

# **OIL ANALYSIS REPORT**

Sample Rating Trend

NORMAL

### Area **THUNDER SPIRIT [700404925]** Machine Id **T041 (S/N 20111455396)** Component

Transformer Oil Fluid NOT GIVEN (658 GAL)

#### DIAGNOSIS

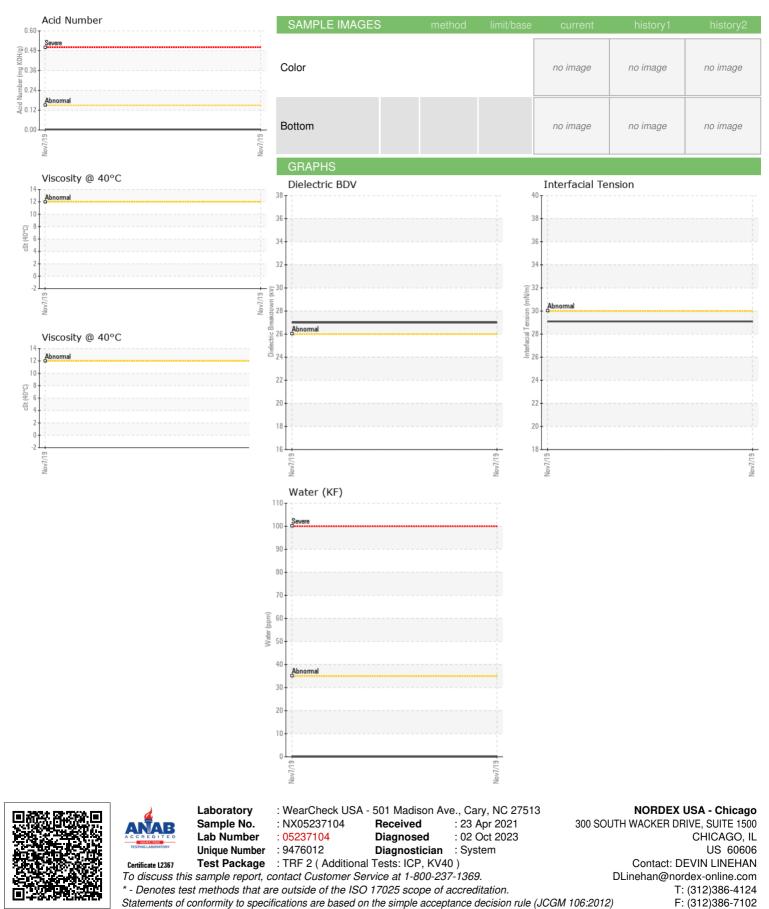
## Recommendation

This is a baseline read-out on the submitted sample. All tests and evaluation performed at subcontracted ISO 17025 laboratory.

