

## **OIL ANALYSIS REPORT**

Sample Rating Trend



#### Area [65334] Machine Id WL149 Component

**Rear Left Final Drive** 

PETRO CANADA DURATRAN ALL-SEASON (--- GAL)

## DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor. ( Customer Sample Comment: Pm3 performed. All oil samples taken. Engine oil, and all filters changed.)

### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination in the oil.

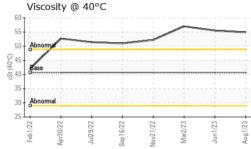
#### Fluid Condition

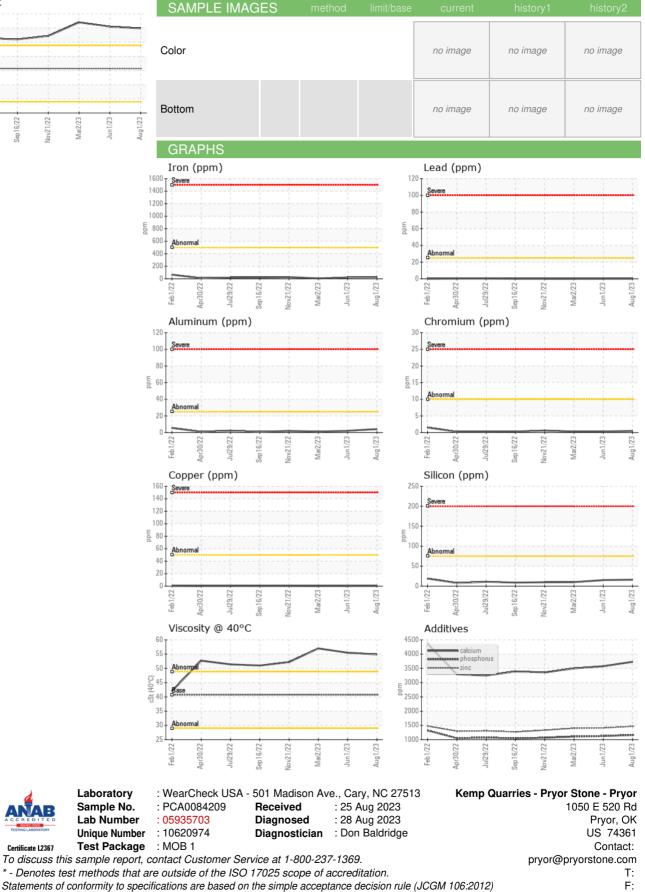
The condition of the oil is acceptable for the time in service.

