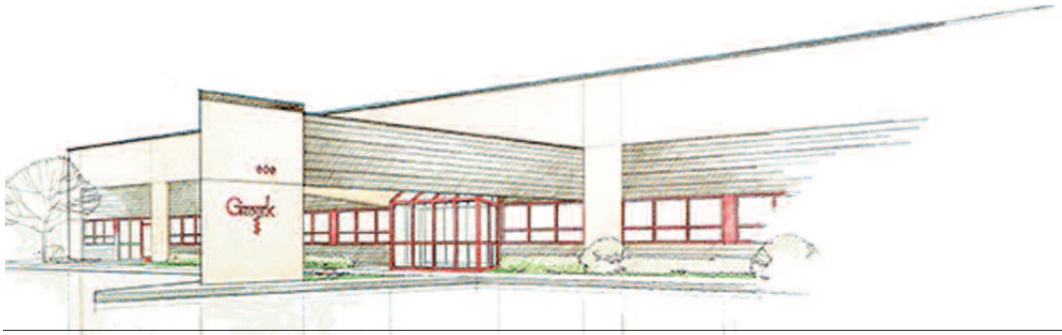


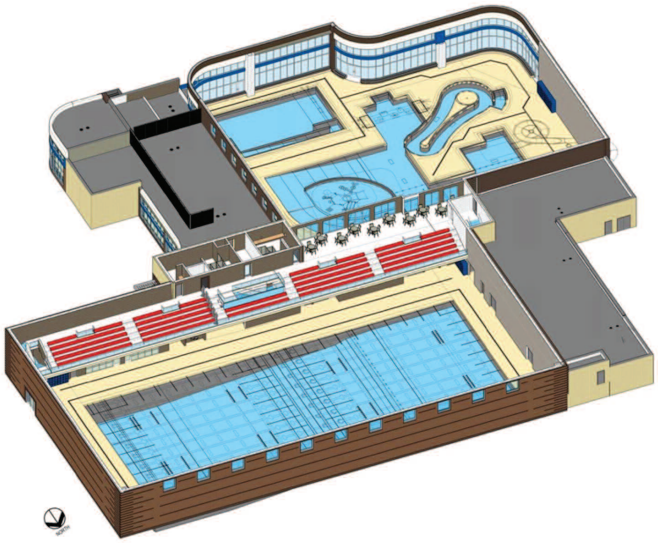
GEOTECHNICAL • CONSTRUCTION MATERIALS/NDT • ENVIRONMENTAL TESTING • INDOOR AIR QUALITY

MIDCO AQUATIC CENTER NEARING COMPLETION

The long-awaited Sioux Falls Indoor Aquatic Center at Spellerberg Park is nearing completion. This year it was named the Midco Aquatic Center. It is a $24 million, 61,000 square foot recreational center that will include competition, recreation, and therapy pools, as well as a spray park. After a public vote, site work began in 2014, and it is scheduled to open this fall.

With capacity for 500 spectators, the mezzanine deck will allow uninterrupted views of the competition pool which includes ten (50-meter) lanes for competitive swimming and 4 diving platforms for competition diving. The therapy pool consists of a 1,500 square foot wheelchair accessible pool. The recreation pool will include a lazy river, water slide and splash pad area.

The Midco Aquatic Center is being constructed by Sioux Falls Construction. Exterior work includes planting 80 trees, shrubbery, landscaping, and parking lot completion. Spellerberg Park is also seeing modifications and upgrades.



GeoTek has provided a number of services for this major project. In 2014, a Phase I Environmental Site Assessment was conducted on the existing pool and park land, and an asbestos survey was completed on the old Spellerberg Park Pool Building (to facilitate demolition). Geotechnical soil borings were also conducted in 2014, consisting of 12 test borings and two temporary groundwater observation wells. Laboratory tests were performed on selected soil samples to aid in determining the index and strength properties of the underlying soils at the site. GeoTek has provided professional and technical services for excavation observations, compaction testing of fill materials, visual inspection on the concrete steel reinforcement, concrete testing, masonry testing, and structural steel (weld, bolts, etc.) observations & testing.

