TRI INDEPENDENT GEOTECHNICAL LABORATORY SERVICES

Schedule of Fees and Services

Please contact for project specific proposals

GTS
A TRI Environmental Company
103 Coraopolis Rd.
Coraopolis, Pennsylvania 15108
1-800-853-7309
www.gts-labs.com

TRI Environmental Group HQ
9063 Bee Caves Rd.
Austin, Texas 78733-6201
1-800-880-8378
geotech@tri-env.com

The TRI Environmental Group operates world-class, independent, third-party, AASHTO - accredited geotechnical laboratory in Austin, Texas and in Coraopolis, Pennsylvania. TRI is unassociated with any manufacturing, engineering/consulting or construction company, thus establishing the independence of all staff and test results generated. TRI is non-competitive with our clients and assists them in achieving success.

Our laboratories boast one of the broadest ranges of soil, aggregate and rock strength testing capabilities in the world. Technical capability, custom service, safety, comprehensive reporting are just a few of the things our clients can count on to ensure project success

TEXAS AND PENNSYLVANIA	PENNSYLVANIA-SPECIFIC	TEXAS-SPECIFIC
Shear strength	Corrosion / Analytical	Leachate Permeation
1-D Consolidation / Swell / Collapse	Cement and Concrete	Direct Simple Shear (DSS)
Hydraulic Conductivity	Aggregates / Gravel / Sand	Constant Rate of Strain (CRS)
Classification & Compaction	Fly Ash / Bottom Ash	Large Diameter Triaxial Testing
Large Scale Direct Shear	Fire Resistive Materials	Geosynthetic Pullout and Friction
Rock Mechanics	Steel & Blast Furnace Slag	Geosynthetic Filtration
Thermal Properties		Geosynthetic Puncture

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Effective 06/01/2026 **Expiration** 12/31/2026

This fee schedule is applicable only to clients who have completed credit applications, are on NET-30 terms, and have maintained good standing by keeping their accounts current. All information within this Fee Schedule, including fees, terms, and financial details, is CONFIDENTIAL. The Client agrees not to disclose this information to third parties and to use it solely for the purpose of the agreed-upon services. See Page 6 for Standard Operating Procedures, Sending Samples to the Laboratory, Contaminated Samples, and Standard Terms.

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Shear strength - single specimen compression, 3/8-inch (-)			PA-Intact	PA-Remold	TX-Intact	TX-Remold	Bulk	Length	Jar
1.	Unconfined Compression	ASTM D2166	$114	$151	$85	$151	2.5-gal	6-inch	10
2.	Q-TYPE | Unconsolidated-Undrained (Total)	ASTM D2850	$142	$256	$114	$179	2.5-gal	6-inch	10

SHEAR STRENGTH - TRIAXIAL SERIES - Three Stresses, 3/8-inch (-)			PA-Intact	PA-Remold	TX-Intact	TX-Remold	Bulk	Length	Jar
1.	Q-TYPE | Unconsolidated-Undrained (Total Stress Envelope)	ASTM D2850	$427	$768	$340	$537	5-gal	24-inch	-
2.	R-Type | Consol. Undrained (Effective Stress Envelope)	ASTM D4767	$1,363	$1,532	$1,136	$1,342	5-gal	24-inch	-
3.	R-Type | Anisotropic Consol. Undrained (K or Ko)	ASTM D4767	-	-	$1,872	$2,069	5-gal	24-inch	-
4.	TX Only - Multi-Stage CU	ASTM D4767 -Modified	-	-	$1,420	$1,616	-	8-inch	-
5.	TX Only - Extension Testing	ASTM D4767 -Modified	-	-	QT	QT	5-gal	24-inch	-
6.	S-Type | Consol. Drained (Effective Stress Envelope)	ASTM D7181	-	-	QT	QT	5-gal	24-inch	-
7.	S-Type | Anisotropic Consol. Drained (Effective Stress Envelope)	ASTM D7181	-	-	QT	QT	5-gal	24-inch	-
8.	PA Only - California Bearing Ratio - 1 Point (Specify placement)	ASTM D1883	-	$216	-	-	5-gal	-	-
9.	PA Only - California Bearing Ratio - 3 Point (56, 25, and 10 blows)	ASTM D1883	-	$649	-	-	10-gal	-	-
10.	PA Only - California Bearing Ratio 1 Point (Cement Amended)	ASTM D1883	-	$270	-	-	5-gal	-	-
11.	TX Only - Large Scale Triaxial Testing (1-inch minus, 6-inch Diam.)	ASTM D2850 /D4767-D7181	-	-	QT	QT	15-gal	-	-

