

OIL ANALYSIS REPORT

Sample Rating Trend



DIRT

Machine Id SJNM01BE Component

Biogas Engine

CHEVRON HDAX 6500 LFG GAS ENGINE OIL (--- GAL)

Sample Number Client Info WC08656709 WC0865655 WC0865611 Sample Date Client Info 04 Jan 2024 27 Dec 2023 21 Dec 2023 Machine Age hrs Client Info 69366 68893 69030 Oil Age hrs Client Info 69366 68893 69030 Oil Age hrs Client Info 69366 68893 69030 Sample Status I Client Info 6133 821 677 Oll Changed VC Bethod ABNORMAL ABNORMAL NORMAL NORMAL Sample Status VC Method >4.0 <1.0 <1.0 <1.0 Water WC Method >0.1 NEG NEG NEG Water WC Method >15 5 6 4 Ohromium ppm ASTM 051555 >2 <1 0 Nickel ppm ASTM 051555 >5 0 0 0 Aluminum ppm ASTM 051555 >6 2 2 1 Lead ppm ASTM 051555 >4 4 1 Copper ppm ASTM 051555 >4 4 3 Admandam ppm	SAMPLE INFORM	ATION	method	limit/base	current	history1	history2
Sample Date Client Info 04 Jan 2024 27 Dec 2023 21 Dec 2023 Machine Age hrs Client Info 69366 68893 66030 Oil Age hrs Client Info 1013 821 677 Oil Changed Client Info Changed Not Changed Not Changed Not Changed Sample Status method limit/base current history1 history2 Fuel WC Method >4.0 1.0 <1.0 <1.0 <1.0 Water WC Method >4.0 Imit/base current history1 history2 Iron ppm ASTM D51855 >4 <1< <1 <1 Nickel ppm ASTM D51855 >2 0 0 0 Quantum ppm ASTM D51855 >5 0 0 0 Gloop ASTM D51855 >5 0 0 0 0 Sitter ppm ASTM D51855 >5 0 0	Sample Number		Client Info		WC0865709	WC0865655	WC0865661
Machine Age hrs Client Info 69366 68893 69030 Oil Age hrs Client Info 1013 821 677 Oil Changed Client Info ABNORMAL ABNORMAL Not Changd Not Changd Sample Status Imit/base current history1 history2 Fuel WC Method >4.0 <1.0	Sample Date		Client Info		04 Jan 2024	27 Dec 2023	21 Dec 2023
Oil Age hrs Client Info 1013 821 677 Oil Changed Client Info Changed Not Changd Not Changd Sample Status I Method ABNORMAL Not Changd CONTAMINATION method Imit/base current history1 history2 Fuel WC Method >4.0 <1.0	Machine Age	hrs	Client Info		69366	68893	69030
Oil Changed Client Info Changed Not Changed Not Changed Sample Status Image Image ABNORMAL ABNORMAL NORMAL CONTAMINATION method imil/base current history1 history2 Fuel WC Method >0.1 NEG NEG NEG Glycol WC Method >0.1 NEG NEG NEG WC Method >0.1 NEG NEG NEG WC Method >0.1 NEG NEG NEG WC Method >15 5 6 4 Chromium ppm ASTM D5185m >2 <1	Oil Age	hrs	Client Info		1013	821	677
Sample Status Method Imit/base current ABNORMAL NORMAL NORMAL CONTAMINATION method imit/base current history1 history2 Fuel WC Method >4.0 <1.0	Oil Changed		Client Info		Changed	Not Changd	Not Changd
CONTAMINATION method limit/base current history1 history2 Fuel WC Method >4.0 <1.0 <1.0 <1.0 <1.0 Water WC Method >0.1 NEG NEG NEG Glycol WC Method NEG NEG NEG NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >15 5 6 4 Chromium ppm ASTM D5185m >2 <1 0 0 Mixele ppm ASTM D5185m >5 0 0 0 Silver ppm ASTM D5185m >6 2 2 1 Lead ppm ASTM D5185m >6 2 2 1 Lead ppm ASTM D5185m >6 2 2 1 Vanadium ppm ASTM D5185m >6 2 2 1	Sample Status				ABNORMAL	ABNORMAL	NORMAL
Fuel WC Method >4.0 <1.0	CONTAMINATION	N	method	limit/base	current	history1	history2
