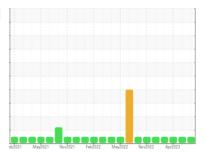


OIL ANALYSIS REPORT

GUAY SON/Yavaros [CONHER] Pacifico Industrial - PISA2 Aux1

Diesel Engine

CHEVRON DELO 400 SDE SAE 15W40 (40 LTR)



Sample Rating Trend



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

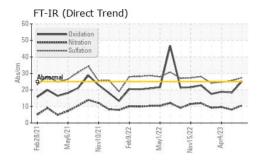
Fluid Condition

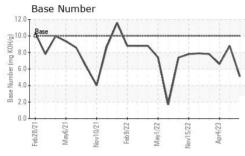
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

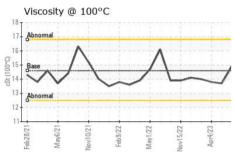
Magnesium ppm ASTM D5185m 741 632 553 Calcium ppm ASTM D5185m 1665 1414 1427 Phosphorus ppm ASTM D5185m 760 749 653 794 Zinc ppm ASTM D5185m 800 962 813 1001 Sulfur ppm ASTM D5185m 3000 2796 2581 2761 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >35 10 6 10 Sodium ppm ASTM D5185m >35 10 6 1 4 Potassium ppm ASTM D5185m >20 0 2 1 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7624 >20 10.6 8.1 9.6 Sulfation Abs/.1mm *ASTM D7415 >30<	SAMPLE INFORM	ATION	method	limit/base	current	history1	history2	
Machine Age hrs Client Info 0 0 0 0 Oil Age hrs Client Info 1450 360 0 Oil Changed Client Info Not Changd Not Changd N/A Sample Status NoRMAL NORMAL NORMAL CONTAMINATION method limit/base current history1 history2 Fuel WC Method >5 <1.0	Sample Number		Client Info		KL0012244	KL0012227	KL0012223	
Oil Age hrs Client Info 1450 360 0 Oil Changed Sample Status Client Info Not Changd No	Sample Date		Client Info		03 Jun 2023	26 Apr 2023	04 Apr 2023	
Client Info Not Changd Nor Changd NORMAL NORMAL NORMAL	Machine Age	hrs	Client Info		0	0	0	
Oil Changed Client Info Not Changd NORMAL NORMAL NORMAL	Oil Age	hrs	Client Info		1450	360	0	
NORMAL NORMAL NORMAL CONTAMINATION method limit/base current history1 history2			Client Info		Not Changd	Not Changd	N/A	
Fuel	-					Ü	NORMAL	
Water Glycol WC Method WC Method >0.2 NEG NEG NEG NEG NEG NEG NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >250 66 12 39 Chromium ppm ASTM D5185m >10 1 <1	CONTAMINATION		method	limit/base	current	history1	history2	
WEAR METALS	Fuel		WC Method	>5	<1.0	<1.0	<1.0	
WEAR METALS method Imit/base current history1 history2 WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >250 66 12 39 Chromium ppm ASTM D5185m >10 1 <1 <1 Nickel ppm ASTM D5185m >5 0 0 0 Silver ppm ASTM D5185m >3 0 0 0 Aluminum ppm ASTM D5185m >3 0 0 0 Aluminum ppm ASTM D5185m >100 8 1 2 Copper ppm ASTM D5185m >100 8 1 2 Copper ppm ASTM D5185m 0 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 0 Cadmium ppm ASTM D5	Water		WC Method	>0.2	NEG	NEG	NEG	
Irron	Glycol		WC Method		NEG			
Chromium ppm ASTM D5185m >10 1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1	WEAR METALS		method	limit/base	current	history1	history2	
Chromium ppm ASTM D5185m >10 1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1	Iron	ppm	ASTM D5185m	>250	66	12	39	
Nickel	Chromium	• •	ASTM D5185m	>10	1	<1	<1	
Titanium					0			
Silver								
Aluminum ppm ASTM D5185m >35 2 2 0 Lead ppm ASTM D5185m >100 8 1 2 Copper ppm ASTM D5185m >60 23 4 5 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 160 240 224 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m -1<				>3	-			
Lead ppm ASTM D5185m >100 8 1 2 Copper ppm ASTM D5185m >60 23 4 5 Tin ppm ASTM D5185m >5 <1 <1 <1 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 160 240 224 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 133 115 114 Manganese ppm ASTM D5185m <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1								
Copper ppm ASTM D5185m >60 23 4 5 Tin ppm ASTM D5185m >5 <1								
