

# **PROBLEM SUMMARY**





## COMPONENT CONDITION SUMMARY

Component

Flui

**1 Diesel Engine** 



### RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

PROBLEMATIC TEST RESULTS								
Sample Status				MARGINAL	ABNORMAL	ABNORMAL		
Fuel	%	ASTM D3524	>5	<u> </u>	<b>3</b> .8	▲ 2.4		

Customer Id: DELSHR Sample No.: PCA0093216 Lab Number: 05893934 Test Package: IND 2



To manage this report scan the QR code

To discuss the diagnosis or test data: Wes Davis +1 905-569-8600 x223 wesd@wearcheck.ca

To change component or sample information: Customer Service +1 1-800-237-1369 customerservice@wearcheck.com

RECOMMENDED	ACTIONS			
Action	Status	Date	Done By	Description
Information Required			?	NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.

## HISTORICAL DIAGNOSIS



## 31 May 2023 Diag: Wes Davis

Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.All component wear rates are normal. Light fuel dilution occurring. The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The condition of the oil is suitable for further service.

#### 27 Apr 2023 Diag: Wes Davis

Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.All component wear rates are normal. Light fuel dilution occurring. The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The condition of the oil is suitable for further service.

01 Mar 2023 Diag: Wes Davis

Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample.All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.





view report





# **OIL ANALYSIS REPORT**



Machine Id **CATERPILLAR BASIN DRILLING 105** Component

**1 Diesel Engine** Fluid

CHEVRON URSA SUPER PLUS EC 15W40 (--- GAL)

