

# **OIL ANALYSIS REPORT**

Sample Rating Trend



# L-10 88 REDUCTION

Gearbox Fluid

## PETRO CANADA ENDURATEX EP 220 (15 GAL)

## DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor.

#### Wear

All component wear rates are normal.

#### Contamination

There is no indication of any contamination in the oil.

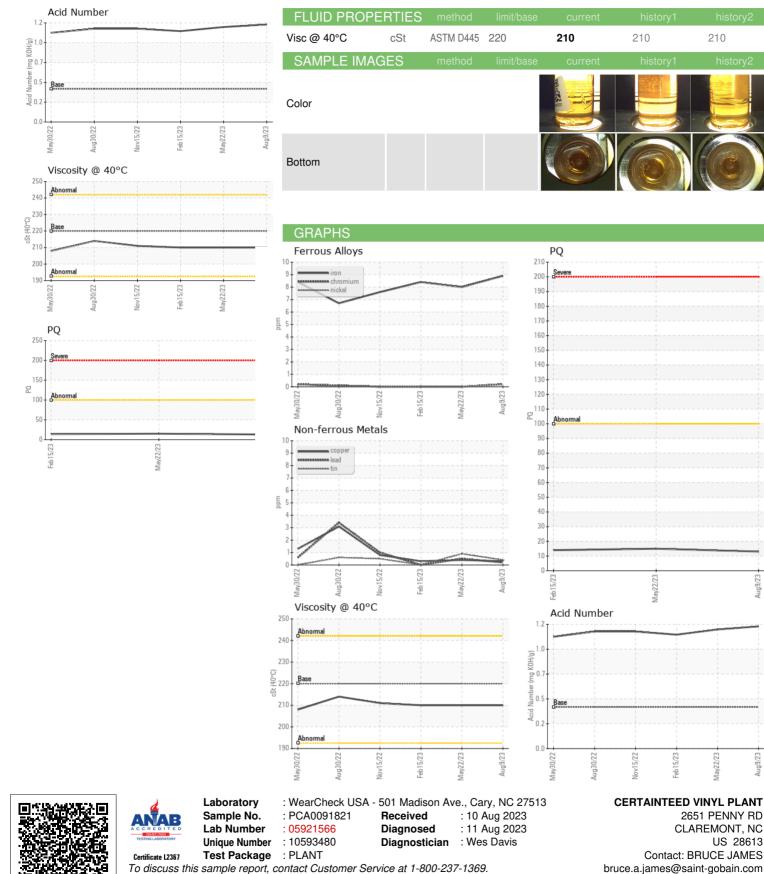
### Fluid Condition

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sample Number     Client Info     PCA0091821     PCA0091892     PCA0091894     PCA0091894       Sample Date     Client Info     0     0     0     0       Oll Age     hrs<     Client Info     0     0     0     0       Oll Age     hrs<     Client Info     N/A     N/A     N/A     N/A       Sample Status     method     imit/base     current     history1     history1       VEAR METALS     method     imit/base     current     history1     history2       PQ     ASTM DSI85m     >15     <1     0     0     0       Titanium     ppm     ASTM DSI85m     >25     <1     <1     0       Silver     ppm     ASTM DSI85m     >200     <1     <1     0       Vanadium     ppm     ASTM DSI85m     >200     <1     <1     0       Vanadium     ppm     ASTM DSI85m     >200     <1     <1     0       Vanadium     ppm     ASTM DSI85m     0     0			WayLorz	AU92022 11072022		AUGZUZ3	
Sample Date     Client Info     09 Aug 2023     22 May 2023     15 Feb 2023       Machine Age     hrs     Client Info     0     0     0       Oil Age     hrs     Client Info     0     0     0       Oil Changed     Client Info     N/A     N/A     N/A     N/A       Sample Status     Imit Motion     NORMAL     NORMAL     NORMAL     NORMAL       WEAR METALS     method     Imit/base     current     Historyl     historyl       PQ     ASTM 05185m     >15     <1     0     0       Nickel     ppm     ASTM 05185m     >15     <1     0     0       Silver     ppm     ASTM 05185m     >200     <1     <1     0     0       Auminum     ppm     ASTM 05185m     >200     <1     <1     0     0     0       Copper     ppm     ASTM 05185m     >200     <1     <1     <1     1       Copper     ppm     ASTM 05185m     >200     <1     <1 <th>SAMPLE INFORM</th> <th>MATION</th> <th>method</th> <th>limit/base</th> <th>current</th> <th>history1</th> <th>history2</th>	SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Machine Age     hrs     Client Info     0     0     0       Oil Age     hrs     Client Info     0     0     0       Sample Status     I     Imit base     NORMAL     NORMAL     NORMAL       WEAR METALS     method     imit base     current     history1     history2       PQ     ASTM 05185     -13     15     14       Iron     ppm     ASTM 05185     -11     0     0       Nickel     ppm     ASTM 05185     -15     <1     0     0       Silver     ppm     ASTM 05185     >10     0     0     0       Qopper     ppm     ASTM 05185     >200     <1     <1     1     1       Tin     ppm     ASTM 05185     >0     0     0     0     0       Cadmium     ppm     ASTM 05185     0     0     0     0     0       ADDITIVES     method     imit/base     current     history2     28     29     28	Sample Number		Client Info		PCA0091821	PCA0091909	PCA0091894
