

Petroleum and Fuel

Ultra Low Kerosene (100 mL minimum) 4 oz bottle

| Part # | Lot # | % Sulfur | Expanded Uncertainty |
|------------------------|--------|----------|----------------------|
| AR6201 | 201217 | 0.0011% | 0.0002 |
| AR6207 | 207208 | 0.0020% | 0.0003 |
| AR6208 | 208105 | 0.0030 | 0.0015 |
| AR6209 | 209410 | 0.0040% | 0.0008 |
| AR6202 | 202503 | 0.0051% | 0.0003 |
| AR6210 | 210105 | 0.0057% | 0.0003 |
| AR6211 | 211916 | 0.0070% | 0.0007 |
| AR6212 | 212100 | 0.00832% | 0.0065 |
| AR6213 | 213916 | 0.0090% | 0.0008 |
| AR6203 | 203203 | 0.0103% | 0.0007 |
| AR6204 | 041003 | 0.0152% | 0.0006 |
| AR6205 | 205502 | 0.0198% | 0.0010 |
| AR6206 | 206893 | 0.400% | 0.0009 |

Residual Oil (100mL minimum) 4 oz bottle

| Part # | Lot # | % Sulfur | Expanded Uncertainty |
|------------------------|--------|----------|----------------------|
| AR2891 | 891418 | 0.125% | 0.015 |
| AR2811 | 811606 | 0.1503% | 0.0045 |
| AR2892 | 892716 | 0.200% | 0.010 |
| AR2893 | 893515 | 0.30% | 0.03 |
| AR2809 | 809606 | 0.346% | 0.013 |
| AR2894 | 941017 | 0.403% | 0.034 |
| AR2895 | 895418 | 0.51% | 0.02 |
| AR2812 | 812808 | 0.6113% | 0.0332 |
| AR2896 | 896312 | 0.70% | 0.03 |
| AR2813 | 813915 | 0.78% | 0.04 |
| AR2897 | 897510 | 0.898% | 0.014 |
| AR2814 | 814417 | 1.02% | 0.03 |
| AR2818 | 818219 | 1.49% | 0.06 |
| AR2815 | 815918 | 1.98% | 0.06 |
| AR2819 | 191214 | 2.50% | 0.12 |

| Part # | Lot # | % Sulfur | Expanded Uncertainty |
|-------------------------------|--------------|-----------------|-----------------------------|
| <u>AR2816</u> | 161016 | 3.02% | 0.15 |
| <u>AR2898</u> | 898615 | 3.55% | 0.16 |
| <u>AR2817</u> | 817217 | 4.09% | 0.1 |
| <u>AR2899</u> | 899113 | 4.52 | 0.12 |

Crude Oil (100mL minimum) 4 oz bottle

| Part # | Lot # | % Sulfur | Expanded Uncertainty |
|-------------------------------|--------------|-----------------|-----------------------------|
| <u>AR2941</u> | 941100 | 0.0102% | 0.0009 |
| <u>AR2942</u> | 942100 | 0.0205% | 0.0012 |
| <u>AR2943</u> | 943100 | 0.0313% | 0.0023 |
| <u>AR2944</u> | 944100 | 0.0415% | 0.0028 |
| <u>AR2041</u> | 041819 | 0.050% | 0.004 |
| <u>AR2945</u> | 945100 | 0.0619% | 0.0030 |
| <u>AR2946</u> | 946100 | 0.0720% | 0.0034 |
| <u>AR2947</u> | 947100 | 0.0824% | 0.0045 |
| <u>AR2948</u> | 948100 | 0.0925% | 0.0044 |

| Part # | Lot # | % Sulfur | Expanded Uncertainty |
|-------------------------------|--------------|-----------------|-----------------------------|
| <u>AR2042</u> | 042218 | 0.100% | 0.010 |
| <u>AR2043</u> | 431216 | 0.22% | 0.01 |
| <u>AR2044</u> | 441208 | 0.41% | 0.06 |
| <u>AR2045</u> | 045111 | 0.619% | 0.04 |
| <u>AR2046</u> | 046911 | 0.816% | 0.052 |
| <u>AR2047</u> | 047420 | 0.98% | 0.03 |
| <u>AR2048</u> | 048819 | 2.00% | 0.05 |
| <u>AR2049</u> | 049220 | 3.07% | 0.11 |
| <u>AR2050</u> | 050211 | 4.24% | 0.41 |
| <u>AR2051</u> | 511012 | 5.56% | 0.24 |