Amesome details         Construction         Construction         Construction         Construction         Client         Into         PCA098210         S1A098200           Nacorrection         Calabal         Client         Into         0         <	DIAGNOSIS	SAMPLE INFOR	MATION	method	limit/base	current	history 1	history 2
No corrective action is recommended at this time.         Sample Date         Client Info         27 Apr 2023         27 Apr 2023<	A Recommendation	Sample Number		Client Info		PCA0093216	PCA0096214	PCA0093204
Breample at the next service interval to montor.         No.         0         0         0           Note: Capacity, filter type and micron rating with rest sample.         Oil Age         mils         Client Info         0         0         0           All component wear rates are normal.         Contamination         NA         N	No corrective action is recommended at this time.	Sample Date		Client Info		27 Jun 2023	31 May 2023	27 Apr 2023
NULLE - Please provide information regarange         Oil Age         Oile Age         Oile America         Oile Age         NA         ABNORMAL	Resample at the next service interval to monitor.	Machine Age	mls	Client Info		0	0	0
Charange         Client Info         N/A         N/A         N/A         N/A           Wear         All component war rates are normal.         Contradmination         Immitbase         current         Nistory 1         Nistory 2           Light fuil dilution occurring. No other contamination         Immitbase         current         Nistory 2         Nistory 2           Pair De Nresult indicates that there is suitable akalinity remaining in the oil. The condition of the alkalinity remaining in the oil. The condition of the alkalinity remaining in the oil. The condition of the alkalinity remaining in the oil. The condition of the alkalinity remaining in the oil. The condition of the alkalinity remaining in the oil. The condition of the oil is suitable for further service.         Nickel         ppm         ASTI0 5188         >20         ol         0         0           Silver         ppm         ASTI0 5188         >20         ol         0         0         0           Charmium         ppm         ASTI0 5188         >20         ol         0	NOTE: Please provide information regarding	Oil Age	mls	Client Info		0	0	0
Sample Status         MARGINAL         ABNORMAL         ABNORMAL         ABNORMAL           All component wear rates are normal.         CONTAMINATION         imitbase         current         inition?         inition?           Light led dlution occurring. No other contaminants were detected in the oil.         NEG         NEG         NEG         NEG         NEG           Fuid Condition of the BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.         O         0 <t< td=""><td>next sample.</td><td>Oil Changed</td><td></td><td>Client Info</td><td></td><td>N/A</td><td>N/A</td><td>N/A</td></t<>	next sample.	Oil Changed		Client Info		N/A	N/A	N/A
CONTAMINATION         method         innibase         current         history 1         history 2           Glycol         WC Method         NEG         NEG         NEG           Ful Condition         Immo courring, No other contaminants were detected in the oil.         Immo ppm         AS/IM 05166         >100         3         12         6           Ful Condition         ppm         AS/IM 05166         >20         <1	Wear	Sample Status				MARGINAL	ABNORMAL	ABNORMAL
Accounting in the observation of the o	All component wear rates are normal.	CONTAMINAT	ION	method	limit/base	current	history 1	history 2
Upper left billow of bodder for the old.         WEAR METALS         method         imitbase         current         history 1         history 2           Fuid Condition         The BN result indicates that there is suitable         in         ppm         ASTM 05185m         >200         3         12         6           Asialinity remaining in the oil. The condition of the oil is suitable for further service.         O         0		Glycol		WC Method		NEG	NEG	NEG
Fluid Condition         ppm         ASTM 05186m         >100         3         12         6           The BN result indicates that there is suitable all into remaining in the 0.1. The condition of the 0.1 Fee conditis of the 0.1 Fee condition of the 0.1 Fee conditis	were detected in the oil.	WEAR METAL	.S	method	limit/base	current	history 1	history 2
The BN result indicates that there is suitable additivy remaining in the oil. The condition of the oil is suitable for further service.       Ppm       ASTM D5185m       >20       <1	Fluid Condition	Iron	ppm	ASTM D5185m	>100	3	12	6
alkalanity emaining in the oil. The condition of the oil is suitable for further service.       Nickel       ppm       ASTM D5158m       >2       0       0         Silver       ppm       ASTM D5158m       >2       0       0       0         Aluminum       ppm       ASTM D5158m       >2       2       0       0         Lead       ppm       ASTM D5158m       >40       0       4       1         Copper       ppm       ASTM D5158m       >40       0       0       0         Copper       ppm       ASTM D5158m       >40       0       0       0       0         Vanadium       ppm       ASTM D5158m       >15       <1	The BN result indicates that there is suitable	Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
iii is suitable for further service.       Titanium       ppm       ASTM D515m       >2       <1	alkalinity remaining in the oil. The condition of the	Nickel	ppm	ASTM D5185m	>2	0	0	0