Sample Date      Client Info      15 Apr 2021      07 Nov 2019         Machine Age      hrs      Client Info      0      0         Oil Age      hrs      Client Info      0      0         Oil Changed      Client Info      N/A      N/A         Sample Status      nethod      imit/base      current      history1      history2        ppm Water      ppm      ASTM D63/24      >35       0         DISSOLVED GAS ANALYSIS (DGA)      method      imit/base      current      history1      history2        DGA - 12      ppm      'NSTM 058/26       4/430/8         DGA - C2      ppm      'NSTM 058/26       386         DGA - CO2      ppm<'/STM 058/26       386         DGA - CO2      ppm<'/sTM 058/26       4         DGA - Acetylene      ppm<'/sTM 058/26       4         DGA - Acetylene      ppm<'/sTM 058/26       4				Nov2019	Apr2021		
Sample Date      Client Info      15 Apr 2021      07 Nov 2019         Machine Age      hrs      Client Info      0      0         Oil Age      hrs      Client Info      0      0         Oil Changed      Client Info      N/A      N/A         Sample Status      method      limit/base      current      history1      history2        ppm Water      ppm      ASTM D6304<>35       0         DISSOLVED CAS ANALYSIS (DGA)      method      limit/base      current      history1      history2        DGA      12      ppm      'XSTM 056/2(e)       4      43298         DGA      CO      ppm      'XSTM 056/2(e)       386         DGA      CO      ppm      'XSTM 056/2(e)       4         DGA      Accetylene      ppm<'/td>      'XSTM 056/2(e)       4         DGA      Accetylene      ppm<'/td>      'XSTM 056/2(e)       4	SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Machine Age      hrs      Client Info      0      0         Oil Age      hrs      Client Info      0      0         Oil Changed      Client Info      N/A      N/A       N/A        Sample Status      Imilibase      current      history1      history2        ppm Water      ppm      ASTM D6304      >35       0         DISOLVED GAS ANALYSIS (DGA)      method      imilibase      current      history1      history2        DGA - Q      ppm      'ASTM D6304      >35       0         DGA - N2      ppm      'ASTM D6312(e)       4 43298         DGA - CO2      ppm      'ASTM D6312(e)       51         DGA - CO2      ppm      'ASTM D6312(e)       4 33         DGA - Acctylene      ppm<'ASTM D6312(e)       4 329         DGA - Ethane      ppm<'ASTM D6312(e)       4 4290         DGA - Tell Combustible Gas      ppm<'ASTM D6	Sample Number		Client Info		NX05237104	NX04850266	
Oil Age    hrs    Client Info    0    0       Oll Changed    Client Info    N/A    N/A    N/A       Sample Status    Imit base    NORMAL    SEVERE       CONTAMINANTS    method    limit/base    current    history1    history2      ppm Water    ppm    ASTM D6304    >35     0       DISSOLVED GAS ANALYSIS (DGA)    method    limit/base    current    history1    history2      DGA - O2    ppm    'ASTM D6302(e)     4    43298       DGA - C0    ppm    'ASTM D6302(e)     51       DGA - C02    ppm    'ASTM D6302(e)     386       DGA - C02    ppm    'ASTM D6302(e)     4       DGA - C02    ppm    'ASTM D6302(e)     4       DGA - C02    ppm    'ASTM D6302(e)     4       DGA - Ethylene    ppm<'ASTM D6302(e)	Sample Date		Client Info		15 Apr 2021	07 Nov 2019	