Kerosene (100mL minimum) 4 oz bottle

| Part # | Lot # | % Sulfur | Expanded Uncertainty |
|-------------------------------|--------------|-----------------|-----------------------------|
| <u>AR2849</u> | 849405 | <0.001% | |
| <u>AR2841</u> | 841103 | 0.0125% | 0.0015 |
| <u>AR2951</u> | 951100 | 0.0211% | 0.0019 |

| Part # | Lot # | % Sulfur | Expanded Uncertainty |
|-------------------------------|--------------|-----------------|---------------------------------|
| <u>AR2842</u> | 421213 | 0.029% | 0.004 |
| <u>AR2952</u> | 952100 | 0.0420% | 0.0051 |
| <u>AR2843</u> | 843812 | 0.049% | 0.002 |
| <u>AR2953</u> | 953409 | 0.062% | 0.007 |
| <u>AR2954</u> | 954610 | 0.071% | 0.003 |
| <u>AR2955</u> | 955100 | 0.0801% | 0.0016 |
| <u>AR2956</u> | 956714 | 0.090% | 0.004 |
| <u>AR2844</u> | 844402 | 0.1313% | 0.0083 |
| <u>AR2845</u> | 845103 | 0.1968% | 0.0070 |
| <u>AR2846</u> | 461010 | 0.30% | 0.02 |
| <u>AR2847</u> | 847795 | 0.395% | 0.014 |
| <u>AR2848</u> | 849498 | 0.505% | 0.006 |

JP Fuels (100mL mimimum) 4 oz bottle

| Part # | Lot # | % Sulfur | Expanded Uncertainty |
|------------------------|---------|----------|----------------------|
| AR2921 | 9211200 | 0.0051% | 0.0003 |
| AR2922 | 221211 | 0.011% | 0.002 |
| AR2923 | 923902 | 0.0198% | 0.0006 |
| AR2924 | 924807 | 0.0300% | 0.0016 |
| AR2925 | 9251099 | 0.0433% | 0.0027 |
| AR2926 | 926614 | 0.050% | 0.002 |
| AR2927 | 927111 | 0.062 | 0.009 |
| AR2928 | 928813 | 0.093 | 0.003 |

High Viscosity Residual Oil (100mL minimum) 4 oz bottle

| Part # | Lot # | % Sulfur | Expanded Uncertainty |
|------------------------|--------|----------|----------------------|
| AR3181 | 893405 | 0.292% | 0.11 |
| AR3182 | 971003 | 0.9037% | 0.0320 |

Nitrogen in Crude Oil (100mL minimum) 4 oz bottle

| Part # | Lot # | Nitrogen |
|------------------------|----------|----------|
| AR3032 | CRU70792 | 67 ppm |
| AR3033 | 033494 | 749 ppm |
| AR3034 | 034494 | 1641 ppm |

Waste Oil (50mL minimum) 2 oz bottle

| Part # | Lot # | Chlorine | Chromium | Lead |
|------------------------|--------|-----------|-----------|-----------|
| AR3161 | 161411 | 506 µg/g | 5.07 µg/g | 49.8 µg/g |
| AR3162 | 621010 | 1013 µg/g | 9.8 µg/g | 98.7µg/g |
| AR3163 | 163398 | 1898 µg/g | 20.7µg/g | 210.2µg/g |

Waste Oil (50mL minimum) 2 oz bottle

| Part # | Lot # | Arsenic |
|--------|---------|----------|
| AR3171 | 1711198 | 2.0 µg/g |
| AR3172 | 1721198 | 4.2 µg/g |
| AR3173 | 1731198 | 10.5µg/g |

Ultimate Residual Fuel Oil (100mL minimum) 4 oz bottle

| | |
|------------------------|--------------|
| AR1622 | Lot # 622318 |
| % Sulfur | 2.01 |
| % Carbon | 86.34 |
| % Hydrogen | 11.95 |
| % Nitrogen | 0.16 |
| Gross BTU | 18,861 |
| Iron | (9.9) µg/g |
| Nickel | 2.39 µg/g |
| Silicon | <0.01 µg/g |
| Copper | <0.01 µg/g |
| Sodium | (2.6) |

