

### **OIL ANALYSIS REPORT**

Sample Rating Trend

NORMAL

# NOT GIVEN IL06073773

Diesel Engine Fluid DIESEL ENGINE OIL SAE 30 (--- GAL)

#### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 30. Please confirm. Please specify the component make and model with your next sample.

#### Wear

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil.

#### Fluid Condition

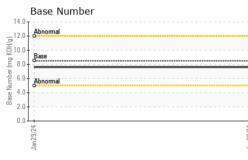
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

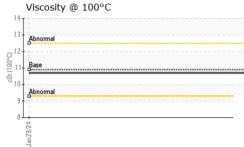
				Jan2024		
SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Number		Client Info		IL06073773		
Sample Date		Client Info		29 Jan 2024		
Machine Age	mls	Client Info		0		
Oil Age	mls	Client Info		0		
Oil Changed		Client Info		N/A		
Sample Status				NORMAL		
CONTAMINATION	١	method	limit/base	current	history1	history2
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	2		
Chromium	ppm	ASTM D5185m	>20	<u>د</u> د1		
Nickel	ppm	ASTM D5185m	>20	0		
Titanium	ppm	ASTM D5185m	~	۰ <1		
Silver	ppm	ASTM D5185m	>3	0		
Aluminum	ppm	ASTM D5185m	>20	2		
Lead	ppm	ASTM D5185m	>40	2 <1		
Copper	ppm	ASTM D5185m	>330	<1		
Tin	ppm	ASTM D5185m	>15	<1		
Vanadium	ppm	ASTM D5185m	210	0		
Cadmium	ppm	ASTM D5185m		0		
ADDITIVES	pp	method	limit/base	current	history1	history2
Boron	nom	ASTM D5185m	250	83		historyz
Barium	ppm	ASTM D5185m	10	0		
Molybdenum	ppm	ASTM D5185m	100	0 79		
	ppm	ASTM D5185m	100	0		
Manganese	ppm	ASTIVI DOTODITI		U		
	nnm	ACTM DE185m	450	104		
-	ppm	ASTM D5185m	450	104		
Calcium	ppm	ASTM D5185m	3000	1928		
Calcium Phosphorus	ppm ppm	ASTM D5185m ASTM D5185m	3000 1150	1928 859		
Calcium Phosphorus Zinc	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	3000 1150 1350	1928 859 1080		
Calcium Phosphorus Zinc Sulfur	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	3000 1150 1350 4250	1928 859 1080 3542		
Calcium Phosphorus Zinc Sulfur CONTAMINANTS	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method	3000 1150 1350 4250 limit/base	1928 859 1080 3542 current		  history2
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> ASTM D5185m	3000 1150 1350 4250 limit/base >25	1928 859 1080 3542 current 3	  history1	  history2
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	3000 1150 1350 4250 limit/base >25 >75	1928 859 1080 3542 current 3 0	  history1 	  history2 
Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	3000 1150 1350 4250 <b>limit/base</b> >25 >75 >20	1928 859 1080 3542 current 3 0 3	  history1  	  history2  
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524	3000 1150 1350 4250 <b>limit/base</b> >25 >75 >20 >5	1928 859 1080 3542 <u>current</u> 3 0 3 <1.0	  history1   	  history2   
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED	ppm ppm ppm ppm ppm ppm %	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524	3000 1150 1350 4250 <b>limit/base</b> >25 >75 >20 >5 <b>limit/base</b>	1928 859 1080 3542 current 3 0 3 <1.0 current	 history1    history1	  history2   history2
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot %	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524 method *ASTM D7844	3000 1150 1350 4250 <b>limit/base</b> >25 >75 >20 >5 <b>limit/base</b> >3	1928 859 1080 3542 current 3 0 3 <1.0 current 0.1	 history1    history1 	 history2    history2 
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm %	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524 <b>method</b> *ASTM D7844 *ASTM D7624	3000 1150 1350 4250 <b>limit/base</b> >25 >20 >5 <b>limit/base</b> >3 >20	1928 859 1080 3542 <u>current</u> 3 0 3 <1.0 <u>current</u> 0.1 7.2	  history1    history1  history1 	 history2    history2  history2
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm % % % Abs/.1mm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524 *ASTM D7824 *ASTM D7624	3000 1150 1350 4250 <b>limit/base</b> >25 >75 >20 >5 <b>limit/base</b> >3 >20 >3	1928 859 1080 3542 <i>current</i> 3 0 3 <1.0 <i>current</i> 0.1 7.2 16.7	 history1    history1  history1 	 history2    history2  history2 
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm % % % Abs/.1mm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524 <b>method</b> *ASTM D7844 *ASTM D7624	3000 1150 1350 4250 <b>limit/base</b> >25 >20 >5 <b>limit/base</b> >3 >20	1928 859 1080 3542 <u>current</u> 3 0 3 <1.0 <u>current</u> 0.1 7.2	  history1    history1  history1 	 history2    history2  history2 
Calcium Phosphorus Zinc Sulfur CONTAMINANTS Silicon Sodium Potassium Fuel INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm ppm ppm ppm % % % Abs/.1mm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D3524 *ASTM D7824 *ASTM D7624	3000 1150 1350 4250 <b>limit/base</b> >25 >75 >20 >5 <b>limit/base</b> >3 >20 >3	1928 859 1080 3542 <i>current</i> 3 0 3 <1.0 <i>current</i> 0.1 7.2 16.7	 history1    history1  history1 	 history2     history2  history2 



