



LITCHFIELD ANALYTICAL SERVICES

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Feeds Forages Mycotoxins Soils Plant Tissues Manure Fertilizers Lime Water

Quick Turnaround

Quality Testing

Personalized Service

Competitive Rates

Litchfield Analytical Services was founded in 1982 to provide feed and forage analysis services for livestock producers, nutritionists, feed dealers, and feed manufacturers. We have offered both Wet Chemistry and Near Infrared Reflectance Spectrophotometry (NIRS) procedures since 1984. The agronomy department was added in 1998. Our staff is trained and experienced in feed, mycotoxin, soil, plant tissue, manure, greenhouse media, fertilizer, lime, and water analysis which ensures you of accurate and reliable results. We use modern, well-maintained, and daily-calibrated equipment to perform valid analytical procedures as prescribed by the Association of Official Analytical Chemists (AOAC). Standard Operating Procedures include precautions to prevent contamination and provide a safe work environment. Litchfield Analytical Services is accredited by The National Forage Testing Association (NFTA), The National Hay Association (NHA), The American Forage and Grassland Council (AFGC), and The North American Proficiency Testing Program (NAPT) for laboratory testing proficiency. Located in Southern Michigan, Litchfield Analytical Services has built a solid reputation in Michigan, Ohio, and Indiana for quality testing, personalized service, and quick turn-around. We are committed to maintain this reputation as we grow our business.

Schedule of Fees

March 1, 2017

Turnaround Time for Routine Testing

Turnaround time for non-routine analysis is dependent upon the test being performed. RUSH results may be available when prior arrangements are made. An additional RUSH fee of up to \$400 per sample will be charged.

Individual Consultation & Clerical Fees

Individual consultation is available for an hourly rate of \$120 per hour plus travel expenses if any. Clerical services performed by a lab technician to search and retrieve records is available for \$60 per hour.

Sample Supplies / Mailers

For your convenience, postage-paid mailers are provided for feed samples. Mailers returned with a multiple samples will be charged \$3 per sample when received. Mailers returned with a single sample will be charged \$6

Postage-paid feed mailers, soil sample bags, 125ml bottles (fertilizer), and 500ml bottles (water & manure samples), sample information forms & mailing labels are provided at no additional charge for submitting samples to Litchfield Analytical Services.

Reporting Procedures

Sample results can be mailed, faxed, or emailed to two recipients at no additional charge. A \$2 per sample fee will be added for mailing or faxing to a third recipient. Phone results are available for \$5.00 per sample.

Terms of Sale

All prices are subject to change without notice. Payment is due within 30 days from the date of invoice with approved credit. New customers must include payment with their first set of samples to aid in account set-up. A finance charge of 2% per month (24% per annum) of the outstanding invoice amount is added to past due invoices. The minimum finance charge is \$2 per past due invoice per semi-monthly statement period.

Discounts

Discounts may be available for large volumes of samples or contract work. Contact the laboratory for more information. No discounts will be allowed on overdue accounts.

Re-Assay Policy

Results questioned by the client will be re-assayed upon request. No charge will be made unless the re-assay confirms the original results.

Sample Holding & Disposal

Samples are held for varying lengths of time, depending on their stability and the amount of storage space required. All samples will be held a minimum of two weeks after results are reported. If longer storage is necessary, a storage fee will be charged based on the type of sample being held. Samples that require special disposal will be returned after analysis at the client's expense. There will be a \$10 minimum charge for returning samples and / or containers.

Unusual Samples

Fees are quoted based on standard sample preparation procedures. . Oversized samples (samples weighing more than 320 grams) may be charged for additional sample prep. We reserve the right to assess additional preparation fees for samples with unusually high concentrations of the analyte, or those requiring special handling, special preparation, or non-standard analytical methods. Samples arriving in unusual packaging and / or without completed test request forms may be assessed a special handling charge for repackaging and / or filling out test request forms.

Confidentiality

All work is performed in confidence. Results are released only to the client or his / her designated agent. Confidentiality agreements will be provided upon request.

Warranty & Limits of Liability

Warranty is limited to the accuracy of analysis of the sample as received. We assume no responsibility for the purposes for which the client uses the test results, nor liability for any other warranties, expressed or implied, including warranties of fitness for a particular purpose or for merchantability made by the client. These terms and conditions shall supersede any conflicting terms and conditions stated on any purchase order, or other order of work submitted by the client.

NIR Feed & Forage Test Packages (1 to 2 day turn-around)

NIR:	Moisture, Crude Protein, ADF, NDF, ADFIN (forages), Ca, P, Mg, K, PSU Energy Values, RFV (forages), Non-Fiber Carbohydrates (forages), & Protein Solubility (forages).	\$ 13
NIRd	Moisture, Crude Protein, ADF, NDF, ADFIN, NDFIN, Lignin, Ash, Fat, Starch & Starch digestibility (corn & corn silage) Sugar, 30hr, 120hr, & 240hr IVNDFd (forages), VFA Screen (silages), Ca, P, Mg, K, S, OSU Energy Values, RFV, RFQ, NFC, & Protein Solubility (forages). A "Milk 2006" (lbs of milk / acre) report is available for corn silage upon request.	\$ 22

NW Feed & Forage Test Packages (1 to 2 day turn-around)

NW:	Test NIR with wet chemistry minerals (Ca, P, K, Mg, Na, Cu, Fe, Mn, & Zn)	\$ 22
NWd:	Test NIRd with wet chemistry minerals (Ca, P, K, Mg, Na, Cu, Fe, Mn, & Zn)	\$ 31

Wet Chemistry Feed & Forage Test Packages (1 to 5 day turn-around)

DM:	Moisture & Dry Matter.	\$ 10
1:	Moisture & Crude Protein (<i>No mineral mixes</i>).	\$ 14
2:	Moisture, Crude Protein, Ca, P, K, Mg, Na, Cu, Fe, Mn, & Zn. (<i>No mineral mixes</i>).	\$ 19
3:	Moisture, Crude Protein, Ca, P, K, Mg, Na, Cu, Fe, Mn, Zn, ADF & Energy Values. (<i>No mineral mixes</i>).	\$ 24
4:	Moisture, Crude Protein, Ca, P, K, Mg, Na, Cu, Fe, Mn, Zn, ADF, Energy Values, NDF, RFV & NFC. (<i>No mineral mixes</i>).	\$ 30
5:	Moisture, Crude Protein, Ca, P, K, Mg, Na, Cu, Fe, Mn, Zn, ADF, Energy Values, NDF, RFV, NFC, Sulfur & Chlorides. DCAD calculations available upon request. (<i>No mineral mixes</i>).	\$ 40
ProxEE:	Moisture, Crude Protein, Fat (Ether Extract), Ash, Crude Fiber, Ca, P, K, Mg, Na, Cu, Fe, Mn, Zn, TDN & Energy Values. (<i>No mineral mixes</i>).	\$ 40
ProxAH:	Moisture, Crude Protein, Fat (Acid Hydrolysis), Ash, Crude Fiber, Ca, P, K, Mg, Na, Cu, Fe, Mn, Zn, TDN & Energy Values. (<i>No mineral mixes</i>).	\$ 75
MinMix:	Mineral analysis for mineral concentrates including Crude Protein, Ca, P, K, Mg, Na, Cu, Fe, Mn, & Zn. (<i>Note: Mineral mixes must be run with the MinMix package.</i>)	\$ 40
OSU Pkg:	Add Lignin, Fat, Ash, ADFIN, NDFIN & OSU Energy Values to Test 4 or 5. (<i>No mineral mixes</i>)	\$ 25
CPM30 Pkg:	Add Lignin, Fat, Ash, ADFIN, NDFIN, Starch, Sugar, 30IVDMd & OSU Energy Values to Test 4 or 5. A Milk 2006 report with Schwab – Shaver Energy Values & Milk / Ton is available upon request for corn silage. (<i>No mineral mixes</i>).	\$ 60
Ferm:	Fermentation Analysis. Includes Moisture, pH, Titratable Acidity, Lactic Acid, Acetic Acid, Propionic Acid, Iso-butyric Acid, Butyric Acid, Total Volatile Fatty Acids, and Ammonia.	\$ 30
NSC:	Non-Structural Carbohydrates. Includes Moisture, Starch and Sugar (Water Soluble CHO)	\$ 40
Sugar Profile:	Fructose, Glucose, Sucrose, Maltose, and Lactose	\$ 150

