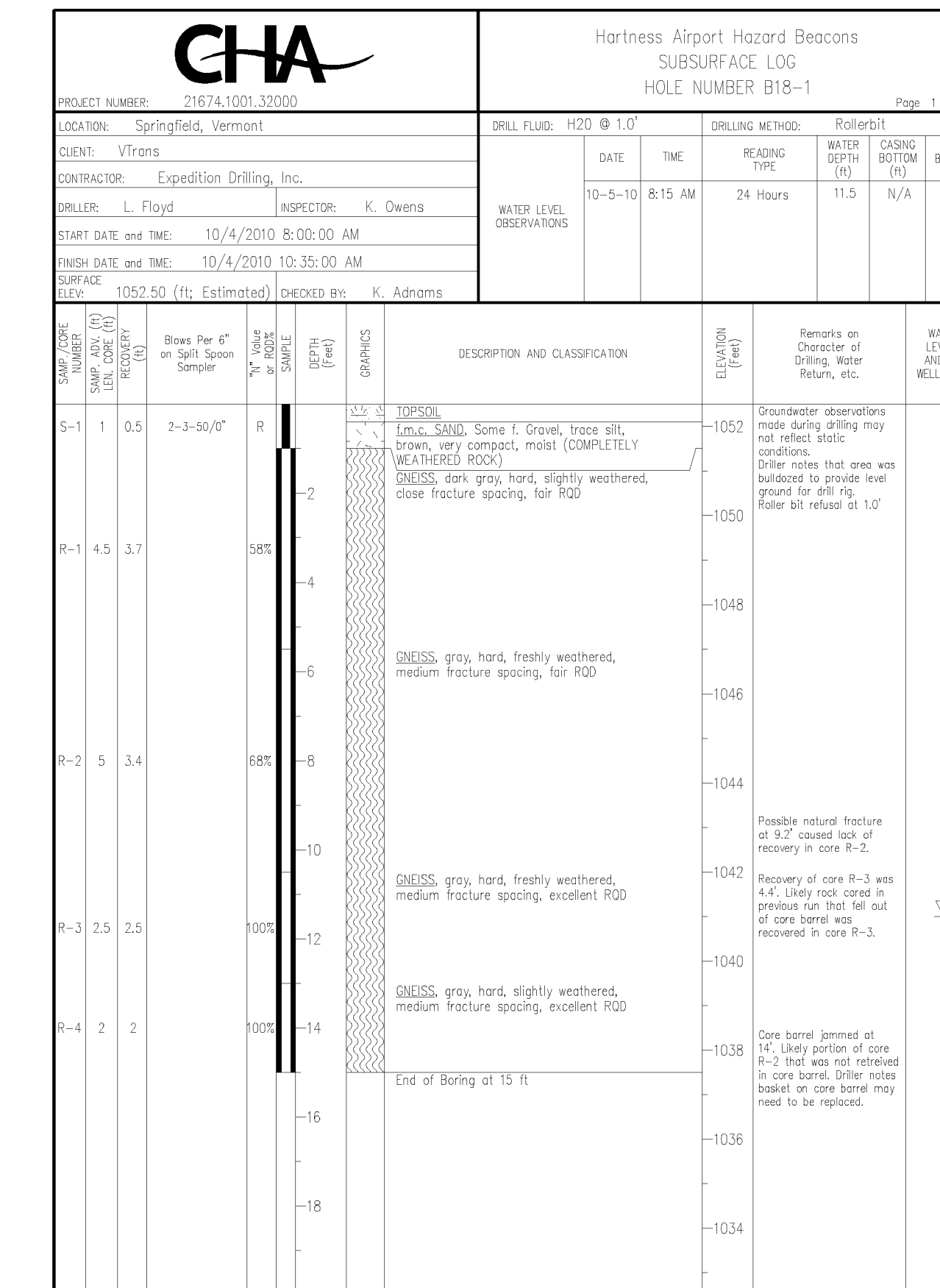
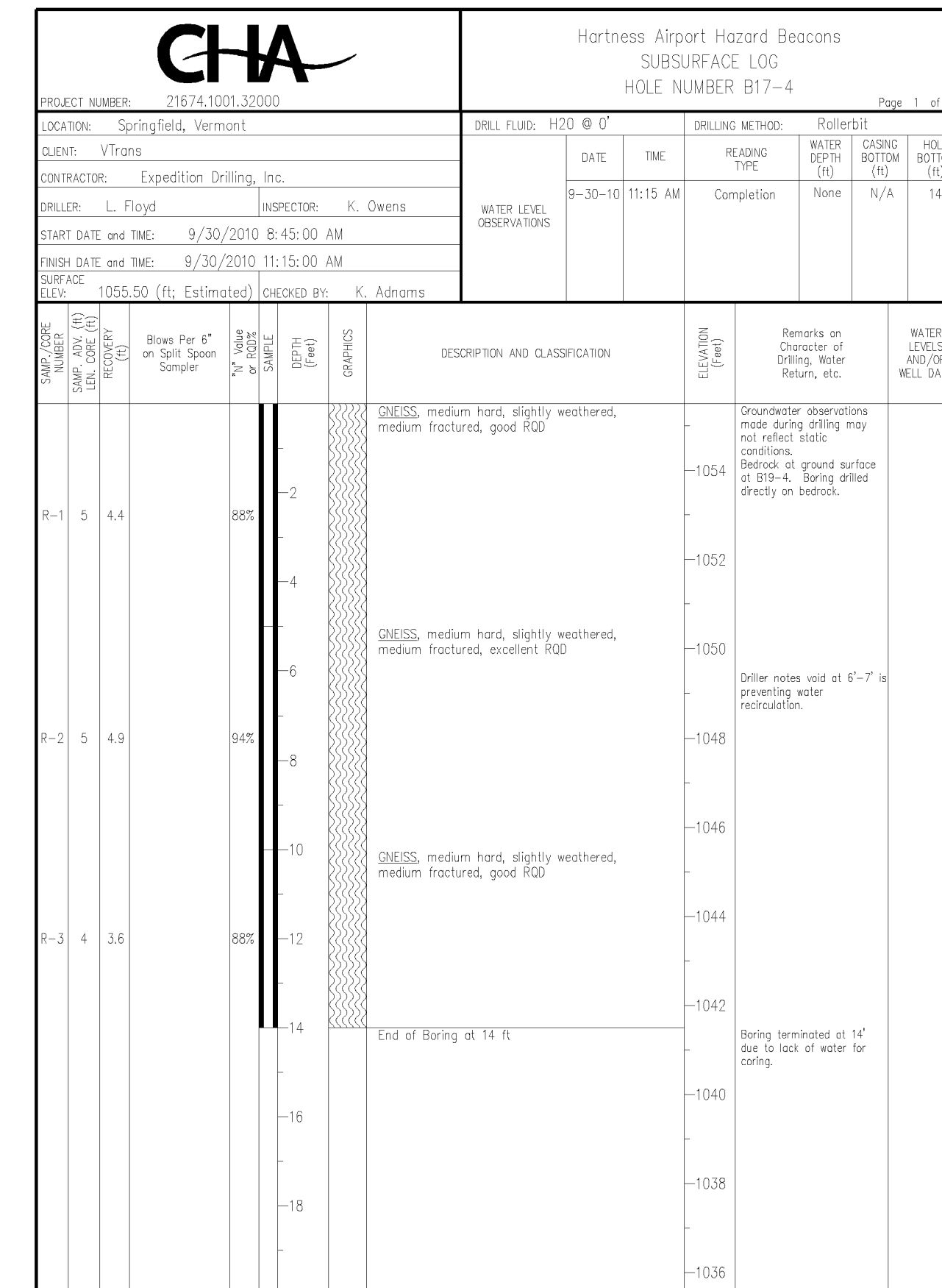
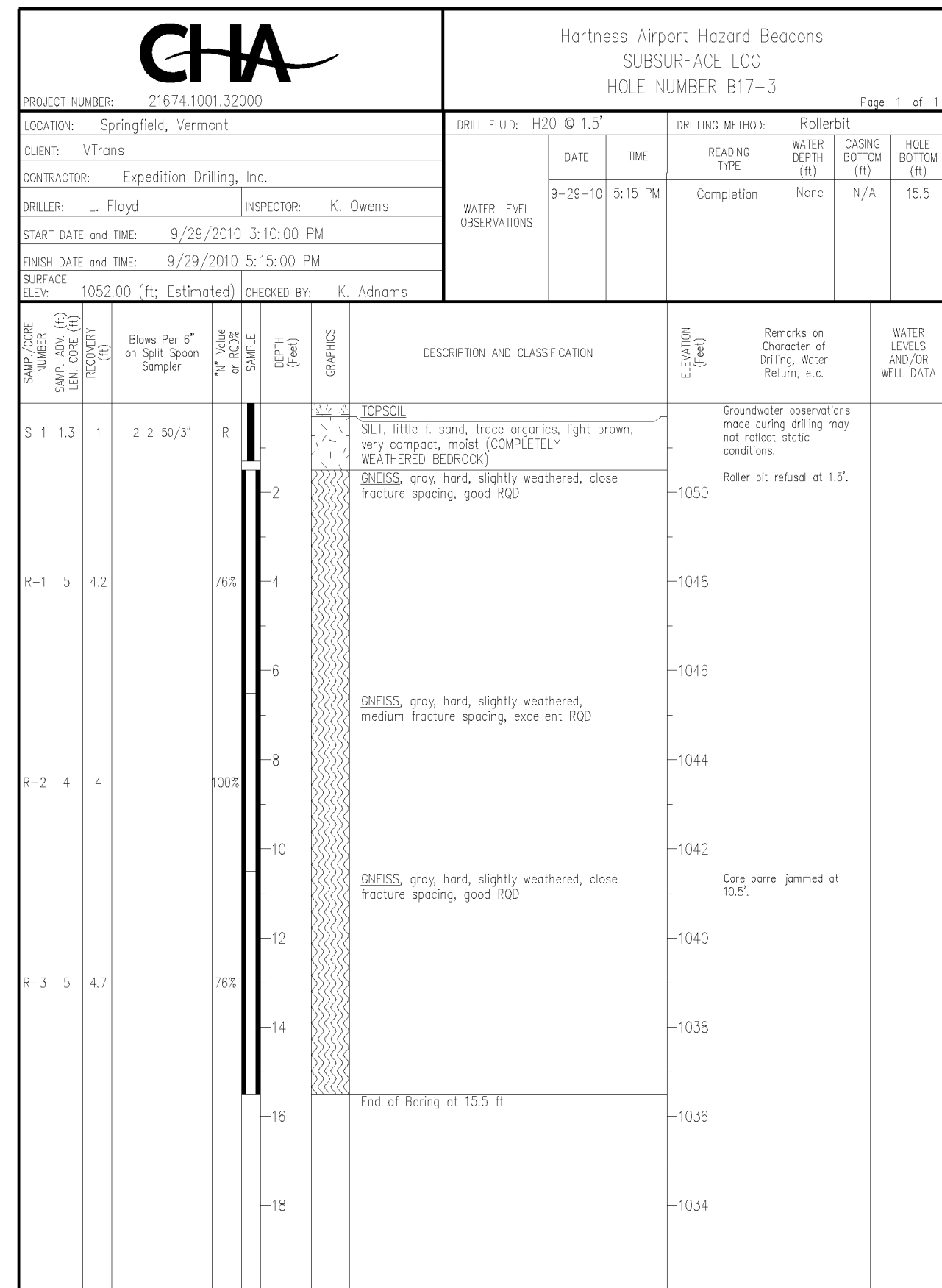
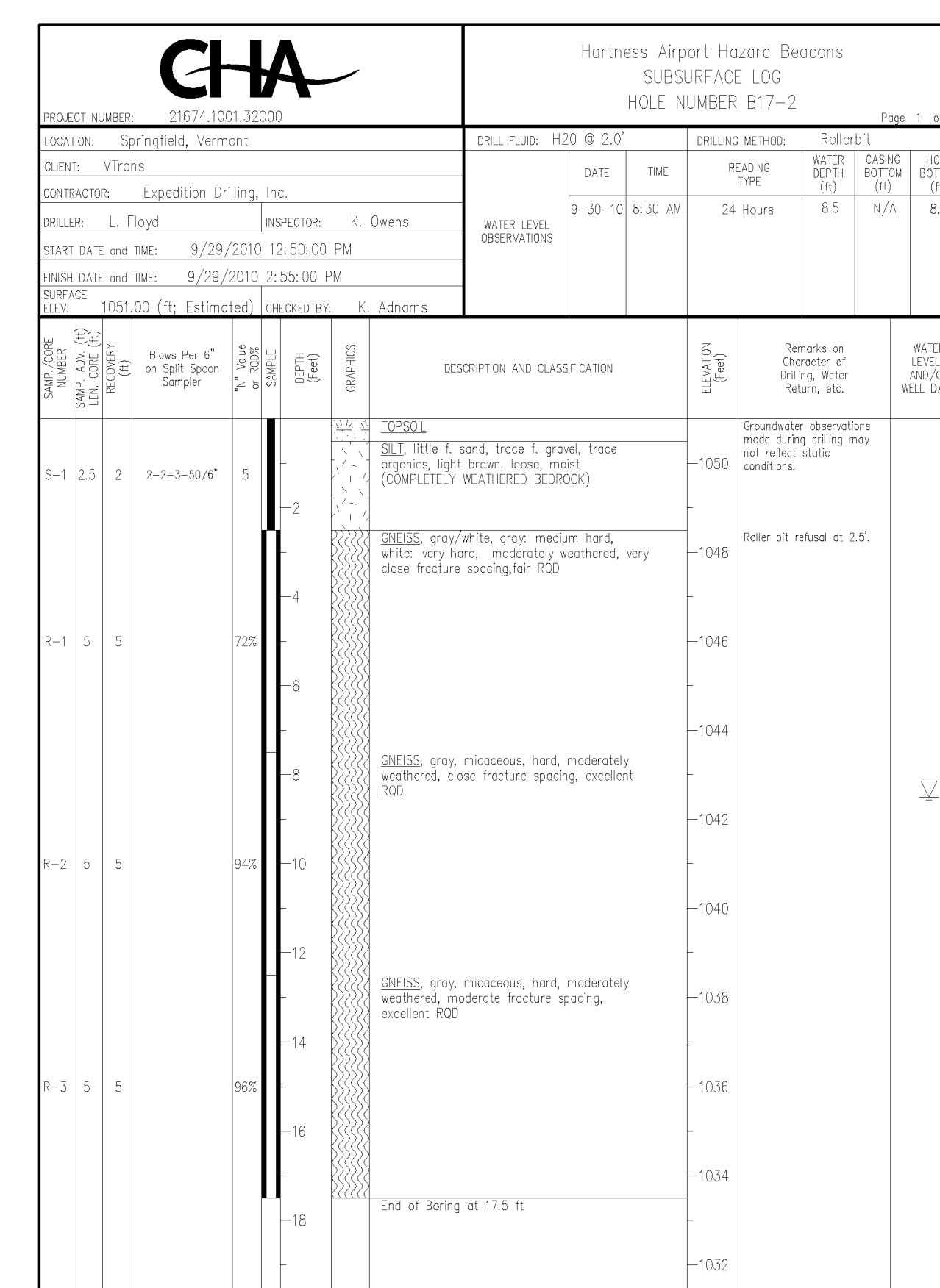
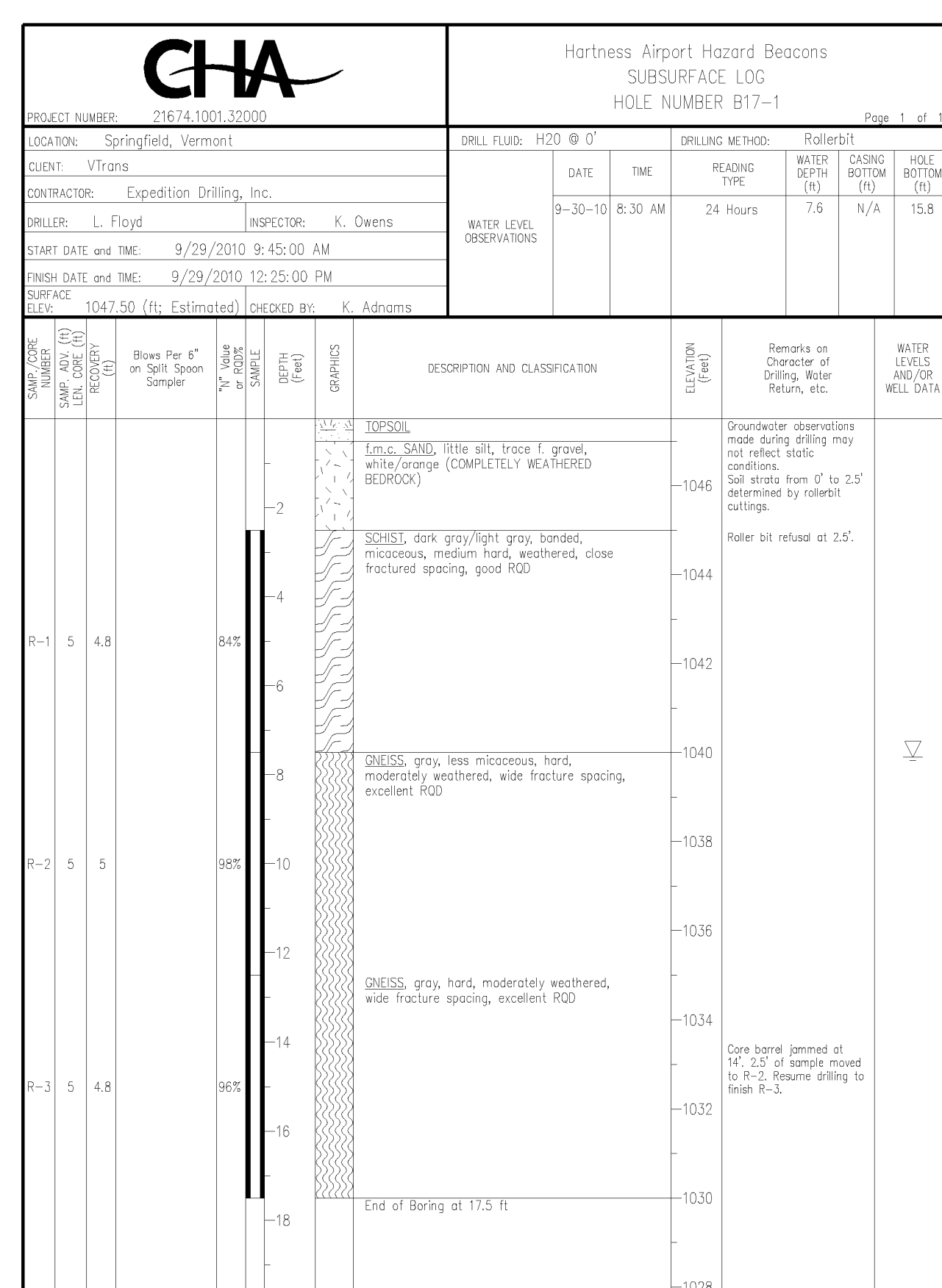


Subsurface Logs present material classifications, test data, and observations from subsurface investigations of the subject site as required by the requesting geologist or engineer. In some cases, the classifications may be made based on laboratory test data when available. It should be noted that the investigation procedures only recover a small portion of the subsurface materials at the site. Therefore, actual conditions between borings and sampled intervals may differ from those presented on the Subsurface Logs. The information presented on the logs provide a basis for an evaluation of the subsurface conditions and may indicate the need for additional exploration. Any evaluation of the conditions reported on the logs must be performed by Professional Engineers or Geologists.

- SAMPLE CORE NUMBER** - Samples are numbered for identification on containers, laboratory reports or in text reports.
- SAMPLE ADVANCE/LENGTH** - Length of sampler advance or length of coring run measured in feet.
- RECOVERY** - Amount of sample actually recovered after withdrawing sampler or core barrel from bore hole measured in feet.
- SAMPLE BLOW COUNT** - Unless otherwise noted, blow counts represent values obtained by driving a 30" (3.0), 1.5-3.0 (1.5) split spoon sampler into the subsurface strata with a 140 pound weight falling 30" on ASTM D 1586. After an initial penetration of 6" to test the sampler into undisturbed material, the sampler is then driven an additional 2 or 3 six inch increments.
