

# **OIL ANALYSIS REPORT**

Sample Rating Trend



Machine Id

# IAD2-B-GEN-03 IAD2-B-GEN-03

Diesel Engine

**DIESEL ENGINE OIL SAE 15W40 (--- GAL)** 

### Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Metal levels are typical for a new component breaking in.

## Contamination

There is no indication of any contamination in the

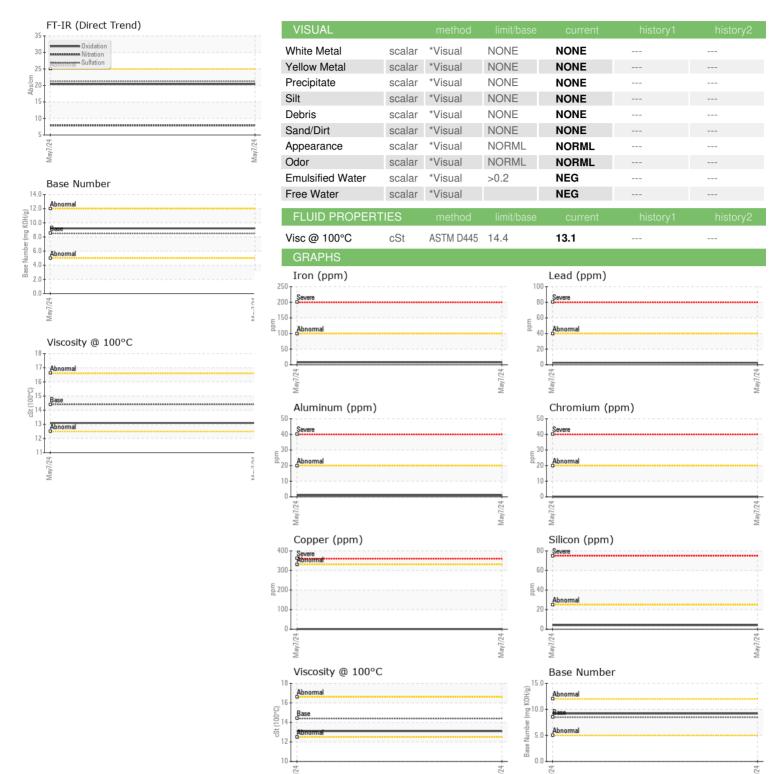
## **Fluid Condition**

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

SAMPLE INFORMATION   method   limit/base   current   history1   history2					May2024		
Client Info	CAMPLE INFOR	AATIONI		lii+/l		hintom d	history O
Client Info		MATION		imivbase		nistory i	nistoryz
Machine Age							
Dil Age	•				-		
Dil Changed   Client Info   Not Changed   NORMAL	•						
CONTAMINATION   method   limit/base   current   history1   history2	-	hrs			-		
CONTAMINATION	-		Client Info				
Water	•				NORMAL		
Water   WC Method   So.2   NEG   Silycol   WC Method   NEG   Silycol   WC Method   NEG   Silycol   WC Method   NEG   Silycol   WC Method   Similibase   Current   Silycor   Si		١				history1	history2
WEAR METALS							
WEAR METALS         method         limit/base         current         history1         history2           Iron         ppm         ASTM D5185m         >100         8             Chromium         ppm         ASTM D5185m         >20         0             Nickel         ppm         ASTM D5185m         >20         0             Silver         ppm         ASTM D5185m         >3         0             Aluminum         ppm         ASTM D5185m         >20         1             Lead         ppm         ASTM D5185m         >20         1             Copper         ppm         ASTM D5185m         >20         1             Lead         ppm         ASTM D5185m         >330         <1				>0.2			
Chromium	Glycol		WC Method		NEG		
ASTM D5185m	WEAR METALS		method	limit/base	current	history1	history2
ASTM D5185m	_						
Silver		ppm			-		
Salver	Nickel	ppm	ASTM D5185m	>4	0		
Astroper	Γitanium	ppm	ASTM D5185m		<1		
Act	Silver	ppm	ASTM D5185m	>3	0		
Copper	Aluminum	ppm	ASTM D5185m	>20	1		
Tin	_ead	ppm	ASTM D5185m	>40	3		
Anadium         ppm         ASTM D5185m         0             Cadmium         ppm         ASTM D5185m         0             ADDITIVES         method         limit/base         current         history1         history2           Boron         ppm         ASTM D5185m         250         55             Barium         ppm         ASTM D5185m         10         0             Molybdenum         ppm         ASTM D5185m         100         42             Magnesium         ppm         ASTM D5185m         450         624             Magnesium         ppm         ASTM D5185m         3000         1518             Phosphorus         ppm         ASTM D5185m         3000         1518             Phosphorus         ppm         ASTM D5185m         1350         1046             Pince         ppm         ASTM D5185m         25         4             CONTAMINANTS         method         limit/base         current         h	Copper	ppm	ASTM D5185m	>330	<1		
ADDITIVES	Γin	ppm	ASTM D5185m	>15	1		
ADDITIVES	√anadium	ppm	ASTM D5185m		0		
Soron   ppm   ASTM D5185m   250   555       Sarium   ppm   ASTM D5185m   10   0   0             Molybdenum   ppm   ASTM D5185m   100   42           Magnesium   ppm   ASTM D5185m   450   624	Cadmium	ppm	ASTM D5185m		0		
Barium	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum         ppm         ASTM D5185m         100         42             Manganese         ppm         ASTM D5185m         450         624             Magnesium         ppm         ASTM D5185m         3000         1518             Calcium         ppm         ASTM D5185m         3000         1518             Phosphorus         ppm         ASTM D5185m         1150         912             Zinc         ppm         ASTM D5185m         1350         1046             Sulfur         ppm         ASTM D5185m         4250         3354             CONTAMINANTS         method         limit/base         current         history1         history2           Solicon         ppm         ASTM D5185m         >25         4             Potassium         ppm         ASTM D5185m         >20         1             Potassium         ppm         ASTM D5185m         >20         1             Soot %         *ASTM D7844	Boron	ppm	ASTM D5185m	250	55		