Sample Number   Client Info   PCA0084209   PCA0084009   PCA0070573     Sample Date   Client Info   01 Aug 2023   01 Jun 2023   02 Mar 2023     Machine Age   hrs   Client Info   1597   1186   7494     Oil Age   hrs   Client Info   Oil Added   Oil Added   Oil Added     Sample Status   method   Imit/base   current   history1   history2     Iron   ppm   ASTM 05185m   >500   29   22   7     Chromium   ppm   ASTM 05185m   >10   <1   <1   0     Nickel   ppm   ASTM 05185m   >20   0   0   0     Silver   ppm   ASTM 05185m   0   0   0   0     Cadmium   ppm   ASTM 05185m   >50   0   0   0   0     Vanadium   ppm   ASTM 05185m   121   123   132     Bartin   ppm   ASTM 05185m   121   13   14			method	limit/base		biotonul	history?
Sample Date   Client Info   01 Aug 2023   01 Jun 2023   02 Mar 2023     Machine Age   hrs   Client Info   8481   8070   7494     Oil Age   hrs   Client Info   1597   1186   7494     Oil Changed   Client Info   011 Added   Oil Added   Oil Added   Oil Added     Sample Status   Imethod   Imit/base   current   Hatory1   History2     Iron   ppm   ASTM 051856   >10   C1   <1   <1     Nickel   ppm   ASTM 051856   >10   0   <1   0   0     Aluminum   ppm   ASTM 051856   >25   4   2   1   Lead   ppm   ASTM 051856   >25   0		MATION		IIIIII/Dase			
Machine Age   hrs   Client Info   5481   8070   7494     Oil Age   hrs   Client Info   1597   1186   7494     Oil Aged   Client Info   Oil Added   Oil Added   Oil Added   Oil Added     Sample Status   Imit Info   Imit Info   NORMAL   NORMAL   NORMAL     WEAR METALS   method   Imit Info   1   <1   <1   <1     Iron   ppm   ASTM 05185n   >500   29   22   7     Chromium   ppm   ASTM 05185n   >10   0   0   0     Titanium   ppm   ASTM 05185n   >25   0   0   0     Lead   ppm   ASTM 05185n   >25   0   0   0     Cardmium   ppm   ASTM 05185n   >10   1   0   0     Vanadium   ppm   ASTM 05185n   121   123   132     Barium   ppm   ASTM 05185n   26   25   28							
Oil Age   hrs   Client Info   1597   1188   7494     Oil Adaged   Client Info   Oil Added   Oil Added   Oil Added   Oil Added     Sample Status    Nethod   Imilibase   Current   history1   NoRMAL     WEAR METALS   method   Imilibase   current   history2   r     from   ppm   ASTM 05185m   >500   29   22   7     Chromium   ppm   ASTM 05185m   >500   0   0   0     Silver   ppm   ASTM 05185m   >50   0   0   0     Auminum   ppm   ASTM 05185m   >50   0   0   0     Copper   ppm   ASTM 05185m   >50   0   0   0     Cadmium   ppm   ASTM 05185m   121   123   132     Barium   ppm   ASTM 05185m   121   1   1   1     Manganese   ppm   ASTM 05185m   126   25   28					-		
Oil Changed   Client Info   Oil Added   Oil Added   Oil Added   Oil Added   Oil Added     Sample Status   Image   current   history1   NORMAL   NORMAL     WEAR METALS   method   limit/base   current   history1   history2     Iron   ppm   ASTM D518m   >500   29   22   7     Chromium   ppm   ASTM D518m   >10   current   history1   of     Ohromium   ppm   ASTM D518m   >10   current   current   current   current   current   of     Aluminum   ppm   ASTM D518m   >10   0   0   0   0     Cadadium   ppm   ASTM D518m   >10   c1   0   0   0     Cadmium   ppm   ASTM D518m   121   123   132   132     Ead   ppm   ASTM D518m   0   1   1   1     Magnesium   ppm   ASTM D518m   26   25   28 </th <th>•</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>	•						
Sample Status   method   Imit/base   current   NORMAL   NORMAL   NORMAL     WEAR METALS   method   imit/base   current   history1   history2     Iron   ppm   ASTM D5185m   >500   29   22   7     Chromium   ppm   ASTM D5185m   >10   <1   <1   <1     Nickel   ppm   ASTM D5185m   >10   0   0   0     Titanium   ppm   ASTM D5185m   >25   0   0   0     Copper   ppm   ASTM D5185m   >25   0   0   0     Copper   ppm   ASTM D5185m   >50   0   0   0     Cadmium   ppm   ASTM D5185m   0   0   0   0     Cadmium   ppm   ASTM D5185m   0   1   1   1     Mangainese   ppm   ASTM D5185m   0   1   1   1     Magnesium   ppm   ASTM D5185m   26   25 <th>-</th> <th>hrs</th> <th></th> <th></th> <th></th> <th></th> <th></th>	-	hrs					