Tin ppm ASTM D5185m >5 <1 <1 <1 Vanadium ppm ASTM D5185m 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 160 240 224 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 133 115 114 Mangaesium ppm ASTM D5185m <1 <1 <1 Magnesium ppm ASTM D5185m 760 749 653 794 Zinc ppm ASTM D5185m 800 962 813 1001 Sulfur ppm ASTM D5185m 3000 2796 2581 2761 CONTAMINANTS method limit/base current history1 history2 Silicon ppm								
Vanadium ppm ASTM D5185m 0 0 0 Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 160 240 224 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 133 115 114 Manganese ppm ASTM D5185m <1 <1 <1 <1 Magnesium ppm ASTM D5185m 741 632 553 Calcium ppm ASTM D5185m 760 749 653 794 Zinc ppm ASTM D5185m 800 962 813 1001 Sulfur ppm ASTM D5185m 3000 2796 2581 2761 CONTAMINANTS method limit/base current history1 history2 <th co<="" td=""><td></td><td></td><td></td><td></td><th>_</th><td></td><td></td></th>	<td></td> <td></td> <td></td> <td></td> <th>_</th> <td></td> <td></td>					_		
Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 160 240 224 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 133 115 114 Manganese ppm ASTM D5185m <1		• •		>5				
ADDITIVES								
Boron		ppm	ASTM D5185m		0	0	0	
Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 133 115 114 Manganese ppm ASTM D5185m <1 <1 <1 Magnesium ppm ASTM D5185m 741 632 553 Calcium ppm ASTM D5185m 1665 1414 1427 Phosphorus ppm ASTM D5185m 760 749 653 794 Zinc ppm ASTM D5185m 800 962 813 1001 Sulfur ppm ASTM D5185m 3000 2796 2581 2761 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >35 10 6 10 Sodium ppm ASTM D5185m >20 0 2 1 INFRA-RED method limit/base current history1 history2	ADDITIVES		method	limit/base	current	history1	history2	
Molybdenum ppm ASTM D5185m 133 115 114 Manganese ppm ASTM D5185m <1 <1 <1 Magnesium ppm ASTM D5185m 741 632 553 Calcium ppm ASTM D5185m 1665 1414 1427 Phosphorus ppm ASTM D5185m 760 749 653 794 Zinc ppm ASTM D5185m 800 962 813 1001 Sulfur ppm ASTM D5185m 3000 2796 2581 2761 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m 35 10 6 10 Sodium ppm ASTM D5185m >20 0 2 1 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 1.5 0.9 1.5	Boron	ppm						
Manganese ppm ASTM D5185m <1 <1 <1 Magnesium ppm ASTM D5185m 741 632 553 Calcium ppm ASTM D5185m 1665 1414 1427 Phosphorus ppm ASTM D5185m 760 749 653 794 Zinc ppm ASTM D5185m 800 962 813 1001 Sulfur ppm ASTM D5185m 3000 2796 2581 2761 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >35 10 6 10 Sodium ppm ASTM D5185m >35 10 6 1 4 Potassium ppm ASTM D5185m >20 0 2 1 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 1.5	Barium	ppm	ASTM D5185m		0	0	0	
Magnesium ppm ASTM D5185m 741 632 553 Calcium ppm ASTM D5185m 1665 1414 1427 Phosphorus ppm ASTM D5185m 760 749 653 794 Zinc ppm ASTM D5185m 800 962 813 1001 Sulfur ppm ASTM D5185m 3000 2796 2581 2761 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >35 10 6 10 Sodium ppm ASTM D5185m >20 0 2 1 INFRA-RED method limit/base current history1 history2 Soot % *ASTM D7844 >3 1.5 0.9 1.5 Nitration Abs/cm *ASTM D7415 >30 27.4 25.6 24.7 FLUID DEGRADATION method limit/base current his	Molybdenum	ppm	ASTM D5185m		133	115	114	
Calcium ppm ASTM D5185m 1665 1414 1427 Phosphorus ppm ASTM D5185m 760 749 653 794 Zinc ppm ASTM D5185m 800 962 813 1001 Sulfur ppm ASTM D5185m 3000 2796 2581 2761 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >35 10 6 10 Sodium ppm ASTM D5185m >35 10 6 1 4 Potassium ppm ASTM D5185m >20 0 2 1 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 1.5 0.9 1.5 Nitration Abs/cm *ASTM D7624 >20 10.6 8.1 9.6 Sulfation Abs/.1mm *ASTM D741	Manganese	ppm	ASTM D5185m		<1	<1	<1	
