JMLord, Inc.

Laboratory Fee Schedule

Spring 2018



www.jmlordinc.com

4184 N. Knoll Drive Fresno CA, 93722 (559) 268-9755 (559) 486-6504 (FAX)

Laboratory Services

Since 1976, JMLord, Inc. has provided consultants and growers with fast and accurate analyses of soil, water, and plant tissue for optimum crop management, with services to clients in Arizona, California, Colorado, Nevada, Oregon, Texas, as well as internationally.

JMLord, Inc. is committed to providing our clients with the highest quality analytical services available. Quality control is of the utmost importance. The laboratory participates in the Agriculture Laboratory Proficiency Program (ALP) where samples are tested quarterly to guarantee accurate testing throughout the year. Check samples, blanks and duplicates for each run and state of the art laboratory equipment also aid in our quality control.

The value of an analysis and of its interpretation is dependent upon an examination of a representative sample. This will consist of a composite of several sub-samples taken from the area under investigation. Exact sampling procedures are available from JMLord, or we can provide sampling services for a nominal charge.

Sample Submission

When submitting samples, the following information should be provided to the laboratory staff:

- Full name, address, telephone and fax number of the person to whom results should be addressed;
- Full name, address, and telephone number of the person to whom an invoice should be addressed;
- Purchase order number if appropriate;
- Complete and unique sample descriptions:
- Detailed list of analyses to be performed for each sample.

Samples should be kept cool and dry until delivered to the laboratory for analysis. The laboratory is open to receive samples from 7:00 AM until 5:00 PM. Samples delivered after these hours will be logged in the next business day. Special arrangements can be made for sample delivery or for sample pick up. We also provide sample drop off locations. Please call for the closest location.

JMLord is authorized to receive imported or quarantined samples for analytical purposes. These samples require special handling, and a handling charge will apply.

Soil samples are kept for 30 days, and plant tissue samples are kept for 60 days, from date of submission. Storage of samples beyond these time periods is available by request. A charge for the storage of samples beyond the above specified time limits may apply.

Reporting

Reports are normally mailed to the client. Reports are also available via facsimile (fax) or e-mail in various formats. Arrangements may be made for other reporting requirements.

All work is strictly confidential. Client names, addresses, and analytical results will not be released without the client's expressed written consent.

Sample Volumes

Minimum sample sizes are as shown

Sample Type	Minimum Amount
Soil Samples	One pint (500 ml.)
Tissue Samples	Two ounces fresh (60 grams)
Water Samples	One pint (500 ml.)
Manure Samples	One pint (500 ml.)

Soil, tissue, and manure samples should be collected in paper sample collection bags. Water samples should be collected in clean plastic or glass bottles. Bags and bottles can be provided upon request.

Turnaround Times

JMLord Inc.'s staff strives to analyze and report samples as quickly as possible. Our turnaround time is greatly influenced by our sample load. Often, results are available **well before** the standard turnaround time. Tissue samples are typically ran in 24 hours and soil and water samples are ran in 48 hours. However, at standard prices, we can only *guarantee* our normal turnaround time of five (5) working days.

Pricing

Prices shown in the price list are for individual sample analysis with standard turnaround time and include sample handling and preparation. Our professional agronomists provide guidelines for critical and desired nutrient levels as well as interpretation of analytical results at no extra charge.

Fees for laboratory services will be billed to the client. The total amount is due within 15 days of billing. After 30 days, there will be an additional charge of 1.5% per month on the unpaid balance. Discounts are available for volume work. All prices are subject to change without notice.

Soil Sampling Equipment*

The Lord Probe is a 3' push probe with depth markings at 6" intervals. The strongest most reliable "tube" type hand sampler developed. Made from chrome-moly steel to ensure a longer life. Replaceable tips (see below) eliminate the need to buy a new body. Manufactured by Soilmaster, American Soil and Oakfield.
 Гube \$98.00 Гip \$63.00

^{*} Prices do not include sales tax or shipping.