Manganese         ppm         ASTM D5185m         <1             Magnesium         ppm         ASTM D5185m         450         624             Calcium         ppm         ASTM D5185m         3000         1518             Phosphorus         ppm         ASTM D5185m         1150         912             Zinc         ppm         ASTM D5185m         1350         1046             Sulfur         ppm         ASTM D5185m         4250         3354             CONTAMINANTS         method         limit/base         current         history1         history2           Solicon         ppm         ASTM D5185m         >25         4             Solicon         ppm         ASTM D5185m         >158         4             Potassium         ppm         ASTM D5185m         >20         1             INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7624         >20	Barium	ppm	ASTM D5185m	10	0		
Magnesium         ppm         ASTM D5185m         450         624             Calcium         ppm         ASTM D5185m         3000         1518             Phosphorus         ppm         ASTM D5185m         1150         912             Zinc         ppm         ASTM D5185m         1350         1046             Sulfur         ppm         ASTM D5185m         4250         3354             CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >25         4             Sodium         ppm         ASTM D5185m         >158         4             Potassium         ppm         ASTM D5185m         >20         1             INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7624         >20         7.9             Sulfation         Abs/.1mm         *ASTM D7414 <td>Molybdenum</td> <td>ppm</td> <td>ASTM D5185m</td> <td>100</td> <td>42</td> <td></td> <td></td>	Molybdenum	ppm	ASTM D5185m	100	42		
Calcium         ppm         ASTM D5185m         3000         1518             Phosphorus         ppm         ASTM D5185m         1150         912             Zinc         ppm         ASTM D5185m         1350         1046             Sulfur         ppm         ASTM D5185m         4250         3354             CONTAMINANTS         method         limit/base         current         history1         history2           Soliicon         ppm         ASTM D5185m         >25         4             Soliicon         ppm         ASTM D5185m         >158         4             Potassium         ppm         ASTM D5185m         >20         1             INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7844         >3         0.2             Sulfation         Abs/.1mm         *ASTM D7415         >30         21.3             FLUID DEGRADATION         method	Manganese	ppm	ASTM D5185m		<1		
Phosphorus         ppm         ASTM D5185m         1150         912             Zinc         ppm         ASTM D5185m         1350         1046             Sulfur         ppm         ASTM D5185m         4250         3354             CONTAMINANTS         method         limit/base         current         history1         history2           Solicon         ppm         ASTM D5185m         >25         4             Sodium         ppm         ASTM D5185m         >158         4             Potassium         ppm         ASTM D5185m         >20         1             INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7844         >3         0.2             Sulfation         Abs/.1mm         *ASTM D7415         >30         21.3             FLUID DEGRADATION         method         limit/base         current         history1         history2           Dxidation         Abs/.1mm         *ASTM	Magnesium	ppm	ASTM D5185m	450	624		