Equus Is For Horses (1 to 3 day turn-around)

Equus:	Moisture, DM, Crude Protein, Digestible Energy, ADF, NDF, Estimated Crude Fiber, Non-Fiber Carbohydrates, P, Ca, K, Mg, Na, Cu, Fe, Zn, & Mn.	\$ 30
EquusPlus:	Moisture, DM, Crude Protein, Digestible Energy, ADF, NDF, Estimated Crude Fiber, Non-Fiber Carbs., Starch., Sugars (WSC), Non-Structural Carbs., P, Ca, K, Mg, Na, Cu, Fe, Zn, & Mn.	\$ 49
EquusPro:	Moisture, DM, Crude Protein, Digestible Energy, ADF, NDF, Estimated Crude Fiber, Non-Fiber Carbs., Starch, Sugars (WSC), Non-Structural Carbs, Fat, Ash, Lignin, P, Ca, K, Mg, Na, Cu, Fe, Zn, & Mn.	\$ 89

Additional Feed & Forage Test Procedures (with NIR, NW, DM, Test 1, 2, 3, 4, 5, or Prox)

Ammonia, Water Extractable (NH ₄)	\$ 15	Methanol	\$ 250
Aluminum (Al)	\$ 15	Mold & Yeast Count (Mold Cnt)	\$ 30
Ash (Ash)	\$ 7	Mold Identification (Mold ID)	\$ 50
Boron (B)	\$ 15	Molybdenum (Mo)	\$ 30
Brix (Brix)	\$ 40	Nitrate, Water Extractable (NO ₃)	\$ 12
Calcium (Ca)	\$ 10	Nitrite, Water Extractable (NO ₂)	\$ 15
Chlorides (Cl)	\$ 10	Nitrogen, Non Protein (NPN)	\$ 20
Cobalt (Co)	\$ 25	Nitrogen, Total (TI N)	\$ 15
Copper (Cu)	\$ 10	Nitrogen, Urea (Urea-N)	\$ 30
CS Processing Score (includes NIRd)	\$ 45	Penn State Particle Length (M)	\$ 15
Ethanol	\$ 150	Pepsin Digestibility	\$ 50
Falling Numbers	\$ 30	pH (pH)	\$ 7
Fat, Acid Hydrolysis (AHFat)	\$ 50	Phosphorus (P)	\$ 10
Fat, Ether Extract (Fat)	\$ 10	Potassium (K)	\$ 10
Fiber, Acid Detergent (ADF)	\$ 7	Prolamin	\$ 25
Fiber, Crude (CF)	\$ 10	Protein, Crude (CP)	\$ 10
Fiber, Neutral Detergent (NDF)	\$ 7	Protein, ADF Insoluble-ADF Required (H)	\$ 7
Fiber, Physically Effective NDF (peNDF)	\$ 30	Protein, NDF Insoluble-NDF Required	\$ 7
Fiber, Total Dietary	\$ 180	Protein Dispersibility Index (PDI)	\$ 50
Fluoride (F)	\$ 40	Protein, Rumen Undegradable (RUP)	\$ 40
Glycerin / Glycerol	\$ 150	Protein Solubility (S)	\$ 7
InSitu CPd (16 hr)	\$ 120	Prussic Acid / Cyanide (HCN)	\$ 70
InSitu DMd (30 or 48 hr)	\$ 85	Salt, Calculated from Chloride	\$ 12
InSitu Starch (2 or 7 hr)	\$ 120	Selenium (Se)	\$ 38
InVitro DMd (24, 30, or 48 hr)	\$ 25	Starch, Enzyme Available (Ungelatinized)	\$ 20
InVitro Starchd (2, 7, or 24 hr w/Starch)	\$ 65	Starch, Total (Starch)	\$ 20
Iodine (I)	\$ 180	Sodium (Na)	\$ 10
Iron (Fe)	\$ 10	Sugars, Total (Ethanol Soluble CHO)	\$ 17
Kansas State Micron Analysis	\$ 30	Sugars, Total (Water Soluble CHO)	\$ 17
Lignin (L) *	\$ 7	Sulfur (S)	\$ 10
Magnesium (Mg)	\$ 10	Test Weight	\$ 10
Manganese (Mn)	\$ 10	Urea	\$ 30
Melamine & Analogs by LC4422	\$ 350	Viscosity (Brookfield)	\$ 70
Melamine by GC	\$ 250	Zinc (Zn)	\$ 10

Feed & Forage Vitamin Tests (10 to 15 day turn-around)

Choline	\$ 240	Vitamin B ₉ (Folic Acid)	\$ 200
Vitamin A (Beta Carotene)	\$ 175	Vitamin B ₁₂ (Cyanocobalamin)	\$ 300
Vitamin A (True, Retinol)	\$ 175	Vitamin C (Ascorbic Acid)	\$ 160
Vitamin A (Total)	\$ 200	Vitamin D, (Calciferiols) High Level	\$ 175
Vitamin B ₁ (Thiamine)	\$ 175	Vitamin D, (Calciferiols) Low Level	\$ 260
Vitamin B ₂ (Riboflavin)	\$ 175	Vitamin E, (Tocopherol), High Level	\$ 175
Vitamin B ₃ (Niacin)	\$ 175	Vitamin E (Tocopherol), Low Level	\$ 260
Vitamin B ₅ (Pantothenic Acid)	\$ 200	Vitamin K ₃ (Menadione), High Level	\$ 175
Vitamin B ₆ (Pyridoxine)	\$ 200	Vitamin K ₃ (Menadione), Low Level	\$ 260
Vitamin B ₇ (Biotin)	\$ 200	Xanthophyll	\$ 160

Feed & Forage Amino Acid Tests (10 to 15 day turn-around)

Amino Acid Profile (AAPProfile): All 18 Amino Acids listed below.			\$ 325
Alanine	\$ 120	Lysine	\$ 150
Arginine	\$ 120	Methionine	\$ 120
Aspartic Acid	\$ 120	Phenylalanine	\$ 120
Cystine	\$ 120	Proline	\$ 120
Glutamic Acid	\$ 120	Serine	\$ 120
Glycine	\$ 120	Threonine	\$ 120
Histidine	\$ 120	Tryptophan	\$ 150
Isoleucine	\$ 120	Tyrosine	\$ 120
Leucine	\$ 120	Valine	\$ 120

Feed & Forage Mycotoxin Tests (1 to 3 day turn-around)

<u>Mycotoxin</u>	<u>Method</u>	<u>MDL</u>	<u>1 - 3</u>	<u>4 - 6</u>	<u>7 - 10</u>	<u>11 +</u>
Aflatoxin (A)	ELISA	1.7 ppb	\$ 32	\$ 29	\$ 27	\$ 26
Citrinin (C)	ELISA	15.0 ppb	\$ 34	\$ 31	\$ 29	\$ 28
Fumonisin (F)	ELISA	0.1 ppm	\$ 34	\$ 31	\$ 29	\$ 28
Ochratoxin A (O)	ELISA	5.0 ppb	\$ 34	\$ 31	\$ 29	\$ 28
T-2 Toxin (T2)	ELISA	50.0 ppb	\$ 34	\$ 31	\$ 29	\$ 28
Vomitoxin, DON (V)	ELISA	0.2 ppm	\$ 34	\$ 31	\$ 29	\$ 28
Zearalenone (Z)	ELISA	50.0 ppb	\$ 34	\$ 31	\$ 29	\$ 28
A, T2, V, Z Screen	ELISA	See Above	\$ 127	\$ 115	\$ 108	\$ 104

Feed & Forage Mycotoxin Tests (24 Hour Rush turn-around)