SHEAR STRENGTH - DIRECT SHEAR (Three Stresses)			Intact	Remold	Test notes	Bulk	Length	Jar
1.	Direct Shear	ASTM D3080	$484	$512	Split-spoon at $657	2.5-gal	6-inch	10
2.	TX Only - Direct Shear in Support of Interface Friction	ASTM D3080	-	$512	With ASTM D5321/ D6243 testing	10-gal	-	-
3.	PA-Only - AASHTO Direct Shear (Residual Strength)	AASHTO T236	$540	$568	Split-spoon at $711	2.5-gal	6-inch	10
4.	PA Only - Repeated Direct Shear (Residual Strength)	ACOE IXA	$1,818	$1,903	2.5-inch Diameter	2.5-gal	8-inch	13
5.	PA Only - Repeated Direct Shear (Residual Strength)	ACOE IXA (ASTM Shear Speed)	$1,250	$1,335	2.5-inch Diamete	2.5-gal	8-inch	13
6.	Large-Scale Direct Shear of Freely Draining Aggregate	ASTM D3080	-	$1,136	1-inch minus, 0.04 ipm	15-gal	-	-
7.	Large-Scale Direct Shear of Cohesive/Fine Agg.	ASTM D3080	-	QT	Displacement Rate Varies	15-gal	-	-
8.	TX Only - Direct Simple Shear	ASTM D6528	QT	QT	2.0-inch Diameter	2.5-gal	6-inch	10

SOIL 1-D CONSOLIDATION / SWELL / COLLAPSE			Intact	Remold	Test notes	Bulk	Length	Jar
1.	Consolidation - 24-hr Advancement	ASTM D2435-A	$1,022	$1,194	24-hr Advancement	1-gal	4-inch	-
2.	Consolidation - 100% Primary	ASTM D2435-B	$512	$683	100% Primary	1-gal	4-inch	-
3.	TX Only - Consolidation in Support of Interface Friction	ASTM D2435-B	-	$673	with ASTM D5321/ D6243 testing	10-gal	-	-
4.	One-Dimensional Swell or Collapse - 4 points (Remolded)	ASTM D4546-A	-	$1,136	Wetting-after -Loading Tests	5-gal	5-inch	-
5.	One-Dimensional Swell or Collapse - 1 point	ASTM D4546-B	$257	-	Single-Point Wet-ting-after-Loading	1-gal	4-inch	-
6.	One-Dimensional Swell or Collapse - 1 point with D2435	ASTM D4546-C	$568	-	Loading-af-ter-Wetting Test	1-gal	4-inch	-
7.	TX-Only - CRS Loading 1-D	ASTM D4186	$919	$988	Requires D6913-D4318 Testing	1-gal	4-inch	-
8.	PA Only - Consolidation (24hr)	AASHTO T216-A	$1,076	$1,248	24-hr Advancement	1-gal	4-inch	-
9.	PA Only - Consolidationd (100% Primary)	AASHTO T216-B	$566	$737	100% Primary	1-gal	4-inch	-

SOIL HYDRAULIC CONDUCTIVITY (PERMEABILITY)			Pa-Intact	Pa-Remold	Tx-Intact	Tx-Remold	Bulk	Length	Jar
1.	Flex Wall Hydraulic Conductivity (2.8-Inch Diameter)	ASTM D5084	$341	$398	$274	$339	1-gal	6-inch	-
2.	Rigid Wall Hydraulic Conductivity (3-inch & 6-inch Diameter)	ASTM D2434	-	$285	-	$218	1&5-gal	-	-
3.	TX Only - Large Diameter Flex Wall Hydraulic Conductivity	ASTM D5084	-	-	-	QT	5-gal	-	-
4.	TX Only - Large Diameter Rigid Wall Hydrauilc Conductivity:	ASTM D2434	-	-	-	QT	15-gal	-	-