() Reference Only

Chlorine in Paraffin Oil (100mL minimum) 4 oz bottle

| Part # | Lot # | Concentration |
|------------------------|--------|---------------|
| AR2004 | 004595 | 0.0009% |
| AR2005 | 005595 | 0.012% |

| | | |
|------------------------|--------|---------|
| AR2006 | 006994 | 0.051% |
| AR2007 | 007595 | 0.122% |
| AR2008 | 008708 | 0.200% |
| AR2009 | 009998 | 0.4462% |
| AR2010 | 010697 | 0.5605% |
| AR2011 | 011117 | 1.00% |
| AR2012 | 012111 | 1.95% |
| AR2013 | 013515 | 3.06% |
| AR2014 | 014515 | 3.98% |
| AR2015 | 015709 | 5.04% |

Lube Oil (100mL minimum) 4 oz bottle

| Part # | Lot # | % Sulfur | Expanded Uncertainty |
|------------------------|--------------|-----------------|-----------------------------|
| AR2838 | 381016 | 0.0100% | 0.0012 |
| AR2931 | 9311299 | 0.0207% | 0.0009 |

| | | | |
|------------------------|--------------|-----------------|---------------------------------|
| AR2932 | 9321299 | 0.0524% | 0.0015 |
| AR2831 | 831996 | 0.073% | 0.002 |
| AR2933 | 933213 | 0.0805% | 0.002 |
| AR2934 | 934816 | 0.10 | 0.01 |
| AR2832 | 832606 | 0.230% | 0.004 |
| AR2935 | 935118 | 0.350% | 0.020 |
| AR2833 | 833111 | 0.511% | 0.04 |
| AR2834 | 834596 | 0.753% | 0.014 |
| AR2936 | 936614 | 0.87% | 0.05 |
| AR2835 | 835919 | 0.99% | 0.04 |
| AR2937 | 371218 | 1.50% | 0.06 |
| AR2836 | 836520 | 2.00% | 0.06 |
| AR2938 | 9381299 | 2.5162% | 0.0326 |
| Part # | Lot # | % Sulfur | Expanded Uncertainty |
| AR2839 | 839320 | 2.97% | 0.010 |
| AR2939 | 939508 | 3.500% | 0.175 |
| AR2837 | 371010 | 4.07% | 0.32 |
| AR2857 | 8571099 | 5.010% | 0.018 |

| | | | |
|------------------------|---------|--------|-------|
| AR2858 | 8581099 | 6.043% | 0.037 |
|------------------------|---------|--------|-------|

Sulfur & Chlorine in Lube Oil Heavy Concentrations (100mL minimum) 4 oz bottle

| Part # | Lot # | % Sulfur | % Chlorine |
|------------------------|--------|----------|------------|
| AR3501 | 501213 | 7.00 | 4.00 |
| AR3502 | 502408 | 5.00 | 2.00 |
| AR3503 | 031008 | 4.00 | 7.00 |
| AR3504 | 504508 | 2.00 | 5.00 |
| AR3505 | 505317 | 1.00 | 0.50 |
| AR3506 | 061008 | 0.50 | 1.00 |
| AR3507 | 507194 | <0.0001 | <0.0001 |
| AR3513 | 513218 | 0.030 | 0.030 |
| AR3515 | 515998 | 0.01 | 0.05 |

Ultra Low #2 Diesel Oil (100mL minimum) 4 oz bottle

| Part # | Lot # | % Sulfur | Expanded Uncertainty |
|------------------------|--------|----------|----------------------|
| AR2868 | 868113 | <0.0001% | |
| AR2882 | 821109 | 0.00048% | 0.6 |
| AR2881 | 811109 | 0.0010% | 0.0001 |

| | | | |
|------------------------|--------|---------|--------|
| AR2869 | 869910 | 0.0021% | 0.0003 |
| AR2879 | 791109 | 0.0025 | 0.0002 |
| AR2878 | 878813 | 0.0049% | 0.0004 |
| AR2871 | 711015 | 0.0105% | 0.0012 |
| AR2872 | 872606 | 0.0207% | 0.0014 |
| AR2873 | 873217 | 0.030% | 0.001 |
| AR2874 | 874814 | 0.040% | 0.002 |
| AR2875 | 751218 | 0.049% | 0.002 |
| AR2865 | 651210 | 0.0600% | 0.0045 |
| AR2876 | 761211 | 0.069% | 0.002 |
| AR2866 | 866103 | 0.0786% | 0.0052 |
| AR2867 | 867613 | 0.089% | 0.005 |
| AR2877 | 877405 | 0.1055% | 0.0045 |