<u>Mycotoxin</u>	<u>Method</u>	<u>MDL</u>	<u>1 - 2</u>	<u>3 - 5</u>	<u>6 - 10</u>	<u>11 +</u>
Aflatoxin (A)	ELISA	1.7 ppb	\$ 132	\$ 63	\$ 46	\$ 36
Citrinin (C)	ELISA	15.0 ppb	\$ 134	\$ 65	\$ 48	\$ 38
Fumonisin (F)	ELISA	0.1 ppm	\$ 134	\$ 65	\$ 48	\$ 38
Ochratoxin A (O)	ELISA	5.0 ppb	\$ 134	\$ 65	\$ 48	\$ 38
T-2 Toxin (T2)	ELISA	50.0 ppb	\$ 134	\$ 65	\$ 48	\$ 38
Vomitoxin, DON (V)	ELISA	0.2 ppm	\$ 134	\$ 65	\$ 48	\$ 38
Zearalenone (Z)	ELISA	50.0 ppb	\$ 134	\$ 65	\$ 48	\$ 38
A, T2, V, Z Screen	ELISA	See Above	\$ 527	\$ 248	\$ 185	\$ 140

Feed & Forage Mycotoxin Tests (3 to 5 day turn-around)

<u>Mycotoxin</u>	<u>Method</u>	<u>MDL</u>	<u>1 - 2</u>	<u>3 - 5</u>	<u>6 - 10</u>	<u>11 +</u>
Aflatoxin B ₁ G ₁ B ₂ G ₁	TLC/HPLC	5.0 ppb	\$ 104	\$ 92	\$ 83	\$ 80
Citrinin (C)	TLC/HPLC	50.0 ppb	\$ 104	\$ 92	\$ 83	\$ 80
Fumonisin B ₁ B ₂ B ₃	TLC/HPLC	0.2 ppm	\$ 104	\$ 92	\$ 83	\$ 80
Ochratoxin A (O)	TLC/HPLC	10.0 ppb	\$ 104	\$ 92	\$ 83	\$ 80
T-2 Toxin (T2)	TLC/HPLC	100.0 ppb	\$ 104	\$ 92	\$ 83	\$ 80
Vomitoxin, DON (V)	TLC/HPLC	0.4 ppm	\$ 104	\$ 92	\$ 83	\$ 80
Zearalenone (Z)	TLC/HPLC	100.0 ppb	\$ 104	\$ 92	\$ 83	\$ 80
A, T2, V, Z Screen	TLC/HPLC	See Above	\$ 140	\$ 125	\$ 115	\$ 110
A, F, O, T2, Z Screen	TLC/HPLC	See Above	\$ 325	\$ 290	\$ 265	\$ 255
A, C, O, T2, Z Screen	TLC/HPLC	See Above	\$ 350	\$ 315	\$ 290	\$ 280
Toxin Binder Efficiency	HPLC Study		\$ 475	\$ 425	\$ 390	\$ 375

Feed & Forage Micro-Biology Tests (10 to 15 day turn-around)

Clostridium perfringens, qualitative	\$ 35	Iron Bacteria, qualitative	\$ 45
Clostridium perfringens, quantitative	\$ 100	Listeria, qualitative	\$ 35
Coliform-Fecal, qualitative	\$ 50	Listeria, quantitative	\$ 50
Coliform-Fecal, quantitative	\$ 200	Plate Count, Total	\$ 60
Coliform-Total, quantitative	\$ 45	Plate Count ID (Per Species identified)	\$ 60
Cryptosporidium, quantitative	\$ 475	Pseudomonas Bacteria, quantitative	\$ 45
E. coli, quantitative	\$ 50	Salmonella, qualitative	\$ 45
E. coli 0157:H7, quantitative	\$ 75	Salmonella, quantitative	\$ 100
Endophyte, Ergovaline	\$ 75	Shigella	\$ 50
Endophyte, Lolitrem B	\$ 75	Staphylococcus	\$ 35
Enterobacter	\$ 50	Streptococcus-Fecal, quantitative	\$ 85
Gossypol in Cottonseed	\$ 120	Streptococcus-Total	\$ 85
Gram Negative Bacteria	\$ 35	Sulfate-Reducing Bacteria, qualitative	\$ 45
Heterotrophic Plate Count	\$ 45		

Fat & Oil Tests (10 to 15 day turn-around)

MIU:	Moisture by Distillation, Insoluble Impurities, & Unsaponifiable Matter.	\$ 100	
Antioxidant Profile:	BHA,BHT, TBHQ, Propyl Gallate	\$ 250	
Active Oxygen Method (A.O.M. Stability)	\$ 70	Neutral Oil Loss (NOL)	\$ 100
Butylated Hydroxyanisol (BHA)	\$ 150	Omega Fatty Acids-Total	\$ 200
Butylated Hydroxytoluene (BHT)	\$ 150	Omega 3 Fatty Acid (DHA 20:5)	\$ 250
Fatty Acid Profile (Includes EE Fat)	\$ 150	Omega 6 Fatty Acid (EHA 22:6)	\$ 250
Free Fatty Acids	\$ 50	Omega 9 Fatty Acid	\$ 200
Glycerol / Glycerine	\$ 100	Peroxide Value	\$ 50
Hydroxyl Value	\$ 90	Polyethelene	\$ 120
Insoluble Impurities	\$ 50	Saponification Value	\$ 80
Iodine Value	\$ 80	Sulfur by X-Ray	\$ 100
Linoleic Acid	\$ 170	Tert-Butylhydroquinone (TBHQ)	\$ 150
Melting Point	\$ 50	Thiobarbituric Acid Value (TBA)	\$ 150
Methanol	\$ 250	Total Fatty Acids (TFA)	\$ 85
Moisture by Distillation	\$ 50	Trans Fatty Acids	\$ 200
Mono, Di, & Triglycerides	\$ 200	Unsaponifiable Matter	\$ 50

Drug Testing

Animal Health Product Tests (10 to 15 day turn-around)

Ampicillin (AMP)	\$ 495	Nitrofurazone (NFZ)	\$ 190
Amprolium	\$ 190	Ormetoprim	\$ ASK
Apramycin	\$ 220	Oxytetracycline (OTC)	\$ 190
Arsenic Acid (Pro-Gen)	\$ 190	Penicillin	\$ 190
Bacitracin (BAC) (BMD)	\$ 350	Phytase	\$ 140
Bamermycin	\$ 280	Piperazine	\$ 190
Carbadox	\$ 190	Poloxalene	\$ 350
Cephapirin (CEPH)	\$ ASK	Pyrantel Tartrate (Continuex)	\$ 190
Chloramphenicol	\$ ASK	Ractopamine (Paylean)	\$ 275
Chlortetracycline (CTC)	\$ 190	Robenidine	\$ 170
Ciprofloxacin (CIP)	\$ ASK	Rumensin (Coban, Monensin)	\$ 190
Cloxacillin (CLOX)	\$ ASK	Salinomycin	\$ 190
Coban (Monensin, Rumensin)	\$ 190	Sarafloxacin (SAR)	\$ ASK
Decoquinatate (Deccox)	\$ 250	Semduramicin	\$ 210
Doxycycline (DC)	\$ ASK	Stenoreol (Halofuginone)	\$ 220
Emanmectin (Benzoate)	\$ 400	Streptomycin	\$ 170
Erythromycin	\$ 250	Sulfa Residue	\$ 200
Fenbendazole (Panacur) (Safeguard)	\$ 400	Sulfachloropyridazine (SPC)	\$ ASK
Flavomycin	\$ 290	Sulfadiazine (SDZ)	\$ 495
Florfenicol	\$ 300	Sulfadimethoxine (SDM)	\$ 250
Flunixin-Flunixinhydroxide (FLU)	\$ ASK	Sulfamerazine (SMR)	\$ 250
Gentamycin	\$ ASK	Sulfamethazine (SMZ)	\$ 190
Laidlomycin	\$ 440	Sulfaquinoxaline (SQX)	\$ ASK
Lasalocid (Avatech, BovaTech)	\$ 360	Sulfathiazole (STZ)	\$ 190
Lincomycin	\$ 300	Tetracycline (TC)	\$ ASK
Monensin (Coban, Rumensin)	\$ 190	Thiabendazole (THBZ)	\$ ASK
Morantel	\$ 360	Tilmicosin in type B Fd (> 600 ppm)	\$1450
Narasin	\$ 200	Tilmicosin in type C Fd (< 600 ppm)	\$ 320
Neomycin Sulfate	\$ 190	Tulathromycin	\$ ASK
Nicarbazin	\$ 295	Tylosin (TYL)	\$ 190
3-Nitro-4-Hydroxyphenylarsonic Acid	\$ 120	Virginiamycin (VIR)	\$ 170

* * * At least 150 grams of dry matter is required and must be submitted with an estimated detection level.