Phosphorus ppm ASTM D5185m 760 749 653 794 Zinc ppm ASTM D5185m 800 962 813 1001 Sulfur ppm ASTM D5185m 3000 2796 2581 2761 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >35 10 6 10 Sodium ppm ASTM D5185m >35 6 1 4 Potassium ppm ASTM D5185m >20 0 2 1 INFRA-RED method limit/base current history1 history2 Soot % "ASTM D7844 >3 1.5 0.9 1.5 Nitration Abs/cm "ASTM D7624 >20 10.6 8.1 9.6 Sulfation Abs/.1mm "ASTM D7415 >30 27.4 25.6 24.7 FLUID DEGRADATION method lim	Magnesium	ppm	ASTM D5185m		741	632	553	
Zinc ppm ASTM D5185m 800 962 813 1001 Sulfur ppm ASTM D5185m 3000 2796 2581 2761 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >35 10 6 10 Sodium ppm ASTM D5185m >35 6 1 4 Potassium ppm ASTM D5185m >20 0 2 1 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 1.5 0.9 1.5 Nitration Abs/cm *ASTM D7624 >20 10.6 8.1 9.6 Sulfation Abs/.1mm *ASTM D7415 >30 27.4 25.6 24.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm	Calcium	ppm	ASTM D5185m		1665	1414	1427	
Sulfur ppm ASTM D5185m 3000 2796 2581 2761 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >35 10 6 10 Sodium ppm ASTM D5185m >35 6 1 4 Potassium ppm ASTM D5185m >20 0 2 1 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 1.5 0.9 1.5 Nitration Abs/cm *ASTM D7624 >20 10.6 8.1 9.6 Sulfation Abs/.1mm *ASTM D7415 >30 27.4 25.6 24.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 25.2 18.4 18.9	Phosphorus	ppm	ASTM D5185m	760	749	653	794	
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >35 10 6 10 Sodium ppm ASTM D5185m 6 1 4 Potassium ppm ASTM D5185m >20 0 2 1 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 1.5 0.9 1.5 Nitration Abs/cm *ASTM D7624 >20 10.6 8.1 9.6 Sulfation Abs/.1mm *ASTM D7415 >30 27.4 25.6 24.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 25.2 18.4 18.9	Zinc	ppm	ASTM D5185m	800	962	813	1001	
Silicon ppm ASTM D5185m >35 10 6 10 Sodium ppm ASTM D5185m 6 1 4 Potassium ppm ASTM D5185m >20 0 2 1 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 1.5 0.9 1.5 Nitration Abs/cm *ASTM D7624 >20 10.6 8.1 9.6 Sulfation Abs/.1mm *ASTM D7415 >30 27.4 25.6 24.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 25.2 18.4 18.9	Sulfur	ppm	ASTM D5185m	3000	2796	2581	2761	
Sodium ppm ASTM D5185m 6 1 4 Potassium ppm ASTM D5185m >20 0 2 1 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 1.5 0.9 1.5 Nitration Abs/cm *ASTM D7624 >20 10.6 8.1 9.6 Sulfation Abs/.1mm *ASTM D7415 >30 27.4 25.6 24.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 25.2 18.4 18.9	CONTAMINANTS		method	limit/base	current	history1	history2	
Potassium ppm ASTM D5185m >20 0 2 1 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 >3 1.5 0.9 1.5 Nitration Abs/cm *ASTM D7624 >20 10.6 8.1 9.6 Sulfation Abs/.1mm *ASTM D7415 >30 27.4 25.6 24.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 25.2 18.4 18.9	Silicon	ppm	ASTM D5185m	>35	10	6	10	
INFRA-RED	Sodium	ppm	ASTM D5185m		6	1	4	
Soot % % *ASTM D7844 >3 1.5 0.9 1.5 Nitration Abs/cm *ASTM D7624 >20 10.6 8.1 9.6 Sulfation Abs/.1mm *ASTM D7415 >30 27.4 25.6 24.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 25.2 18.4 18.9	Potassium	ppm	ASTM D5185m	>20	0	2	1	
Nitration Abs/cm *ASTM D7624 >20 10.6 8.1 9.6 Sulfation Abs/.1mm *ASTM D7415 >30 27.4 25.6 24.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 25.2 18.4 18.9	INFRA-RED		method	limit/base	current	history1	history2	
Nitration Abs/cm *ASTM D7624 >20 10.6 8.1 9.6 Sulfation Abs/.1mm *ASTM D7415 >30 27.4 25.6 24.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 25.2 18.4 18.9	Soot %	%	*ASTM D7844	>3	1.5	0.9	1.5	
Sulfation Abs/.1mm *ASTM D7415 >30 27.4 25.6 24.7 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 25.2 18.4 18.9								
Oxidation Abs/.1mm *ASTM D7414 >25 25.2 18.4 18.9								
	FLUID DEGRADA	TION	method	limit/base	current	history1	history2	
	Oxidation	Ahs/1mm	*ASTM D7414	>25	25.2	18.4	18.9	
		mg KOH/g			5.1	8.8	6.6	