Oil Age     hrs     Client Info     0     0     0       Oil Changed     Client Info     N/A     N/A     N/A     N/A       Sample Status     Client Info     NORMAL     NORMAL     NORMAL     NORMAL       WEAR METALS     method     imil/base     current     history1     history2       PQ     ASTM 05185     >15     <1     0     0       Nickel     ppm     ASTM 05185     >15     <1     0     0       Titanium     ppm     ASTM 05185     >15     <1     0     0       Silver     ppm     ASTM 05185     >100     <1     <1     0       Capper     ppm     ASTM 05185     >200     <1     <1     0       Vanadium     ppm     ASTM 05185     >200     <1     <1     0     0       Vanadium     ppm     ASTM 05185     0     0     0     0     0     0       Astm 05185     0     0     0     0     0 <td< th=""><th>Sample Date</th><th></th><th>Client Info</th><th></th><th>09 Aug 2023</th><th>22 May 2023</th><th>15 Feb 2023</th></td<>	Sample Date		Client Info		09 Aug 2023	22 May 2023	15 Feb 2023
Oli Changed Client Info N/A N/A N/A N/A   Sample Status Imit Point NoRMAL NORMAL NORMAL NORMAL   WEAR METALS method limit/base current History1 History2   PQ ASTM 05185m >15 <1 0 0   Kornenium ppm ASTM 05185m >15 <1 0 0   Nickel ppm ASTM 05185m >15 <1 0 0   Aluminum ppm ASTM 05185m >15 <1 0 0   Aluminum ppm ASTM 05185m >100 <1 <1 0   Copper ppm ASTM 05185m >200 <1 <1 1   Yanadium ppm ASTM 05185m >200 <1 <1 <1   Vanadium ppm ASTM 05185m 0 0 0 0   AbDITIVES method imit/base current History1 History2   Boron ppm ASTM 05185m 0 0 0 0   Magnesium ppm ASTM 05185m 0 0 1 <1   Calcium ppm ASTM 05185m	Machine Age	hrs	Client Info		0	0	0
Sample Status     NORMAL     NORMAL     NORMAL     NORMAL     NORMAL     NORMAL       WEAR METALS     method     limit/base     current     history1     history2       PQ     ASTM D8184     13     15     14       Iron     ppm     ASTM D8185     >200     9     8     8       Chromium     ppm     ASTM D8185     >15     <1     0     0       Nokel     ppm     ASTM D8185     >15     <1     0     0       Auminum     ppm     ASTM D8185     >100     <1     <1     0       Lead     ppm     ASTM D8185     >200     <1     <1     0       Copper     ppm     ASTM D8185     >200     <1     <1     0       Vanadium     ppm     ASTM D8185     0     0     0     0     0       Vanadium     ppm     ASTM D8185     0     0     0     0     0       Vanadium     ppm     ASTM D8185     0     0     0 <th>Oil Age</th> <th>hrs</th> <th>Client Info</th> <th></th> <th>0</th> <th>0</th> <th>0</th>	Oil Age	hrs	Client Info		0	0	0
WEAR METALS     method     imit/base     current     history1     history2       PQ     ASTM D8184     13     15     14       iron     ppm     ASTM D5185m     >15     <1     0     0       Nickel     ppm     ASTM D5185m     >15     <1     0     0       Tatanium     ppm     ASTM D5185m     >15     <1     0     0       Aluminum     ppm     ASTM D5185m     >15     <1     0     0       Aluminum     ppm     ASTM D5185m     >200     <1     <1     0     0       Lead     ppm     ASTM D5185m     >200     <1     <1     <1     0       Copper     ppm     ASTM D5185m     0     0     0     0     0       Cadmium     ppm     ASTM D5185m     0	Oil Changed		Client Info		N/A	N/A	N/A
PQ     ASTM D8184     13     15     14       Iron     ppm     ASTM D5185m     >200     9     8     8       Chromium     ppm     ASTM D5185m     >15     <1	Sample Status				NORMAL	NORMAL	NORMAL