Oil Changed Sample Status    Client Info    N/A    N/A    N/A       Sample Status    method    limit/base    current    history1    history2      ppm Water    ppm    ASTM D6304    >35     0       DISOLVED GAS ANALYSIS (DGA)    method    limit/base    current    history1    history2      DGA - O2    ppm    'ASTM D6312(e)     494       DGA - O2    ppm    'ASTM D6312(e)     51       DGA - CO    ppm    'ASTM D6312(e)     366       DGA - CO2    ppm    'ASTM D6312(e)     386       DGA - CO2    ppm    'ASTM D6312(e)     4       DGA - CO2    ppm    'ASTM D6312(e)     4    290	Machine Age	hrs	Client Info		0	0	
Sample Status    NORMAL    SEVERE       CONTAMINANTS    method    limit/base    current    history1    history2      ppm Water    ppm    ASTM D6304    >35     0       DISSOLVED GAS ANALYSIS (DGA)    method    limit/base    current    history1    history2      DGA - O2    ppm    'ASTM 05812(e)     4944       DGA - O2    ppm    'ASTM 05812(e)     10748       DGA - CO2    ppm    'ASTM 05812(e)     386       DGA - CO2    ppm    'ASTM 05812(e)     4       DGA - CO2    ppm    'ASTM 05812(e)     4       DGA - Acetylene    ppm    'ASTM 05812(e)     4       DGA - Ethane    ppm    'ASTM 05812(e)     4       DGA - Total Gas Content    %    'ASTM 05812(e)     63129       DGA - Total Gas Content    %    Yistm 03812(e)     63129       DGA - Total	Oil Age	hrs	Client Info		0	0	
CONTAMINANTS    method    limit/base    current    history1    history2      ppm    Water    ppm    ASTM D6304    >35     0       DISSOLVED GAS ANAL/SIS (DGA)    method    limit/base    current    history1    history2      DGA - O2    ppm    'ASTM 05612(e)     4    43298       DGA - O2    ppm    'ASTM 05612(e)     51     0       DGA - CO    ppm    'ASTM 05612(e)     386     0       DGA - CO2    ppm    'ASTM 05612(e)     386     0    0       DGA - CO2    ppm    'ASTM 05612(e)     4     0    0       DGA - CO2    ppm    'ASTM 05612(e)     4     0    0       DGA - Co1 (Gas Content    %ASTM 05612(e)      4    490     0    0     0    0     0    0     0    0	Oil Changed		Client Info		N/A	N/A	
ppm Water  ppm  ASTM D6304< >35   0     DISSOLVED GAS ANALYSIS (DGA)  method  limit/base  current  history1  history2    DGA - H2  ppm  'ASTM D6312(e)   49298     DGA - O2  ppm  'ASTM D6312(e)   494     DGA - O2  ppm  'ASTM D6312(e)   10748     DGA - CO2  ppm  'ASTM D6312(e)   386     DGA - CO2  ppm  'ASTM D6312(e)   386     DGA - CO2  ppm  'ASTM D6312(e)   4     DGA - Acetylene  ppm  'ASTM D6312(e)   4     DGA - Ethylene  ppm  'ASTM D6312(e)   4     DGA - Total Gas Content  %  'ASTM D6312(e)   € 63129     DGA - Total Gas Content  %  'ASTM D6312(e)   € 63129     DGA - Total Gas Content  %  'ASTM D6312(e)   € 63129     PLUID DEGRADATION  method  limit/base  current  history1  history2    VisUAL  method  limit/	Sample Status				NORMAL	SEVERE	