WEAR METALS   method   limit/base   current   history1   history2     Iron   ppm   ASTM D5185m   >500   29   22   7     Chromium   ppm   ASTM D5185m   >10   <1   <1   <1     Nickel   ppm   ASTM D5185m   >10   0   <1   0     Titanium   ppm   ASTM D5185m   >25   4   2   1     Lead   ppm   ASTM D5185m   >25   0   0   0     Copper   ppm   ASTM D5185m   >50   0   0   0     Copper   ppm   ASTM D5185m   50   0   0   0     Cadmium   ppm   ASTM D5185m   0   0   0   0     Cadmium   ppm   ASTM D5185m   121   123   132     Barium   ppm   ASTM D5185m   121   131   132     Barium   ppm   ASTM D5185m   16   1   1     Marganesi	-		Client Info				
Iron   ppm   ASTM D5185m   >500   29   22   7     Chromium   ppm   ASTM D5185m   >10	Sample Status				NORMAL	NORMAL	NORMAL
Dromium   ppm   ASTM D5185m   >10   <1	WEAR METAL	S	method	limit/base	current	history1	history2
Nickel   ppm   ASTM D5185m   >10   0   <1	Iron	ppm	ASTM D5185m	>500	29	22	7
Titanium   ppm   ASTM D5185m   0   0   0   0     Silver   ppm   ASTM D5185m   >25   4   2   1     Lead   ppm   ASTM D5185m   >25   4   2   1     Lead   ppm   ASTM D5185m   >25   0   0   0     Copper   ppm   ASTM D5185m   >50   0   0   0     Copper   ppm   ASTM D5185m   >10   <1   0   0     Vanadium   ppm   ASTM D5185m   0   0   0   0     Cadmium   ppm   ASTM D5185m   0   1   1   132     Barium   ppm   ASTM D5185m   0   1   1   1     Magnesium   ppm   ASTM D5185m   0   1   1   1     Magnesium   ppm   ASTM D5185m   26   25   28   28     Calcium   ppm   ASTM D5185m   3730   3576   3499 <td< th=""><th>Chromium</th><th>ppm</th><th>ASTM D5185m</th><th>&gt;10</th><th>&lt;1</th><th>&lt;1</th><th>&lt;1</th></td<>	Chromium	ppm	ASTM D5185m	>10	<1	<1	<1
Silver   ppm   ASTM D5185m   0   0   0   0     Aluminum   ppm   ASTM D5185m   >25   4   2   1     Lead   ppm   ASTM D5185m   >25   0   0   0     Copper   ppm   ASTM D5185m   >50   0   0   0     Tin   ppm   ASTM D5185m   0   0   0   0     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   0   1   1   1     Magneseise   ppm   ASTM D5185m   0   1   1   1     Magneseium   ppm   ASTM D5185m   26   25   28   28   24   1   1   1   1   1   1   1   1	Nickel	ppm	ASTM D5185m	>10	0	<1	0
Atuminum   ppm   ASTM D5185m   >25   4   2   1     Lead   ppm   ASTM D5185m   >25   0   0   0     Copper   ppm   ASTM D5185m   >50   0   0   0     Vanadium   ppm   ASTM D5185m   >10   <1   0   0     Cadmium   ppm   ASTM D5185m   0   0   0   0     Cadmium   ppm   ASTM D5185m   0   0   0   0     Cadmium   ppm   ASTM D5185m   0   121   123   132     Barium   ppm   ASTM D5185m   0   1   1   1     Magnesium   ppm   ASTM D5185m   26   25   28   Calcium   ppm   ASTM D5185m   3730   3576   3499     Phosphorus   ppm   ASTM D5185m   1165   1128   1109     Zinc   ppm   ASTM D5185m   >75   16   15   10     Sodium	Titanium	ppm	ASTM D5185m		0	0	0
Lead   ppm   ASTM D5185m   >25   0   0   0     Copper   ppm   ASTM D5185m   >50   0   0   0     Vanadium   ppm   ASTM D5185m   >10   <1   0   0     Cadmium   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   0   121   123   132     Barium   ppm   ASTM D5185m   0   1   1   1     Magnesse   ppm   ASTM D5185m   26   25   28     Calcium   ppm   ASTM D5185m   3730   3576   3499     Phosphorus   ppm   ASTM D5185m   3930   3801   3948     CONTAMINANTS   method   limit/base   current   history1   history2	Silver	ppm	ASTM D5185m		0	0	0
Copper   ppm   ASTM D5185m   >50   0   0   0     Tin   ppm   ASTM D5185m   >10   <1   0   0     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   0   1   1     Manganese   ppm   ASTM D5185m   0   1   1     Magnese   ppm   ASTM D5185m   26   25   28     Calcium   ppm   ASTM D5185m   1165   1128   1109     Zinc   ppm   ASTM D5185m   3930   3801   3948     CONTAMINANTS   method   limit/base   current   history1   history2     Silicon   ppm   ASTM D5185m   >20   0   1   0     Visual   NONE <t< th=""><th>Aluminum</th><th>ppm</th><th>ASTM D5185m</th><th>&gt;25</th><th>4</th><th>2</th><th>1</th></t<>	Aluminum	ppm	ASTM D5185m	>25	4	2	1