Water WC Method >0.1 NEG NEG NEG NEG Glycol WC Method Imit/base current history1 history2 WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >15 5 6 4 Chromium ppm ASTM D5185m >2 <1	Fuel		WC Method	>4.0	<1.0	<1.0	<1.0
Glycol WC Method NEG NEG NEG NEG WEAR METALS method limit/base current history1 history2 Iron ppm ASTM D5185m >4 <1	Water		WC Method	>0.1	NEG	NEG	NEG
WEAR METALSmethodlimit/basecurrenthistory1history2IronppmASTM D5185m>15564ChromiumppmASTM D5185m>2<1	Glycol		WC Method		NEG	NEG	NEG
IronppmASTM D5185m ASTM D5185m>15564ChromiumppmASTM D5185m>4<1<1<1NickelppmASTM D5185m>2<100TitaniumppmASTM D5185m>2000SilverppmASTM D5185m>50000AluminumppmASTM D5185m>50411LeadppmASTM D5185m>94411CopperppmASTM D5185m>44333VanadiumppmASTM D5185m>44333VanadiumppmASTM D5185m>44333VanadiumppmASTM D5185m00000ADDITIVESmethodlimit/basecurrenthistory1history2BoronppmASTM D5185m4555BariumppmASTM D5185m323334CalciumppmASTM D5185m3253111314ZincppmASTM D5185m206719922020PhosphorusppmASTM D5185m250622722284CONTAMINANTSppmASTM D5185m250622722284SolfumppmASTM D5185m>20244Istory1history2pitoty2228422<	WEAR METALS		method	limit/base	current	history1	history2
Chromium ppm ASTM D5185m >4 <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 <td>Iron</td> <td>maa</td> <td>ASTM D5185m</td> <td>>15</td> <td>5</td> <td>6</td> <td>4</td>	Iron	maa	ASTM D5185m	>15	5	6	4
Nickel ppm ASTM D5185m >2 <1 0 0 Titanium ppm ASTM D5185m >5 0 0 0 Silver ppm ASTM D5185m >5 0 0 0 Aluminum ppm ASTM D5185m >6 2 2 1 Lead ppm ASTM D5185m >6 2 2 <1	Chromium	maa	ASTM D5185m	>4	<1	<1	<1
Titanium ppm ASTM D5185m 0 0 0 Silver ppm ASTM D5185m >5 0 0 0 Aluminum ppm ASTM D5185m >6 2 2 1 Lead ppm ASTM D5185m >9 4 4 1 Copper ppm ASTM D5185m >6 2 2 <1	Nickel	ppm	ASTM D5185m	>2	<1	0	0
Silver ppm ASTM D5185m >5 0 0 0 Aluminum ppm ASTM D5185m >6 2 2 1 Lead ppm ASTM D5185m >9 4 4 1 Copper ppm ASTM D5185m >6 2 2 <1 Tin ppm ASTM D5185m >4 4 3 3 Vanadium ppm ASTM D5185m >4 4 3 3 Vanadium ppm ASTM D5185m >4 0 0 0 Cadmium ppm ASTM D5185m 4 5 5 Barium ppm ASTM D5185m 4 5 4 Magnesium ppm ASTM D5185m 32 33 34 Calcium ppm ASTM D5185m 32 33 34 Calcium ppm ASTM D5185m 32 33 34 Calcium ppm ASTM D5185m	Titanium	ppm	ASTM D5185m		0	0	0
AluminumppmASTM D5185m>6221LeadppmASTM D5185m>9441CopperppmASTM D5185m>622<1	Silver	ppm	ASTM D5185m	>5	0	0	0
Lead ppm ASTM D5185m >9 4 4 1 Copper ppm ASTM D5185m >6 2 2 <1 Tin ppm ASTM D5185m >4 4 3 3 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 4 5 5 Barium ppm ASTM D5185m 8 5 4 Manganese ppm ASTM D5185m 32 33 34 Calcium ppm ASTM D5185m 32 33 34 Calcium ppm ASTM D5185m 325 311 314 Zinc ppm ASTM D5185m 2506 2272 284 CONTAMINANTS method limit/base	Aluminum	ppm	ASTM D5185m	>6	2	2	1
Copper ppm ASTM D5185m >6 2 2 <1 Tin ppm ASTM D5185m >4 4 3 3 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 4 5 5 Barium ppm ASTM D5185m 4 5 5 Barium ppm ASTM D5185m 8 5 4 Maganese ppm ASTM D5185m 32 33 34 Calcium ppm ASTM D5185m 355 311 314 Zinc ppm ASTM D5185m 2506 2272 2284 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m <	Lead	ppm	ASTM D5185m	>9	4	4	1