Images from City of Sioux Falls website.

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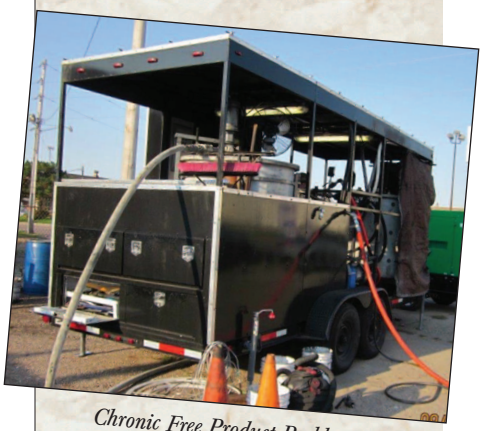

Chronic Free Product Problem and Site Closure (See Page 3)

USD Sports Performance Enhancement Complex

The University of South Dakota Sports Performance Complex includes three projects (arena, outdoor track and soccer complex, and the science, health and research lab) at a cost of approximately $66 million. Construction is a joint effort by Mortenson Construction and Fiegen Construction, to be completed by the start of the 2016-2017 academic year. The project includes:

- The 118,000 sq ft arena facility will provide a competition, practice and training facility for the basketball and volleyball athletic programs. The main court will be surrounded by 6,000 spectator seats, which includes an integrated club space. It will also have two full-size practice courts and locker rooms for men's and women's basketball, volleyball, staff, officials and visiting teams.
- The outdoor track and soccer complex will cover approximately 11 acres and include a nine-lane 400-meter NCAA-certified outdoor track, field event areas adjacent to the track, two soccer fields (one competition and one practice), and 1000 bleacher seats. The fields will be natural grass with underground landscape irrigation.
- The 59,000 sq ft science, health and research lab will be a centralized location for Occupational Therapy, Physical Therapy, Kinesiology and Sports Sciences, and Sports Medicine programs, with state-of-the-art classrooms, laboratory and clinical spaces. In addition, it will include a 7,500 square foot

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Geotechnical Exploration

Geotechnical explorations are usually conducted for structures such as buildings, grain bins, bridges, water towers, roads, houses, etc., to gather data on the engineering properties of the underlying soils or bedrock that will support the structure. From the collected data, foundation design parameters are developed for support of the planned structure.

Geotechnical exploration is an old profession. The Bible, with the parable about the wise man that built his house on rock, is one of the first written references to geotechnical exploration. The most famous example of a geotechnical problem is probably the Leaning Tower of Pisa (Pisa got its name from a Greek word meaning marshy land). One can wonder if a geotechnical exploration was conducted before construction began.

Usually, an exploration is conducted with specific building location, building plans, and proposed final grade elevations. Sometimes, preliminary work is conducted (without specific building plans) to better estimate proposed site preparation and foundation costs, or before purchase of real estate. An exploration may also be performed for an existing structure that has experienced distress or problems, to attempt to determine the source of the problem and potential solutions, or for a failure investigation. However, sometimes the source of the problem is not easily determined. Soil borings are advanced to various depths, soil samples collected, and laboratory tests conducted on the collected samples. Soil samples are collected with a split spoon sampler (a hollow tube that splits in half lengthwise) that is driven ahead of the drill auger (it is shaped like a cork-screw). The split spoon sampler is driven into the soil with a 140 pound weight (hammer) dropped from a height of 30 inches; the number of blows to drive the sampler into the ground provides a relative measure of the stiffness of the soil. Other samples of silt or clay can be collected with a thin wall Shelby tube. To be sure, geotechnical exploration is a science unto itself. Professional organizations (i.e. ASTM) have developed many standard methods.

The geotechnical exploration is a team effort. The drill crew chief and driller operate the drill rig to advance the soil borings, gather the soil samples, log the soils encountered, etc. Soil lab technicians conduct tests on the samples. Administrative staff prepare the boring logs and a site sketch. A geotechnical engineer directs the operations and prepares the final report.