OIL ANALYSIS REPORT



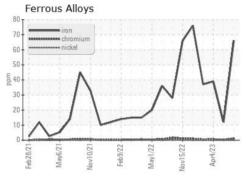


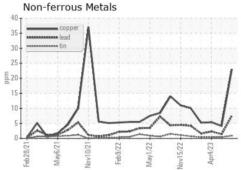


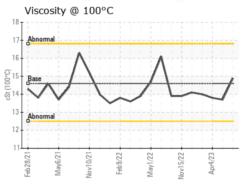
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	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
Free Water	scalar	*Visual		NEG	NEG	NEG

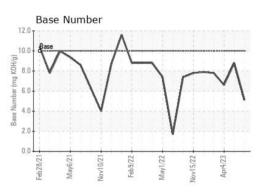
FLUID PROPER	TIES	method				history2
Visc @ 100°C	cSt	ASTM D445	14.6	14.9	13.7	13.8

GRAPHS













Certificate 12367

Laboratory Sample No.

: KL0012244 Lab Number : 05870117 Unique Number : 10509901 Test Package : FLEET

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 09 Jun 2023 **Tested**

: 12 Jun 2023 Diagnosed

: 13 Jun 2023 - Doug Bogart

JUAREZ 348 HERMOSILLO, MX 83140 Contact: EDUARDO GARCIA egarcia.comsa@gmail.com

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)

T: (526)622-1581 x:81 F: x:

CONOR