#2 Diesel Oil (100mL minimum) 4 oz bottle

| Part # | Lot # | % Sulfur | Expanded Uncertainty |
|------------------------|--------|----------|----------------------|
| AR2821 | 821516 | 0.150% | 0.010 |

| | | | |
|------------------------|--------|---------|--------|
| AR2961 | 961402 | 0.2060% | 0.0094 |
| AR2822 | 822613 | 0.305% | 0.010 |
| AR2962 | 962113 | 0.40% | 0.02 |
| AR2823 | 823413 | 0.53% | 0.03 |
| AR2963 | 631211 | 0.61% | 0.02 |
| AR2824 | 824714 | 0.70% | 0.02 |
| AR2964 | 964402 | 0.808% | 0.0300 |
| AR2965 | 965106 | 0.8530% | 0.300 |
| AR2825 | 825417 | 1.01% | 0.02 |
| AR2826 | 826313 | 1.50% | 0.08 |
| AR2827 | 827606 | 1.867% | 0.075 |
| AR2828 | 281012 | 2.53% | 0.12 |
| AR2829 | 829119 | 2.96% | 0.11 |

Desulfurized Hydrocarbon Standards (100mL minimum) 4 oz bottle

| Part # | Lot # | Matrix | % Sulfur |
|------------------------|--------|-----------|----------|
| AR3116 | 116995 | Isooctane | <0.0001 |
| AR3117 | 117995 | Kerosene | <0.0001 |

| | | | |
|------------------------|--------|--------------|---------|
| AR3118 | 118995 | #1 Diesel | <0.0001 |
| AR3119 | 119995 | #2 Diesel | <0.0001 |
| AR3120 | SUP95 | Paraffin Oil | <0.0001 |
| AR3121 | 121915 | Gasoline | <0.0001 |

Sulfur in Isooctane (100mL minimum) 4 oz bottle

| Part # | Lot # | Concentration $\mu\text{g/g}$ Sulfur | Expanded Uncertainty |
|------------------------|--------|--------------------------------------|----------------------|
| AR3101 | 101310 | 0.9 | 0.3 |
| AR3102 | 102995 | 4.7 | 0.8 |
| AR3103 | 103995 | 12.4 | 1.4 |
| AR3104 | 104995 | 28.6 | 2.4 |
| AR3105 | 105995 | 52.1 | 3.8 |

Sulfur in Gasoline (100mL minimum) 4 oz bottle

| Part # | Lot # | % Sulfur |
|------------------------|--------|----------|
| AR3001 | 011218 | 0.0001 |
| AR3002 | 002910 | 0.0052 |

| | | |
|------------------------|--------|--------|
| AR3003 | 003910 | 0.0103 |
| AR3004 | 041015 | 0.0308 |
| AR3005 | 050417 | 0.0500 |
| AR3006 | 006312 | 0.0703 |
| AR3007 | 007910 | 0.0908 |
| AR3008 | 081214 | 0.119 |
| AR3009 | 009419 | 0.200 |
| AR3011 | 011217 | |
| AR3012 | 012117 | 0.0000 |
| AR3013 | 013117 | 0.0010 |
| AR3014 | 014117 | 0.0015 |
| AR3015 | 015117 | 0.0020 |

Viscosity Standards (100mL minimum) 4 oz bottle

| Part # | Lot # | Matrix | Viscosity |
|------------------------|--------|-----------|-----------------|
| AR3028 | 028893 | #1 Diesel | 2.43 cSt @ 40°C |
| AR3029 | 029893 | #2 Diesel | 2.88 cSt @ 40°C |

| | | | |
|------------------------|--------|----------|-----------------|
| AR3030 | 030893 | JP 8 | 5.6 cSt @ -20°C |
| AR3031 | 031893 | Kerosene | 1.33 cSt @ 40°C |