The report will discuss what loads the soils or bedrock can be expected to support, types of foundations to consider (spread footings, driven piles, auger cast piles, concrete caissons, aggregate piers, etc.), recommendations for removal of unsuitable soils and replacement with engineered fill, expected total and differential settlement, construction considerations, etc. Hopefully, potential problems (soft layers that may settle or consolidate, expansive clays, differential settlement, etc.) are identified and avoided.

GeoTek operates two hollow stem auger drill rigs for geotechnical and environmental soil borings. We also have one pickup-mounted Geoprobe unit for working in tight areas, a tractor mounted rig for rough terrain or wet conditions, and a backup hollow stem auger unit. Unless conducting equipment repairs or maintenance, our two drill crews work every day, year round. Occasionally, wet project site conditions or severe weather may limit operations. Ask a driller, "What is perfect drilling weather?" The answer is, "Any weather!"

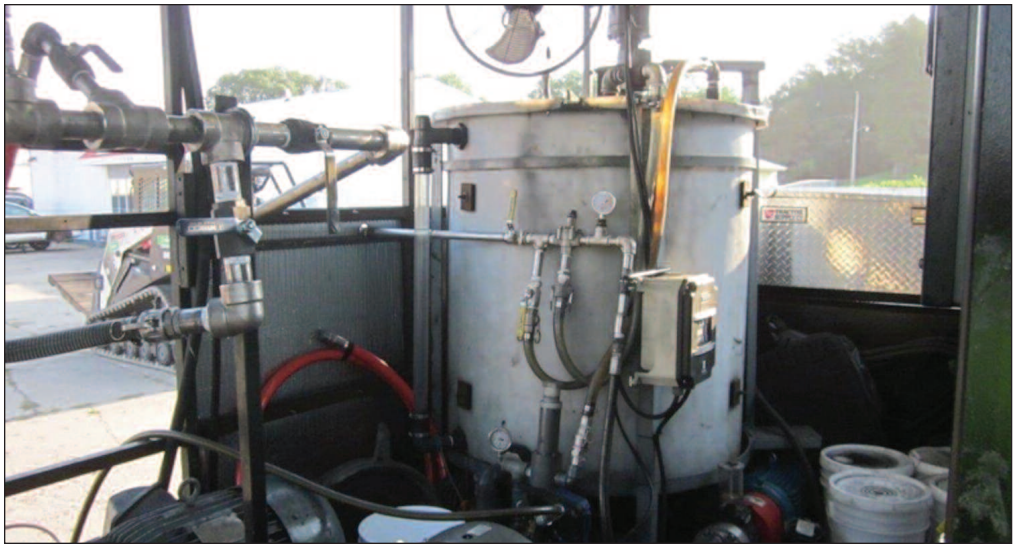
Chronic Free Product Problem and Site Closure

In Iowa, a Leaking Underground Storage Tank (LUST) site can remain open despite a Risk Based Corrective Action (RBCA) classification as No Action Required due to minor amounts of free product petroleum in 1 or 2 groundwater monitoring wells. If 0.01' or more of free product is measured in site monitoring well(s), then free product removal must be conducted. Free product removal/recovery may continue for years without moving the site towards full closure. How do these sites get past the chronic free product problem and get file closure?

At one such site in northwest Iowa, monthly free product bailing had been conducted in two monitoring wells for years, with removal of only a few gallons of product and no end in sight. Obviously, recovery of product by traditional methods was not successful. A Laser-induced fluorescence (LIF) investigation was conducted, and it was found that the mass of light non-aqueous phase liquid (LNAPL, or free product) was located in a limited area, approximately 22' to 30' below grade, within saturated lean clay, silty clay, and sand deposits.

To treat the submerged LNAPL plume, an activated carbon remedial technology was selected. Trap & Treat® BOS 200® is an activated carbon combined with a blend of sulfate reduction material and bacteria concentrate, developed by Remediation Products, Inc. The activated carbon traps the LNAPL in place, and then biodegrades it.

