

September 25, 2012

Department of Natural Resources
Division of Reclamation, Mining and Safety
Colorado Inactive Mines Reclamation Program
1313 Sherman Street, Room 215
Denver, Colorado 80203

Attn: Ms. Tara Tafi

**RE: SUMMARY REPORT, UTE ULAY MINE AND MILL DRILLING AND
MAPPING PROJECT, HINSDALE COUNTY, COLORADO**

Shannon & Wilson has completed drilling activities for the Ute-Ulay Mine and Mill Drilling and Mapping Project (the Project). The location of the site is shown on Figure 1. This letter briefly summarizes our site activities and observations.

SCOPE OF WORK

Broadly, our scope of work at the site included the following tasks:

- Drilling and logging cuttings and occasional drive samples in 14 total nominal 6-inch-diameter borings to depths ranging from 3.5 to 36.1 feet below ground surface.
- Topographic mapping and volume estimates of mine wastes in the drilling exploration area.

Project construction activities were completed in substantial accordance with the brief Scope of Work set forth in Task Order Letter C188836TO45 provided by DRMS, dated June 21, 2012.

SITE ACTIVITIES

An initial site walk-through was completed on July 16, 2012. Attendees included Mr. Robbie Deister, a Shannon & Wilson field representative, and Ms. Tara Tafi, the Colorado Division of Reclamation, Mining and Safety (DRMS) Project Manager. Other attendees included surveying field representatives from Nolte Vertical Five (NV5) of Centennial, Colorado and drilling representatives from Precision Sampling (Precision) of Colorado Springs, Colorado. Following

the initial site walk-through, the Shannon & Wilson field representative remained onsite to observe site activities for the remainder of the Project.

Topographic Surveying

Site topographic surveying operations were completed between July 16 and July 18, 2012 by NV5 under subcontract to Shannon & Wilson. The enclosed topographic exhibit displays boring locations, an approximate estimate of total mine waste volume, and an approximate estimate of the sub-economic ore pile volume.

To estimate total mine waste volumes, NV5 calculated the approximate volume between the topographic surface and a second, assumed surface at the base of mine waste. The assumed surface at the base of mine waste was defined by observations of the base of mine waste in each boring and an arbitrarily assigned zero-tailings thickness perimeter (shown on the enclosed topographic exhibit). The tailings volume estimate should be considered approximate.

Drilling Activities

Site drilling operations were completed between July 17 and July 20, 2012 by Precision (under subcontract to Shannon & Wilson). Precision completed a total of 14 borings, designated UU-SA-07 through UU-SA-20, to depths ranging from 3.5 to 36.1 feet in depth. Each boring was advanced to practical refusal, which typically occurred at bedrock based on drill action and observations of sample material obtained from each boring. Soil and rock classification keys are included as Figures 3 and 4. Individual boring logs are enclosed as Figures 5 through 18.

The location of each boring was surveyed by NV5 after completion. The surveyed locations of the borings are shown on Figure 2 (enclosed). Figure 2 also includes the locations of six borings, designated UU-SA-01 through UU-SA-06, drilled during a previous phase of work in September and October of 2011. Drilling logs and laboratory testing associated with this previous phase are included in a Shannon & Wilson report issued under separate cover.

Drilling and Sampling Methods

All borings were drilled by Precision with a CME 55-300 track-mounted drill rig using 4¼-inch inside-diameter hollow stem auger drilling techniques. This tooling configuration resulted in

nominal 8-inch diameter borings, except where raveling conditions resulted in larger diameter boreholes.

