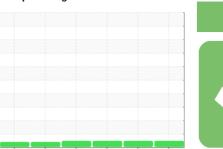


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



American Demo SANY SY365 SY0361CB00768

Swing Drive

GEAR OIL SAE 80W90 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

All component wear rates are normal.

Contamination

There is no indication of any contamination in the

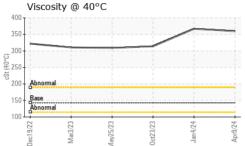
Fluid Condition

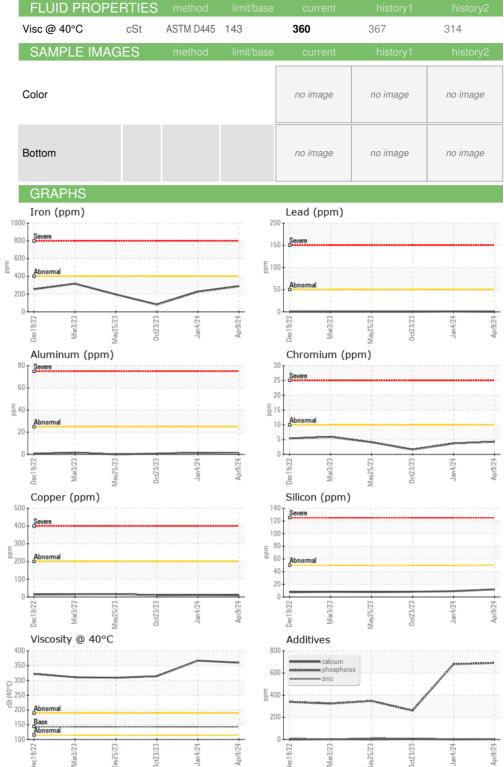
The condition of the oil is acceptable for the time in service.