Silver       ppm       ASTM 05185m       >2       0       0       0         Aluminum       ppm       ASTM 05185m       >25       2       2       2       0         Lead       ppm       ASTM 05185m       >330       2       34       6         Copper       ppm       ASTM 05185m       >15       <1       1       <1         Vanadium       ppm       ASTM 05185m       >15       <1       1       <1         Qathium       ppm       ASTM 05185m       >15       <1       1       <1       <1         ADDITIVES       method       Imit/base       current       history 1       history 1       history 2         Boron       ppm       ASTM 05185m       <1       0       0       0       0         Marganesum       ppm       ASTM 05185m       <1       131       78       123       23         Marganesum       ppm       ASTM 05185m       <1       128       296       271         Calcium       ppm       ASTM 05185m       120       663       933       672         Marganesum       ppm       ASTM 05185m       220       8       15       12      S	oil is suitable for further service.	Titanium	ppm	ASTM D5185m	>2	<1	0	0
Aluminum         ppm         ASTM D5185m         >25         2         2         0           Lead         ppm         ASTM D5185m         >3300         2         344         6           Tin         ppm         ASTM D5185m         >3300         2         344         6           Vanadium         ppm         ASTM D5185m         -         1         1         <1		Silver	ppm	ASTM D5185m	>2	0	0	0
Lead       ppm       ASTM D5185m       >400       0       4       1         Copper       ppm       ASTM D5185m       >330       2       344       6         Tin       ppm       ASTM D5185m       >15       <1		Aluminum	ppm	ASTM D5185m	>25	2	2	0
Copper         ppm         ASTM D5185m         >330         2         34         6           Tin         ppm         ASTM D5185m         >15         <1		Lead	ppm	ASTM D5185m	>40	0	4	1
Tin       ppm       ASTM D5185m       >15       <1       1       <1         Vanadium       ppm       ASTM D5185m       0       0       0         Cadmium       ppm       ASTM D5185m       0       0       0         ADDITIVES       rest       imit/base       current       history 1       history 2         Boron       ppm       ASTM D5185m       131       78       123         Barium       ppm       ASTM D5185m       0       0       0         Molybdenum       ppm       ASTM D5185m       131       78       823       82         Manganese       ppm       ASTM D5185m       128       296       271         Calacium       ppm       ASTM D5185m       128       296       271         Calacium       ppm       ASTM D5185m       128       296       271         Calacium       ppm       ASTM D5185m       128       3815       3213         ContrAdmINANTS       method       limit/base       current       history 1       history 2         Silicon       ppm       ASTM D5185m       2.4       1       1         Potassium       ppm       ASTM D5185m       2.4<		Copper	ppm	ASTM D5185m	>330	2	34	6
VanadiumppmASTM D5185m000CadmiumppmASTM D5185m000ADDITIVESmethodlimit/basecurrenthistory 1history 2BoronppmASTM D5185m13178123BariumppmASTM D5185m0000MolybdenumppmASTM D5185m788382ManganeseppmASTM D5185m128296271CateiumppmASTM D5185m128296271CateiumppmASTM D5185m182518001645PhosphorusppmASTM D5185m120863933872ZincppmASTM D5185m1200863933872ZincppmASTM D5185m1300101411701070SulfurppmASTM D5185m1300101411701070SulfurppmASTM D5185m20411Fuel%ASTM D5185m>20411Fuel%ASTM D5185m>20411Fuel%ASTM D714>300.10.20.1Nortacing%ASTM D714>3019.424.120.2Solidum%%ASTM D714>3019.424.120.2LintrationAbs/m%ASTM D714>3019.424.120.2Solidation%%ASTM D714		Tin	ppm	ASTM D5185m	>15	<1	1	<1
Cadmium       ppm       ASTM D5185m       0       0       0         ADDITIVES       method       limit/base       current       history 1       history 2         Boron       ppm       ASTM D5185m       0       0       0       0         Barium       ppm       ASTM D5185m       0       0       0       0         Molybdenum       ppm       ASTM D5185m       78       83.0       82.2         Magnesium       ppm       ASTM D5185m       0       0       .1       23.6       .27.1         Calcium       ppm       ASTM D5185m       128       296       .27.1         Calcium       ppm       ASTM D5185m       1200       863       93.3       .87.2         Phosphorus       ppm       ASTM D5185m       1200       863       .93.3       .87.2         Sulfur       ppm       ASTM D5185m       1200       863       .93.1       .21.3         Sodium       ppm       ASTM D5185m       20       81.5       .21.3         Sodium       ppm       ASTM D5185m       >20       4       .1       .1         Fuel       %       ASTM D5185m       2.4       .3.8       2.4 <td></td> <td>Vanadium</td> <td>ppm</td> <td>ASTM D5185m</td> <td></td> <td>0</td> <td>0</td> <td>0</td>		Vanadium	ppm	ASTM D5185m		0	0	0
ADDITIVES       method       limit/base       current       history 1       history 2         Boron       ppm       ASTM D5185m       131       78       123         Barium       ppm       ASTM D5185m       0       0       0         Molybdenum       ppm       ASTM D5185m       78       83       82         Magnesium       ppm       ASTM D5185m       128       296       271         Calcium       ppm       ASTM D5185m       1825       1800       1645         Phosphorus       ppm       ASTM D5185m       120       863       933       872         Zinc       ppm       ASTM D5185m       1200       863       933       872         Sulfur       ppm       ASTM D5185m       1200       863       933       872         Sulfur       ppm       ASTM D5185m       1300       1014       1170       1070         Sulfur       ppm       ASTM D5185m       1300       1014       1170       1070         Sulfur       ppm       ASTM D5185m       >25       8       15       12         Sodium       ppm       ASTM D5185m       >20       4       1       1      <		Cadmium	ppm	ASTM D5185m		0	0	0
Boron       ppm       ASTM D5185m       131       78       123         Barium       ppm       ASTM D5185m       0       0       0         Molybdenum       ppm       ASTM D5185m       78       83       82         Manganese       ppm       ASTM D5185m       0       <10		ADDITIVES		method	limit/base	current	history 1	history 2
Barium       ppm       ASTM D5185m       0       0       0         Molybdenum       ppm       ASTM D5185m       78       83       82         Manganese       ppm       ASTM D5185m       0       <1		Boron	ppm	ASTM D5185m		131	78	123