Zinc	Calcium	ppm	ASTM D5185m	3000	1518		
Sulfur         ppm         ASTM D5185m         4250         3354             CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >25         4             Sodium         ppm         ASTM D5185m         >158         4             Potassium         ppm         ASTM D5185m         >20         1             INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7844         >3         0.2             Sulfation         Abs/cm         *ASTM D7624         >20         7.9             FLUID DEGRADATION         method         limit/base         current         history1         history2           Oxidation         Abs/.1mm         *ASTM D7414         >25         20.4	Phosphorus	ppm	ASTM D5185m	1150	912		
CONTAMINANTS         method         limit/base         current         history1         history2           Silicon         ppm         ASTM D5185m         >25         4             Sodium         ppm         ASTM D5185m         >158         4             Potassium         ppm         ASTM D5185m         >20         1             INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7844         >3         0.2             Sulfration         Abs/.mm         *ASTM D7624         >20         7.9             FLUID DEGRADATION         method         limit/base         current         history1         history2           Oxidation         Abs/.1mm         *ASTM D7414         >25         20.4	Zinc	ppm	ASTM D5185m	1350	1046		
Solition   ppm   ASTM D5185m   >25   4	Sulfur	ppm	ASTM D5185m	4250	3354		
Sodium	CONTAMINANTS		method	limit/base	current	history1	history2
Potassium         ppm         ASTM D5185m         >20         1             INFRA-RED         method         limit/base         current         history1         history2           Soot %         %         *ASTM D7844         >3         0.2             Nitration         Abs/cm         *ASTM D7624         >20         7.9             Sulfation         Abs/.1mm         *ASTM D7415         >30         21.3             FLUID DEGRADATION         method         limit/base         current         history1         history2           Oxidation         Abs/.1mm         *ASTM D7414         >25         20.4	Silicon	ppm	ASTM D5185m	>25	4		
INFRA-RED	Sodium	ppm	ASTM D5185m	>158	4		
Soot %	Potassium	ppm	ASTM D5185m	>20	1		
Nitration         Abs/cm         *ASTM D7624         >20         7.9             Sulfation         Abs/.1mm         *ASTM D7415         >30         21.3             FLUID DEGRADATION         method         limit/base         current         history1         history2           Oxidation         Abs/.1mm         *ASTM D7414         >25         20.4	INFRA-RED		method	limit/base	current	history1	history2
Sulfation         Abs/.1mm         *ASTM D7415         >30         21.3             FLUID DEGRADATION         method         limit/base         current         history1         history2           Oxidation         Abs/.1mm         *ASTM D7414         >25         20.4	Soot %	%	*ASTM D7844	>3	0.2		
FLUID DEGRADATION method limit/base current history1 history2  Oxidation Abs/.1mm *ASTM D7414 >25 20.4	Vitration	Abs/cm	*ASTM D7624	>20	7.9		
Oxidation	Sulfation	Abs/.1mm	*ASTM D7415	>30	21.3		
	FLUID DEGRADA	TION	method	limit/base	current	history1	history2
	Oxidation	Abs/.1mm	*ASTM D7414	>25	20.4		
	Base Number (BN)	mg KOH/g	ASTM D2896		9.2		



## **OIL ANALYSIS REPORT**







Certificate 12367

Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0931677 Lab Number : 06193817

Unique Number : 11055940

Received **Tested** Diagnosed

: 30 May 2024 : 30 May 2024 - Wes Davis

: 29 May 2024

Test Package : MOB 1 ( Additional Tests: TBN )

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. **NATIONAL POWER CORP** 

4541 PRESLYN DR RALEIGH, NC US 27616

Contact: Brandon Daniels Brandon.Daniels@natpow.com

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (919)790-9714 Contact/Location: Brandon Daniels - NATRAL