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1:22 pm, Oct 12, 2009

Alameda County
Environmental Health

September 21, 2009
Project No. 104484/WP

Mr. Mark Detterman
Alameda County Environmental Health Services
Environmental Protection
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

SUBJECT: Addendum to the Work Plan for Environmental Site Investigation of a Diesel Release from an Above Ground Storage Tank (AST) Located at the Lake Chabot Marine Maintenance Yard, 17930 Lake Chabot Road, Castro Valley, California

Dear Mr. Detterman:

Kleinfelder, on behalf of East Bay Regional Parks District (EBRPD), is pleased to present Alameda County Environmental Health Services with this addendum regarding Kleinfelder's Work Plan dated June 15, 2009, for an investigation of a diesel release from an above ground storage tank (AST) located at 17930 Lake Chabot Road, in Castro Valley, California (the Site). A revised Site Plan (Plate 2) is attached. This addendum was prepared in response to a letter dated August 14, 2009 from the Alameda County Environmental Health (ACEH) to Mr. Jeff LeBow of the East Bay Regional Parks District, requesting modifications to Kleinfelder's Work Plan dated June 15, 2009.

RESPONSE TO ACEH TECHNICAL COMMENTS (TC)

TC 1

The referenced work plan indicates that four direct push (Geoprobe) soil bores will be installed around the former location of the aboveground storage tank (AST) at locations specified in the work plan, but that locations may move due to surface impediments such as overhead or underground utilities and accessibility. As currently situated the number of bores around the AST are more than adequate; however, it also appears warranted that a minimum of two additional bores should be installed to confirm the vertical extent of hydrocarbon impacts associated with soil samples collected along piping runs.

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Kleinfelder Response to TC 1

A total of six borings will be advanced at the site. Four in the vicinity of the former AST and two at the previous sample locations along the piping runs (see attached Site Plan).

TC 2

The work plan also states that the borings will be installed up to a depth of 16 feet below grade surface (bgs), unless bedrock or groundwater is encountered first. The site is noted to sit on a ridge top and that bedrock is expected to be shallow. This is substantiated by existing AST removal photographs in the file that suggest a rocky soil. Consequently, because Geoprobe systems have difficulty achieving depth in coarsely granular or rocky soil, it would appear warranted to have a contingency to allow a switch to hollow-stem auger (HSA) drilling capabilities, either in-field or a later mobilization. As a consequence ACEH is requesting modification of the work plan to include this contingency and the inclusion of appropriate HSA drilling and sampling methodology. This can be done in an addendum.

Kleinfelder's Response to TC 2

A track-mounted Geoprobe 6625CPT combination direct-push and hollow-stem auger drill rig equipped with eight-inch hollow-stem augers will be used at the site to advance the bore holes (See attached Geoprobe brochure). If refusal is encountered using the direct-push method at less than 16 feet bgs, eight-inch hollow-stem augers will be used to advance the boring further to a maximum of 16 feet bgs, if possible without refusal. A modified California split-spoon sampler will be used to collect soil samples ahead of the augers during drilling at five foot intervals. The sampler will be advanced by blows from a 140-pound hammer dropped 30 inches. Soil samples will be contained in 6-inch long, 2-inch diameter stainless steel tubes. Soils encountered in the boring will be logged in the field according to the Unified Soil Classification System. Field boring logs will contain information such as color, texture, plasticity, relative moisture content, and odor.

Soil samples will be screened for the presence of volatile organic compounds (VOCs) with a photo-ionization detector (PID). Samples will be selected for laboratory analysis based on the PID readings and field observations. The sample with the highest PID reading collected above the water table will be selected. If significant concentrations are not detected with the PID, and other indications of contamination are not observed, one sample will be collected at 5 feet bgs. The selected soil sample will be collected in stainless steal tubing, and sealed using Teflon™ sheets and plastic or rubber end caps. The soil sample will be labeled with a unique sample ID number and other pertinent information, and placed in an ice chest packed with water-based ice to approximately four degrees Celsius for transport under chain of custody to a State of California certified laboratory.