Tin   ppm   ASTM D5185m   >10   <1	Lead	ppm	ASTM D5185m	>25	0	0	0
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   121   123   132     Barium   ppm   ASTM D5185m   0   1   1     Maganese   ppm   ASTM D5185m   0   1   1     Magnesium   ppm   ASTM D5185m   26   25   28     Calcium   ppm   ASTM D5185m   1165   1128   1109     Zinc   ppm   ASTM D5185m   1466   1413   1402     Sulfur   ppm   ASTM D5185m   3930   3801   3948     CONTAMINANTS   method   limit/base   current   history1   history2     Silicon   ppm   ASTM D5185m   20   0   1   0     Visual   NONE   NONE   N	Copper	ppm	ASTM D5185m	>50	0	0	0
Cadmium   ppm   ASTM D5185m   0   0   0     ADDITIVES   method   limit/base   current   history1   history2     Boron   ppm   ASTM D5185m   121   123   132     Barium   ppm   ASTM D5185m   0   2   0     Molyddenum   ppm   ASTM D5185m   0   1   1     Manganese   ppm   ASTM D5185m   26   25   28     Calcium   ppm   ASTM D5185m   3730   3576   3499     Phosphorus   ppm   ASTM D5185m   1165   1128   1109     Zinc   ppm   ASTM D5185m   3930   3801   3948     CONTAMINANTS   method   limit/base   current   history1   history2     Silicon   ppm   ASTM D5185m   20   0   1   0     Sodium   ppm   ASTM D5185m   20   0   1   0     Visual   NONE   NONE   NONE	Tin	ppm	ASTM D5185m	>10	<1	0	0
ADDITIVESmethodlimit/basecurrenthistory1history2BoronppmASTM D5185m121123132BariumppmASTM D5185m011MolybdenumppmASTM D5185m011ManganeseppmASTM D5185m262528CalciumppmASTM D5185m262528CalciumppmASTM D5185m373035763499PhosphorusppmASTM D5185m116511281109ZincppmASTM D5185m393038013948CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>75161510SodiumppmASTM D5185m>20010VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONENONESiltscalar*VisualNONENONENONENONENONEVisualNONENONENONENONENONENONENONEVisualNONENONENONENONENONENONENONESiltscalar*VisualNONENONE <td< th=""><th>Vanadium</th><th>ppm</th><th>ASTM D5185m</th><th></th><th>0</th><th>0</th><th>0</th></td<>	Vanadium	ppm	ASTM D5185m		0	0	0
Boron   ppm   ASTM D5185m   121   123   132     Barium   ppm   ASTM D5185m   0   2   0     Molybdenum   ppm   ASTM D5185m   0   1   1     Manganese   ppm   ASTM D5185m   26   25   28     Calcium   ppm   ASTM D5185m   26   25   28     Calcium   ppm   ASTM D5185m   26   25   28     Calcium   ppm   ASTM D5185m   3730   3576   3499     Phosphorus   ppm   ASTM D5185m   1165   1128   1109     Zinc   ppm   ASTM D5185m   3930   3801   3948     CONTAMINANTS   method   limit/base   current   history1   history2     Silicon   ppm   ASTM D5185m   >20   0   1   0     Sodium   ppm   ASTM D5185m   >20   0   1   0     Visual   NONE   NONE   NONE   NONE	Cadmium	ppm	ASTM D5185m		0	0	0
Barium   ppm   ASTM D5185m   0   2   0     Molybdenum   ppm   ASTM D5185m   0   1   1     Magnesium   ppm   ASTM D5185m   26   25   28     Calcium   ppm   ASTM D5185m   26   25   28     Calcium   ppm   ASTM D5185m   26   25   28     Calcium   ppm   ASTM D5185m   1165   1128   1109     Zinc   ppm   ASTM D5185m   1165   1128   1109     Sulfur   ppm   ASTM D5185m   3930   3801   3948     CONTAMINANTS   method   limit/base   current   history1   history2     Silicon   ppm   ASTM D5185m   >75   16   15   10     Sodium   ppm   ASTM D5185m   >20   0   1   0     VISUAL   method   limit/base   current   history1   history2     White Metal   scalar   *Visual   NONE<	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum   ppm   ASTM D5185m   0   1   1     Magnesium   ppm   ASTM D5185m   <1   <1   <1   <1     Magnesium   ppm   ASTM D5185m   26   25   28     Calcium   ppm   ASTM D5185m   3730   3576   3499     Phosphorus   ppm   ASTM D5185m   1165   1128   1109     Zinc   ppm   ASTM D5185m   1466   1413   1402     Sulfur   ppm   ASTM D5185m   3930   3801   3948     CONTAMINANTS   method   limit/base   current   history1   history2     Silicon   ppm   ASTM D5185m   >75   16   15   10     Sodium   ppm   ASTM D5185m   >20   0   1   0     VISUAL   method   limit/base   current   history1   history2     White Metal   scalar   *Visual   NONE   NONE   NONE   NONE     Yellow Metal	Boron	ppm	ASTM D5185m		121	123	132