Molybdenum       ppm       ASTM D5185m       78       83       82         Manganese       ppm       ASTM D5185m       0       <1		Barium	ppm	ASTM D5185m		0	0	0
Manganese       ppm       ASTM D5185m       0       <1       <1         Magnesium       ppm       ASTM D5185m       128       296       271         Calcium       ppm       ASTM D5185m       120       1825       1800       1645         Phosphorus       ppm       ASTM D5185m       1200       863       933       872         Zinc       ppm       ASTM D5185m       1300       1014       1170       1070         Sulfur       ppm       ASTM D5185m       >20       8       15       12         Sodium       ppm       ASTM D5185m       >20       4       1       1         Potassium       ppm       ASTM D5185m       >20       4       1       1         Fuel       %       ASTM D5185m       >20       4       1       1         Sodot%       %       YASTM D5185m       >2.4       3.8 <td></td> <td>Molybdenum</td> <td>ppm</td> <td>ASTM D5185m</td> <td></td> <td>78</td> <td>83</td> <td>82</td>		Molybdenum	ppm	ASTM D5185m		78	83	82
Magnesium       ppm       ASTM D5185m       128       296       271         Calcium       ppm       ASTM D5185m       I       1800       1645         Phosphorus       ppm       ASTM D5185m       1200       863       933       872         Zine       ppm       ASTM D5185m       1300       1014       1170       1070         Sulfur       ppm       ASTM D5185m       20       815       3213         CONTAMINATY       method       limit/base       current       history 1       history 2         Solium       ppm       ASTM D5185m       >20       4       1       1         Fuel       %       ASTM D5185m       >20       4       1       1         Fuel       %       ASTM D5185m       >20       4       3       0.1       0.2       0.1         Nitration       Abs/tmm       'ASTM D7624 <td< td=""><td></td><td>Manganese</td><td>ppm</td><td>ASTM D5185m</td><td></td><td>0</td><td>&lt;1</td><td>&lt;1</td></td<>		Manganese	ppm	ASTM D5185m		0	<1	<1
Calcium       ppm       ASTM D5185m       1825       1800       1645         Phosphorus       ppm       ASTM D5185m       1200       863       933       872         Zinc       ppm       ASTM D5185m       1300       1014       1170       1070         Sulfur       ppm       ASTM D5185m       1300       1014       1170       1070         Sulfur       ppm       ASTM D5185m       4024       3815       3213         CONTAMINANTS       method       limit/base       current       history 1       history 2         Silicon       ppm       ASTM D5185m       >25       8       15       12         Sodium       ppm       ASTM D5185m       >20       4       1       1         Fuel       %       ASTM D5185m       >20       4       1       1         Fuel       %       ASTM D5185m       >20       4       3       2.4         INFRA-RED       method       limit/base       current       history 1       history 2         Soot %       %       'ASTM D7844       >3       0.1       0.2       0.1         Nitration       Abs/tmm <th'astm d7612<="" th="">       &gt;20       7.8</th'astm>		Magnesium	ppm	ASTM D5185m		128	296	271
Phosphorus       ppm       ASTM D5185m       1200       863       933       872         Zinc       ppm       ASTM D5185m       1300       1014       1170       1070         Sulfur       ppm       ASTM D5185m       1300       1014       1170       1070         Sulfur       ppm       ASTM D5185m       4024       3815       3213         CONTAMINANTS       method       limit/base       current       history 1       history 2         Silicon       ppm       ASTM D5185m       >25       8       15       12         Sodium       ppm       ASTM D5185m       >20       4       1       1         Potassium       ppm       ASTM D5185m       >20       4       1       1         Fuel       %       ASTM D5185m       >20       4       3.8       2.4         INFRA-RED       method       limit/base       current       history 1       history 2         Soot %       %       'ASTM D7624       >20       7.8       10.5       9.0         Sulfation       Abs/im       'ASTM D7415       >30       19.4       24.1       20.2         FLUID DEGRADATION       method       limit/base<		Calcium	ppm	ASTM D5185m		1825	1800	1645
Zinc       ppm       ASTM D5185m       1300       1014       1170       1070         Sulfur       ppm       ASTM D5185m       4024       3815       3213         CONTAMINANTS       method       limit/base       current       history 1       history 2         Silicon       ppm       ASTM D5185m       >25       8       15       12         Sodium       ppm       ASTM D5185m       >25       8       15       12         Sodium       ppm       ASTM D5185m       >20       4       1       1         Potassium       ppm       ASTM D5185m       >20       4       1       1         Fuel       %       ASTM D585m       >20       4       1       1         Soot %       %       *ASTM D585m       >20       4       3       2.4         INFRA-RED       method       limit/base       current       history 1       history 2         Soot %       %       *ASTM D7844       >3       0.1       0.2       0.1         Nitration       Abs/rmm       *ASTM D7645       >30       19.4       24.1       20.2         FLUID DEGRADATION       method       limit/base       current <td></td> <td>Phosphorus</td> <td>ppm</td> <td>ASTM D5185m</td> <td>1200</td> <td>863</td> <td>933</td> <td>872</td>		Phosphorus	ppm	ASTM D5185m	1200	863	933	872
Sulfur       ppm       ASTM D5185m       4024       3815       3213         CONTAMINANTS       method       limit/base       current       history 1       history 2         Silicon       ppm       ASTM D5185m       >25       8       15       12         Sodium       ppm       ASTM D5185m       >20       4       1       1         Potassium       ppm       ASTM D5185m       >20       4       3.8       2       4         Fuel       %       ASTM D5185m       >20       4       3.8       2.4       4       3.8       2.4         INFRA-RED       method       limit/base       current       history 1       history 2       0.1       0.2       0.1         Soot %       %       *ASTM D7844       >3       0.1       0.2       0.1       0.2       0.1         Nitration       Abs/rm       *ASTM D7624       >20       7.8       10.5       9.0       2.2         FLUID DEGRADATION       method       limit/base       current       history 1       history 2         Oxidation       Abs/1mm       *ASTM D7845       >30       19.4       24.1       20.2         Midation       Mb/m MK/MM A		Zinc	ppm	ASTM D5185m	1300	1014	1170	1070