Iron     ppm     ASTM D5185m     >200     9     8     8       Chromium     ppm     ASTM D5185m     >15     <1     0     0       Nickel     ppm     ASTM D5185m     >15     <1     0     0       Nickel     ppm     ASTM D5185m     >15     <1     0     0       Silver     ppm     ASTM D5185m     >25     2     <1     0       Lead     ppm     ASTM D5185m     >200     <1     <1     <1     0       Copper     ppm     ASTM D5185m     >200     <1     <1     <1     0       Vanadium     ppm     ASTM D5185m     >200     <1     <1     <1     0       Vanadium     ppm     ASTM D5185m     0     0     0     0     0       Cadmium     ppm     ASTM D5185m     0     0     0     0     0       Cadmum     ppm     ASTM D5185m     0     0     0     0     0     0     0	WEAR METAL	S	method	limit/base	current	history1	history2
Chromium     ppm     ASTM D5185m     >15     <1	PQ		ASTM D8184		13	15	14
Nickel     ppm     ASTM D5185m     >15     <1	Iron	ppm	ASTM D5185m	>200	9	8	8
Titanium     ppm     ASTM D5185m     <1	Chromium	ppm	ASTM D5185m	>15	<1	0	0
Silver     ppm     ASTM 05185m     0     0     0     0       Aluminum     ppm     ASTM 05185m     >25     2     <1     0       Lead     ppm     ASTM 05185m     >200     <1     <1     0       Copper     ppm     ASTM 05185m     >200     <1     <1     0       Vanadium     ppm     ASTM 05185m     >200     <1     <1     0       Vanadium     ppm     ASTM 05185m     0     0     0     0       Vanadium     ppm     ASTM 05185m     0     0     0     0     0       ADDITIVES     method     limit/base     current     history1     history2       Boron     ppm     ASTM 05185m     0     0     0     0       Magnese     ppm     ASTM 05185m     0     0     0     0       Magnesium     ppm     ASTM 05185m     0     41     4     2       Sulfur     ppm     ASTM 05185m     >50     2     <	Nickel	ppm	ASTM D5185m	>15	<1	0	0
Aluminum     ppm     ASTM D5185m     >25     2     <1	Titanium	ppm	ASTM D5185m		<1	<1	0
Lead     ppm     ASTM D5185m     >100     <1	Silver	ppm	ASTM D5185m		0	0	0
Copper     ppm     ASTM D5185m     >200     <1	Aluminum	ppm	ASTM D5185m	>25	2	<1	0
Tin     ppm     ASTM D5185m     >25     <1	Lead	ppm	ASTM D5185m	>100	<1	<1	0
VanadiumppmASTM D5185m000CadmiumppmASTM D5185m000ADDITIVESmethodlimit/basecurrenthistory1history2BoronppmASTM D5185m60282928BariumppmASTM D5185m0000MolybdenumppmASTM D5185m0000MagneseppmASTM D5185m0000MagnesiumppmASTM D5185m0688PhosphorusppmASTM D5185m0688PhosphorusppmASTM D5185m0<142SulfurppmASTM D5185m0<142SulfurppmASTM D5185m0<142SulfurppmASTM D5185m0<142SulfurppmASTM D5185m50242SodiumppmASTM D5185m>50242SodiumppmASTM D5185m>20222FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2Acid Number (AN)mg KOHgASTM D5185m>20222FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2White Metalscalar"VisualNONENONENONENONEYellow	Copper	ppm	ASTM D5185m	>200	<1	<1	<1
CadmiumppmASTM D5185m000ADDITIVESmethodlimit/basecurrenthistory1history2BoronppmASTM D5185m60282928BariumppmASTM D5185m0000MolybdenumppmASTM D5185m0000MagneseppmASTM D5185m0000MagnesiumppmASTM D5185m00<1<1CalciumppmASTM D5185m0688PhosphorusppmASTM D5185m0<142SulfurppmASTM D5185m11200638159735097CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>50242SodiumppmASTM D5185m>20222FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2Acid Number (AN)mg KOHgASTM D80450.401.181.151.10VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*Visual<	Tin	ppm	ASTM D5185m	>25	<1	<1	0