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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 4 5 5 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 3 5 4 Manganese ppm ASTM D5185m 32 33 34 Calcium ppm ASTM D5185m 3255 311 314 Zinc ppm ASTM D5185m 355 311 314 Zinc ppm ASTM D5185m 2506 2272 2284 CONTAMINANTS method limit/base current history1 history2 Solium ppm ASTM D5185m >181 197 188 171 Sodium ppm ASTM D5185m 2 4 <t< td=""><td>Tin</td><td>ppm</td><td>ASTM D5185m</td><td>>4</td><td>4</td><td>3</td><td>3</td></t<>	Tin	ppm	ASTM D5185m	>4	4	3	3
Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 4 5 5 Barium ppm ASTM D5185m 4 5 5 Barium ppm ASTM D5185m 8 5 4 Manganese ppm ASTM D5185m 8 5 4 Manganese ppm ASTM D5185m 322 33 34 Calcium ppm ASTM D5185m 326 311 314 Zinc ppm ASTM D5185m 355 311 314 Zinc ppm ASTM D5185m 2506 2272 2284 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >20 2 4 4 INFRA-RED method limit/base current history1	Vanadium	ppm	ASTM D5185m		0	0	0
ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 4 5 5 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 8 5 4 Magnesee ppm ASTM D5185m 32 33 34 Calcium ppm ASTM D5185m 322 33 34 Calcium ppm ASTM D5185m 355 311 314 Zinc ppm ASTM D5185m 355 311 387 Sulfur ppm ASTM D5185m 2506 2272 2284 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >181 197 188 171 Sodium ppm ASTM D5185m >20 2 4 4 INFRA-RED method limit/base current	Cadmium	ppm	ASTM D5185m		0	0	0
BoronppmASTM D5185m45BariumppmASTM D5185m000MolybdenumppmASTM D5185m854ManganeseppmASTM D5185m323334CalciumppmASTM D5185m323334CalciumppmASTM D5185m206719922020PhosphorusppmASTM D5185m355311314ZincppmASTM D5185m410391387SulfurppmASTM D5185m250622722284CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>181197188171SodiumppmASTM D5185m>20244INFRA-REDmethodlimit/basecurrenthistory1history2Soot %%'ASTM D78440.10.10.11NitrationAbs/1mm'ASTM D7415>3023.423.021.3FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2OxidationAbs/1mm'ASTM D7414>2520.920.217.1Acid Number (AN)mgK0HigASTM D2861.21.681.611.71Base Number (BN)mgK0HigASTM D2864.54.143.973.69	ADDITIVES		method	limit/base	current	history1	history2
Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 8 5 4 Manganese ppm ASTM D5185m 32 33 34 Calcium ppm ASTM D5185m 355 311 314 Zinc ppm ASTM D5185m 355 311 387 Sulfur ppm ASTM D5185m 2506 2272 2284 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >181 197 188 171 Sodium ppm ASTM D5185m >20 2 4 4 INFRA-RED method limit/base current <t< td=""><td>Boron</td><td>ppm</td><td>ASTM D5185m</td><td></td><td>4</td><td>5</td><td>5</td></t<>	Boron	ppm	ASTM D5185m		4	5	5
MolybdenumppmASTM D5185m854ManganeseppmASTM D5185m<1	Barium	ppm	ASTM D5185m		0	0	0
Manganese ppm ASTM D5185m <1 <1 <1 <1 Magnesium ppm ASTM D5185m 32 33 34 Calcium ppm ASTM D5185m 2067 1992 2020 Phosphorus ppm ASTM D5185m 355 311 314 Zinc ppm ASTM D5185m 410 391 387 Sulfur ppm ASTM D5185m 2506 2272 2284 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >181 197 188 171 Sodium ppm ASTM D5185m >20 2 4 4 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7624 >20 8.2 7.9 7.4 Sulfation Abs/.mm *ASTM D715 >30 23.4 23.0 21.3	Molybdenum	ppm	ASTM D5185m		8	5	4