Agronomic Testing Services

Soil & Greenhouse Media Test Packages (2 to 7 day turn-around)

		<u>1 - 3</u>	<u>4 - 6</u>	<u>7 - 10</u>	<u>11 +</u>	<u>Dealer</u>
S1:	pH, buffer pH, P, K, Ca, Mg, Na, S, CEC, % Base & Fertility Rx	\$ 16	\$ 12	\$ 10	\$ 9	\$ 7
S2:	Test S1 <i>plus</i> % Organic Matter	\$ 18	\$ 14	\$ 12	\$ 11	\$ 9
S3:	Test S1 <i>plus</i> % Organic Matter, B, Mn & Zn	\$ 19	\$ 17	\$ 16	\$ 15	\$ 13
S4:	Test S1 <i>plus</i> % Organic Matter, B, Mn, Zn, Cu, & Fe	\$ 20	\$ 18	\$ 17	\$ 16	\$ 14
PSNT:	Pre-Sidedress Soil Nitrate Level & Rx for Nitrogen credit	\$ 15	\$ 13	\$ 11	\$ 10	\$ 10
AvailableN:	Total Available Nitrogen, includes NO ₃ & NH ₄	\$ 28	\$ 23	\$ 21	\$ 20	\$ 20
SatPaste:	pH, Soluble Salts, NO ₃ -N, P, K, Ca, Mg, Na, Cl, Cu, Fe, Mn, & Zn	\$ 44	\$ 39	\$ 35	\$ 32	\$ 32

Manure / Compost / Sludge Test Packages (4 to 7 day turn-around)

M1:	Moisture, Total N, NH ₄ -N, P ₂ O ₅ , & K ₂ O					\$ 30
M2:	Moisture, Total N, NH ₄ -N, P ₂ O ₅ , K ₂ O, Ca, Mg, Na, & Nutrient Dollar Value Calculation (Using prevailing N-P-K Fertilizer Costs)					\$ 40
M3:	Moisture, Total N, NH ₄ -N, P ₂ O ₅ , & K ₂ O, Ca, Mg, Na, Nutrient Dollar Value Calculation (Using prevailing N-P-K Fertilizer Costs), Cu, Fe, Mn, & Zn					\$ 50
AppCalc:	Maximum Manure or Sludge Application Rate Based on Limiting Nutrient, Crop Nutrient Uptake, & Tri-State Recommended Fertility Rates					\$ 2

Plant Tissue Test Packages (1 to 7 day turn-around)

T1:	N, P, K, Ca & Mg, Cu, Fe, Mn, & Zn					\$ 25
T2:	N, P, K, Ca, Mg, S, B, Cu, Fe, Mn & Zn					\$ 45

Water Test Packages (5 to 10 day turn-around)

W1:	pH, Alkalinity, EC, NO ₃ -N, P, K, Ca, Mg, SO ₄ -S, B, Cu, Fe, Mn, Zn, Cl, & Na (Greenhouse Water)					\$ 65
W2:	pH, Hardness, Salt Concentration, NO ₃ -N, P, K, Ca, Mg, SO ₄ -S, Cl, Na, CO ₃ , HCO ₃ , B, Cu, Fe, Mn, Zn & Al (Livestock Water)					\$ 65
W3:	NO ₃ -N, P, K, Ca, Mg, SO ₄ -S, Cl, Na, B, Cu, Fe, Mn, Zn, Al, pH, EC, Hardness, CO ₃ , HCO ₃ , Salt Concentration & SAR (Irrigation Water)					\$ 65

Fertilizer & Lime Test Packages (1 to 7 day turn-around)

DF1:	Total N, Available P ₂ O ₅ , Soluble K ₂ O (Dry Fertilizer)					\$ 60
DF2:	Total N, Available P ₂ O ₅ , Soluble K ₂ O, Ca, Mg, S, Cu, Fe, Mn, Zn & Na (Dry Fertilizer)					\$ 120
LF1:	Total N, pH & Specific Gravity (Liquid Fertilizer)					\$ 25
LF2:	Total N, Available P ₂ O ₅ , Ortho P ₂ O ₅ , Poly P ₂ O ₅ , pH and Specific Gravity (Liquid Fertilizer)					\$ 42
LF3:	Total N, Available P ₂ O ₅ , Soluble K ₂ O, pH & Specific Gravity (Liquid Fertilizer)					\$ 50
LF4:	Ammonical N, Nitrate N, Total N, Available P ₂ O ₅ , Soluble K ₂ O, pH, Specific Gravity, Conductivity, Ca, Mg, S, Co, Cu, Fe, Mn, Mo, Zn, Al & Na (Liquid Fertilizer)					\$ 120
L1:	Particle Size Distribution: 8, 20, 60, 100 mesh sieves (Lime)					\$ 25
L2:	Moisture, Ca & Mg (Lime)					\$ 26
L3:	Moisture, Ca, Mg & NV (Lime)					\$ 50
L4:	Moisture, Ca, Mg, NV, ECCE & Particle Size Distribution (Lime)					\$ 60
G1:	Moisture, Ca, S & Purity (Gypsum)					\$ 60

Additional Agronomic Test Procedures (7 to 10 day turn-around)
 (May be requested w/ S1 – S2, SME, M1 – M3, T1 – T2, W1 – W3, DF1 - DF2, LF1 - LF4, L1 - L4 or G1)