ADDITIVESmethodlimit/basecurrenthistory1history2BoronppmASTM D5185m60282928BariumppmASTM D5185m0000MolybdenumppmASTM D5185m0000ManganeseppmASTM D5185m0000MagnesiumppmASTM D5185m0000CalciumppmASTM D5185m00<1<1CalciumppmASTM D5185m0688PhosphorusppmASTM D5185m0<142SulfurppmASTM D5185m0<142SulfurppmASTM D5185m11200638159735097CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>50242SodiumppmASTM D5185m>20222FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2Mhite Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONENONESiltscalar*VisualNONENONENONENONENONEDebrisscalar*V	Vanadium	ppm	ASTM D5185m		0		0
BoronppmASTM D5185m60282928BariumppmASTM D5185m00000MolybdenumppmASTM D5185m00000MagneseppmASTM D5185m00-1<1<1CalciumppmASTM D5185m06888PhosphorusppmASTM D5185m06888PhosphorusppmASTM D5185m0<1420SulfurppmASTM D5185m11200638159735097CONTAMINANTSmethodimit/basecurrenthistory1history2SiliconppmASTM D5185m>50242SodiumppmASTM D5185m>20222FLUID DEGRADATIONmethodimit/basecurrenthistory1history2Acid Number (AN)mg K0HgASTM D80450.401.181.151.10VISUALmethodimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONE </th <th>Cadmium</th> <th>ppm</th> <th>ASTM D5185m</th> <th></th> <th>0</th> <th>0</th> <th>0</th>	Cadmium	ppm	ASTM D5185m		0	0	0
BariumppmASTM D5185m00000MolybdenumppmASTM D5185m00000MagneseppmASTM D5185m00000MagnesiumppmASTM D5185m00<1<1<1CalciumppmASTM D5185m06888PhosphorusppmASTM D5185m270413405393393ZincppmASTM D5185m0<1422SulfurppmASTM D5185m11200638159735097CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>50242SodiumppmASTM D5185m>20222FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2Acid Number (AN)mg K0HgASTM D80450.401.181.151.10VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONESititscalar*VisualNONENONENONENONESititscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONEAppearancescalar*VisualNORML <td< th=""><th>ADDITIVES</th><th></th><th>method</th><th>limit/base</th><th>current</th><th>history1</th><th>history2</th></td<>	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum     ppm     ASTM D5185m     0     0     0     0     0       Maganese     ppm     ASTM D5185m     0     0     -1     <1       Galcium     ppm     ASTM D5185m     0     0     -1     <1       Calcium     ppm     ASTM D5185m     0     6     8     8       Phosphorus     ppm     ASTM D5185m     270     413     405     393       Zinc     ppm     ASTM D5185m     0     <1     4     2       Sulfur     ppm     ASTM D5185m     11200     6381     5973     5097       CONTAMINANTS     method     limit/base     current     history1     history2       Silicon     ppm     ASTM D5185m     >50     2     4     2       Sodium     ppm     ASTM D5185m     >50     2     2     2       FLUID DEGRADATION     method     limit/base     current     history1     history2       White Metal     scalar     Visual     NONE	Boron	ppm	ASTM D5185m	60	28	29	28
ManganeseppmASTM D5185m00000MagnesiumppmASTM D5185m0688PosphorusppmASTM D5185m0688PhosphorusppmASTM D5185m270413405393ZincppmASTM D5185m0<142SulfurppmASTM D5185m11200638159735097CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>50242SodiumppmASTM D5185m>20222FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2Acid Number (AN)mg KOHigASTM D80450.401.181.151.10VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONENONEDebrisscalar*VisualNONENONENONENONENONEAstid Diritscalar*VisualNONENONENONENONENONEAcid Numberscalar*VisualNONENONENONENONENONEPrecipitatescalar	Barium	ppm	ASTM D5185m	0	0	0	0