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TC 3

The work plan also indicates Total Petroleum Hydrocarbons as gasoline (TPHg) will be included in the analysis. Because this was a heating oil tank analysis for TPHg does not appear necessary. File photographs also indicate the area does not appear to be underlain by organic rich soil, thus inclusion of silica gel cleanup for the heaver hydrocarbon compounds may not be warranted.

Kleinfelder's Response to TC 3

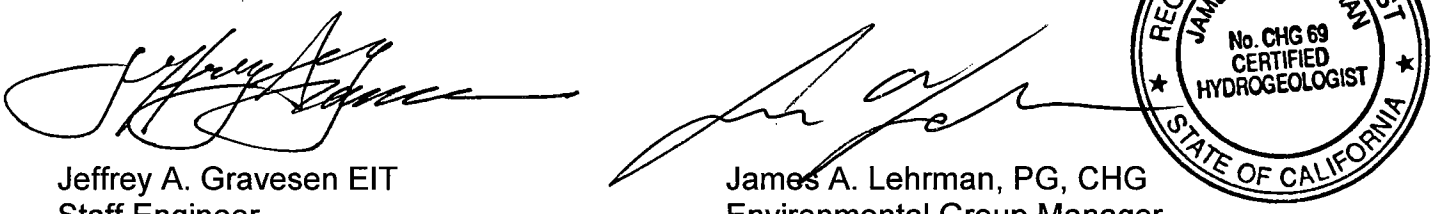
Kleinfelder will instruct the laboratory to analyze soil and groundwater samples for total petroleum hydrocarbons in the diesel and motor oil range, using EPA method 8015. Silica Gel cleanup will not be used on the soil and groundwater samples.

CLOSING REMARKS

If you have any questions regarding this letter, or if Kleinfelder may be of further assistance with this project, please call Jim Lehrman at (925) 484-1700 ext 4520.

Sincerely,

KLEINFELDER WEST, INC.



Jeffrey A. Gravesen EIT
Staff Engineer

James A. Lehrman, PG, CHG
Environmental Group Manager

JAG/JAL/jmk

Attachment: Site Plan
Geoprobe 6625CPT Brochure

CC Mr. Jeff LeBow
East Bay Regional Park District
2950 Peralta Oaks Court
Oakland, California 94605