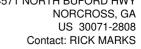
## **OIL ANALYSIS REPORT**

VISUAL





		method		current		
White Metal	scalar	*Visual	NONE	NONE		
Yellow Metal	scalar	*Visual	NONE	NONE		
Precipitate	scalar	*Visual	NONE	NONE		
Silt	scalar	*Visual	NONE	NONE		
Debris	scalar	*Visual	NONE	NONE		
Sand/Dirt	scalar	*Visual	NONE	NONE		
Appearance	scalar	*Visual	NORML	NORML		
Odor	scalar	*Visual	NORML	NORML		
	scalar		>0.2			
Free Water	scalar	*Visual		NEG		
FLUID PROPER	TIES	method	limit/base	current	history1	history
Visc @ 100°C	cSt	ASTM D445	10.9	10.7		
GRAPHS						
Ferrous Alloys						
iron						
8 - nickel						
0						
4						
2						
0 - 1			1/24			
Jan 29			Jan 29			
Non-ferrous Meta	ls					
	10					
0T						
copper						
copper						
copper lead						
copper lead						
copper lead						
copper lead						
8 copper lead						
8 copper lead						
8 copper lead						
8 copper lead			Jan29/24	Dage No	-	
8 - copper lead				Base Numbe	r	
8 viscosity @ 100°C			Jan 29/24 +		r	
8 5 5 5 5 5 5 5 5 5 5 5 5 5			+t2/62uer 14.0	Abnormal	r	
8 viscosity @ 100°C			+t2/62uer 14.0	Abnormal	r	
8 5 5 5 5 5 5 5 5 5 5 5 5 5			+t2/62uer 14.0	Abnormal	r	
8 5 5 5 5 5 5 5 5 5 5 5 5 5			+t2/62uer 14.0	Abnormal	r	
8 - Copper lead			+ 72/62 usp	Abnormal	r	
8 Subscription of the second			+t2/62uer 14.0	Abnormal	r	
8 copper   6 ead   4 ead   2 ead   5 ead   6 ead   7 ead   6 ead   7 ead   6 ead   6 ead   7 ead   8 ead   9 ead   8 ead			+62662uer (0)HOX Bu HOX	Abnormal Base Abnormal	r	
8 copper   6 ead   4 ead   2 ead   5 ead   6 ead   7 ead   6 ead   7 ead   6 ead   6 ead   7 ead   8 ead   9 ead   8 ead			+62662uer (0)HOX Bu HOX	Abnormal Base Abnormal	r	
8 - Copper lead			+6262222 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)110.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0)10.0 (0	Abnormal	r	
Viscosity @ 100°C	5		+2/62/uer (0)H0X 000 Bull and 0	Abnormal Base Abnormal		SE-NORCRC
Viscosity @ 100°C	5	son Ave., Ca	+2/62/uer (0)H0X 000 Bull and 0	Abnormal Base Abnormal		
8	501 Madi	son Ave., Ca d : 30 v ed : 31 v	+62662uer (0)H0X bu 30 (0)H0X b	Abnormal Base Abnormal	IDEALEAS 4571 NORTH	SE-NORCRO BUFORD H ORCROSS, JS 30071-2