DISSOLVED GAS ANALYSIS (DGA)    method    limit/base    current    history1    history2      DGA - H2    ppm    'ASTM D3612(e)     49298       DGA - O2    ppm    'ASTM D3612(e)     494       DGA - O2    ppm    'ASTM D3612(e)     10748       DGA - O2    ppm    'ASTM D3612(e)     51       DGA - CO2    ppm    'ASTM D3612(e)     386       DGA - CO2    ppm    'ASTM D3612(e)     433       DGA - CO2    ppm    'ASTM D3612(e)     4       DGA - Ethylene    ppm    'ASTM D3612(e)     4       DGA - Total Gas Content    %    'ASTM D3612(e)     74757       DGA - Total Gas Content    %    'ASTM D3612(e)     € 63129       FLUID DEGRADATION    method    limit/base    current    history1    history2      Acid Number (AN)    mg KOHg    ASTM D8612(e)     0.003 <th>CONTAMINANTS</th> <th></th> <th>method</th> <th>limit/base</th> <th>current</th> <th>history1</th> <th>history2</th>	CONTAMINANTS		method	limit/base	current	history1	history2
DGA - H2    ppm    'ASTM D3612(e)     ▲ 43298       DGA - O2    ppm    'ASTM D3612(e)     494       DGA - N2    ppm    'ASTM D3612(e)     10748       DGA - CO    ppm    'ASTM D3612(e)     51       DGA - CO2    ppm    'ASTM D3612(e)     386       DGA - CO2    ppm    'ASTM D3612(e)     386       DGA - Acetylene    ppm    'ASTM D3612(e)     4       DGA - Total Gas Content    %ASTM D3612(e)     4290       DGA - Total Gas Content    %ASTM D3612(e)     63129       DGA - Total Gas Content    %ASTM D3612(e)     0.003       FLUID DEGRADATION    method    limit/base    current    history1    history2      Moite Metal    scalar    *Visual    NONE    VLITE        Yellow Metal    scalar    *Visual    NONE    VLITE        Yellow Me	ppm Water	ppm	ASTM D6304	>35		0	
DGA - O2    ppm    /ASTM D3612(e)     494       DGA - O2    ppm    'ASTM D3612(e)     10748       DGA - CO    ppm    'ASTM D3612(e)     51       DGA - CO2    ppm    'ASTM D3612(e)     386       DGA - Methane    ppm    'ASTM D3612(e)     4       DGA - Acetylene    ppm    'ASTM D3612(e)     4       DGA - Acetylene    ppm    'ASTM D3612(e)     4290       DGA - Ethylene    ppm    'ASTM D3612(e)     4290       DGA - Total Gas Content    '% ASTM D3612(e)     63129       DGA - Total Gas Content    '% ASTM D3612(e)     0.003       FLUID DEGRADATION    method    limit/base    current    history1    history2      Mkite Metal    scalar    'Visual    NONE    VLITE        Yellow Metal    scalar    'Visual    NONE    VLITE	DISSOLVED GAS ANAL	YSIS (DGA	) method	limit/base	current	history1	history2
DGA - N2    ppm    'ASTM D3612(e)     10748       DGA - CO    ppm    'ASTM D3612(e)     51       DGA - CO2    ppm    'ASTM D3612(e)     386       DGA - CO2    ppm    'ASTM D3612(e)     386       DGA - Methane    ppm    'ASTM D3612(e)     4       DGA - Schylene    ppm    'ASTM D3612(e)     4       DGA - Ethane    ppm    'ASTM D3612(e)     63129       DGA - Total Gas Content    %    'ASTM D3612(e)     63129       DGA - Total Gas Content    %    'ASTM D3612(e)     63129       DGA - Total Combustible Gas    ppm    'ASTM D3612(e)     0.003       FLUID DEGRADATION    mg KOHg    ASTM D3612(e)     0.003       VISUAL    method    limit/base    current    history1    history2      White Metal    scalar    'Visual    NONE    VLITE	DGA - H2	ppm	*ASTM D3612(e)			43298	