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SOIL CLASSIFICATION - ASTM			PA	TX	Test Notes	Bulk	Length	Jar
1.	Water Content	ASTM D2216	$25	$31	110 ± 5°C	1-qt	1-inch	1
2.	Atterberg Limits (Liquid & Plastic)	ASTM D4318	$86	$107	3-Point Liquid Limit	1-qt	2-inch	1
3.	Sieve Analysis	ASTM D6913	$81	$100	ASTM D1140 Wash Included	1-qt	2-inch	1
4.	PA Only - Sieve Analysis - Historical	ASTM D422-63	$81	-	ASTM D1140 Wash Included	1-qt	2-inch	1
5.	% Passing #200 Sieve Only	ASTM D1140	$56	$70	Included with ASTM D6913	1-qt	2-inch	1
6.	Hydrometer	ASTM D7928	$86	$107	Minus #200 Particle Analysis	1-qt	2-inch	1
7.	Particle Size Analysis	Sieve and Hydrometer	$166	$205	ASTM D6913 & D7928	1/2-gal	4-inch	2
8.	USCS Classification	Sieve and Atterberg	$166	$205	Sieve and Atterberg Limit	1/2-gal	4-inch	2
9.	Specific Gravity	ASTM D854	$93	$115	For Phase Relationships	1-qt	2-inch	1
10.	Loss On Ignition	ASTM D2974-A	$68	$85	440 ± 10°C (ASTM Method A)	1-qt	2-inch	1
11.	PA Only - Water Displacement Method (Wax Density)	ASTM D7263-A	$93	-	Clod must be intact	-	-	1
12.	Lab Determination of Density (Unit Weight)	ASTM D7263-B	$68	$85	+D854 for void ratio and porosity	-	-	1
13.	TX Only - Rapid Carbonate Content	ASTM D4373	-	$172	Percent Calcite Equivalent	1-qt	2-inch	1

SOIL CLASSIFICATION - AASHTO			PA	TX	Test Notes	Bulk	Length	Jar
1.	PA Only - Water Content	AASHTO T265	$25	-	110 ± 5°C	1-qt	1-inch	1
2.	PA Only - Atterberg Limits	AASHTO T89 & T90	$86	-	Liquid & Plastic	1-qt	2-inch	1
3.	PA Only - Particle Size Analysis	AASHTO T88	$166	-	Sieve and Hydrometer	1/2-gal	4-inch	2
4.	PA Only - Specific Gravity	AASHTO T100	$93	-	For Phase Relationships	1-qt	2-inch	1
5.	PA Only - Loss On Ignition	AASHTO T267	$68	-	440 ± 10°C (ASTM Method A)	1-qt	2-inch	1

SOIL CLASSIFICATION - USDA			PA	TX	Test Notes	Bulk	Length	Jar
1.	USDA Classification	USDA	$154		Sieve and Hydrometer	1/2-gal	4-inch	2

SOIL COMPACTION / MOISTURE-DENSITY			PA	TX	Test Notes	Bulk	Length	Jar
1.	Standard Proctor	ASTM D698	$193	$297	PA Only - 1 Point : $60	5-gal	-	-
2.	Modified Proctor	ASTM D1557	$225	$313	PA Only - 1 Point : $70	5-gal	-	-
3.	PA Only - Oversize Rock Correction	ASTM D4718	$72	-	Bulk Density and Absorption	-	-	-
4.	PA Only - PADOT Proctor	PTM 106	$193	-	Oversize Material Replacement	10-gal	-	-
5.	PA Only - Cement Amended Proctor (Std or Mod)	ASTM D558 / AASHTO T134	$256	-	Prescribed Percent by Mass	15-gal	-	-
6.	PA Only - Lime Amended Proctor (Std or Mod)	Industry Practice	$320	-	Prescribed Percent by Mass	15-gal	-	-
7.	TX Only - Relative Density	ASTM D4254 / ASTM D4253	-	$398	Minimum & Maximum	10-gal	-	-

ROCK MECHANICS			PA	TX	Test Notes	Bulk	Length	Jar
1.	Mohs Hardness of Rock	Industry Practice	$54		Resistance to Scratching	-	4-inch	-
2.	Point Load - Per Point	ASTM D5731	$60		Index for strength classification.	-	4-inch	-
3.	Point Load - 10 Points	ASTM D5731	$352			-	4-ft	-
4.	Rebound Hammer	ASTM D5873	$172		-	-	4-inch	-
5.	Splitting Tensile - Per Point	ASTM D3967	$60		Also Termed Brazilian or Indirect Tensile	-	4-inch	-
6.	Splitting Tensile - 10 Points	ASTM D3967	$352			-	4-ft	-
7.	Unconfined Compressive Strength (UCS), NQ, NX	ASTM D7012 "C"	$137		See ASTM D2166 for Soil	-	8-inch	-
8.	Modulus of Elasticity, NQ, NX	ASTM D7012 "D"	$285		Axial Strain	-	8-inch	-
9.	Modulus of Elasticity & Poisson's Ratio, NQ, NX	ASTM D7012 "D"	$426		Axial and Radial Strain	-	8-inch	-
10.	Slake Durability	ASTM D4644	$228		Qualitative Durability Index	-	1.5-ft	
11.	TX Only - Cherchar Abrasivity Index (CAI)	ASTM D7625	-	$228	Saw Cut, Specify if Natural	-	4-inch	-
12.	TX Only - Punch Penetration (QT for variation)	TRI Punch	-	$398	Spherical and Conical	-	8-inch	-