Based on the assessment data, an injection plan was developed to place the material in the best locations. The material was mixed with water, and the slurry was injected into the subsurface using special direct push and pressure pump methods. In September 2015, 8200 lbs of the material was injected at 25 locations on the site. Since then, the site has been checked monthly and free product has not been detected. Additionally, groundwater contaminate concentrations are decreasing. Site closure is now on the horizon!



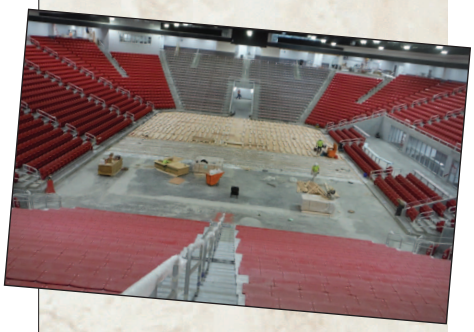
USD Sports Performance Enhancement Complex

Continued from page 2

strength and conditioning room, hydrotherapy room, sports medicine training room, physical therapy, training room and a biomechanics lab.

GeoTek's initial role for the project was to perform 16 test borings and install three temporary groundwater observation wells as part of a geotechnical exploration program. Laboratory tests were performed on selected soil samples to aid in determining the index and strength properties of the underlying soils at the site. The laboratory tests included moisture content, dry density, Atterberg limits (liquid and plastic limits), unconfined compressive strength and triaxial compression tests. Due to the low strength soils encountered within the upper 15 to 20 feet of the soil profile, aggregate piers were selected for support of the facility.

GeoTek provided the QA/QC oversight during the installation of the aggregate piers along with our professional and technical services for excavation observations, compaction testing of fill materials, visual inspection on the concrete steel reinforcement, concrete testing, floor flatness and levelness testing, moisture emission testing, structural steel (weld, bolts, etc.) observations, masonry inspection, and fireproofing inspection and testing.



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GeoTek Goes SURFing

GeoTek was recently tasked with conducting a Phase I Environmental Site Assessment (Phase I) of a planned future research laboratory at the former Homestake Gold Mine in Lead, South Dakota for the Fermi Research Alliance, a division of the Fermi National Accelerator Laboratory. The underground portion of the project, as yet unexcavated, will expand the Sanford Underground Research Facility (SURF) at and around the 4850 foot level of the mine, and will be the "far-site" of the Long-Baseline Neutrino Facility (LBNF) project. The project will involve shooting an underground high-intensity neutrino beam from the Fermilab site in Illinois to a high-precision neutrino detector at the SURF site located 800 miles away. Additionally, office space and surface cryogenics infrastructure will be constructed to support the detector, along with logistics for waste rock transport and disposal during construction.

The vicinity of the subject site has been operated as a gold mine from approximately 1878 to 2001. Potential environmental concerns for the project include over 120 years of historical ore processing chemicals, waste rock disposal, and groundwater and process water collection and treatment. Potential processing contaminants include mercury, cyanide, arsenic, and sulfates.

In addition, in 1965 Dr. Ray Davis constructed a Noble Prize winning solar neutrino experiment on the 4850 Level near the Yates Shaft. Substances included in the experiment were a 100,000 gallon tank of perchloroethylene (PCE), mercury, potassium chloride, lead bricks and other items. These materials remained in place until the mine was decommissioned in 2003.

In the course of the Phase I, GeoTek environmental professionals conducted a review of surface structures and toured the 4850 foot level of the mine (descending at over 450 feet per minute, it is about a 11 minute cage elevator ride from the surface). Extensive document review was conducted including detailed mine closure documents and photographs from the 2002-2003 decommissioning, historical environmental reports, asbestos removal documents, water treatment and discharge permit testing results, and chemical storage and use for current experiments on-site.

Project design is nearing completion with one major final review pending. The current schedule indicates Fermilab will advertise for a construction manager/general contractor in 2017, with construction beginning in 2018.