DGA - N2    ppm    'ASTM D3612(e)     10748       DGA - CO    ppm    'ASTM D3612(e)     386       DGA - CO2    ppm    'ASTM D3612(e)     386       DGA - CO2    ppm    'ASTM D3612(e)     386       DGA - CO2    ppm    'ASTM D3612(e)     4       DGA - Acetylene    ppm    'ASTM D3612(e)     4       DGA - Ethane    ppm    'ASTM D3612(e)     4290       DGA - Total Gas Content    %    'ASTM D3612(e)     63129       DGA - Total Combustible Gas    ppm    'ASTM D3612(e)     0.003       FLUID DEGRADATION    method    limit/base    current    history1    history2      White Metal    scalar    'Visual    NONE    VLITE        Yellow Metal    scalar    'Visual    NONE    VLITE        Silt    scalar    'Visual    NONE    VLITE <td>DGA - 02</td> <td></td> <td>*ASTM D3612(e)</td> <td></td> <td></td> <td>494</td> <td></td>	DGA - 02		*ASTM D3612(e)			494	
DGA - COppm'ASTM D3612(e)51DGA - CO2ppm'ASTM D3612(e)386DGA - CO2ppm'ASTM D3612(e)15483DGA - Methaneppm'ASTM D3612(e)4DGA - Acetyleneppm'ASTM D3612(e)4DGA - Ethyleneppm'ASTM D3612(e)4DGA - Ethaneppm'ASTM D3612(e)63129DGA - Total Gas Content%'ASTM D3612(e)63129DGA - Total Combustible Gasppm'ASTM D3612(e)0.003FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2Acid Number (AN)mg KOHgASTM D80450.003YISUALmethodlimit/basecurrenthistory1history2White Metalscalar'VisualNONEVLITEYellow Metalscalar'VisualNONEVLITESiltscalar'VisualNONEVLITEDebrisscalar'VisualNONEVLITEAppearancescalar'VisualNORMLAMMONGodoscalar'VisualNORMLAMMONFree Waterscalar'VisualNORMLAMMONFree	DGA - N2		*ASTM D3612(e)			10748	
DGA - CO2    ppm    *ASTM D3612(e)     386       DGA - Methane    ppm    *ASTM D3612(e)     ▲ 3       DGA - Acetylene    ppm    *ASTM D3612(e)     ▲ 3       DGA - Ethylene    ppm    *ASTM D3612(e)     4       DGA - Ethylene    ppm    *ASTM D3612(e)     4       DGA - Ethylene    ppm    *ASTM D3612(e)     € 4290       DGA - Total Gas Content    %    *ASTM D3612(e)     € 63129       DGA - Total Combustible Gas    ppm    *ASTM D3612(e)     € 63129       FLUID DEGRADATION    method    limit/base    current    history1    history2      Acid Number (AN)    mg KOH/g    ASTM D8045     0.003       YISUAL    method    limit/base    current    history1    history2      White Metal    scalar    *Visual    NONE    VLITE        Yellow Metal    scalar    *Visual    NONE <t< td=""><td>DGA - CO</td><td></td><td>*ASTM D3612(e)</td><td></td><td></td><td>51</td><td></td></t<>	DGA - CO		*ASTM D3612(e)			51	
DGA - Acetyleneppm*ASTM D3612(e)A 3DGA - Ethyleneppm*ASTM D3612(e)4DGA - Ethaneppm*ASTM D3612(e)4290DGA - Total Gas Content%*ASTM D3612(e)63129DGA - Total Combustible Gasppm*ASTM D3612(e)63129FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2Acid Number (AN)mg KOHgASTM D80450.003VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONEVLITEYellow Metalscalar*VisualNONEVLITESiltscalar*VisualNONEVLITEDebrisscalar*VisualNONEVLITEAppearancescalar*VisualNORMLLAYRDAppearancescalar*VisualNORMLAMMONGodrscalar*VisualNORMLAMMONFree Waterscalar*VisualNORMLAMMONFree Waterscalar*VisualSo035.1%Free Waterscalar*VisualSo035.1%Free Waterscalar*VisualSo035.1%	DGA - CO2	ppm	*ASTM D3612(e)			386	
DGA - Ethyleneppm*ASTM D3612(e)4DGA - Ethaneppm*ASTM D3612(e)4290DGA - Total Gas Content%*ASTM D3612(e)63129DGA - Total Combustible Gasppm*ASTM D3612(e)63129FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2Acid Number (AN)mg KOH/gASTM D3012(e)0.003VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONEVLITEYellow Metalscalar*VisualNONEVLITEPrecipitatescalar*VisualNONEVLITESiltscalar*VisualNONEVLITEDebrisscalar*VisualNONEVLITEAppearancescalar*VisualNOREVLITEQdorscalar*VisualNORMLLAYRDCodorscalar*VisualNORMLAMMONEmulsified Waterscalar*Visual>0.0035.1%Free Waterscalar*Visual>0.0035.1%FLUID PROPERTIESmethodlimit/basecurrenthistory1history2Specific GravityASTM D4052(e) <td>DGA - Methane</td> <td>ppm</td> <td>*ASTM D3612(e)</td> <td></td> <td></td> <td>• 15483</td> <td></td>	DGA - Methane	ppm	*ASTM D3612(e)			• 15483	