	<u>Soil</u>	<u>Sludge/ Manure</u>	<u>Plant Tissue</u>	<u>Water</u>	<u>Fert & Lime</u>
Aluminum (Al)	\$ 10	\$ 20	\$ 20	\$ 20	\$ 15 *
Ash	\$ 10	\$ 10	\$ 10	-----	\$ 15
Bicarbonate (HCO ₃)	\$ 15	-----	\$ 15	\$ 15	\$ 15
BioChemical Oxygen Demand (BOD)	-----	-----	-----	\$ 48	-----
Boron (B)	\$ 15	\$ 20	\$ 20	\$ 20	\$ 20 *
BTUs (British Thermal Units)	-----	\$175	\$175	-----	-----
Bulk Density (lbs / ft ³)	\$ 25	-----	-----	-----	\$ 25
Calcium (Ca)	\$ 10	\$ 10	\$ 10	\$ 10	\$ 15 *
Calcium Carbonate Equivalent (CCE)	\$ 15	\$ 20	-----	-----	\$ 20
Carbon (C)	\$ 15	\$ 20	\$ 20	-----	\$ 25
Carbon : Nitrogen Ratio	\$ 30	\$ 30	\$ 30	-----	\$ 35
Carbonate (CO ₃)	-----	-----	-----	\$ 15	-----
Chemical Oxygen Demand (COD)	-----	-----	-----	\$ 48	-----
Chloride (Cl)	\$ 10	\$ 10	\$ 10	\$ 10	\$ 20
Cobalt (Co)	\$ 16	\$ 35	\$ 35	\$ 35	\$ 35 *
Conductivity / Soluble Salts (EC)	\$ 10	\$ 15	-----	\$ 15	\$ 15 *
Copper (Cu)	\$ 15	\$ 15	\$ 15	\$ 15	\$ 15 *
Dissolved Oxygen (DO)	-----	-----	-----	\$ 25	-----
Fluoride (F)	-----	\$ 15	\$ 15	\$ 15	\$ 25
Formeldehyde	-----	-----	-----	-----	\$ 50
Free Acid	-----	-----	-----	-----	\$ 50
Hardness	-----	-----	-----	\$ 20	-----
Iron (Fe)	\$ 10	\$ 10	\$ 10	\$ 10	\$ 15 *
Magnesium (Mg)	\$ 10	\$ 10	\$ 10	\$ 10	\$ 15 *
Manganese (Mn)	\$ 10	\$ 10	\$ 10	\$ 10	\$ 15 *
Moisture, Oven (DM)	\$ 9	\$ 10	\$ 9	-----	\$ 9
Molybdenum (Mo)	\$ 20	\$ 35	\$ 35	\$ 35	\$ 35
Nematode, Complete	\$ 75	-----	-----	-----	-----
Nematode, Soybean Cyst (SCN) or Sugar Beet (SBN)	\$ 50	-----	-----	-----	-----
Nitrogen-Ammonium (NH ₄ ⁺)	\$ 15	\$ 15	\$ 15	\$ 15	\$ 15
Nitrogen-Nitrate (NO ₃ ⁻)	\$ 15	\$ 15	\$ 15	\$ 15	\$ 15
Nitrogen-Nitrite (NO ₂)	-----	\$ 15	\$ 15	\$ 15	\$ 15
Nitrogen-Slow Release (N)	-----	-----	-----	-----	\$ 40
Nitrogen-Total (N)	\$ 15	\$ 15	\$ 15	\$ 15	\$ 15
Nitrogen-Water Soluble / Insoluble (N)	-----	\$ 35	-----	-----	\$ 35
Organic Matter	\$ 7	\$ 10	-----	-----	-----
Particle Size (% sand, silt, clay)	\$ 50	-----	-----	-----	-----
Particle Size (each screen)	\$ 12	\$ 20	-----	-----	\$ 10
pH	\$ 7	\$ 7	\$ 10	\$ 7	\$ 7
Phosphate (P ₂ O ₅)	-----	\$ 10	-----	-----	\$ 15
Phosphate-Ortho & Poly (P ₂ O ₅)	-----	-----	-----	-----	\$ 25
Phosphorus (P)	\$ 10	-----	\$ 10	\$ 10	\$ 15
Potassium (K)	\$ 10	-----	\$ 10	\$ 10	\$ 15
Potassium Oxide (K ₂ O)	-----	\$ 10	-----	-----	\$ 20
Salt Index	-----	-----	-----	-----	\$ 15
Selenium (Se)	\$ 38	\$ 38	\$ 38	\$ 38	\$ 38
Size Guide Number (SGN)	-----	-----	-----	-----	\$ 50
Specific Gravity	-----	\$ 10	-----	\$ 10	\$ 10
Sodium (Na)	\$ 10	\$ 10	\$ 10	\$ 10	\$ 18 *
Solvita Biological Respiration Index	\$ 75	\$ 75	-----	-----	-----
Starch, Total	-----	\$ 20	\$ 20	-----	-----
Sugars, Total	-----	\$ 17	\$ 17	-----	-----
Sulfur (S)	\$ 10	\$ 10	\$ 10	\$ 10	\$ 20 *
Sulfur, Sulfate (SO ₄ -S)	\$ 10	\$ 20	\$ 12	\$ 10	\$ 30 *
Total Dissolved Solids / Salt Conc. (TDS)	-----	-----	-----	\$ 15	-----
Total Organic Carbon (TOC)	\$ 30	-----	-----	\$ 50	-----
Total Solids	-----	-----	-----	\$ 20	-----
Total Suspended Solids (TSS)	-----	-----	-----	\$ 20	-----
Total Volatile Solids (TVS)	-----	\$ 28	-----	\$ 28	-----
Zinc (Zn)	\$ 10	\$ 10	\$ 10	\$ 10	\$ 15 *

* The Cost is \$35 per element if concentration exceeds 5.0%.

Environmental Testing Services

Heavy Metal Scans (10 to 15 day turn-around)

ICP Scan # 1, Not for Low Detection Level - Aluminum, Beryllium, Boron, Calcium, Cobalt, Copper, Iron, Magnesium, Manganese, Molybdenum, Phosphorus, Potassium, Sodium, Sulfur, & Zinc.	\$ 275
ICP Scan # 2, Not for Low Detection Level - Arsenic, Barium, Cadmium, Chromium, Lead, Nickel, & Selenium.	\$ 110
ICP Scan # 3, Not for Low Detection Level - Cadmium, Chromium, Copper, Lead, Nickel, Silver, & Zinc.	\$ 120
ICP Scan # 6, For Low Detection Level - Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Nickel, & Selenium.	\$ 300
Resource Conservation & Recovery Act (RCRA) Metals - Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium, & Silver.	\$ 325
Priority Pollutant (PP) Metals - Antimony, Arsenic, Beryllium, Cadmium, Chromium, Copper, Lead, Mercury, Nickel, Selenium, Silver, Thallium, & Zinc.	\$ 450
Target Analyte List (TAL) Metals - Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, & Zinc	\$ 475
CFR Part 503 Metals, Not for Low Detection Level - Arsenic, Cadmium, Chromium, Copper, Lead, Mercury, Molybdenum, Nickel, Selenium, and Zinc.	\$ 260
MCL (IOC) Package, For Low Detection Level - Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Fluoride, Mercury, Nickel, Selenium, & Thallium.	\$ 420

Metals (10 to 15 day turn-around)

Aluminum (Al)	\$ 30	Mercury (Hg)	\$ 80
Antimony (Sb)	\$ 30	Mercury (Hg) LDL 1631	\$ 240
Arsenic (As)	\$ 30	Molybdenum (Mo)	\$ 30
Barium (Ba)	\$ 30	Nickel (Ni)	\$ 30
Beryllium (Be)	\$ 30	Phosphate (PO4)	\$ 30
Boron (B)	\$ 30	Phosphate-Ortho as P	\$ 40
Cadmium (Cd)	\$ 30	Phosphorus-Dissolved (P)	\$ 40
Calcium (Ca)	\$ 30	Phosphorus-Total (P)	\$ 30
Chromium (Cr)	\$ 30	Potassium (K)	\$ 30
Chromium, Hexavalent	\$ 50	Selenium (Se)	\$ 70
Cobalt (Co)	\$ 30	Silica (SiO ₂)	\$ 50
Copper (Cu)	\$ 30	Silicon (Si)	\$ 70
Iron (Fe)	\$ 15	Silver (Ag)	\$ 40
Iron-Soluble (Fe)	\$ 40	Sodium (Na)	\$ 30
Lead (Pb)	\$ 30	Strontium (Sr)	\$ 30
Lead & Copper Rule	\$ 70	Sulfur-Total (S)	\$ 30
Lead-Soluble (Pb)	\$ 40	Thallium (Tl)	\$ 30
Lithium (Li)	\$ 30	Tin (Sn)	\$ 30
Magnesium (Mg)	\$ 30	Titanium (Ti)	\$ 30
Magnesium-Soluble (Mg)	\$ 40	Vanadium (V)	\$ 30
Manganese (Mn)	\$ 30	Zinc (Zn)	\$ 30
Manganese-Soluble (Mn)	\$ 40	Zinc-Soluble (Zn)	\$ 40

Environmental Testing

Volatile Organics (10 to 15 day turn-around)

EPA 524.2 Drinking Water Volatiles **\$ 300**

Regulated VOC's: Benzene, Carbon Tetrachloride, o-Dichlorobenzene, p-Dichlorobenzene, 1,2-Dichloroethane, cis-1,2-Dichloroethylene, 1,1-Dichloroethylene, trans-1,2-Dichloroethylene, Dichloromethane, 1,2-Dichloropropane, Ethylbenzene, Monochlorobenzene, Styrene, Tetrachloroethylene, Toluene, 1,2,4-Trichlorobenzene, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, Trichloroethylene, Vinyl Chloride, and Xylenes (total).