- "N" VALUE or ROD "L"** - "N" VALUE - The sum of the second and third sample blow increments is generally termed the Standard Penetration Test (SPT) "N" value. CORE ROD - Core Rock Quality Designation, RQD, is defined as the summed length of all pieces of core equal to or longer than 4 inches divided by the total length of the coring run. Fresh, irregular breaks distinguishable as being caused by drilling or recovery operations are ignored and the pieces are counted as intact lengths. RQD values are valid only for cores obtained with six size core barrels.
- SAMPLE** - Graphical presentation of sample type and advance or core run length. See Table 1.
- DEPTH** - Depth as measured from the ground surface in feet.
- GRAPHICS** - Graphical presentation of subsurface materials. See Table 4. Dual soil classification and rock graphics may vary and are not shown on Table 4.
- DESCRIPTION AND CLASSIFICATION** - Soil - Recovered samples are visually classified in the field by the supervising geologist or engineer unless otherwise noted. Particle size and plasticity classification is based on field observations and using the Unified Soil Classification System (USCS). See Table 4. USCS symbols are presented in parentheses following the soil description. Where necessary, dual symbols may be used for combinations of soil types. Relative proportions, by weight and/or plasticity, are described in general accordance with "Suggested Methods of Test for Identification of Soils" by J.M. Burmeister, ASTM Spec. Publication #79, 6-1973. See Table 2. Soil density or consistency description is based on the penetration resistance. See Table 3. Soil moisture description is based on the observed wetness of the soil recovered being dry, moist, wet, or saturated. Water introduced into the soil during drilling may affect the moisture content of the materials. Other geologic terms may also be used to further describe the subsurface materials. Rock flow rate descriptions are based on the engineer's observations and may be expanded and described in greater detail by the project engineer or geologist. Terms used in the description of rock core are presented in Table 5.
- BOUNDARIES** - Division lines between deposits are based on field observations and changes in recovered material. Soil lines depict contacts between two deposits of different geologic depositional environment or flow elevation. Dashed lines represent estimated elevation of contacts between two deposits of different geologic depositional environment. Dotted lines depict transitions of deposits within the same depositional environment, such as grain size or density.
- ELEVATION** - Elevation of strata changes in feet.
- REMARKS** - Miscellaneous observations.
- WATER LEVELS & WELL DATA** - Hollow water level symbol, if present, represents level at which first saturated sample of water level was encountered. Solid water level symbol, if present, depicts the most probable static water elevation at the time of drilling or as measured in an installed observation well at a later date. Subsurface water conditions are influenced by factors such as precipitation, stratigraphic composition, and drilling/coring methods. Conditions at other times may differ from those described on the logs. For graphical presentation of observation/measurement well construction, see Table 6. Elevations of changes in construction are noted at the bottom of each section.

Subsurface Logs present material classifications, test data, and observations from subsurface investigations of the subject site as required by the requesting geologist or engineer. In some cases, the classifications may be made based on laboratory test data when available. It should be noted that the investigation procedures only recover a small portion of the subsurface materials at the site. Therefore, actual conditions between borings and sampled intervals may differ from those presented on the Subsurface Logs. The information presented on the logs provide a basis for an evaluation of the subsurface conditions and may indicate the need for additional exploration. Any evaluation of the conditions reported on the logs must be performed by Professional Engineers or Geologists.

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RECORD DRAWING 07/07/13

Appr. By	Date
HAW HAW	07/07/13
Submitter / Revision	
No.	

STATE OF VERMONT
AGENCY OF TRANSPORTATION

DESIGNED: HAW
DRAWN: HAW
CHECKED: TYL
DATE: 03/18/11
PROJECT NO.: 21674
SCALE: AS SHOWN

HARTNESS STATE AIRPORT
HAZARD BEACON REPLACEMENT
SUBSURFACE LOGS

C-003

File: V:\PROJECTS\AV\AV\21674\CADD\CADD\SHEET_FILES\C003-4-21674.DWG
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