DGA - Ethaneppm*ASTM D3612(e)4290DGA - Total Gas Content%*ASTM D3612(e)74757DGA - Total Combustible Gasppm*ASTM D3612(e)63129FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2Acid Number (AN)mg KOHlgASTM D80450.003VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONEVLITEYellow Metalscalar*VisualNONEVLITEPrecipitatescalar*VisualNONEVLITESiltscalar*VisualNONEVLITEDebrisscalar*VisualNONEVLITEAppearancescalar*VisualNOREVLITEQdorscalar*VisualNORMLLAYRDAppearancescalar*VisualNORMLAMMONEmulsified Waterscalar*VisualNORMLAMMONFree Waterscalar*VisualNORMLAMMONFLUID PROPERTIESmethodlimit/basecurrenthistory1history2Specific GravityASTM D4052(e)0.878Dielectric BreakdownkVA	DGA - Acetylene	ppm	*ASTM D3612(e)			<b>A</b> 3	
DGA - Total Gas Content%*ASTM D3612(e)74757DGA - Total Combustible Gasppm*ASTM D3612(e)63129FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2Acid Number (AN)mg KOH/gASTM D80450.003VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONEVLITEYellow Metalscalar*VisualNONEVLITEPrecipitatescalar*VisualNONEVLITESiltscalar*VisualNONEVLITESand/Dirtscalar*VisualNONEVLITEAppearancescalar*VisualNORMLLAYRDOdorscalar*VisualNORMLAMMONCodorscalar*VisualNORMLAMMONFree Waterscalar*Visual>0.0035.1%FLUID PROPERTIESmethodlimit/basecurrenthistory1history2Specific GravityASTM D4052(e)0.878Dielectric BreakdownkVASTM D1816(e)29.1Interfacial TensionmN/mASTM D971(e)29.1	DGA - Ethylene	ppm	*ASTM D3612(e)			4	
DGA - Total Combustible Gasppm*ASTM D3812(e)63129FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2Acid Number (AN)mg KOH/gASTM D80450.003VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONEVLITEYellow Metalscalar*VisualNONEVLITEPrecipitatescalar*VisualNONEVLITESiltscalar*VisualNONEVLITEDebrisscalar*VisualNONEVLITESand/Dirtscalar*VisualNONEVLITEAppearancescalar*VisualNORMLLAYRDOdorscalar*Visual>0.0035.1%Free Waterscalar*Visual>0.0035.1%FLUID PROPERTIESmethodlimit/basecurrenthistory1history2Specific GravityASTM D4052(e)0.878Dielectric BreakdownkVASTM D1816(e)29.1Interfacial TensionmN/mASTM D971(e)29.1	DGA - Ethane	ppm	*ASTM D3612(e)			4290	
FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2Acid Number (AN)mg KOHgASTM D80450.003VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONEVLITEYellow Metalscalar*VisualNONEVLITEPrecipitatescalar*VisualNONEVLITESiltscalar*VisualNONEVLITEDebrisscalar*VisualNONEVLITESand/Dirtscalar*VisualNONEVLITEAppearancescalar*VisualNORMLLAYRDOdorscalar*VisualNORMLLAYRDEmulsified Waterscalar*Visual>0.0035.1%Free Waterscalar*VisualS%FLUID PROPERTIESmethodlimit/basecurrenthistory1history2Specific GravityASTM D4052(e)0.878Dielectric BreakdownkVASTM D1816(e)429.1Interfacial TensionmN/mASTM D971(e)429.1	DGA - Total Gas Content	%	*ASTM D3612(e)			74757	