CONTAMINANTSmethodlimit/basecurrenthistory 1history 2SiliconppmASTM D5185m>2581512SodiumppmASTM D5185m>2032<1		Sulfur	ppm	ASTM D5185m		4024	3815	3213
Silicon       ppm       ASTM D5185m       >25       8       15       12         Sodium       ppm       ASTM D5185m       2       3       2       <1		CONTAMINAN	ITS	method	limit/base	current	history 1	history 2
Sodium       ppm       ASTM D5185m       3       2       <1         Potassium       ppm       ASTM D5185m       >20       4       1       1         Fuel       %       ASTM D3524       >5       ▲ 2.4       3.8       ▲ 2.4         INFRA-RED       method       limit/base       current       history 1       history 2         Soot %       %       *ASTM D7844       >3       0.1       0.2       0.1         Nitration       Abs/cm       *ASTM D7624       >20       7.8       10.5       9.0         Sulfation       Abs/.1mm       *ASTM D7415       >30       19.4       24.1       20.2         FLUID DEGRADATION       method       limit/base       current       history 1       history 2         Oxidation       Abs/.1mm       *ASTM D7414       >25       15.3       22.2       18.3         Base Number (BN)       mmKOH/n       ASTM D2896       8.0       9.70       6.62       7.73		Silicon	ppm	ASTM D5185m	>25	8	15	12
Potassium       ppm       ASTM D5185m       >20       4       1       1         Fuel       %       ASTM D3524       >5       ▲       2.4       ▲       3.8       ▲       2.4         INFRA-RED       method       limit/base       current       history 1       history 2       0.1         Soot %       %       *ASTM D7844       >3       0.1       0.2       0.1         Nitration       Abs/cm       *ASTM D7624       >20       7.8       10.5       9.0         Sulfation       Abs/.1mm       *ASTM D7415       >30       19.4       24.1       20.2         FLUID DEGRADATION       method       limit/base       current       history 1       history 2         Oxidation       Abs/.1mm       *ASTM D7414       >25       15.3       22.2       18.3         Base Number (BN)       mtKOH/n       ASTM D2896       8.0       9.70       6.62       7.73		Sodium	ppm	ASTM D5185m		3	2	<1
Fuel%ASTM D3524>52.43.82.4INFRA-REDmethodlimit/basecurrenthistory 1history 2Soot %%*ASTM D7844>30.10.20.1NitrationAbs/cm*ASTM D7624>207.810.59.0SulfationAbs/.1mm*ASTM D7415>3019.424.120.2FLUID DEGRADATIONmethodlimit/basecurrenthistory 1history 2OxidationAbs/.1mm*ASTM D7414>2515.322.218.3Base Number (BN)mmKOH/nASTM D28968.09.706.627.73		Potassium	ppm	ASTM D5185m	>20	4	1	1
INFRA-RED       method       limit/base       current       history 1       history 2         Soot %       %       *ASTM D7844       >3       0.1       0.2       0.1         Nitration       Abs/cm       *ASTM D7624       >20       7.8       10.5       9.0         Sulfation       Abs/.tmm       *ASTM D7415       >30       19.4       24.1       20.2         FLUID DEGRADATION       method       limit/base       current       history 1       history 2         Oxidation       Abs/.tmm       *ASTM D7414       >25       15.3       22.2       18.3         Base Number (BN)       mmKOH/n       ASTM D2896       8.0       9.70       6.62       7.73		Fuel	%	ASTM D3524	>5	<u> </u>	▲ 3.8	<b>2</b> .4
Soot %       %       *ASTM D7844       >3       0.1       0.2       0.1         Nitration       Abs/cm       *ASTM D7624       >20       7.8       10.5       9.0         Sulfation       Abs/.1mm       *ASTM D7415       >30       19.4       24.1       20.2         FLUID DEGRADATION       method       limit/base       current       history 1       history 2         Oxidation       Abs/.1mm       *ASTM D7414       >25       15.3       22.2       18.3         Base Number (BN)       mg/KOH/g       ASTM D2896       8.0       9.70       6.62       7.73		INFRA-RED		method	limit/base	current	history 1	history 2
Nitration         Abs/cm         *ASTM D7624         >20         7.8         10.5         9.0           Sulfation         Abs/.1mm         *ASTM D7415         >30         19.4         24.1         20.2           FLUID DEGRADATION         method         limit/base         current         history 1         history 2           Oxidation         Abs/.1mm         *ASTM D7414         >25         15.3         22.2         18.3           Base Number (BN)         mmKOH/n         ASTM D2896         8.0         9.70         6.62         7.73		Soot %	%	*ASTM D7844	>3	0.1	0.2	0.1
Sulfation         Abs/.1mm         *ASTM D7415         >30         19.4         24.1         20.2           FLUID DEGRADATION         method         limit/base         current         history 1         history 2           Oxidation         Abs/.1mm         *ASTM D7414         >25         15.3         22.2         18.3           Base Number (BN)         mmKOH/m         ASTM D2896         8.0         9.70         6.62         7.73		Nitration	Abs/cm	*ASTM D7624	>20	7.8	10.5	9.0
FLUID DEGRADATIONmethodlimit/basecurrenthistory 1history 2OxidationAbs/.1mm*ASTM D7414>2515.322.218.3Base Number (BN)mmKOH/mASTM D28968.09.706.627.73		Sulfation	Abs/.1mm	*ASTM D7415	>30	19.4	24.1	20.2
Oxidation         Abs/.1mm         *ASTM D7414         >25         15.3         22.2         18.3           Base Number (BN)         mg KOH/g         ASTM D2896         8.0         9.70         6.62         7.73		FLUID DEGRAI		method	limit/base	current	history 1	history 2
Base Number (BN) mrK0H/r ASTM D2896 8.0 9.70 6.62 7.73		Oxidation	Abs/ 1mm	*ASTM D7414	>25	15.3	22.2	18.3
		Base Number (BN)	ma KOH/a	ASTM D2896	8.0	9.70	6.62	7.73