Disturbed samples were occasionally obtained from the borings in accordance with the Standard Penetration Test (SPT). The SPT consists of driving a 2-inch O.D., 1.375-inch inside-diameter split-spoon sampler a distance of 18 inches with a 140-pound hammer free-falling a distance of 30 inches. The number of blows required to advance the split-spoon through each of the 6-inch increments was recorded. The SPT resistance, or N-value, is defined as the number of blows required to drive the second and third 6-inch increments. Because high penetration resistance prevented driving the total length of the sampler at times, the penetration resistance for the partial penetration was recorded where applicable. The N-values provide a means for evaluating the relative density or compactness of cohesionless (granular) soils and consistency or stiffness of cohesive (fine-grained) soils and are shown on boring logs.

The Shannon & Wilson field representative performed visual logging of cuttings and sample material obtained in SPT samples. The Shannon & Wilson field representative also observed drill action and communicated with the driller to identify potential changes in subsurface conditions with depth. At each boring, the Shannon & Wilson field representative compiled visual logging and drill action observations on a field log to develop an approximate subsurface stratigraphy. Our drilling observations for each boring are included on the boring logs (Figures 5 through 18).

Note that the descriptions shown on the boring logs are based only on visual classification in general accordance with the Unified Soil Classification System (USCS) and the Shannon & Wilson rock classification system. These classification systems are summarized on Figures 3 and 4, respectively. In accordance with our scope of work, we did not retain or perform laboratory testing on soil samples.

Boring Abandonment

During drilling, we observed that borings advanced in waste rock had a tendency to ravel and collapse inward, resulting in large diameter holes at the surface. We also observed that the waste rock appeared to be loosely placed and very porous. Based on these observations and communications with the DRMS project manager, we determined that abandonment with

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bentonite grout would likely result in excessive grout losses into the waste rock. All borings were instead abandoned with cuttings and adjacent surface soils.

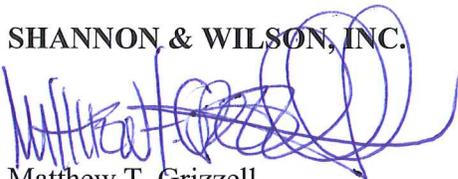
LIMITATIONS

Within the limitations of scope, schedule and budget, our observations were completed in accordance with generally accepted professional geotechnical and geological principles and practice at the time the work was done. We make no other warranty, express or implied.

We appreciate the opportunity to be of service to DRMS on this project. If you have any questions regarding this project, please contact me at (303) 825-3800.

Sincerely,

SHANNON & WILSON, INC.