Sample Number			Deczuzz	marzuza mayzuza	S Oct2023 Jan2024	Apr2UZ4	
Sample Date	SAMPLE INFORI	MATION	method	limit/base	current	history1	history2
Sample Date	Sample Number		Client Info		PCA0115520	LW0008261	LW0007612
Machine Age hrs Client Info 2795 2342 1971 Oil Age hrs Client Info 2795 2342 1971 Oil Changed Client Info Not Changd Not Changd Not Changd Not Changd NoRMAL 1 1 1 1 1 1 1 1 1 1 1 1 1 1			Client Info		09 Apr 2024	04 Jan 2024	23 Oct 2023
Oil Age hrs Client Info 2795 2342 1971 Oil Changed Sample Status Client Info Not Changd North Chang	•	hrs			-		
Oil Changed Sample Status Client Info Not Changd NORMAL NO		hrs	Client Info		2795	2342	1971
NORMAL NORMAL NORMAL	•		Client Info		Not Changd	Not Changd	Not Changd
Water WC Method >0.2 NEG NEG NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >400 288 227 81 Chromium ppm ASTM D5185m >10 4 4 2 Nickel ppm ASTM D5185m >10 0 <1	-				_	Ŭ	_
WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >400 288 227 81 Chromium ppm ASTM D5185m >10 4 4 2 Nickel ppm ASTM D5185m >10 0 <1 <1 Titanium ppm ASTM D5185m 0 0 <1 0 Silver ppm ASTM D5185m >50 0 <1 0 Aluminum ppm ASTM D5185m >50 0 <1 0 Lead ppm ASTM D5185m >200 10 11 10 Copper ppm ASTM D5185m >200 10 11 10 Vanadium ppm ASTM D5185m 0 0 0 0 Cadmium ppm ASTM D5185m 0 0 1 0 Boron ppm ASTM D5185m 200 1 5 <th>CONTAMINAT</th> <th>ION</th> <th>method</th> <th>limit/base</th> <th>current</th> <th>history1</th> <th>history2</th>	CONTAMINAT	ION	method	limit/base	current	history1	history2
Iron	Water		WC Method	>0.2	NEG	NEG	NEG
Chromium ppm ASTM D5185m >10 4 4 2 Nickel ppm ASTM D5185m >10 0 <1 <1 Titanium ppm ASTM D5185m 0 <1 0 Silver ppm ASTM D5185m >20 0 0 Aluminum ppm ASTM D5185m >50 0 <1 0 Lead ppm ASTM D5185m >50 0 <1 0 Copper ppm ASTM D5185m >200 10 11 10 Vanadium ppm ASTM D5185m >10 0 0 0 Cadmium ppm ASTM D5185m >10 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 20 1 5 2 Barium ppm ASTM D5185m 12 0 <1 0	WEAR METAL	S	method	limit/base	current	history1	history2
Nickel	Iron	ppm	ASTM D5185m	>400	288	227	81
Titanium	Chromium	ppm	ASTM D5185m	>10	4	4	2
Silver ppm ASTM D5185m 0 0 0 Aluminum ppm ASTM D5185m >25 <1 2 <1 Lead ppm ASTM D5185m >50 0 <1 0 Copper ppm ASTM D5185m >200 10 11 10 Tin ppm ASTM D5185m 0 0 0 0 Vanadium ppm ASTM D5185m 0 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 0 3 92 <1 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 400 33 92 <1 Barium ppm ASTM D5185m 12 0 <1 0 <	Nickel	ppm	ASTM D5185m	>10	0	<1	<1
Aluminum ppm ASTM D5185m >25 <1	Titanium	ppm	ASTM D5185m		0	<1	0
Lead	Silver	ppm	ASTM D5185m		0	0	0
Copper ppm ASTM D5185m >200 10 11 10 Tin ppm ASTM D5185m >10 0 0 0 Vanadium ppm ASTM D5185m 0 0 0 0 Cadmium ppm ASTM D5185m 0 <1 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 400 33 92 <1 Barium ppm ASTM D5185m 200 1 5 2 Molybdenum ppm ASTM D5185m 12 0 <1 0 Magnesium ppm ASTM D5185m 12 1 1 3 Calcium ppm ASTM D5185m 150 2 <1 4 Phosphorus ppm ASTM D5185m 150 2 <1 4 Phosphorus ppm ASTM D5185m 125 <1 3 </th <th>Aluminum</th> <th>ppm</th> <th>ASTM D5185m</th> <th>>25</th> <th><1</th> <th>2</th> <th><1</th>	Aluminum	ppm	ASTM D5185m	>25	<1	2	<1
Copper ppm ASTM D5185m >200 10 11 10 Tin ppm ASTM D5185m >10 0 0 0 Vanadium ppm ASTM D5185m 0 0 0 0 Cadmium ppm ASTM D5185m 0 <1 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 400 33 92 <1 Barium ppm ASTM D5185m 200 1 5 2 Molybdenum ppm ASTM D5185m 12 0 <1 0 Mangaesium ppm ASTM D5185m 12 1 1 3 Magnesium ppm ASTM D5185m 150 2 <1 4 Phosphorus ppm ASTM D5185m 125 <1 3 11 Sulfur ppm ASTM D5185m 125 <1 3 </th <th>Lead</th> <th></th> <th>ASTM D5185m</th> <th>>50</th> <th>0</th> <th><1</th> <th>0</th>	Lead		ASTM D5185m	>50	0	<1	0
Tin	Copper		ASTM D5185m	>200	10	11	10
Vanadium ppm ASTM D5185m 0 0 0 Cadmium ppm ASTM D5185m 0 <1			ASTM D5185m	>10	0	0	0
Cadmium ppm ASTM D5185m 0 <1	Vanadium		ASTM D5185m		0	0	0
Boron	Cadmium		ASTM D5185m		0	<1	0
Barium ppm ASTM D5185m 200 1 5 2 Molybdenum ppm ASTM D5185m 12 0 <1 0 Manganese ppm ASTM D5185m 12 1 1 3 Magnesium ppm ASTM D5185m 12 1 1 3 Calcium ppm ASTM D5185m 150 2 <1 4 Phosphorus ppm ASTM D5185m 1650 691 680 261 Zinc ppm ASTM D5185m 125 <1 3 11 Sulfur ppm ASTM D5185m 125 <1 3 11 Sulfur ppm ASTM D5185m >20 28465 24464 23153 ppm ASTM D5185m >50 12 9 8 Sodium ppm ASTM D5185m >170 1 0 <1 VISUAL method limit/base cu	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 12 0 <1	Boron	ppm	ASTM D5185m	400	33	92	<1