# **OIL ANALYSIS REPORT**



	VISUAL		method	limit/base	e current	history 1	history 2
	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
27/23	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
μη	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
1	Free Water	scalar	*Visual		NEG	NEG	NEG
$\sim$	FLUID PROPE	RTIES	method	limit/base	e current	history 1	history 2
	Visc @ 100°C	cSt	ASTM D445	15.4	11.9	▲ 11.5	<b>1</b> 1.8
	GRAPHS						
	Ferrous Alloys						
Api21/23 +	Viscosity @ 100°C	2 CStelnel	Api21/23	Jun27/23 Jun27/23 Base Number (mg KOH(g)	Base Numbe	L	Apr27/23
Laboratory Sample No.	: WearCheck USA - 5 : PCA0093216	01 Madis Received	son Ave., Ca	ry, NC 275 <sup>.</sup> Jul 2023	13	DELTA FU 1000 WEL	JEL COMPANY



 Unique Number
 : 10549744
 Diagnostician
 : Wes Davis

 Certificate L2367
 Test Package
 : IND 2 (Additional Tests: FuelDilution, PercentFuel)

 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)

Diagnosed

: 12 Jul 2023

: 05893934

Lab Number

Contact/Location: BRAD GORDON - DELSHR

US 71107

F:

SHREVEPORT, LA

T: (318)780-3921

Contact: BRAD GORDON

bgordon@deltafuel.com