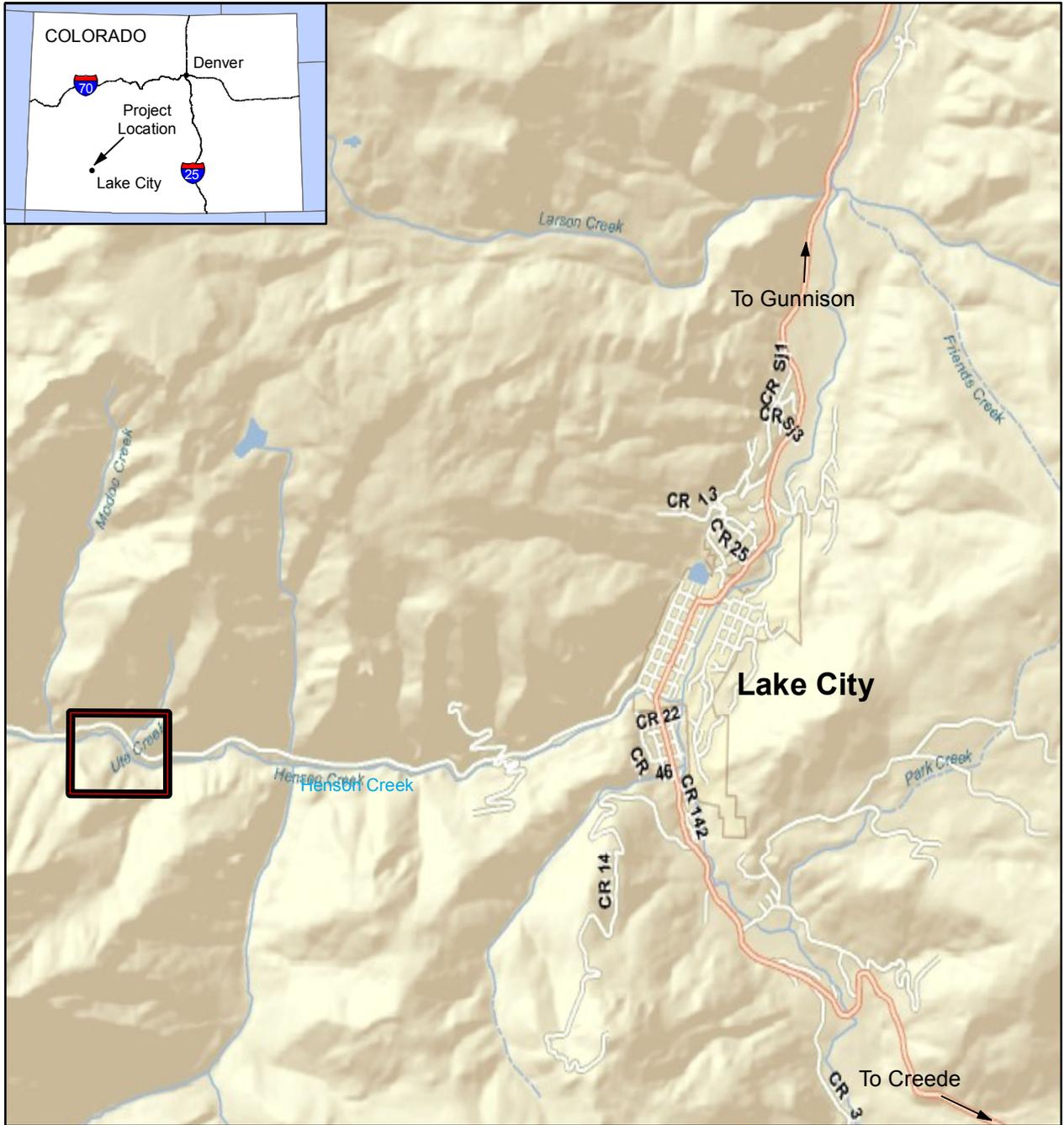
Matthew T. Grizzell
Geologist

MTG:GRF/mtg

- Enc: Figure 1 – Vicinity Map
Figure 2 – Site and Exploration Plan
Figure 3 – Soil Classification and Log Key (2 sheets)
Figure 4 – Rock Classification and Log Key
Figure 5 – Log of Boring UU-SA-07
Figure 6 – Log of Boring UU-SA-08
Figure 7 – Log of Boring UU-SA-09
Figure 8 – Log of Boring UU-SA-10
Figure 9 – Log of Boring UU-SA-11
Figure 10 – Log of Boring UU-SA-12
Figure 11 – Log of Boring UU-SA-13
Figure 12 – Log of Boring UU-SA-14
Figure 13 – Log of Boring UU-SA-15
Figure 14 – Log of Boring UU-SA-16
Figure 15 – Log of Boring UU-SA-17
Figure 16 – Log of Boring UU-SA-18
Figure 17 – Log of Boring UU-SA-19

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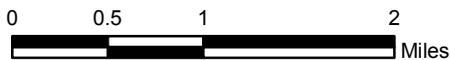
Enc: Figure 18 – Log of Boring UU-SA-20
Nolte Vertical Five Topographic Exhibit



Basemap from ESRI®, ArcGIS online (© 2009 ESRI, AND, TANA, ESRI-Japan, and UNEP-WCMC) captured October, 2011.