Other probe and auger models available. Please call for details.

Soil Analysis

Packages 100	Soil Nutrients (NO ₃ -N, PO ₄ -P, K)	\$22.00
101	Soil Nutrients (NO ₃ -N, PO ₄ -P, K, Zn)	
102	Soil Salinity (pH, EC, SP, B, Cl, SO ₄ , Ca, Mg, Na, SAR)	
105	Complete Soil Analysis	
	(NO3-N, PO4-P, Extractable minors [Cu, Fe, Mn, Zn], Exchangeable Bases [Ca, K, Mg, Na, SO ₄ -S], Sat %, pH, EC, Sat. paste ions [Ca, Mg, Na, B, Cl])	
105SE	Complete Soil Plus Analysis	.\$74.50
	(NO3-N, PO4-P, Extractable minors [Cu, Fe, Mn, Zn], Exchangeable Bases [Ca, K, Mg, Na, SO ₄ -S], Sat %, pH, EC, Sat. paste ions [Ca, Mg, Na, B, Cl], Bicarbonate, Lime %, K-Soluble)	
160	Ammonia + Nitrate (NH ₄ -N, NO ₃ -N)	
148	Exchangeable Bases (Ca, K, Mg, Na)	
149	Extractable Minors (Cu, Fe, Mn, Zn)	
121	Electrical Conductivity + pH	
116	Electrical Conductivity + Saturation Percent	
163	Limestone Purity (Ca, CaCO ₃ Mg, Moisture)	
167	Limestone Analysis (Ca, Mg, Moisture, SO ₄ -S)	
107	Nitrate Profile + EC _e (Multiple samples)	
141	Nitrate Profile + EC _e + pH (Multiple samples)	
129	Organic Matter (C, OM)	
135	Salinity + Nitrate	
148	Exchangeable Bases (Ca, K, Mg, Na)	
149	Extractable Minors (Cu, Fe, Mn, Zn)	.\$21.00