Acid Number (AN)mg KOH/gASTM D80450.003VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONEVLITEYellow Metalscalar*VisualNONEVLITEPrecipitatescalar*VisualNONEVLITESiltscalar*VisualNONEVLITEDebrisscalar*VisualNONEVLITESand/Dirtscalar*VisualNONEVLITEAppearancescalar*VisualNORMLLAYRDOdorscalar*VisualNORMLAMMONEmulsified Waterscalar*Visual>0.0035.1%Free Waterscalar*Visual>0.0035.1%Fulid PROPERTIESmethodlimit/basecurrenthistory1history2Specific GravityASTM D4052(e)0.878Interfacial TensionmN/mASTM D971(e)29.1	DGA - Total Combustible Gas	ppm	*ASTM D3612(e)			63129	
VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONEVLITEYellow Metalscalar*VisualNONEVLITEPrecipitatescalar*VisualNONEVLITESiltscalar*VisualNONEVLITEDebrisscalar*VisualNONEVLITESand/Dirtscalar*VisualNONEVLITEAppearancescalar*VisualNORMLLAYRDOdorscalar*VisualNORMLAMMONEmulsified Waterscalar*Visual>0.0035.1%Free Waterscalar*Visual>0.0035.1%FLUID PROPERTIESmethodlimit/basecurrenthistory1history2Specific GravityASTM D4052(e)0.878Dielectric BreakdownkVASTM D1816(e)427Interfacial TensionmN/mASTM D971(e)429.1	FLUID DEGRADA	TION	method	limit/base	current	history1	history2
White Metalscalar*VisualNONEVLITEYellow Metalscalar*VisualNONEVLITEPrecipitatescalar*VisualNONEVLITESiltscalar*VisualNONEVLITEDebrisscalar*VisualNONEVLITESand/Dirtscalar*VisualNONEVLITEAppearancescalar*VisualNORMLLAYRDOdorscalar*VisualNORMLAMMONEmulsified Waterscalar*Visual>0.0035.1%Free Waterscalar*Visual5%FLUID PROPERTIESmethodlimit/basecurrenthistory1history2Specific GravityASTM D4052(e)0.878Interfacial TensionmN/mASTM D971(e)29.1	Acid Number (AN)	mg KOH/g	ASTM D8045			0.003	
Yellow Metalscalar*VisualNONEVLITEPrecipitatescalar*VisualNONEVLITESiltscalar*VisualNONEVLITEDebrisscalar*VisualNONEVLITESand/Dirtscalar*VisualNONEVLITEAppearancescalar*VisualNORMLLAYRDOdorscalar*VisualNORMLAMMONEmulsified Waterscalar*Visual>0.0035.1%Free Waterscalar*Visual5%FLUID PROPERTIESmethodlimit/basecurrenthistory1history2Specific GravityASTM D4052(e)0.878Dielectric BreakdownkVASTM D1816(e)427Interfacial TensionmN/mASTM D971(e)429.1	VISUAL		method	limit/base	current	history1	history2
Precipitatescalar*VisualNONEVLITESiltscalar*VisualNONEVLITEDebrisscalar*VisualNONEVLITESand/Dirtscalar*VisualNONEVLITEAppearancescalar*VisualNORMLLAYRDOdorscalar*VisualNORMLAMMONEmulsified Waterscalar*Visual>0.0035.1%Free Waterscalar*Visual>0.0035.1%Free Waterscalar*VisualSolo35.1%FLUID PROPERTIESmethodlimit/basecurrenthistory1history2Specific GravityASTM D4052(e)0.878Dielectric BreakdownkVASTM D1816(e)427Interfacial TensionmN/mASTM D971(e)429.1	White Metal	scalar	*Visual	NONE	VLITE		
Siltscalar*VisualNONEVLITEDebrisscalar*VisualNONEVLITESand/Dirtscalar*VisualNONEVLITEAppearancescalar*VisualNORMLLAYRDOdorscalar*VisualNORMLAMMONEmulsified Waterscalar*Visual>0.0035.1%Free Waterscalar*Visual>0.0035.1%Free Waterscalar*Visual5%FLUID PROPERTIESmethodlimit/basecurrenthistory1history2Specific GravityASTM D4052(e)0.878Dielectric BreakdownkVASTM D1816(e)427Interfacial TensionmN/mASTM D971(e)429.1	Yellow Metal	scalar	*Visual	NONE	VLITE		
Debrisscalar*VisualNONEVLITESand/Dirtscalar*VisualNONEVLITEAppearancescalar*VisualNORMLLAYRDOdorscalar*VisualNORMLAMMONEmulsified Waterscalar*Visual>0.0035.1%Free Waterscalar*Visual>0.0035.1%Free Waterscalar*Visual5%FLUID PROPERTIESmethodlimit/basecurrenthistory1history2Specific GravityASTM D4052(e)0.878Dielectric BreakdownkVASTM D1816(e)427Interfacial TensionmN/mASTM D971(e)429.1	Precipitate	scalar	*Visual	NONE	VLITE		