Unregulated VOC's: Bromobenzene, Bromodichloromethane, Bromoform, Bromomethane, Chlorodibromomethane, Chloroethane, Chloroform, Chloromethane, o-Chlorotoluene, p-Chlorotoluene, Dibromomethane, m-Dichlorobenzene, 1,1-Dichloroethane, 1,3-Dichloropropane, 2,2-Dichloropropane, 1,3-Dichloropropene, 1,1-Dichloropropene, 1,1,1,2-Tetrachloroethane, 1,1,2,2-Tetrachloroethane, 1,2,3-Trichloropropane.

Discretionary VOC's: Bromochloromethane, n-Butylbenzene, sec-Butylbenzene, tert-Butylbenzene, Dichlorodifluoromethane, Hexachlorobutadiene, Isopropylbenzene, p-Isopropyl toluene, Naphthalene, n-Propylbenzene, 1,2,3-Trichlorobenzene, Trichlorofluoromethane, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, Trichlorofluoromethane, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, MTBE.

EPA 8260 Groundwater VOA Volatiles **Water, Soil, or Sediments: \$ 500**

Acetone, Acrolein, Acrylonitrile, Benzene, Bromodichloromethane, Bromoform, Bromomethane, 2-Butanone, Carbon Disulfide, Carbon Tetrachloride, Chlorobenzene, Chlorodibromomethane, Chloroethane, 2-Chloroethyl Vinyl Ether, Chloroform, Chloromethane, Dibromomethane, 1,4-Dichlorobutene (total), Dichlorodifluoromethane, 1,1-Dichloroethane, 1,2-Dichloroethane, 1,1-Dichloroethene, 1,2-Dichloroethene (total), 1,2-Dichloropropane, cis-1,3-Dichloropropene, trans-1,3-Dichloropropene, Ethanol, Ethylbenzene, Ethyl Methacrylate, 2-Hexanone, Isomethane, Methylene Chloride, 4-Methyl-2-Pentanone, Styrene, 1,1,2,2-Tetrachloroethane, Tetrachloroethene, Toluene, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, Trichloroethene, Trichlorofluoromethane, 1,2,3-Trichloropropane, Vinyl Acetate, Vinyl Chloride, and Xylenes (total).

EPA Method 624 – Purgeable VOC's **Waste Water: \$ 400**

Benzene, Bromobenzene, Bromochloromethane, Bromoform, Bromodichloromethane, Bromomethane, n-Butylbenzene, sec-Butylbenzene, tert-Butylbenzene, Carbon Tetrachloride, Chlorobenzene, Chlorodibromomethane, Chloroethane, Chloroform, Chloromethane, 2-Chlorotoluene, 4-Chlorotoluene, 1,2-Dibromo-3-Chloropropane, 1,2-Dichlorobenzene, 1,4-Dichlorobenzene, Dichlorodifluoromethane, 1,1-Dichloroethane, 1,2-Dichloroethane, 1,1-Dichloroethene, cis-1,2-Dichloropropane, 1,3-Dichloropropane, 2,2-Dichloropropane, 1,1-Dichloropropene, cis-1,3-Dichloropropene, trans-1,3-Dichloropropene, Ethylbenzene, Hexachlorobutadiene, Isopropylbenzene, p-Isopropyltoluene, Methylene Chloride, Naphthalene, n-Propylbenzene, Styrene, 1,1,2,2-Tetrachloroethane, 1,1,1,2-Tetrachloroethane, Tetrachloroethene, Toluene, 1,2,3-Trichlorobenzene, 1,2,4-Trichlorobenzene, 1,1,1-Trichloroethane, 1,1,2-Trichloroethane, Trichloroethene, Trichlorofluoromethane, 1,2,3-Trichloropropane, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene, Vinyl Chloride, o-Xylene, m-Xylene, and p-Xylene.

Semi-Volatile Organics (10 to 15 day turn-around)

EPA 525.2 Group A – Alachlor, Atrazine, Butachlor, Metalachlor, Metribuzin, Propachlor, & Simazine **Water: \$ 290**

EPA 531.1 Group B – Aldicarb, Aldicarb Sulfone, Aldicarb Sulfoxide, Carbaryl, Carbofuran, 3-Hydroxycarbofuran, Methomyl, Oxamyl (Vydate) **Water: \$ 375**

EPA 508 Group C/K – Aldrin, Chlordane, Dieldrin, Endrin, Heptachlor, Heptachlor Epoxide, Hexachlorobenzene, Hexachlorocyclopentadiene, Lindane, Methoxychlor, Toxaphene, & Polychlorinated Biphenyls (PCB's) **Water: \$ 260**

EPA 515.1 Group E – Dalapon, Dicamba, 2,4,D, Dinoseb, Pentachlorophenol, Pichloram, & 2,4,5-TP **Water: \$ 320**

EPA 504.1 Group F – Dibromochloropropane (DBCP) & Ethylenedibromide (EDB) **Water: \$ 200**

EPA 525.2 Group G – Di(2-Ethylhexyl) Adipate, & Di(2-Ethylhexyl) phthalate **Water: \$ 290**

EPA 549.1 Group H – Diquat **Water: \$ 290**

EPA 548.1 Group I – Endothall **Water: \$ 320**

EPA 547 Group J – Glyphosate (Roundup) **Water: \$ 290**

EPA 508A Group K- Polychlorinated Biphenyls (PCB's) **Water: \$ 240**

EPA 1613 Group L – 2,3,4,8-TCDD (Dioxin) **Water: \$ 800**

Environmental Testing

Semi-Volatile Organics (10 to 15 day turn-around)

Base / Neutral / Acid / Extractable Semi-Volatiles (EPA Method 625 & 8270) - Water: \$ 800

1,2,4-Trichlorobenzene, 1,2-Dichlorobenzene, 1,2-Diphenylhydrazine, 1,3-Dichlorobenzene, 1,4-Dichlorobenzene, 2,4,6-Trichlorophenol, 2,4-Dichlorophenol, 2,4-Dimethylphenol, 2,4-Dinitrophenol, 2,4-Dinitrotoluene, 2,6-Dinitrotoluene, 2-Chloronaphthalene, 2-Chlorophenol, 2-Nitrophenol, 3,3-Dichlorobenzidine, 4,6-Dinitro-o-cresol, 2-Methyl-4,6-Dinitrophenol, Naphthalene, Nitrobenzene, 4-Bromophenyl Phenyl Ether, 4-Chloro-3-Methyl Phenol, 4-Chlorophenyl Phenyl Ether, 4-Nitrophenol, Acenaphthene, Acenaphthylene, Anthracene, Benzidine, Benzo (a) Anthracene, Benzo (a) Pyrene, Benzo (ghi) Perylene, Benzo (k) Fluoranthene, Bis (2-Chloroethoxy) Methane, Bis (2-Chloroethyl) ether, Bis (2-Chloroisopropyl) Ether, Bis (2-Ethylhexyl) Phthalate, Butyl Benzyl Phthalate, Chrysene, Dibenzo (a,h) Anthracene, Diethyl Phthalate, Dimethyl Phthalate, Di-N-Butyl Phthalate, Di-N-Octyl Phthalate, Fluoranthene, Fluorene, Hexachlorobenzene, Hexachlorobutadiene, Hexachlorocyclopentadiene, Hexachloroethane, Ideno (1,2,3-ch) Pyrene, Isophorone, N-Nitrosodimethylamine, N-Nitrosodi-N-Propylamine, N-Nitrosodiphenylamine, Pentachlorophenol, Phenanthrene, Phenol, and Pyrene.

Polynuclear Aromatic Hydrocarbon Semi-Volatiles (Methods EPA 610, 8100, 8270, & 8310) Water: \$ 400

Acenaphthylene, Anthracene, Benzo (a) Anthracene, Benzo (a) Pyrene, Benzo (b) Fluoranthene, Benzo (ghi) Perylene, Benzo (k) Fluoranthene, Chrysene, Dibenzo (a,h) Anthracene, Fluoranthene, Fluorene, Indeno (1,2,3-cd), Naphthalene, Phenanthrene, & Pyrene.

