15/22	0ct2/23	40 40 40 40 40 40 40 40 40 40	Abnormal SUISTRO Silicon (ppm) Severe Abnormal SUSTRO Base Number Abnormal Base Abnormal	0ct23/17 0ct23/17 0ct23/17	Sep15/22	0ct2/23	
Abnomal SUISINO Copper (ppm) Severe Suisino	Sep 15/22		40 40 30 40 20 40 40 20 40 40 40 40 40 40 40 40 40 4	Abnormal SUISIPO Silicon (ppm) Severe Abnormal SUSIPO Base Number Abnormal Base Abnormal	0ct23/17			



Contact/Location: Chris Halvorsen - GENNEW