THERMAL RESISTIVITY			PA	TX	Test Notes	Bulk	Length	Jar
1.	Single Point Test	ASTM D5334	-	$114	Specify Condition	1-gal	6-inch	-
2.	Multi-Point Test with Dry Out Curve	ASTM D5334	-	$654	Initial to Oven Dry	1-gal	6-inch	-

DISPERSIVE CLAY SOIL TESTING (DISPERSION)			PA	TX	Test Notes	Bulk	Length	Jar
1.	TX-Only - Double Hydrometer	ASTM D4221	-	$285		1-gal	6-inch	-
2.	TX-Only - Pinhole	ASTM D4647	-	$352		1-gal	6-inch	-
3.	TX-Only - Crumb Test	ASTM D6572	-	$47		1-gal	6-inch	-

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SOIL CORROSION / ANALYTICAL - PA Only			PA	Test Notes	Bulk	Length	Jar
1.	Resistivity	ASTM G187 / AASHTO T288	$182	Two Electrode	For corrosion analysis, a 1-gallon bag of soil (approximately 2,000 grams) is generally sufficient for testing. However, the adequacy of the sample depends on the specific test requested and the composition of the soil. For additional information, please reach out to our analytical laboratory, GTS, located in Pennsylvania - 1-800-853-7309		
2.	Resistivity	ASTM G57	$86	Four Electrode			
3.	pH	G51 / ASTM D4972 / AASHTO T289	$18	Acidity or Alkalinity			
4.	Chloride	AASHTO T291	$63	Water-Soluble			
5.	Sulfate	ASTM C1580	$211	Water-Soluble			
6.	Sulfate	AASHTO T290	$63	Water-Soluble			
7.	Sulfide	AWWA 4500, A.4C	$63	Qualitative			
8.	Oxidation-Reduction Potential (ORP)	ASTM G200	$63	Often w/pH and elect. resistivity			
9.	Total Sulfur	ASTM D4239	$92	Coal or Coke			
10.	Pyrite (Forms of Sulfur)	ASTM D2492	$114	Pyritic vs Sulfate			

WATER CORROSION - PA Only			PA	Test Notes
1.	Resistivity & Conductivity	ASTM D1125	$154	Quantitative Measurement of Ionic Constituents
2.	pH	ASTM D1293	$30	Electrometric Measurement
3.	Chloride	ASTM D512	$86	Ion-Selective Electrode
4.	Sulfate	ASTM D516	$86	Turbidimetric

FIRE RESISTIVE MATERIALS - PA Only			PA	Test Notes
1.	Material Density *(Specimens provided by Client)*	ASTM E605	$110	Laboratory Procedure

CEMENT PRODUCTS - PA Only			PA	Test Notes
1.	Chloride Permeability - 3 Points	ASTM C1202 / AASHTO T277	QT	Specify Age at Time of Test
2.	Compressive Strength of Concrete	ASTM C39	$21	Molded Cylinders - Cost Per Sample
3.	Compressive Strength of Grout	ASTM C39 / ASTM C109	$21	
4.	Compressive Strength of Mortar	ASTM C109	$21	2-in. Cube Specimens - Cost Per Sample
5.	Compressive Strength of Cores - 1 specimen	ASTM C42 /C39	$86	ACI 318 Series at Three Specimens/Tests
6.	Coring Fee	Industry Practice	$114	2" bit & 4" bit
7.	Density, Absorption, and Voids in Hardened Concrete	ASTM C642	$285	Mass-Volume Relationship

AGGREGATES / GRAVEL / SAND - PA-Only			PA	Test Notes
1.	Carbonate Content	ASTM D3042	($356 TX $534)	Insoluble Residue
2.	Sieve Analysis	PTM 616 / ASTM C136 / AASHTO T27	$121	Particle Size Distribution
3.	Percent Passing #200 Sieve	PTM 100 / ASTM C117 / AASHTO T11	$80	Percent Fines
4.	Sodium Sulfate Soundness	PTM 510 / ASTM C88 / AASHTO T104	$568	Generally More Severe with Magnesium Sulfate
5.	Magnesium Sulfate Soundness	ASTM C88 / AASHTO T104	$568	
6.	Clay Lumps and Friable Particles in Aggregates	ASTM C142 / AASHTO T112	$228	Broken with the fingers into fines removable by wet sieving
7.	Los Angeles Abrasion - Small-Size Coarse Aggregate	ASTM C131 / AASHTO T96	$454	Relative Quality and Competence
8.	Los Angeles Abrasion - Large-Size Coarse Aggregate	ASTM C535	$454	
9.	Flat and Elongate Particles	ASTM D4791	$512	Specify Dimensional Ratios
10.	Specific Gravity and Absorption - Fine	ASTM C128 / AASHTO T84	$144	Mass-Volume Relationships
11.	Specific Gravity and Absorption - Coarse	ASTM C127 / AASHTO T85	$86	