Various Environmental Tests (10 to 15 day turn-around)

Alkalinity, Bicarbonate	\$ 28	Oil & Grease	\$ 85
Alkalinity, Carbonate	\$ 28	Organic Matter (OM)	\$ 35
Alkalinity, Total	\$ 50	Paint Filter Test	\$ 32
Asbestos (Plm Bulk)	\$ 76	PCB's, Total	\$ 200
Ash	\$ 50	PCB Conigers (1668A)	\$ 1,800
BOD (BioChemical Oxygen Demand)	\$ 56	pH	\$ 28
BOD Soluble	\$ 60	Phenolics, Total	\$ 100
Bromide (EPA 300.1)	\$ 85	Phosphorus, Dissolved Reactive Ortho	\$ 50
Bromate (EPA 300.1)	\$ 210	Phosphorus, Water Soluble	\$ 25
BTEX	\$ 200	Potassium, Water Soluble	\$ 25
BTEX & MTBE	\$ 240	Redox Potential in Soils	\$ 60
BTU's (British Thermal Units)	\$ 175	Resistivity @ 75 degress F	\$ 25
Carbonaceous BOD	\$ 56	Solids, Total	\$ 20
Carbonaceous BOD, Soluble	\$ 60	Solids, Total Disolved (TDS)	\$ 20
Chloride	\$ 40	Solids, Total Suspended (TSS)	\$ 20
Chloride, Total Residual	\$ 22	Solids, Total Volatile (TVS)	\$ 28
COD (Chemical Oxygen Demand)	\$ 56	Specific Gravity	\$ 45
Conductivity / Reactivity	\$ 24	Sulfate (SO ₄)	\$ 50
Corrosivity, Langelier Index	\$ 200	Sulfide (H ₂ S)	\$ 50
Cyanide (HCN), Free or Amendable	\$ 80	Sulfite (HO ₃)	\$ 100
Cyanide (HCN), Total	\$ 80	TPH-(8015) c4-34	\$ 550
Dioxin (2,3,7,8,-TCDD)	\$ 800	TPH-(8015M) Gasoline Range Organics	\$ 135
Dioxins / Furans (1613B)	\$ 1,900	TPH-(8015M) Diesel Range Organics	\$ 135
Dissolved Organic Carbon (DOC)	\$ 100	TPH-(8015M) Lube Range Organics	\$ 135
Dissolved Oxygen (DO)	\$ 25	TPH-Hexane Extractables (1664)	\$ 185
Extractable Organic Halides (EOX)	\$ 200	TCLP, Acid Compounds	\$ 285
Flashpoint	\$ 70	TCLP, Base Neutral Compounds	\$ 285
Fluoride	\$ 45	TCLP, Bottle Extraction	\$ 150
Haloacetic Acids (HAA5)	\$ 395	TCLP, ZHE Volatile Extraction	\$ 150
Halogens, Total (TOX)	\$ 220	TCLP, Herbicides	\$ 310
Hardness	\$ 45	TCLP, Metals	\$ 200
Melamine & Analogs by LC4422	\$ 350	TCLP, Pesticides	\$ 310
Melamine by GC	\$ 250	TCLP, Volatiles	\$ 295
Moisture, Karl Fischer	\$ 150	TCLP, Complete Package	\$ 1,800
Nitrogen, Ammonium (NH ₄ -N)	\$ 22	TOC (Total Organic Carbon)	\$ 85
Nitrogen, Nitrate (NO ₃ -N)	\$ 28	TriHaloMethanes, Total (TTHM)	\$ 160
Nitrogen, Nitrite (NO ₂ -N)	\$ 28	Turbidity	\$ 30
Nitrogen, Total Kjeldahl (TKN)	\$ 45	UV @ 254nm Water Quality	\$ 45

TCLP = Toxicity Characteristic Leaching Procedure

TPH = Total Petroleum Hydrocarbons

Pesticide Testing (10 to 15 day turn-around)

<u>Chemical Name (Trade Name)</u>	<u>Cost</u>	<u>Chemical Name (Trade Name)</u>	<u>Cost</u>
2,4,5-T (2,4,5-T)	\$ 245	Ethoprop (Ethoprop)	\$ 245
2,4,5-TP (Silvex)	\$ 245	Ethylene Dibromide (EDB)	\$ 160
2,4-D (2,4-D)	\$ 245	Etridiazole (Etridiazole)	\$ 145
2,4-DB (Butyrac 200, Butoxone 200)	\$ 245	Fenoxaprop-Ethel (Acclaim)	\$ 270
4,4-DDD (4,4-DDD)	\$ 210	Gesatamin (Atraton)	\$ 245
4,4-DDE (4,4-DDE)	\$ 245	Glyphosate (Roundup)	\$ 200
4,4-DDT (4,4-DDT)	\$ 210	Heptachlor (Heptachlor)	\$ 210
a-BHC	\$ 210	Heptachlor Epoxide (Heptachlor metabolite)	\$ 210
Acetochlor (Harness, Surpass)	\$ 245	Hexazinone (Velpar)	\$ 245
Alachlor (Lasso)	\$ 220	Imazapyr (Arsenal)	\$ 245
Aldrin (Aldrin)	\$ 210	Imazaquin (Scepter)	\$ 245
Ametryn (Evik)	\$ 335	Imazethapyr (Pursuit)	\$ 245
Atrazine (Aatrex)	\$ 210	Iprodione (Chipco)	\$ 270
Azinphos Methyl (Guthion)	\$ 245	Isopropalin (Paarlan)	\$ 245
b-BHC	\$ 210	Lindane (g-BHC)	\$ 210
Benfluralin (Benefin, Balan, Balfin)	\$ 210	Linuron (Lorox)	\$ 245
Bensulide (Bromacil)	\$ 210	Malathion (Malathion)	\$ 245
Bentazon (Basagran)	\$ 245	MCPA (MCPA)	\$ 245
Bromacil (Bromacil)	\$ 245	MCPP (MCPP)	\$ 245
Bromoxynil (Buctril)	\$ 350	Metalaxyl (Apron, Ridomil)	\$ 245
Butachlor (Butachlor)	\$ 245	Methoxychlor (Methoxychlor)	\$ 245
Butylate (Sutan)	\$ 270	Metolachlor (Dual)	\$ 245
Captan (Captan)	\$ 245	Metribuzin (Lexone, Sencor)	\$ 160
Carbazole (Carbazole)	\$ 245	Molinate (Molinate, Ordram)	\$ 245
Carbofuran (Carbofuran)	\$ 245	Oxadiazon (Ronstar)	\$ 245
Chlordane (Chlordane)	\$ 220	Oxyfluorfen (Goal)	\$ 245
Chlorimuron ethyl (Classic)	\$ 220	Oryzalin (Surflan)	\$ 270
Chloroneb (Terraneb)	\$ 220	Paraquat (Gramoxone)	\$ 300
Chlorothalonil (Bravo, Daconil)	\$ 245	Parathion (Parathion)	\$ 245
Chlorpyrifos (Lorsban, Dursban)	\$ 245	Pendimethalin (Prowl)	\$ 220
Clopyralid (Stinger)	\$ 245	Pentachloronitrobenzene (PCNB)	\$ 245
Cyanazine (Bladex)	\$ 220	cis-Permethrin	\$ 245
Cycloate (Ro-Neet)	\$ 220	trans-Permethrin	\$ 245
Dalapon (Dalapon)	\$ 245	Phorate (Thimet)	\$ 245
d-BHC	\$ 210	Pichloram (Tordon K)	\$ 245
DCPA (Dacthal)	\$ 245	Prodiamine (Barricade)	\$ 245
DEF	\$ 245	Profluralin (Tolban)	\$ 245
Demeton (Systox)	\$ 245	Prometon (Pramitol)	\$ 245
Dibromochloropropane (DBCP)	\$ 160	Prometryn (Prometryn)	\$ 245
Dichloroprop (2,4-DP)	\$ 245	Propachlor (Propachlor)	\$ 245
Dicamba (Banvel)	\$ 245	Propazine (Propazine)	\$ 245
Dieldrin (Dieldrin)	\$ 210	Propiconazole (Banner)	\$ 270
Dimethoate (Dimethoate)	\$ 210	Simetryn (Simetryn)	\$ 245
Dinoseb (DNBP)	\$ 245	Simazine (Princep)	\$ 245
Disulfoton (Disulfoton)	\$ 245	Sulfometuron Methyl (Oust)	\$ 410
Dithiocarbamates	\$ 245	Tebuthiuron (Spike)	\$ 245
Dithiopyr (Dimension)	\$ 270	Terbacil (Sinbar)	\$ 245
Diuron (Karmex)	\$ 245	Terbutryn (Terbutryn)	\$ 245
Endosulfan I	\$ 210	Terbutylazine (Gardoprim)	\$ 245
Endosulfan II	\$ 210	Thifensulfuron-Methyl	\$ 270
Endosulfansulfate	\$ 210	Thiophanate Methyl (Topsin)	\$ 300
Endrin (Hexadrin)	\$ 210	Thiram (Thiram)	\$ 310
Endrin aldehyde	\$ 210	Toxaphene (Toxaphene)	\$ 220
Endrin Ketone	\$ 210	Triadimefon (Bayleton)	\$ 270
EPTC (Eptam)	\$ 270	Triclopyr (Crossbow, Garlon)	\$ 410
Ethalfuralin (Sonalan)	\$ 245	Trifluralin (Treflan)	\$ 220
Ethion (Ethion)	\$ 245	Vernolate (Vernam)	\$ 245