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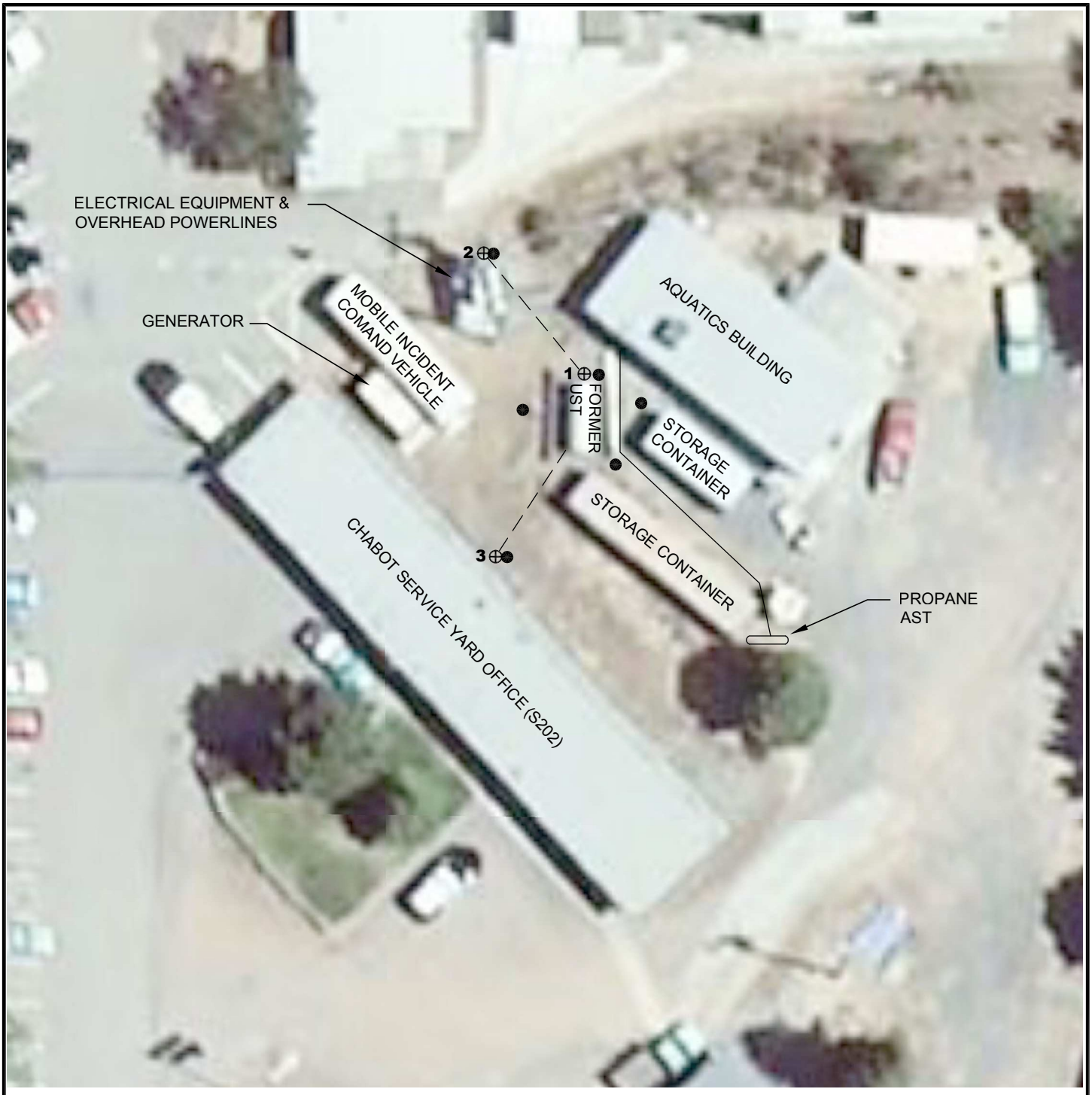

30 15 0 30

APPROXIMATE SCALE (feet)

REFERENCE:
maps.google.com, 2006

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LEGEND

- ⊕ SOIL SAMPLE LOCATION (By Decon, 7/07)
- ● PROPOSED SOIL BORING LOCATION
- - - - - - - - - FORMER PIPING
- ——————— PROPANE PIPING

NOTE: Locations are approximate.

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PROJECT NO.	104484
DRAWN:	SEPT 2009
DRAWN BY:	JDS
CHECKED BY:	JG
FILE NAME:	VIC-PLAN.dwg

SITE PLAN

EAST BAY REGIONAL PARK DISTRICT
LAKE CHABOT MARINE MAINTENANCE YARD
17930 LAKE CHABOT ROAD
CASTRO VALLEY, CALIFORNIA

PLATE **2**

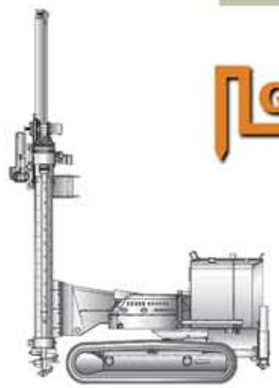
PLOTTED: 17 Sep 2009, 10:54am, jsala
LAYOUT: SITEPLAN
CAD FILE: L:\2009\09Projects\104484\GRAPHICs\WP\9-2009\
XRef: Eng-A 8x11_P StyleA
ATTACHED XREFS:
Images: SITE-VIC.jpg Images: SITEPLAN.jpg
ATTACHED IMAGES:
PLEASANTON, CA

Resting on a special testing platform on this barge (upper left), the 6625CPT Machine is ready to gather data from the river bottom. Multiple tool storage areas keep tools handy. An adjustable hydraulic chuck clamps on to CPT tools during a static push (middle left). The top rod of the tool string is placed under the microphone (middle right) in preparation of the CPT push. These anchors (left) were pushed 10 feet (3 m) and secured the 6625CPT Machine for a 100-foot (30 m) push.