Soil Analysis continued

Extraction N)	\$11.00 \$7.00 \$7.00 \$12.50 \$12.50 \$5.00 \$35.00 \$10.00 \$110.00 \$10.00 \$110.00 \$12.50 \$25.00 \$12.50 \$5.00 \$12.50 \$5.00 \$12.50 \$5.00 \$12.50 \$5.00 \$12.50 \$5.00 \$12.50 \$5.00 \$12.50 \$5.00
O3, added to 104 or 105) ted paste extract) changeable) Capacity (Ammonium ion determination) turated paste extract) ractable) onductivity) ment Ca, S, %Gypsum, Moisture) able) ualitative) uantitative as CaCO ₃) nt (Exchangeable) (Extractable) (NO ₃ -N) (NO ₃ -N) IN) LOI) lysis	\$7.00 \$12.50 \$12.50 \$5.00 \$5.00 \$35.00 \$10.00 \$110.00
ted paste extract) changeable) Capacity (Ammonium ion determination) turated paste extract) ractable) onductivity) ment Ca, S, %Gypsum, Moisture) able) ualitative) uantitative as CaCO ₃) nt (Exchangeable) (Extractable) (NO ₃ -N) N) LOI)	\$12.50 \$12.50 \$5.00 \$5.00 \$35.00 \$10.00 \$12.50 \$10.00 \$11.50 \$12.50 \$12.50 \$12.50 \$12.50 \$12.50 \$12.50 \$12.50 \$12.50 \$12.50 \$12.50 \$12.50 \$12.50 \$12.50 \$12.50 \$12.50 \$12.50 \$12.50
Capacity (Ammonium ion determination) turated paste extract) ractable) moductivity) ment Ca, S, %Gypsum, Moisture) able) ualitative) uantitative as CaCO ₃) nt (Exchangeable) (Extractable) (NO ₃ -N) N) LOI)	\$12.50 \$5.00 \$35.00 \$10.00 \$112.50 \$10.00 \$110.00
Capacity (Ammonium ion determination) turated paste extract) ractable) moductivity) ment Ca, S, %Gypsum, Moisture) able) ualitative) uantitative as CaCO ₃) nt (Exchangeable) (Extractable) (NO ₃ -N) N) LOI)	\$5.00 \$35.00 \$10.00 \$110.00 \$12.50 \$10.00 \$110.00
Capacity (Ammonium ion determination) turated paste extract) ractable) moductivity) ment Ca, S, %Gypsum, Moisture) able) ualitative) uantitative as CaCO ₃) nt (Exchangeable) (Extractable) (NO ₃ -N) N) LOI)	\$35.00 \$10.00 \$12.50 \$10.00 \$10.00 \$10.00 \$16.50 \$25.00 \$12.50 \$5.00 \$12.50 \$20.00 \$12.50 \$12.50 \$12.50 \$12.50 \$12.50 \$12.50 \$12.50 \$12.50 \$12.50 \$12.50
turated paste extract) ractable) moductivity) ment Ca, S, %Gypsum, Moisture) able) ualitative) uantitative as CaCO ₃) nt (Exchangeable) (Extractable) (NO ₃ -N) N) LOI)	\$10.00 \$12.50 \$10.00 \$10.00 \$10.00 \$16.50 \$25.00 \$12.50 \$5.00 \$12.50 \$20.00 \$12.50 \$12.50 \$12.50 \$12.50 \$12.50 \$12.50 \$12.50 \$12.50 \$12.50
ractable)	\$12.50 \$10.00 \$10.00 \$10.00 \$16.50 \$25.00 \$12.50 \$5.00 \$12.50 \$20.00 \$12.50 \$12.50 \$12.50 \$12.50 \$12.50 \$12.50 \$12.50 \$12.50
onductivity) ment Ca, S, %Gypsum, Moisture) ualitative) uantitative as CaCO ₃) nt (Exchangeable) (Extractable) (NO ₃ -N) TN) LOI) lysis	\$10.00 \$10.00 \$10.00 \$16.50 \$25.00 \$12.50 \$5.00 \$12.50 \$20.00 \$12.50 \$12.50 \$12.50 \$12.50 \$8.50 \$12.50
onductivity) ment Ca, S, %Gypsum, Moisture) ualitative) uantitative as CaCO ₃) nt (Exchangeable) (Extractable) (NO ₃ -N) TN) LOI) lysis	\$10.00 \$16.50 \$25.00 \$12.50 \$5.00 \$12.50 \$20.00 \$12.50 \$12.50 \$12.50 \$12.50 \$12.50 \$12.50 \$12.50
ment Ca, S, %Gypsum, Moisture) able) ualitative) uantitative as CaCO ₃) nt (Exchangeable) (Extractable) (NO ₃ -N) TN) LOI)	\$16.50 \$25.00 \$12.50 \$5.00 \$12.50 \$20.00 \$12.50 \$12.50 \$8.50 \$12.50
Ca, S, %Gypsum, Moisture)	\$25.00 \$12.50 \$5.00 \$12.50 \$20.00 \$12.50 \$12.50 \$8.50 \$12.50 \$15.00
able) ualitative) uantitative as CaCO ₃) nt (Exchangeable) (Extractable) (NO ₃ -N) N) LOI)	\$12.50 \$5.00 \$12.50 \$20.00 \$12.50 \$12.50 \$8.50 \$12.50 \$15.00
ualitative) uantitative as CaCO ₃) nt (Exchangeable) (Extractable) (NO ₃ -N) N) LOI)	\$5.00 \$12.50 \$20.00 \$12.50 \$12.50 \$8.50 \$12.50 \$15.00
uantitative as CaCO ₃) nt. (Exchangeable). (Extractable). (NO ₃ -N). TN). LOI). lysis	\$12.50 \$20.00 \$12.50 \$12.50 \$8.50 \$12.50 \$15.00
nt. (Exchangeable). (Extractable). (NO ₃ -N) TN) LOI). lysis	\$20.00 \$12.50 \$12.50 \$8.50 \$12.50 \$15.00
(Exchangeable). (Extractable). (NO ₃ -N). (NO ₃ -N). LOI). lysis	\$12.50 \$12.50 \$8.50 \$12.50 \$15.00
(Extractable)	\$12.50 \$8.50 \$12.50 \$15.00
(NO ₃ -N)	\$8.50 \$12.50 \$15.00
(NO ₃ -N)	\$12.50 \$15.00
(NO ₃ -N)	\$15.00
LOI)lysis	
LOI)lysis	\$17.50
lysis	
	\$7.50
horus (PO ₄ -P) (Olsen extract)	\$25.00
	\$15.00
xchangeable)	
ntage	
•	
1	
able)	512.50
ion (Dry, grind and/or store)	\$7.50
	rus (Sol-P) n (K-Soluble) ted paste extract) ration (H ₂ SO ₄) able) ion (Dry, grind and/or store)