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	STEEL & BLAST FURNACE SLAG - PA Only		PA	Test Notes	Bulk	Length	Jar
1.	Bulk Density of Aggregates - Blast Only *(Rodding Method)*	ASTM C29 "A" / AASHTO T19 Sec 10	$75	Mass-Volume Relationships			
2.	Potential Expansion of Steel Slags - 1 pt	PTM 130	$598	PTM Proctor not included			
3.	PennDOT Proctor	PTM 106	$172	Required for Expansion			

	FLY ASH / BOTTOM ASH - PA Only		PA	Test Notes	Bulk	Length	Jar
1.	Moisture Content	ASTM C311	$35	110 ± 5°C	1-qt	1-inch	1
2.	Sieve Analysis	ASTM C311	$92	Coarse Particle Size Distribution	1-qt	2-inch	1
3.	Hydrometer	ASTM C311	$98	Fines Particle Size Distribution	1-qt	2-inch	1
4.	Loss on Ignition	ASTM C311	$80	750 ± 50°C (ASTM Method A)	1-qt	2-inch	1
5.	Standard Proctor	ASTM D698 / AASHTO T99	$341	PA Only - 1 Point : $120	10-gal	-	-
6.	Modified Proctor	ASTM D1557 / AASHTO T180	$398	PA Only - 1 Point : $140	10-gal	-	-
7.	Rigid Wall Permeability (3" & 6" Diameter) bottom ash only	ASTM D2434	$398	2.8-Inch Diameter	1-gal	6-inch	-
8.	Flex Wall Permeability (Hydraulic Conductivity) fly ash only	ASTM D5084	$512	3-inch & 6-inch Diameter	1 & 5-gal	-	-

	OTHER		PA	TX	
1.	PA Only - Sample Pickup Mileage Round Trip (after 50 miles)		$3.62	-	PA Only - after 50 miles
2.	Rush Testing Surcharge		Call		Call
3.	Contamination Surcharge		Call		Call

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Standard Operating Procedures

This fee schedule is based on TRI's terrestrial standard operating procedures. TRI participates in specialized testing for the offshore, renewable, nuclear, and other industries that requires special handling, testing, and reporting. These projects should be discussed with TRI staff prior to engaging. TRI has in house electrical engineering, equipment development, machine shop, NIST traceable calibration equipment, that allow us to cater to these industries.

Sending Samples to the Laboratory

Please ship samples for geotechnical testing to the attention of "Soil-Interaction" with contact information as presented on the first page of this document. Please appropriately package samples for shipping, labeling each individual sample / group of samples with their sample IDs as submitted on the COC. Please ensure that a copy of the COC is shipped with each sample. The COC copy should be packaged in such a manner as to protect it from moisture damage. If a completed and signed COC / test request form is not received, a project manager will be engaged at an hourly rate to gather this information from the client in order to initiate testing. Please be sure to include the client name, the project name as it will be used for reporting, and the parties that are to be reported to. If the billable party is different from the reporting party, please be sure to include this information as well.

Contaminated Samples

TRI places a high value on safe work conditions for its employees and visitors. Clients are expected to disclose any and all analytical data, material safety data sheets (MSDS/SDS/PSDS), or other materials relevant to the safe handling of materials submitted to the laboratory. Packaging of these materials should indicate that they contain such potentially harmful materials to protect our receiving staff. TRI will perform a hazard analysis to determine the appropriate personal protective equipment. All work on contaminated materials requires discussions with the engineering staff and project-specific quoting.

If a testing standard is not listed, please contact us to inquire.

Standard Terms

1- Unit costs quoted here are "not to exceed" costs within standard operating procedures.
2- Payment: Net 30 Days
3- All results will be e-mailed.
4- One report in PDF format will be issued.
5- Interim reporting is at the lab's discretion and costs and timing need to be discussed/quoted if requested.
6- Custom reporting will be charged at hourly rates.
7- Costs do not include shipping or customs fees.
8- Sample shipping at cost plus 30 percent.
9- Standard sample retention of 30 days following reporting.
10- Samples are assumed to be free of potentially harmful materials unless otherwise noted by the client at which point the appropriate safety precautions will need to be enacted in the laboratory.