Sand/Dirt    scalar    *Visual    NONE    VLITE        Appearance    scalar    *Visual    NORML    LAYRD        Odor    scalar    *Visual    NORML    AMMON        Emulsified Water    scalar    *Visual    >0.0035    .1%        Free Water    scalar    *Visual    >0.0035    .1%        Fluid PROPERTIES    method    limit/base    current    history1    history2      Specific Gravity    ASTM D4052(e)     0.878       Dielectric Breakdown    kV    ASTM D1816(e)     4    27       Interfacial Tension    mN/m    ASTM D971(e)     4    29.1	Silt	scalar	*Visual	NONE	VLITE		
Appearancescalar*VisualNORMLLAYRDOdorscalar*VisualNORMLAMMONEmulsified Waterscalar*Visual>0.0035.1%Free Waterscalar*Visual5%FLUID PROPERTIESmethodlimit/basecurrenthistory1history2Specific GravityASTM D4052(e)0.878Dielectric BreakdownkVASTM D1816(e)27Interfacial TensionmN/mASTM D971(e)29.1	Debris	scalar	*Visual	NONE	VLITE		
Odor      scalar      *Visual      NORML      AMMON          Emulsified Water      scalar      *Visual      >0.0035      .1%          Free Water      scalar      *Visual      >0.0035      .1%          FLUID PROPERTIES      method      limit/base      current      history1      history2        Specific Gravity      ASTM D4052(e)       0.878         Dielectric Breakdown      kV      ASTM D1816(e)       27         Interfacial Tension      mN/m      ASTM D971(e)       29.1	Sand/Dirt	scalar	*Visual	NONE	VLITE		
Emulsified Water      scalar      *Visual      >0.0035      .1%          Free Water      scalar      *Visual      5%          FLUID PROPERTIES      method      limit/base      current      history1      history2        Specific Gravity      ASTM D4052(e)       0.878         Dielectric Breakdown      kV      ASTM D1816(e)       27         Interfacial Tension      mN/m      ASTM D971(e)       29.1	Appearance	scalar	*Visual	NORML	LAYRD		
Free Water  scalar  *Visual  5%      FLUID PROPERTIES  method  limit/base  current  history1  history2    Specific Gravity  ASTM D4052(e)   0.878     Dielectric Breakdown  kV  ASTM D1816(e)   27     Interfacial Tension  mN/m  ASTM D971(e)   29.1	Odor	scalar	*Visual	NORML	AMMON		
FLUID PROPERTIES    method    limit/base    current    history1    history2      Specific Gravity    ASTM D4052(e)     0.878       Dielectric Breakdown    kV    ASTM D1816(e)     27       Interfacial Tension    mN/m    ASTM D971(e)     29.1	Emulsified Water	scalar	*Visual	>0.0035	.1%		
Specific Gravity      ASTM D4052(e)       0.878         Dielectric Breakdown      kV      ASTM D1816(e)       27         Interfacial Tension      mN/m      ASTM D971(e)       29.1	Free Water	scalar	*Visual		5%		
Dielectric Breakdown      kV      ASTM D1816(e)       27         Interfacial Tension      mN/m      ASTM D971(e)       29.1	FLUID PROPERT	IES	method	limit/base	current	history1	history2
Interfacial Tension mN/m ASTM D971(e)	Specific Gravity		ASTM D4052(e)			0.878	
	Dielectric Breakdown	kV	ASTM D1816(e)			<b>2</b> 7	
ASTM Color scalar ASTM D1500(e) L1.0	Interfacial Tension	mN/m	ASTM D971(e)			<b>2</b> 9.1	
	ASTM Color	scalar	ASTM D1500(e)			L1.0	



# **OIL ANALYSIS REPORT**



Contact/Location: DEVIN LINEHAN - NORDEX