Plant Tissue Analysis

Packages		
Petiole Ana		
201	Petiole Monitoring (NO ₃ -N, PO ₄ -P, K)	
202	Petiole Monitoring + Zn	\$25.00
Grane Petic	ole Analysis	
232	NO ₃ -N, P, K, Zn	\$27.00
205	Grape Complete (NO ₃ -N, B, Ca, Cl, Cu, Fe, K, Mg, Mn, Na, P, S, Zn)	
Leaf Analys		
206	TN, P, K	
207	TN, P, K, Zn	
240	Complete Tissue (N, B, Ca, Cl, Cu, Fe, K, Mg, Mn, Na, P, S, Zn)	\$50.00
Garlic		
229	TN, PO ₄ -P, K	\$23.00
230	TN, PO ₄ -P, K, Zn	
Leaf and Po	etiole combinations	
242	Petiole Monitoring + Leaf TN	
243	Petiole Monitoring + Complete Tissue	\$66.00
Individual A	<u>analyses</u>	
215	Boron (B)	
252	Brix Sugar	
219	Calcium (Ca)	
251	Carbon (C)	
216	Chloride (Cl)	
224	Copper (Cu)	
223	Iron (Fe)	
220	Magnesium (Mg)	
225 235	Manganese (Mn)	
236	Molybdenum + Cobalt (added to 240)	
253	Moisture (%)	
214	Nitrogen-Total (TN)	
208	Nitrogen-Nitrate (NO ₃ -N)	
209	Phosphate Phosphorus (PO ₄ -P)	
222	Phosphorus (P)	
210	Potassium (Acetic acid extractable) (K)	
221	Potassium (Total) (K)	
218	Sodium (Na)	
244	Sulfur (S)	
211	Zinc (Zn)	
200	Sample Preparation (Dry, chopping, grind and/or store)	\$7.50

Water Analysis

Packages		
301	Ag Water Suitability	\$35.00
	(pH, EC, Ca, Mg, Na, SAR, SARadj, Alk (HCO ₃), SO ₄ ,Cl, B, NO ₃ -N)	
340	Ag Water Complete (Suitability + Fe, Mn, Cu, Zn)	\$45.00
341	Nursery Water Analysis	\$55.00
	Alkalinity, pH, Boron, Calcium, Chloride, Copper, Conductivity, Iron	
	Potassium, Magnesium, Manganese, Sodium, Ammonia, Nitrate, Phosphorus Sulfate, Zinc	,
Individual A	Analyses	
329	Acid Water Titration	\$20.00
308	Bicarbonate (HCO ₃)	
304	Boron (B)	
310	Calcium (Ca)	
318	Carbonate (CO ₃)	
312	Chloride (Cl)	
316	ECw	
317	ECw + pH	
320 314	Hardness (added to 301)	
314	Magnesium (Mg)	
326	Manganese (Mn)	
305	Nitrogen-Nitrate (NO ₃ -N)	
306	Nitrogen-Total (TN)	
307	Nitrogen-Ammonia (NH ₄ -N)	
315	pH	
313	Phosphorus (P)	
303	Potassium (K)	
325	Sodium (Na)	
322	Solids, Total Suspended (TSS).	
323	Solids, Total Dissolved (TDS) (Measured)	
327	Solids, Total Dissolved (TDS) (Measured) + ECw	
324	Solids, Total Dissolved (TDS) (Calculated) + ECw	
321	Solids, Total Dissolved (TDS) (Calculated, added to 301)	\$2.00
343	Zinc (Zn)	\$12.50

We provide for Title 22 certified sampling. Call for details.