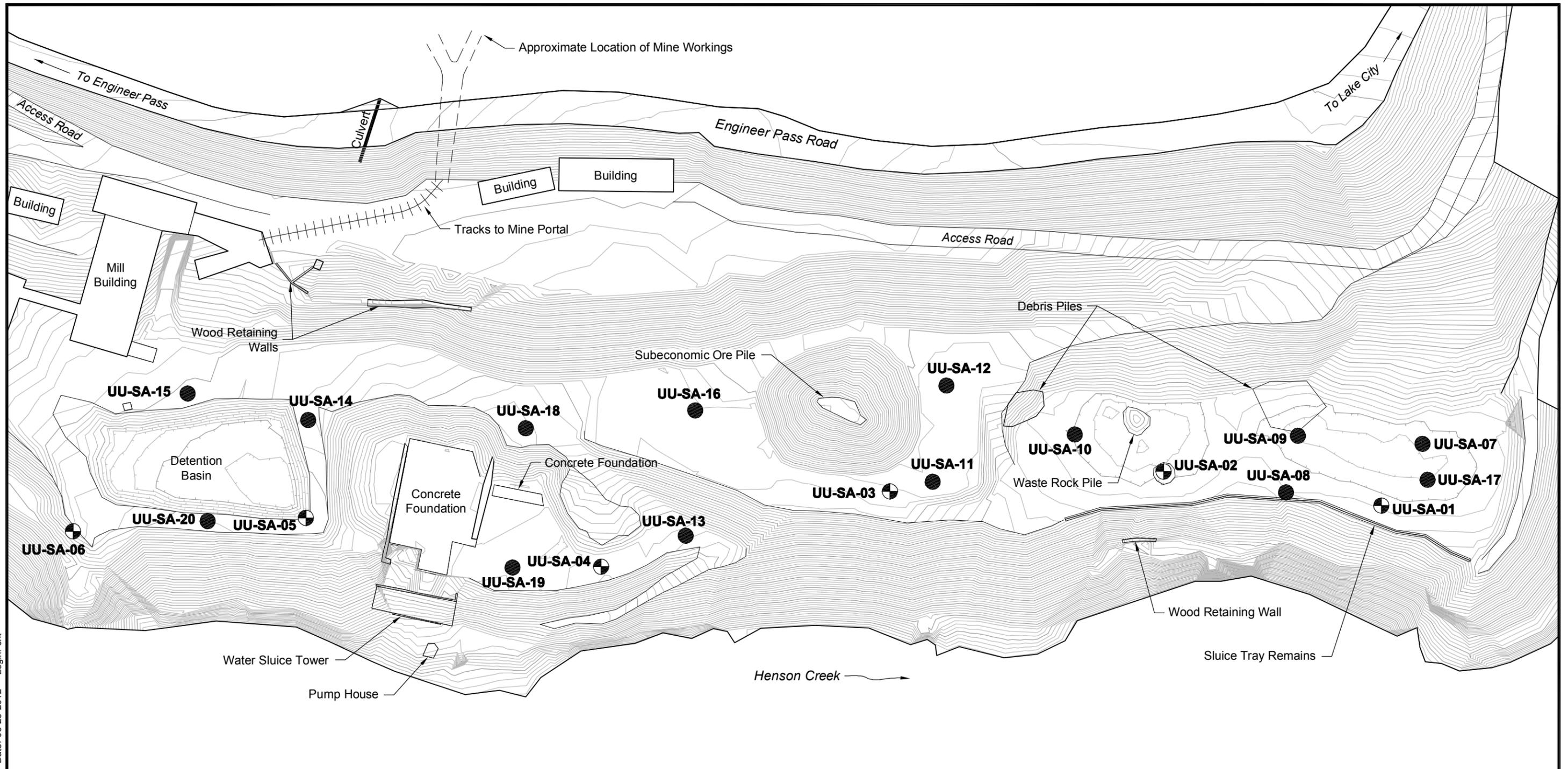
LEGEND

 Approximate Site Limits



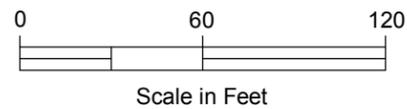
DRMS Ute Ulay Mine Complex Hinsdale County, Colorado	
VICINITY MAP	
September 2012	23-1-01187-132
SHANNON & WILSON, INC. Geotechnical and Environmental Consultants	FIG. 1