6625CPT Machine

6625CPT Machine Specifications

Stroke	66 in. 1676 mm
Weight	8,720 lb. (3959 kg)
Track Width	60 in. (1524 mm)
Mast Width	78 in. (1981 mm)
Length (folded)	127 in. (3226 mm)
Height (folded)	84 in. (2134 mm)
Height (unfolded, max)	166 in. (4216 mm)
Lateral Movement (side-to-side)	12 in. (305 mm)
Extension	15 in. (381 mm)
Main (Push) Cylinders, two	4 in. (102 mm) diameter
Down Force	40,000 lb. (178 kN)
Retraction Force	46,000 lb. (205 kN)
CPT Operating Pressure	2,450 psi (169 bar)
Hydraulic Flow Rate (system)	30 gpm (114 Lpm)
Hammer System	GH62
Hammer Percussion Rate	32 Hz
Torque (hammer motor)	560 ft. lb. (759 Nm)
Rotation Rate (hammer motor)	240 rpm (bi-directional)
Hammer Side Shift	12 in. (305 mm)
Fuel Capacity (diesel)	15 gal (57 L)
Engine (diesel)	Kubota, 4-cylinder turbo, liquid cooled
Engine Power	54 hp (40 Kw)
Leveling Jacks	hydraulic; 2 forward, 2 rear
Travel Speed	0-4.5 mph (0-7.2 kph)
Surface Load	4.4lb/in2 (0.31 kg/cm2)
Anchor Drives	2
Center-to-Center Anchor Spacing	66 in. (1676 mm)
Anchor Drive Stroke	69 in. (1753 mm)
Anchor Torque	2500 ft. lb. (3390 Nm)
Anchor Diameter (max.)	16 in. (406 mm)
Auxiliary Hydraulic Outletss, 2	6 gpm (23 Lpm) (each)