Manure Analysis

Packages		
401	Manure Analysis (N,P,K, Moisture)	\$30.00
402	Manure Analysis + Zinc	\$34.00
403	Bulk Density	\$8.50
404	Moisture (%)	\$8.50
405	CN Ratio	\$17.50
406	Nitrogen Analysis (TN, NH ₄ -N, NO3-N, Moisture, Soluble)	\$50.00
407	Liquid Manure (TN, NH ₄ -N, NO3-N)	\$22.00
410	Complete Compost Analysis	\$75.00
	NO3-N, PO4-P, pH, EC, Organic Matter, TN, B, Ca, Cl, Cu, Fe, K, Mg,	Mn,
	Na, P, Zn, Extractable minors (Fe, Mn, Cu, Zn), Exchangeable Cations (Ca,	Mg,
	Na, K), Bulk Density	
Dairy Moni	· ·	
411	Merced County Manure Analysis	\$60.00
	(Total N, NO ₃ -N, Solids, K, P, Moisture)	
413	Merced County Manure Water Analysis	\$60.00
	(Total N, NH ₄ -N, P, K, Ca, Mg, Na, Cl)	
412	Nitrate-N, Ammonia-N, Conductivity	\$31.00
414	Lagoon Water: TN, Nitrate-N, EC, TDS (Calc.)	\$33.00
416	Lagoon Water: TN, Ammonia-N, Nitrate-N	\$22.00
420	Complete Lagoon Water	\$72.00
	Alkalinity, Boron, Calcium, Chloride, Phosphate, Potassium, Magnesium,	
	Sodium, Ammonia-N, Nitrate-N, pH, Sulfate, Total Nitrogen	

Fertilizer Analysis - Call for quotes.

Regional Water Quality Control Board **Testing Requirements**

Dairy General Order as of February 23, 2011*

Process Wastewater

510	Quarterly Sampling	\$47.00
511	(NO ₃ -N, NH ₄ -N, TKN, TN, K, P, TDS, EC) Every 2 years	\$25.00
	(Ca, Mg, Na, HCO ₃ , SO ₄ , Cl, CO ₃)	
315	pH (Annually)	\$7.00
	<u>Manure</u>	
503	Every 2 years	\$60.00
	(Ca, Mg, Na, S, Cl, Fixed Solids)	
504	Twice/Year(TN, P, K, Moisture)	\$35.00
133	Moisture (%)	\$8.50
	<u>Plant Tissue</u>	
505	At Harvest (Silage, Hay, etc.)	\$35.00
	At Harvest (Silage, Hay, etc.)	
505 506	At Harvest (Silage, Hay, etc.)	
	At Harvest (Silage, Hay, etc.)	

.)

508	Spring Pre-plant (0-1 ft)	\$18.00
	(NO_3-N, OM)	
509	Fall Pre-plant (0-1 ft)	\$35.00
	$(NO_3-N, PO_4-P, K, OM, EC)$	
106	Spring/Fall Pre-plant (Below 1 ft)	\$15.00
	(NO3-N)	

Fresh Water Samples

All fresh water samples, which include irrigation and domestic wells and canal water samples, will be tested by a laboratory with an Environmental Laboratory Accreditation Program (ELAP) certification. JMLord, Inc. has a working relationship with several ELAP certified laboratories in the San Joaquin Valley. JMLord, Inc works to obtain the most competitive prices from outside laboratories.

^{*}Tests will be updated with any changes made to the General Order.