Magnesium ppm ASTM D5185m 32 33 34 Calcium ppm ASTM D5185m 2067 1992 2020 Phosphorus ppm ASTM D5185m 355 311 314 Zinc ppm ASTM D5185m 410 391 387 Sulfur ppm ASTM D5185m 2506 2272 2284 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >181 197 188 171 Sodium ppm ASTM D5185m >20 2 4 4 INFRA-RED ppm ASTM D7844 0.1 0.1 0.1 Nitration Abs/cm *ASTM D7624 >20 8.2 7.9 7.4 Sulfation Abs/.1mm *ASTM D715 >30 23.4 23.0 21.3 FLUID DEGRADATION method limit/base current history1 history2	Manganese	ppm	ASTM D5185m		<1	<1	<1
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Phosphorus ppm ASTM D5185m 355 311 314 Zinc ppm ASTM D5185m 410 391 387 Sulfur ppm ASTM D5185m 2506 2272 2284 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >181 197 188 171 Sodium ppm ASTM D5185m >181 197 188 171 Sodium ppm ASTM D5185m >20 2 4 4 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7624 >20 8.2 7.9 7.4 Sulfation Abs/cm *ASTM D7624 >20 8.2 7.9 7.4 Sulfation Abs/.1mm *ASTM D7415 >30 23.4 23.0 21.3 FLUID DEGRADATION method limit/base current history1 </td <td>Calcium</td> <td>ppm</td> <td>ASTM D5185m</td> <td></td> <td>2067</td> <td>1992</td> <td>2020</td>	Calcium	ppm	ASTM D5185m		2067	1992	2020
Zinc ppm ASTM D5185m 410 391 387 Sulfur ppm ASTM D5185m 2506 2272 2284 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >181 197 ▲ 188 171 Sodium ppm ASTM D5185m >181 ▲ 197 ▲ 188 171 Sodium ppm ASTM D5185m >20 2 4 4 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0.1 0.1 0.1 Nitration Abs/cm *ASTM D7624 >20 8.2 7.9 7.4 Sulfation Abs/.1mm *ASTM D7615 >30 23.4 23.0 21.3 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 20.9	Phosphorus	ppm	ASTM D5185m		355	311	314
SulfurppmASTM D5185m250622722284CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>181197188171SodiumppmASTM D5185m>20252PotassiumppmASTM D5185m>20244INFRA-REDmethodlimit/basecurrenthistory1history2Soot %%*ASTM D78440.10.10.1NitrationAbs/cm*ASTM D7624>208.27.97.4SulfationAbs/lmm*ASTM D7615>3023.423.021.3FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2OxidationAbs/lmm*ASTM D7414>2520.920.217.1Acid Number (AN)mg KOHgASTM D80451.21.681.611.71Base Number (BN)mg KOHgASTM D28964.54.143.973.69	Zinc	ppm	ASTM D5185m		410	391	387
CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>181197188171SodiumppmASTM D5185m252PotassiumppmASTM D5185m>20244INFRA-REDmethodlimit/basecurrenthistory1history2Soot %%*ASTM D78440.10.10.1NitrationAbs/cm*ASTM D7624>208.27.97.4SulfationAbs/.1mm*ASTM D7415>3023.423.021.3FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2OxidationAbs/.1mm*ASTM D7414>2520.920.217.1Acid Number (AN)mg KOHgASTM D28964.54.143.973.69	Sulfur	ppm	ASTM D5185m		2506	2272	2284
Silicon ppm ASTM D5185m >181 197 188 171 Sodium ppm ASTM D5185m >181 197 188 171 Sodium ppm ASTM D5185m >20 2 5 2 Potassium ppm ASTM D5185m >20 2 4 4 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0.1 0.1 0.1 0.1 Nitration Abs/cm *ASTM D7624 >20 8.2 7.9 7.4 Sulfation Abs/.1mm *ASTM D7415 >30 23.4 23.0 21.3 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 20.9 20.2 17.1 Acid Number (AN) mg KOHg ASTM D8045 1.2 1.68 1.61 1.71 Base Number (BN) m	CONTAMINANTS		method	limit/base	current	history1	history2