MagnesiumppmASTM D5185m00<1	Molybdenum	ppm	ASTM D5185m	0	0	0	0
CalciumppmASTM D5185m0688PhosphorusppmASTM D5185m270413405393ZincppmASTM D5185m0<142SulfurppmASTM D5185m11200638159735097CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m550242SodiumppmASTM D5185m500242SodiumppmASTM D5185m300PotassiumppmASTM D5185m20222FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2Acid Number (AN)mg KOHgASTM D80450.401.181.151.10VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLOdorscalar*Visual>0.2NEGNEGNEG	Manganese	ppm	ASTM D5185m	0	0	0	0
PhosphorusppmASTM D5185m270413405393ZincppmASTM D5185m0<142SulfurppmASTM D5185m11200638159735097CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>50242SodiumppmASTM D5185m>50242SodiumppmASTM D5185m>20222FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2Acid Number (AN)mg KOHgASTM D80450.401.181.151.10VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONEAgpearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLCodrscalar*VisualNORMLNORMLNORMLNORMLCodrscalar*VisualNORMLNORMLNORML	Magnesium	ppm	ASTM D5185m	0	0	<1	<1
ZincppmASTM D5185m0<1	Calcium	ppm	ASTM D5185m	0	6	8	8
SulfurppmASTM D5185m11200638159735097CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>50242SodiumppmASTM D5185m>50242SodiumppmASTM D5185m>20222PotassiumppmASTM D5185m>20222FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2Acid Number (AN)mg KOHgASTM D80450.401.181.151.10VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEAppearancescalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLAppearancescalar*VisualNORMLNORMLNORMLNORMLCodorscalar*VisualNORMLNORMLNORMLNORMLAppearancescalar*VisualNORMLNORM	Phosphorus	ppm	ASTM D5185m	270	413		
CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>50242SodiumppmASTM D5185m300PotassiumppmASTM D5185m>20222FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2Acid Number (AN)mg KOH/gASTM D80450.401.181.151.10VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGNEG	Zinc	ppm	ASTM D5185m	0	<1		2
SiliconppmASTM D5185m>50242SodiumppmASTM D5185m300PotassiumppmASTM D5185m>20222FLUID DEGRADATION method limit/basecurrenthistory1history2Acid Number (AN)mg KOH/gASTM D80450.401.181.151.10VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLCodorscalar*Visual>0.2NEGNEGNEGFree Waterscalar*Visual>0.2NEGNEGNEG			ASTM D5185m	11200	6381	5973	5097
SodiumppmASTM D5185m300PotassiumppmASTM D5185m<>20222FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2Acid Number (AN)mg KOH/gASTM D80450.401.181.151.10VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONEAppearancescalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGFree Waterscalar*Visual>0.2NEGNEGNEGERCLA	CONTAMINAN	TS	method	limit/base	current	history1	history2
PotassiumppmASTM D5185m>20222FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2Acid Number (AN)mg KOH/gASTM D80450.401.181.151.10VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONEAppearancescalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGFree Waterscalar*Visual>0.2NEGNEGNEG				>50			