Ultimate Oil Analysis

| 500 mL bottle Part # | 118mL bottle Part # | Lot # | Oil Type | Fe (ppm) | Ni (ppm) | V (ppm) | Si (ppm) | Cu (ppm) | Na (ppm) |
|------------------------|-------------------------|-----------|--------------------------|----------|----------|---------|----------|----------|----------|
| AR2070 | AR2070S | CRU70792 | Wyoming Sweet Crude | 1.94 | 0.92 | 0.39 | 0.42 | 0.82 | 2.74 |
| AR2071 | AR2071S | EKO711192 | North Sea Sweet Crude | 4.33 | 2.24 | 1.91 | 1.05 | 0.1 | 5.76 |
| AR2072 | AR2072S | ANS721292 | Alaska North Slope Crude | 4.6 | 16.9 | 43.6 | 1.3 | 0.3 | 2.6 |
| AR2078 | AR2078S | BNM78792 | Vacuum Gas Oil | 0.18 | 0.055 | 0.13 | 0.15 | 0.14 | 0.87 |

| Part # | Part # | Lot # | Oil Type | API 60° F | Organic Cl ppm | Total Cl ppm | Benzene weight % | Nitrogen ppm | Sulfur Weight % | Salt lb/Mbbls | Carbon weight % |
|--------|---------|-----------|--------------------------|-----------|----------------|--------------|------------------|--------------|-----------------|---------------|-----------------|
| AR2070 | AR2070S | CRU70792 | Wyoming Sweet Crude | | <1.0 | 3.16 | 0.42 | 67.00 | 0.082 | 0.75 | |
| AR2071 | AR2071S | EKO711192 | North Sea Sweet Crude | 39.75 | <1.00 | 0.18 | 0.37 | 749.90 | 0.175 | 2.53 | |
| AR2072 | AR2072S | ANS721292 | Alaska North Slope Crude | 28.2 | | 1.50 | 0.18 | 1780.00 | 1.15 | 2.8 | |
| AR2078 | AR2078S | BNM78792 | Vacuum Gas Oil | 20.20 | | | | 438.80 | 0.342 | | 0.0386 |

Ultimate Oil Analysis Plus Distillation

Distillation (°F)

| Part # | Lot # | Oil Type | Contents | IBP1 | 5 | 10 | 20 | 30 | 40 | 50 | 60 |
|------------------------|-----------|----------------|----------|------|-----|-------|-------|-------|-----|-----|-----|
| AR2074 | 074513 | Kerosine (K-1) | 500mL | 369 | 391 | 399 | 409 | 418 | 427 | 435 | 446 |
| AR2075 | 751015 | #2 Diesel | 500mL | 363 | 417 | 437 | 459 | 476 | 495 | 510 | 526 |
| AR2076 | CRU761292 | #1 Diesel | 500mL | 455 | 468 | 471.6 | 476.8 | 482.4 | 486 | 490 | 495 |

Distillation (°F) Continued from Above

| Part # | Lot # | Oil Type | Contents | 70 | 80 | 90 | 95 | EP |
|--------|------------|----------------|----------|-----|-----|-----|-----|-----|
| AR2074 | 074513 | Kerosine (K-1) | 500mL | 454 | 467 | 486 | 503 | 523 |
| AR2075 | 075300S288 | #2 Diesel | 500mL | 544 | 566 | 595 | 619 | 635 |
| AR2076 | CRU761292 | #1 Diesel | 500mL | 501 | 508 | 520 | | 549 |

| Part # | Lot # | Oil Type | Contents | API 60° F | ConCarbon | Cetane Index | Cloud Pt. | Pour Pt. | Sulfur Weight (%) | Viscosity cSt | Flast Pt. (°F) |
|--------|------------|----------------|----------|-----------|-----------|--------------|-----------|----------|-------------------|---------------|----------------|
| AR2074 | 074513 | Kerosine (K-1) | 500mL | 40.2 | <0.1 | 44.3 | -48°C | -53°C | 0.0006 | 1.69@ 40C | 138 |
| AR2075 | 075300S288 | #2 Diesel | 500mL | 35.1 | <0.01 | - | 10.6°F | -7.2°F | 0.0379 | 2.67 @ 100°C | 162.0 |
| AR2076 | CRU761292 | #1 Diesel | 500mL | 47.0 | 0.025 | 66.7 | 19.6°F | 20.0°F | 0.003 | 2.49@ 100°C | 219.0 |