Sodium ppm ASTM D5185m 2 5 2 Potassium ppm ASTM D5185m >20 2 4 4 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0.1 0.1 0.1 0.1 Nitration Abs/cm *ASTM D7624 >20 8.2 7.9 7.4 Sulfation Abs/.1mm *ASTM D7415 >30 23.4 23.0 21.3 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 20.9 20.2 17.1 Acid Number (AN) mg KOH/g ASTM D8045 1.2 1.68 1.61 1.71 Base Number (BN) mg KOH/g ASTM D2896 4.5 4.14 3.97 3.69	Silicon	ppm	ASTM D5185m	>181	🔺 197	1 88	171
Potassium ppm ASTM D5185m >20 2 4 4 INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0.1 0.1 0.1 0.1 Nitration Abs/cm *ASTM D7624 >20 8.2 7.9 7.4 Sulfation Abs/.1mm *ASTM D7624 >30 23.4 23.0 21.3 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 20.9 20.2 17.1 Acid Number (AN) mg KOHg ASTM D8045 1.2 1.68 1.61 1.71 Base Number (BN) mg KOHg ASTM D2896 4.5 4.14 3.97 3.69	Sodium	ppm	ASTM D5185m		2	5	2
INFRA-RED method limit/base current history1 history2 Soot % % *ASTM D7844 0.1 0.1 0.1 Nitration Abs/cm *ASTM D7624 >20 8.2 7.9 7.4 Sulfation Abs/.1mm *ASTM D7415 >30 23.4 23.0 21.3 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 20.9 20.2 17.1 Acid Number (AN) mg KOH/g ASTM D8045 1.2 1.68 1.61 1.71 Base Number (BN) mg KOH/g ASTM D2896 4.5 4.14 3.97 3.69	Potassium	ppm	ASTM D5185m	>20	2	4	4
Soot % % *ASTM D7844 0.1 0.1 0.1 Nitration Abs/cm *ASTM D7624 >20 8.2 7.9 7.4 Sulfation Abs/.1mm *ASTM D7624 >20 8.2 7.9 7.4 Sulfation Abs/.1mm *ASTM D7415 >30 23.4 23.0 21.3 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 20.9 20.2 17.1 Acid Number (AN) mg KOH/g ASTM D8045 1.2 1.68 1.61 1.71 Base Number (BN) mg KOH/g ASTM D2896 4.5 4.14 3.97 3.69	INFRA-RED		method	limit/base	current	history1	history2
Nitration Abs/cm *ASTM D7624 >20 8.2 7.9 7.4 Sulfation Abs/.1mm *ASTM D7415 >30 23.4 23.0 21.3 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 20.9 20.2 17.1 Acid Number (AN) mg KOH/g ASTM D8045 1.2 1.68 1.61 1.71 Base Number (BN) mg KOH/g ASTM D2896 4.5 4.14 3.97 3.69	Soot %	%	*ASTM D7844		0.1	0.1	0.1
Sulfation Abs/.1mm *ASTM D7415 >30 23.4 23.0 21.3 FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 20.9 20.2 17.1 Acid Number (AN) mg KOH/g ASTM D8045 1.2 1.68 1.61 1.71 Base Number (BN) mg KOH/g ASTM D2896 4.5 4.14 3.97 3.69	Nitration	Abs/cm	*ASTM D7624	>20	8.2	7.9	7.4
FLUID DEGRADATION method limit/base current history1 history2 Oxidation Abs/.1mm *ASTM D7414 >25 20.9 20.2 17.1 Acid Number (AN) mg KOH/g ASTM D8045 1.2 1.68 1.61 1.71 Base Number (BN) mg KOH/g ASTM D2896 4.5 4.14 3.97 3.69	Sulfation	Abs/.1mm	*ASTM D7415	>30	23.4	23.0	21.3
Oxidation Abs/.1mm *ASTM D7414 >25 20.9 20.2 17.1 Acid Number (AN) mg KOH/g ASTM D8045 1.2 1.68 1.61 1.71 Base Number (BN) mg KOH/g ASTM D2896 4.5 4.14 3.97 3.69	FLUID DEGRADA	TION	method	limit/base	current	history1	history2
Acid Number (AN) mg KOH/g ASTM D8045 1.2 1.68 1.61 1.71 Base Number (BN) mg KOH/g ASTM D2896 4.5 4.14 3.97 3.69							
Base Number (BN) mg KOH/g ASTM D2896 4.5 4.14 3.97 3.69	Oxidation	Abs/.1mm	*ASTM D7414	>25	20.9	20.2	17.1
	Oxidation Acid Number (AN)	Abs/.1mm mg KOH/g	*ASTM D7414 ASTM D8045	>25 1.2	20.9 1.68	20.2 1.61	17.1 1.71