Filename: J:\231\01187-141\23-1-01187-141 fig 2.dwg Date: 09-25-2012 Login: cnt



LEGEND

- UU-SA-01**  Shannon & Wilson Boring Designation and Approximate Location (Sept/Oct 2011)²
- UU-SA-07**  Shannon & Wilson Boring Designation and Surveyed Location (July 2012)³



NOTES

1. Base map (entitled "EXP.N.dwg" and "ECTO-C3.dwg") provided by Nolte Vertical Five on 9-12-2012.
2. Borings UU-SA-1 through UU-SA-6 drilled by Shannon & Wilson in September and October 2011. These boring locations are shown approximately based on handheld GPS coordinates.
3. Borings UU-SA-7 through UU-SA-20 surveyed by Nolte Vertical Five between 7-16-2012 and 7-18-2012.

DRMS Ute-Ulay Mine Complex Hinsdale County, Colorado	
SITE AND EXPLORATION PLAN	
September 2012	23-1-01187-141
SHANNON & WILSON, INC. Geotechnical and Environmental Consultants	FIG. 2

Shannon & Wilson, Inc. (S&W), uses a soil classification system modified from the Unified Soil Classification System (USCS). Elements of the USCS and other definitions are provided on this and the following page. Soil descriptions are based on visual-manual procedures (ASTM D 2488-93) unless otherwise noted.

S&W CLASSIFICATION OF SOIL CONSTITUENTS

- MAJOR constituents compose more than 50 percent, by weight, of the soil. Major constituents are capitalized (SAND).
- Minor constituents compose 12 to 50 percent of the soil and precede the major constituents (silty SAND). Minor constituents preceded by "slightly" compose 5 to 12 percent of the soil (slightly silty SAND).
- Trace constituents compose 0 to 5 percent of the soil (slightly silty SAND, trace of gravel).

MOISTURE CONTENT DEFINITIONS

Dry	Absence of moisture, dusty, dry to the touch
Moist	Damp but no visible water
Wet	Visible free water, from below water table

ABBREVIATIONS

ATD	At Time of Drilling
Elev.	Elevation
ft	feet
HSA	Hollow Stem Auger
ID	Inside Diameter
in	inches
lbs	pounds
Mon.	Monument cover
N	Blows for last two 6-inch increments
NA	Not Applicable or Not Available
OD	Outside Diameter
OVA	Organic Vapor Analyzer
PID	Photoionization Detector
ppm	parts per million
PVC	Polyvinyl Chloride
SS	Split Spoon sampler
SPT	Standard Penetration Test
USC	Unified Soil Classification
WLI	Water Level Indicator

GRAIN SIZE DEFINITIONS

DESCRIPTION	SIEVE SIZE
FINES	< #200 (0.8 mm)
SAND*	<ul style="list-style-type: none"> ▪ Fine #200 - #40 (0.4 mm) ▪ Medium #40 - #10 (2 mm) ▪ Coarse #10 - #4 (5 mm)
GRAVEL*	<ul style="list-style-type: none"> ▪ Fine #4 - 3/4 inch ▪ Coarse 3/4 - 3 inches
COBBLES	3 - 12 inches
BOULDERS	> 12 inches

* Unless otherwise noted, sand and gravel, when present, range from fine to coarse in grain size.