	Yellow Metal Precipitate Silt Debris Sand/Dirt Appearance Odor Emulsified Water Free Water FLUID PROPER <sup>7</sup> Visc @ 100°C GRAPHS Ferrous Alloys 100°C GRAPHS Ferrous Alloys Non-ferrous Meta	Yellow Metal scalar   Precipitate scalar   Silt scalar   Debris scalar   Sand/Dirt scalar   Sand/Dirt scalar   Appearance scalar   Odor scalar   Free Water scalar   FLUID PROPERTIES   Visc @ 100°C cSt   GRAPHS   Ferrous Alloys   Image: State of the	Yellow Metal   scalar   *Visual     Precipitate   scalar   *Visual     Silt   scalar   *Visual     Debris   scalar   *Visual     Sand/Dirt   scalar   *Visual     Appearance   scalar   *Visual     Odor   scalar   *Visual     Emulsified Water   scalar   *Visual     Free Water   scalar   *Visual     FLUID PROPERTIES   method     Visc @ 100°C   cSt   ASTM D445     GRAPHS   Ferrous Alloys   Image: Mark and the stale and t	Yellow Metal   scalar   *Visual   NONE     Precipitate   scalar   *Visual   NONE     Silt   scalar   *Visual   NONE     Debris   scalar   *Visual   NONE     Sand/Dirt   scalar   *Visual   NONE     Appearance   scalar   *Visual   NORML     Odor   scalar   *Visual   NORML     Odor   scalar   *Visual   NORML     Codor   scalar   *Visual   NORML     Emulsified Water   scalar   *Visual   >0.2     Free Water   scalar   *Visual   >0.2     Ftuilin PROPERTIES   method   limit/base     Visc @ 100°C   cSt   ASTM D445   10.9     GRAPHS   Ferrous Alloys   Imit (base)   Imit (base)     Image: State St	Yellow Metal   scalar   *Visual   NONE   NONE     Precipitate   scalar   *Visual   NONE   NONE     Silt   scalar   *Visual   NONE   NONE     Debris   scalar   *Visual   NONE   NONE     Sand/Dirt   scalar   *Visual   NONE   NONE     Sand/Dirt   scalar   *Visual   NONE   NONE     Appearance   scalar   *Visual   NORML   NORML     Odor   scalar   *Visual   >0.2   NEG     Free Water   scalar   *Visual   >0.2   NEG     FLUID PROPERTIES   method   limit/base   current     Visc @ 100°C   cSt   ASTM D445   10.9   10.7     GRAPHS	Yellow Metal   scalar   *Visual   NONE      Precipitate   scalar   *Visual   NONE   NONE      Silt   scalar   *Visual   NONE   NONE      Debris   scalar   *Visual   NONE   NONE      Sand/Dirt   scalar   *Visual   NONE   NONE      Appearance   scalar   *Visual   NORML   NORML      Appearance   scalar   *Visual   NORML   NORML      Odor   scalar   *Visual   NORML   NORML      Gdor   scalar   *Visual   NORML   NORML      Free Water   scalar   *Visual   >0.2   NEG      FLUID PROPERTIES   method   limit/base   current   history1     Visc @ 100°C   cSt   ASTM D445   10.9   10.7      GRAPHS



T:

F: (770)300-0614

Contact/Location: RICK MARKS - IDENORGA