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

Elemental level of silicon (Si) above normal indicating ingress of seal material.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Submitted By: Aaron Klein

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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	>0.1	NEG	NEG	NEG				
Free Water	scalar	*Visual		NEG	NEG	NEG				
FLUID PROPERT	IES	method	limit/base	current	history1	history2				
Visc @ 100°C	cSt	ASTM D445	14.7	14.4	14.3	14.0				
GRAPHS										
Iron (ppm)			2	Lead (ppm)						
20 - Severe										
= 15 - Abnormal			E.	Severe						
ā.		Α.	āl	0 - Abnormal	1 1					
5		Μ	~	SINV	M	1-1				
Apr7/2 /ay12/2 Jun15/2	Aug25/2	Sep28/2 Nov2/2 Dec7/2		Apr7/2 Aay12/2 Jun15/2	Jul21/7 Aug25/2 Sep28/2	Nov2/7 Dec7/7				
Aluminum (ppm) Chromium (ppm)										
12 Severe			22222	Severe						
8				4 Abnormal						
E 6 Abnormal			h	3						
4-				2						
	N	N	\sim			m				
7/23 - 2/23 - 5/23 -	5/23 -	2/23		r7/23 - 2/23 5/23 -	21/23	12/23				
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EDL NA Recips-South Jordan Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. : WC0865709 Received : 08 Jan 2024 South Jordan Powerstation, 10473 S. Bacchus Hwy. Lab Number : 06054079 Tested : 09 Jan 2024 South Jordan, UT Unique Number : 10820028 Diagnosed : 09 Jan 2024 - Sean Felton US 84095 Test Package : MOB 2 Contact: Aaron Klein Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. aaron.klein@edlenergy.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Т:

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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