C, H, N,S, BTU Standards (100mL minimum) 4 oz bottle

| Part # | Lot # | Description | % Carbon | % Hydrogen | % Nitrogen | % Sulfur | Gross BTU/Pound |
|------------------------------|--------------|------------------------|-----------------|-------------------|-------------------|-----------------|----------------------------|
| <u>AR000</u> | 000513 | Paraffin Oil Standard | 85.80 | 14.20 | <0.0001 | <0.0001 | 19,888 |
| <u>AR100</u> | 100614 | Residual Oil Standard | 88.0 | 10.1 | 0.19 | 0.93 | 18,408 |
| <u>AR150</u> | 150614 | Residual Oil Standard | 89.0 | 10.29 | 0.018 | 0.26 | 18,514 |
| <u>AR327</u> | 271009 | Kerosene Standard | 85.47 | 13.97 | 0.0002 | 0.136 | 19,730 |
| <u>AR330</u> | 330903 | #2 Diesel Oil Standard | 87.05 | 13.08 | 0.0098 | 0.034 | 19,418 |

Engine Oils (100mL minimum) 4 oz bottle

| Part # | Lot # | % Ash | % Zn | % Ca | % Mg | % P | % S | ASTM D2896 Base Number | Viscosity (cSt 100°C) | Viscosity (cSt/40°C) |
|-------------------------------|--------------|--------------|-------------|-------------|-------------|------------|------------|-----------------------------------|----------------------------------|---------------------------------|
| <u>AR6301</u> | AA | 0.05 | <0.001 | <0.001 | <0.001 | <0.001 | 0.29 | 2.42 | 12.25 | 119.2 |
| <u>AR6302</u> | EO | 0.22 | 0.122 | 0.0005 | 0.0005 | 0.103 | 0.22 | 2.83 | 12.56 | 124.87 |
| <u>AR6303</u> | 100 | 0.83 | 0.101 | 0.009 | 0.105 | 0.084 | 0.40 | 5.42 | 11.44 | 102.70 |

| | | | | | | | | | | |
|------------------------|-----|------|-------|-------|-------|-------|------|------|-------|-------|
| AR6305 | 300 | 0.78 | 0.155 | 0.168 | 0.052 | 0.126 | 0.57 | 7.07 | 11.52 | 98.74 |
|------------------------|-----|------|-------|-------|-------|-------|------|------|-------|-------|

Nitrogen in Vacuum Gas Oil (100mL minimum 4 oz bottle)

| Part # | Lot # | Concentration |
|------------------------|---------|---------------|
| AR3151 | 151995 | 1.05 µg/g |
| AR3152 | 152697 | 5.15 µg/g |
| AR3153 | 153798 | 10.01 µg/g |
| AR3154 | 154995 | 26.37 µg/g |
| AR3155 | 155610 | 49 µg/g |
| AR3156 | 156414 | 90 µg/g |
| AR3157 | 1571296 | 432 µg/g |

High Sulfur Residual Oil (100mL minimum) 4 oz bottle

| Part # | Lot # | % Sulfur | Expanded Uncertainty |
|------------------------|--------|----------|----------------------|
| AR2859 | 591108 | 5.00% | 0.12 |

| | | | |
|------------------------|--------|--------|------|
| AR2861 | 861514 | 5.90% | 0.12 |
| AR2862 | 862220 | 9.64% | 0.66 |
| AR2863 | 863917 | 20.00% | 0.43 |
| AR2864 | 864220 | 29.04% | 1.56 |

Vacuum Gas Oil (100mL minimum) 4 oz bottle

| | |
|------------------------|-----------------------|
| AR2077 | Lot # CR771092 |
| Sulfur (wt%) | 0.45 |
| Nitrogen (ppm) | 1267 |

Low Sulfur Lube Oil (100MI 20minimum) 4 oz bottle

| Part # | Lot # | % Sulfur | Expanded Uncertainty |
|------------------------|---------|----------|----------------------|
| AR3521 | 5111093 | <0.0001 | |
| AR3522 | 522595 | 0.0036 | 0.0006 |

| | | | |
|------------------------|---------|--------|--------|
| AR3523 | 523595 | 0.0052 | 0.0004 |
| AR3524 | 524701 | 0.011 | 0.002 |
| AR3525 | 5251193 | 0.021 | 0.002 |
| AR3526 | 526215 | 0.031 | 0.006 |
| AR3527 | 5271193 | 0.041 | 0.004 |
| AR3528 | 528398 | 0.0505 | 0.0016 |

