

# LABORATORY AND ANALYTICAL CAPABILITIES

## EXPERIENCED TECHNICAL SPECIALISTS

PureChem Services has a network of labs strategically located to deliver the best possible service and turnaround times to our customers. We have full service labs in Carlyle, Saskatchewan and in Calgary, Nisku, Drayton Valley and Grande Prairie, Alberta. We also have field labs at many of our area offices to support some of the more basic testing required.

Our full service labs are equipped to perform an array of analysis aimed at comprehensive product selection, product development and program design. Following is a listing of some of the testing available in our labs:

Acid and Solvent Stimulations	Demulsifier Bottle Testing	Paraffin Dispersant Testing
Asphaltene Dispersant Testing	Emulsion Tendency Testing	Paraffin Inhibitor Testing
Asphaltene Inhibitor Testing	Foaming Tendency Column Testing	Particle Size Determination
Bacteria and Biocide Testing	Frac Fluid Design and Testing	Product Selection and Development
Chemical Residual Tracking	Material Compatibility Testing	Solids and Scale Analysis
Complete Water Analysis	Millipore Filtration and Testing	Scale Tendency Calculations
Corrosion Failure Examination	Oil Compatibility Testing	Water Clarifier Jar Testing
Corrosion Inhibitor Evaluation	Oil in Water Testing	Water Compatibility Testing
Corrosion Ring and Coupon Monitoring	Paraffin Cloud Point Testing	Wax Compositional Analysis

## PURECHEM'S CARLYLE, NISKU, AND GRANDE PRAIRIE LABORATORIES

are ISO 9001:2015 certified laboratories for their quality management systems. PureChem maintains a proficiency program, which includes:

- Regular maintenance and calibration of laboratory equipment by accredited third-party laboratories
- Random spot checks on sample analysis verified by independent accredited third-party laboratories
- Testing according to ISO 9001 quality standards and ASTM test methods



## LABORATORY EQUIPMENT FOR IN-DEPTH ANALYSIS

Our labs are staffed with locally-based experts holding professional qualifications ranging from technical diplomas to PhDs. This knowledge combined with extensive industry experience enables PureChem to deliver top notch laboratory services to our customers. Our labs are equipped with the following instrumentation for performing in-depth analysis:

### LABORATORY EQUIPMENT

Adenosine Triphosphate Luminometer  
Auto-Titrator  
Bacteria Incubators  
Brookfield LVDV-II+ Viscometer  
Brookfield PVS HTHP Viscometer  
Brookfield PVS Rheometer  
Cold Finger Apparatus  
Coulometric Karl Fisher  
Dean-Stark/Soxhlet Combo Apparatus  
Differential Scanning Calorimetry  
Dynamic Scale Loop  
Fann 35A Viscometer  
Flash Point Apparatus  
Fluorescence Spectrometer  
Friction Reducer Flow Loop  
FTIR (Fourier Transform Infrared) Spectrometer  
Gas Chromatography  
Heated Centrifuge  
High Pressure Liquid Chromatograph (HPLC)  
HPHT Acid Corrosion Autoclave  
ICP (Inductively Coupled Plasma)  
Ion Chromatography (IC)  
Laser Particle Size Analyzer  
Linear Polarization Resistance Autoclave Corrosion Cells  
Low Temperature Freezers (-40°C Capable)  
Multi-Cell Jar Stirrer

Oil in Water Fluorimeter  
Raman Spectrometer  
Rotating Cylinder Electrode (RCE) Corrosion Cells  
Refractometer  
Sulfur Analyzer (XRF)  
Turbidity Spectrometer  
UV-Vis Spectrometer  
Vapour Phase Corrosion Cell  
Volumetric Karl Fisher  
X-Ray Diffraction (XRD) Instrument