Manganese   ppm   ASTM D5185m   <1	Barium	ppm	ASTM D5185m		0	2	0
MagnesiumppmASTM D5185m262528CalciumppmASTM D5185m373035763499PhosphorusppmASTM D5185m116511281109ZincppmASTM D5185m146614131402SulfurppmASTM D5185m393038013948CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>75161510SodiumppmASTM D5185m>75161510SodiumppmASTM D5185m>20010PotassiumppmASTM D5185m>20010VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNORENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLGodrscalar*VisualNORMLNORMLNORMLNORMLAppearancescalar*VisualNORMLNORMLNORMLFullified Waterscalar*Visual <td< th=""><th>Molybdenum</th><th>ppm</th><th>ASTM D5185m</th><th></th><th>0</th><th>1</th><th>1</th></td<>	Molybdenum	ppm	ASTM D5185m		0	1	1
CalciumppmASTM D5185m373035763499PhosphorusppmASTM D5185m116511281109ZincppmASTM D5185m146614131402SulfurppmASTM D5185m393038013948CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>75161510SodiumppmASTM D5185m>75161510PotassiumpmASTM D5185m>20010VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONESodiumscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLFLUID	Manganese	ppm	ASTM D5185m		<1	<1	<1
PhosphorusppmASTM D5185m116511281109ZincppmASTM D5185m146614131402SulfurppmASTM D5185m393038013948CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m<>75161510SodiumppmASTM D5185m<>75161510SodiumppmASTM D5185m<>7516150PotassiumppmASTM D5185m<>20010VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLCorreet Waterscalar*Visual>0.2NEGNEGNEGFree Waterscalar*Visual>0.2NEGNEGNEGVisc@ 40°CcStASTM D44540.754.955.557.0	Magnesium	ppm	ASTM D5185m		26	25	28
ZincppmASTM D5185m146614131402SulfurppmASTM D5185m393038013948CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>75161510SodiumppmASTM D5185m>75161510PotassiumppmASTM D5185m20010VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGFree Waterscalar*Visual>0.2NEGNEGVisc@ 40°CcStASTM D44540.754.955.557.0	Calcium	ppm	ASTM D5185m		3730	3576	3499
SulfurppmASTM D5185m393038013948CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>75161510SodiumppmASTM D5185m>75161510PotassiumppmASTM D5185m>20010VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONEAppearancescalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*Visual>0.2NEGNEGNEGNEGFree Waterscalar*Visual>0.2NEGNEGNEGVisc@ 40°CcStASTM D4540.754.955.557.0	Phosphorus	ppm	ASTM D5185m		1165	1128	1109
CONTAMINANTSmethodlimit/basecurrenthistory1history2SiliconppmASTM D5185m>75161510SodiumppmASTM D5185m101PotassiumppmASTM D5185m>20010VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONEAppearancescalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLOdorscalar*Visual>0.2NEGNEGNEGFree Waterscalar*Visual>0.2NEGNEGNEGVisc @ 40°CcStASTM D44540.754.955.557.0	Zinc	ppm	ASTM D5185m		1466	1413	1402
SiliconppmASTM D5185m>75161510SodiumppmASTM D5185m1010PotassiumppmASTM D5185m>20010VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGFree Waterscalar*Visual>0.2NEGNEGVisc @ 40°CcStASTM D44540.754.955.557.0	Sulfur	ppm	ASTM D5185m		3930	3801	3948
SodiumppmASTM D5185m101PotassiumppmASTM D5185m>20010VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGFree Waterscalar*Visual>0.2NEGNEGNEGVisu@ 40°CcStASTM D44540.754.955.557.0	CONTAMINAN	ITS	method	limit/base	current	history1	history2
PotassiumppmASTM D5185m>20010VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONEYellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONESiltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGFree Waterscalar*Visual>0.2NEGNEGNEGVisualVorentNORMLNORMLNORMLNORMLNORMLVisual>0.2NEGNEGNEGNEGNEGFree Waterscalar*Visual>0.2NEGNEGNEGVisual>0.2NEGNEGNEGNEGNEGVisual>0.2NEGNEGNEGNEGNEGVisual<0.2NEGNEGNEGNEGNEGVisual<0.2NEGNEGNEGS5.557.0	Silicon	ppm	ASTM D5185m	>75	16	15	10