Pesticide Testing (10 to 15 day turn-around)

<u>Pesticide Pkg</u>	<u>Pesticides Included</u>	<u>Media</u>	<u>Cost (\$)</u>
EPA 504.1 List	Dibromochloropropane (DBCP), Ethylene Dibromide (EDB)	Water	\$ 150
EPA 507 List	Alachlor, Atrazine, Metolachlor, Metribuzin, Simazine		\$ 335
EPA 508 List	Aldrin, Chlordane, Dieldrin, Endrin, Heptachlor, Heptachlor Epoxide, Hexachlorobenzene, Hexachlorocyclopentadiene, Lindane, Methoxychlor, Toxaphene	Water	\$ 200
EPA 508A List	Polychlorinated Biphenyls (PCB)	Water	\$ 180
EPA 515.1 List	2,4-D, 2,4,5-TP, Acidfluorfen, Bentazon, DCPA, Dalapon, Dicamba, Dichloroprop, Dinoseb, Pentachlorophenol, Picloram		\$ 395
EPA 525.2A List	Alachlor, Atrazine, Butachlor, Metolachlor, Metribuzin, Propachlor, Simazine	Water	\$ 250
EPA 525.2G List	Di (2-Ethylhexyl) Adipate, Di (2-Ethylhexyl) phthalate	Water	\$ 130
EPA 531.1 List	Aldicarb, Aldicarb Sulfone, Aldicarb Sulfoxide, Carbaryl Carbofuran, 3-Hydroxycarbofurn, Methomyl, Oxamyl (Vydate)	Water	\$ 390
EPA 547 List	Glyphosate	Water	\$ 200
EPA 548.1 List	Endothall	Water	\$ 225
EPA 549.1 List	Diquat	Water	\$ 200
EPA 550.1 List	Benzo (a) Pyrene	Water	\$ 400
EPA 1613 List	2,3,4,8-TCDD (Dioxin)	Water	\$ 800
EPA 8081 List	Aldrin, a-BHC, b-BHC, d-BHC, Lindane, DDD, DDE, DDT, Dieldrin, Endosulfan I, Endosulfan II Endosulfan Sulfate, Endrin, Endrin Aldehyde Endrin Ketone, Heptachlor, Heptachlor Epoxide, Methoxychlor, Toxaphene, PCB's - 1242, 1254, 1221, 1232, 1248, 1260, 1016, Chlordane		\$ 445
EPA 8141 List	Agricultural Pesticides: Azinphos Methyl, Chlorpyrifos, Demeton, Diazinon, Disulfoton, Ethoprop, Malathion, Parathion Methyl, Phorate		\$ 550
Neutral Extractables	Alachlor, Ametryn, Atrazine, Benfluralin, Butachlor, Butylate, Chlorpyrifos, Cyanazine, EPTC, Ethafluralin, Metolachlor, Metribuzin, Pendimethaline, Phorate, Prometon, Prometryn, Propachlor, Propazine, Simazine, Trifluralin		\$ 395
Acid Extractables	2,4-D, 2,4-DB, 2,4-DP, 2,4,5-T, 2,4,5-TP, Dicamba, Bentazon, Dalapon, Dacthal, MCPA, MCPP, Pentachlorophenol, Picloram, Triclopyr		\$ 370
EPA 625 / 8270	Trizines: Ametryn, Atrazine, Atraton, Cyanazine, Metribuzin, Prometon, Prometryn, Propazine, Simazine, Simetryn, Terbutylazine, Terbutryn		\$ 270
EPA 625 / 8270	Trinzines Plus: Alachlor, Ametryn, Atrazine, Atraton, Bromacil, Butylate, Cyanazine, Metholachlor, Metribuzin, Prometon, Prometryn, Propachlor, Propazine, Simazine, Simetryn, Terbutylazine, Terbutryn, Trifluralin		\$ 335
EPA 625 / 8270	Herbicide Short Scan: Alachlor, Bromacil, Butachlor, Butylate, Dachal, Dithiopyr, EPTC, Hexazinone, Metolachlor, Metribuzin, Oxadiazon, Propachlor, Propanil, Terbacil, Vernolate		\$ 270
EPA 615M / 8270	Acid Herbicides: Bentazon, DCPA, Dicamba, MCPA, MCPP, Picloram, Triclopyr, 2,4-D, 2,4-DB, 2,4-DP		\$ 445
EPA 625 / 8270	DNA Herbicides: Benefluralin, Ethafluralin, Pendamethalin, Prodiamine, Trifluralin		\$ 335

Pesticide Testing (10 to 15 day turn-around)

<u>Pesticide Pkg</u>	<u>Pesticides Included</u>	<u>Cost (\$)</u>
Herbicide Screen #1	Imazapyr, Imazaquin, Imazethapyr	\$ 335
Full Herbicide Screen (EPA 8270)	Alachlor, Ametryn, Atraton, Atrazine, Benfluralin, Bromacil, Butylate, Cyanazine, Butachlor, DCPA, Propanil, Dichlobonil, Dithiopyr, EPTC, Hexazinone, Ethalfluralin, Linuron, Metolachlor, Metribuzin, Oxadiazon, Prometon, Prometryn, Propachlor, Propazine, Propyzamide (Kerb), Pendimethalin, Simazine, Simetryn, Terbacil, Terbutylazine, Terbutryn, Trifluralin, Vernolate.	\$ 495
Full Insecticide Screen	Aldrin, a-BHC, b-BHC, d-BHC, g-BHC, Chlordane, Chlorpyrifos, Demeton, 4,4-DDD, 4,4-DDE, 4,4-DDT, Diazinon, Dieldrin, Disulfoton, Endosulfan I, Endosulfan II, Endosulfan Sulfate, Endrin, Endrin Aldehyde, Ethion, Ethoprop, Ethyl Parathion, Fenamiphos (Nemacur), Guthion, Heptachlor, Heptachlor Epoxide, Kepone, Malathion, Methoxychlor, Methyl Paration, Mirex, cis-Permethrin, trans-Permethrin, Phorate	\$ 495
Full Fungicide Screen	Banner, Captan, Chloroneb (Terraneb), Chlorothalonil, Flutolanil, Hexachlorobenzene, Methalaxyl, Pentachloronitrobenzene, Propiconazole, Rubigan, Vinclozolin (Uralan)	\$ 275
Any 2 Full Screens		\$ 675
All 3 Full Screens		\$ 775

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