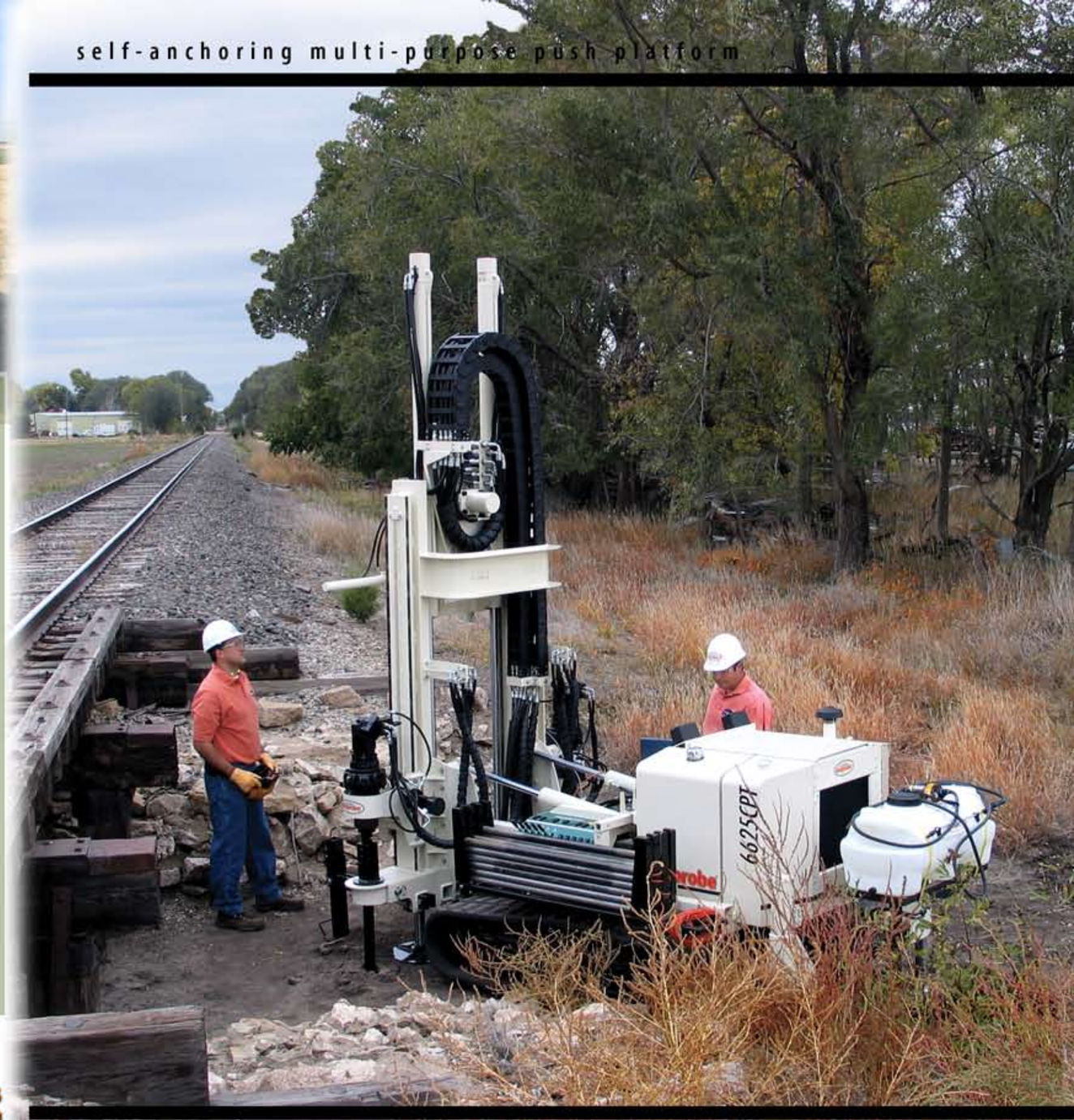


Geoprobe® Systems

www.geoprobe.com

More information is available by calling Geoprobe Systems® 1-800-436-7762.

self-anchoring multi-purpose push platform



6625CPT Machine

a versatile **track-mounted** push platform for dedicated **Geotechnical CPT applications** with **percussion hammering** for subsurface **sampling**

Geoprobe® Systems

www.geoprobe.com

6625CPT Machine

All Machine Functions Operable With Remote

Self-Anchoring for Quick and Easy Machine Support

20-ton push capability on a 4.5-ton machine

FEATURES

- Self-anchoring
- Multi-purpose platform for pushing CPT, Direct Image®, or groundwater or soil sampling with percussion hammer
- 20-ton push capability
- 23-ton pulling capacity
- Fully operable using wireless remote or manual controls
- Hydraulic chuck
- Geoprobe® GH62 Hammer can be hydraulically moved to allow access to the hydraulic chuck or moved back for percussion driving
- Hydraulic outriggers for easy leveling
- Two-speed probe cylinder cycles from bottom to top in 5 seconds
- Wide, track-mounted undercarriage distributes weight to minimize ground pressure
- Powered by a reliable 4-cylinder, 54 hp, liquid-cooled Kubota turbo diesel engine
- Compact design easily transports from site-to-site

APPLICATIONS

- Geotechnical CPT Testing
- Geotechnical Seismic CPT Testing
- Tool installation for Geotechnical sampling (shelby tube)
- Pushing corded Direct Image® tooling
- Hydraulically driving Direct Image® tooling using GH62 Hammer
- Environmental or Geotechnical sampling using GH62 Hammer

A hydraulic side-shift function centers the GH62 Hammer and Augerhead over the work area for direct push environmental sampling or logging.

Multi-purpose platform allows for collecting of environmental soil and groundwater samples from the same machine (upper photo). All machine operations performed using wireless remote or from control panel on the machine.

The 6625CPT Machine presents a total package for companies providing geotechnical testing services. The track-mounted machine's small footprint (apprx. 53 sq. ft [5 sq. m.]) allows for easy mobilization, but its light weight ... almost 5 tons ... doesn't diminish the machine's 20-ton push capabilities.

Geoprobe® Cordless CPT Tools are the perfect compliment to the 6625CPT Machine.