VISUALmethodlimit/basecurrenthistory1history2White Metalscalar*VisualNONENONENONENONENONEYellow Metalscalar*VisualNONENONENONENONENONEPrecipitatescalar*VisualNONENONENONENONENONESiltscalar*VisualNONENONENONENONENONEDebrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGFree Waterscalar*Visual>0.2NEGNEGFLUID PROPERTIESmethodlimit/basecurrenthistory1history2Visc @ 40°CcStASTM D44540.754.955.557.0	Sodium	ppm	ASTM D5185m		1	0	1
White Metalscalar*VisualNONENONENONENONENONEYellow Metalscalar*VisualNONENONENONENONENONEPrecipitatescalar*VisualNONENONENONENONENONESiltscalar*VisualNONENONENONENONENONEDebrisscalar*VisualNONENONENONENONENONESand/Dirtscalar*VisualNONENONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGFree Waterscalar*VisualNEGNEGNEGVisualVisualStage1history1history2Visc @ 40°CcStASTM D44540.754.955.557.0	Potassium	ppm	ASTM D5185m	>20	0	1	0
Yellow Metalscalar*VisualNONENONENONENONEPrecipitatescalar*VisualNONENONENONENONENONESiltscalar*VisualNONENONENONENONENONEDebrisscalar*VisualNONENONENONENONENONESand/Dirtscalar*VisualNONENONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGFree Waterscalar*VisualNONEGNEGNEGFLUID PROPERTIESmethodlimit/basecurrenthistory1history2Visc @ 40°CcStASTM D44540.754.955.557.0	VISUAL		method	limit/base	current	history1	history2
Precipitatescalar*VisualNONENONENONENONENONESiltscalar*VisualNONENONENONENONENONEDebrisscalar*VisualNONENONENONENONENONESand/Dirtscalar*VisualNONENONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGFree Waterscalar*VisualImit/basecurrenthistory1history2Visc @ 40°CcStASTM D44540.754.955.557.0	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Siltscalar*VisualNONENONENONENONEDebrisscalar*VisualNONENONENONENONENONESand/Dirtscalar*VisualNONENONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGFree Waterscalar*VisualImit/basecurrenthistory1history2Visc @ 40°CcStASTM D44540.754.955.557.0	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Debrisscalar*VisualNONENONENONENONESand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGFree Waterscalar*VisualNEGNEGNEGFLUID PROPERTIESmethodlimit/basecurrenthistory1history2Visc @ 40°CcStASTM D44540.754.955.557.0	Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGFree Waterscalar*VisualNEGNEGNEGFLUID PROPERTIESmethodlimit/basecurrenthistory1history2Visc @ 40°CcStASTM D44540.754.955.557.0	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGFree Waterscalar*VisualImit/baseNEGNEGNEGFLUID PROPERTIESmethodlimit/basecurrenthistory1history2Visc @ 40°CcStASTM D44540.754.955.557.0	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Odorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEGFree Waterscalar*VisualNEGNEGNEGNEGFLUID PROPERTIESmethodlimit/basecurrenthistory1history2Visc @ 40°CcStASTM D44540.754.955.557.0	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Emulsified Waterscalar*Visual>0.2NEGNEGNEGFree Waterscalar*VisualMEGNEGNEGNEGFLUID PROPERTIESmethodlimit/basecurrenthistory1history2Visc @ 40°CcStASTM D44540.754.955.557.0	Appearance	scalar	*Visual		NORML	NORML	
Free Waterscalar*VisualNEGNEGFLUID PROPERTIESmethodlimit/basecurrenthistory1history2Visc @ 40°CcStASTM D44540.754.955.557.0	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
FLUID PROPERTIES method limit/base current history1 history2   Visc @ 40°C cSt ASTM D445 40.7 54.9 55.5 57.0	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Visc @ 40°C cSt ASTM D445 40.7 54.9 55.5 57.0	Free Water	scalar	*Visual		NEG	NEG	NEG
-	FLUID PROPE	RTIES	method	limit/base	current	history1	history2
5:50:51) Rev: 1 Submitted By:	Visc @ 40°C	cSt	ASTM D445	40.7	54.9	55.5	57.0
	5:50:51) Rev: 1						Submitted By:



# **OIL ANALYSIS REPORT**





Certificate L2367