FLUID DEGRADATIONmethodlimit/basecurrenthistory1history2Acid Number (AN)mg KOH/gASTM D80450.401.181.151.10VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONELIGHTLIGHTLIGHTSand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGFree Waterscalar*Visual>0.2NEGion: RECUCE JAMESNEGERCLA		ppm					
Acid Number (AN)mg KOH/gASTM D80450.401.181.151.10VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONENONEYellow Metalscalar*VisualNONENONENONENONENONEPrecipitatescalar*VisualNONENONENONENONENONESiltscalar*VisualNONENONENONENONENONEDebrisscalar*VisualNONELIGHTLIGHTLIGHTSand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGFree Waterscalar*VisualNORMLNEGIon: RECUCE JAMES NEGERCLA	Potassium	ppm	ASTM D5185m	>20	2	2	2
VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONENONEYellow Metalscalar*VisualNONENONENONENONENONEPrecipitatescalar*VisualNONENONENONENONENONESiltscalar*VisualNONENONENONENONENONEDebrisscalar*VisualNONELIGHTLIGHTLIGHTSand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGFree Waterscalar*VisualNEGion: IMERCICE JAMES NEGERCLA	FLUID DEGRAD	DATION	method	limit/base	current	history1	history2
White Metalscalar*VisualNONENONENONENONENONEYellow Metalscalar*VisualNONENONENONENONENONEPrecipitatescalar*VisualNONENONENONENONENONESiltscalar*VisualNONENONENONENONENONEDebrisscalar*VisualNONELIGHTLIGHTLIGHTSand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGFree Waterscalar*VisualNEGIon: INERCICE JAMES/HEGERCLA	, , , , , , , , , , , , , , , , , , ,	mg KOH/g	ASTM D8045	0.40	1.18	1.15	1.10
Yellow Metalscalar*VisualNONENONENONENONENONEPrecipitatescalar*VisualNONENONENONENONENONESiltscalar*VisualNONENONENONENONENONEDebrisscalar*VisualNONELIGHTLIGHTLIGHTSand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGFree Waterscalar*VisualNEGIon: IBED/CE JAMES/HCGERCLA			method	limit/base		history1	history2
Precipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONENONEDebrisscalar*VisualNONELIGHTLIGHTLIGHTLIGHTSand/Dirtscalar*VisualNONENONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGFree Waterscalar*VisualImage: Stalar*VisualNEGNEG							
Siltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONELIGHTLIGHTLIGHTSand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGFree Waterscalar*VisualNEGNEGNEG							
Debrisscalar*VisualNONELIGHTLIGHTLIGHTSand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGFree Waterscalar*VisualImage: State S	•						
Sand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGFree Waterscalar*VisualImage: Scalar*VisualNEGNEG							
Appearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGFree Waterscalar*VisualCNEGNEGNEG							
Odor     scalar     *Visual     NORML     NORML     NORML     NORML       Emulsified Water     scalar     *Visual     >0.2     NEG     NEG     NEG       Free Water     scalar     *Visual     NEG     NEG     NEG     NEG							
Emulsified Water     scalar     *Visual     >0.2     NEG     NEG     NEG       Free Water     scalar     *Visual     NEG     NEG     NEG     NEG							
Free Water scalar *Visual NEG ion: BEGCE JAMESNEGERCLA							
				>0.2			
Deco 1 of 2	Free Water	scalar	*Visual		NEG	ION: NOT CE JAI	



# **OIL ANALYSIS REPORT**



\* - 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)

Contact/Location: BRUCE JAMES - CERCLA

Feb15/23

May22/23

2651 PENNY RD

T: (828)459-3320

F: (828)459-3329

CLAREMONT, NC

Contact: BRUCE JAMES

Nov15/22

Mav22/23

210

210

US 28613

Aug9/23