Manganese ppm ASTM D5185m 5 4 3 Magnesium ppm ASTM D5185m 12 1 1 3 Calcium ppm ASTM D5185m 150 2 <1 4 Phosphorus ppm ASTM D5185m 1650 691 680 261 Zinc ppm ASTM D5185m 125 <1 3 11 Sulfur ppm ASTM D5185m 22500 28465 24464 23153 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >50 12 9 8 Sodium ppm ASTM D5185m >170 1 0 <1 Potassium ppm ASTM D5185m >20 0 2 1 VISUAL method limit/base current history1 history2 VISUAL NONE <t< th=""><th>Barium</th><th>ppm</th><th>ASTM D5185m</th><th>200</th><th>1</th><th>5</th><th>2</th></t<>	Barium	ppm	ASTM D5185m	200	1	5	2
Magnesium ppm ASTM D5185m 12 1 1 3 Calcium ppm ASTM D5185m 150 2 <1	Molybdenum	ppm	ASTM D5185m	12	0	<1	0
Calcium ppm ASTM D5185m 150 2 <1	Manganese	ppm	ASTM D5185m		5	4	3
Phosphorus ppm ASTM D5185m 1650 691 680 261 Zinc ppm ASTM D5185m 125 <1 3 11 Sulfur ppm ASTM D5185m 22500 28465 24464 23153 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >50 12 9 8 Sodium ppm ASTM D5185m >170 1 0 <1 Potassium ppm ASTM D5185m >20 0 2 1 VISUAL method limit/base current history1 history2 VISUAL method limit/base current history1 history2 VISUAL NONE NONE <th>Magnesium</th> <th>ppm</th> <th>ASTM D5185m</th> <th>12</th> <th>1</th> <th>1</th> <th>3</th>	Magnesium	ppm	ASTM D5185m	12	1	1	3
Zinc ppm ASTM D5185m 125 <1	Calcium	ppm	ASTM D5185m	150	2	<1	4
Sulfur ppm ASTM D5185m 22500 28465 24464 23153 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >50 12 9 8 Sodium ppm ASTM D5185m >170 1 0 <1 Potassium ppm ASTM D5185m >20 0 2 1 VISUAL method limit/base current history1 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 NONE Debris scalar *Visual NONE NONE NONE NONE Sand/Dirt scalar *Visual	Phosphorus	ppm	ASTM D5185m	1650	691	680	261
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >50 12 9 8 Sodium ppm ASTM D5185m >170 1 0 <1 Potassium ppm ASTM D5185m >20 0 2 1 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE Debris scalar *Visual NONE NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML Codor scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual >0.2 NEG NEG NEG	Zinc	ppm	ASTM D5185m	125	<1	3	11
Silicon ppm ASTM D5185m >50 12 9 8 Sodium ppm ASTM D5185m >170 1 0 <1	Sulfur	ppm	ASTM D5185m	22500	28465	24464	23153
Sodium ppm ASTM D5185m >170 1 0 <1 Potassium ppm ASTM D5185m >20 0 2 1 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE NONE Debris scalar *Visual NONE NONE NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual >0.2 NEG NEG NEG	CONTAMINAN	TS	method	limit/base	current	history1	history2
PotassiumppmASTM D5185m>20021VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEG	Silicon	ppm	ASTM D5185m	>50	12	9	8
White Metal scalar *Visual NONE NONE NONE NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE NONE Debris scalar *Visual NONE NONE NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual >0.2 NEG NEG NEG	Sodium	ppm	ASTM D5185m	>170	1	0	<1
White Metal scalar *Visual NONE NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE Debris scalar *Visual NONE NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual >0.2 NEG NEG NEG	Potassium	ppm	ASTM D5185m	>20	0	2	1
Yellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEG	VISUAL		method	limit/base	current	history1	history2
Precipitate scalar *Visual NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE Debris scalar *Visual NONE NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual >0.2 NEG NEG NEG	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silt scalar *Visual NONE NONE NONE NONE Debris scalar *Visual NONE NONE NONE NONE Sand/Dirt scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NORML NORML NORML NORML Odor scalar *Visual NORML NORML NORML NORML Emulsified Water scalar *Visual >0.2 NEG NEG NEG	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Debrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEG	Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEG	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEG	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Odor scalar *Visual NORML NORML NORML NORML NORML Emulsified Water scalar *Visual >0.2 NEG NEG NEG	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Emulsified Water scalar *Visual >0.2 NEG NEG NEG	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Free Water scalar *Visual NEG NEG NEG	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
	Free Water	scalar	*Visual		NEG	NEG	NEG



OIL ANALYSIS REPORT









Certificate 12367

Sample No.

Lab Number : 06147696 Unique Number : 10977774

Test Package : MOB 1

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : PCA0115520

To discuss this sample report, contact Customer Service at 1-800-237-1369.

Received **Tested** Diagnosed

: 12 Apr 2024 : 15 Apr 2024 : 16 Apr 2024 - Sean Felton

Contact: Mike Korbelik mike@chicagomachineryinc.com

* - 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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