Heavy Lube Oil V, Ni, S (50mL minimum) 2 oz bottle

| Part # | Lot # | ppm V | ppm Ni | % S |
|------------------------|---------|--------|--------|--------|
| AR2901 | 9011196 | 407 | 75 | 4.25 |
| AR2902 | 902695 | 271 | 50 | 3.11 |
| AR2903 | 903900 | 168 | 22 | 2.002 |
| Part # | Lot # | ppm V | ppm Ni | % S |
| AR2904 | 9004500 | 104.01 | 18.1 | 1.053 |
| AR2905 | 905599 | 50.2 | 9.9 | 0.5263 |

Lead in Gasoline (100mL minimum) 4 oz bottle

| Part # | Lot # | % Lead |
|-------------------------------|--------------|---------------|
| <u>AR2067</u> | 067909 | <0.0001 |
| <u>AR2066</u> | 066217 | 0.0100 |
| <u>AR2065</u> | 065909 | 0.0253 |
| <u>AR2064</u> | 641210 | 0.050 |
| <u>AR2063</u> | 063810 | 0.075 |
| <u>AR2062</u> | 062810 | 0.125 |
| <u>AR2061</u> | 611210 | 0.201 |

Sulfur & Lead in Gasoline (100mL 22inimum) 4 oz bottle

| Part # | Lot # | Sulfur µg/g | Lead µg/g |
|---------------|--------------|--------------------|------------------|
| AR3111 | 111995 | 1023 | 3.1 |
| AR3112 | 112995 | 524 | 0.90 |

| | | | |
|--------|--------|------|----|
| AR3113 | 113995 | 106 | 40 |
| AR3114 | 114995 | 1.06 | 82 |
| AR3115 | 115995 | <1 | <1 |

API Standards (500mL contents)

| Part # | Lot # | Matrix | API |
|------------------------|--------|-----------|------|
| AR3045 | 451015 | #2 Diesel | 35.1 |
| AR3046 | 046794 | Crude Oil | 28.2 |

Extreme Pressure Oil (100mL 23íminimum) 4 oz bottle

| Part # | Lot # | % Sulfur | Expanded Uncertainty |
|------------------------|--------|----------|----------------------|
| AR2851 | 5191 | 2.00 | 0.03 |
| AR2852 | 521013 | 2.95 | 0.10 |

| | | | |
|------------------------|---------|------|------|
| AR2853 | 853694I | 4.19 | 0.04 |
|------------------------|---------|------|------|

JP-8 Jet Fuel

| Part # | Lot # | Total Acid (mg KOH/g) | Aromatics (vol%) | Olefins (vol%) | Total Sulfur (wt%) | Mercaptan Sulfur (wt%) | API Gravity (60° F) |
|------------------------|----------------|-----------------------|------------------|----------------|--------------------|------------------------|---------------------|
| AR5201 | 5201 | 0.0025 | 17.70 | 2.45 | 0.178 | 0.0019 | 41.85 |
| | Freeze Pt (°F) | BTU (/lb) | Smoke Pt | Flast Pt D93 | Flast Pt D56 | Viscosity (cSt) | |
| | -42.75 | 18536 | 21 (mm) | 124.1° F | 117.4° F | 6.14 @ -4°F | |

| Biodiesel Contaminate | | |
|------------------------------------|-----|-----------|
| In Synthetic Diesel (50ml bottles) | | |
| AR2971 | *** | Blank |
| AR2972 | *** | 0.025 wt% |
| AR2973 | *** | 0.05 wt% |

| | | |
|--|-----|-----------|
| AR2974 | *** | 0.075 wt% |
| AR2975 | *** | 0.100 wt% |
| Biodiesel Contaminate In #2 Diesel (50ml bottles) | | |
| AR2980 | *** | Blank |
| AR2981 | *** | 0.025 wt% |
| AR2982 | *** | 0.050 wt% |
| AR2983 | *** | 0.075 wt% |
| AR2984 | *** | 0.100 wt% |
| AR2985 | *** | 0.500 wt% |
| AR2986 | *** | 1.00 wt% |
| AR2987 | *** | 3.00 wt% |
| AR2988 | *** | 5.00 wt% |
| ***Made on receipt of order | | |