RELATIVE DENSITY / CONSISTENCY

COARSE-GRAINED SOILS		FINE-GRAINED/COHESIVE SOILS	
N, SPT, BLOWS/FT.	RELATIVE DENSITY	N, SPT, BLOWS/FT.	RELATIVE CONSISTENCY
0 - 4	Very loose	<2	Very soft
4 - 10	Loose	2 - 4	Soft
10 - 30	Medium dense	4 - 8	Medium stiff
30 - 50	Dense	8 - 15	Stiff
Over 50	Very dense	15 - 30	Very stiff
		Over 30	Hard

WELL AND OTHER SYMBOLS

	Cement/Concrete		Asphalt or PVC Cap
	Bentonite Grout		Cobbles
	Bentonite Seal		Fill
	Slough		Ash
	Silica Sand		Bedrock
	2" I.D. PVC Screen (0.020-inch Slot)		Gravel

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Hinsdale County, Colorado

SOIL CLASSIFICATION AND LOG KEY

September 2012

23-1-01187-141

SHANNON & WILSON, INC.
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FIG. 3
Sheet 1 of 2

File: I:\WIP\23-1-01100s\23-1-01187 (DRMS IDIQ)\100 - Geotech\141 - Ute Ulay Mine Complex Drilling IIR\Reporting\Figures\Soil and Rock Log Keys.dwg Date: 09-14-2012 Author: daa

UNIFIED SOIL CLASSIFICATION SYSTEM (From USACE Tech Memo 3-357)					
MAJOR DIVISIONS			GROUP/GRAPHIC SYMBOL ②	TYPICAL DESCRIPTION	
Coarse-Grained Soils (more than 50% retained on No. 200 sieve) [use Dual Symbols for 5 - 12% Fines (i.e. GP-GM)]①	Gravels (more than 50% of coarse fraction retained on No. 4 sieve)	Clean Gravels ① (less than 5% fines)	GW		Well-Graded Gravels, Gravel-Sand Mixtures, Little or No Fines
			GP		Poorly Graded Gravels, Gravel-Sand Mixtures, Little or No Fines
		Gravels with Fines ① (more than 12% fines)	GM		Silty Gravels, Gravel-Sand-Silt Mixtures
			GC		Clayey Gravels, Gravel-Sand-Clay Mixtures
	Sands (50% or more of coarse fraction passes the No. 4 sieve)	Clean Sands ① (less than 5% fines)	SW		Well-Graded Sands, Gravelly Sands, Little or No Fines
			SP		Poorly Graded Sand, Gravelly Sands, Little or No Fines
		Sands with Fines ① (more than 12% fines)	SM		Silty Sands, Sand-Silt Mixtures
			SC		Clayey Sands, Sand-Silt Mixtures
Fine-Grained Soils (50% or more passes the No. 200 sieve)	Silts and Clays (liquid limit less than 50)	Inorganic	ML		Inorganic Silts of Low to Medium Plasticity, Rock Flour, or Clayey Silts With Slight Plasticity
			CL		Inorganic Clays of Low to Medium Plasticity, Gravelly Clays, Sandy Clays, Silty Clays, Lean Clays
		Organic	OL		Organic Silts and Organic Silty Clays of Low Plasticity
	Silts and Clays (liquid limit 50 or more)	Inorganic	CH		Inorganic Clays of Medium to High Plasticity, Sandy Fat Clay, Gravelly Fat Clay
			MH		Inorganic Silts, Micaceous or Diatomaceous Fine Sands or Silty Soils, Elastic Silt
		Organic	OH		Organic Clays of Medium to High Plasticity, Organic Silts
Highly Organic Soils	Primarily organic matter, dark in color, and organic odor	PT		Peat, Humus, Swamp Soils with High Organic Content (See D 4427-92)	

NOTES

- Dual symbols (symbols separated by a hyphen, i.e., SP-SM, slightly silty fine SAND) are used for soils with between 5% and 12% fines or when the liquid limit and plasticity index values plot in the CL-ML area of the plasticity chart.
- Borderline symbols (symbols separated by a slash, i.e., CL/ML, silty CLAY/clayey SILT; GW/SW, sandy GRAVEL/gravelly SAND) indicate that the soil may fall into one of two possible basic groups.

DRMS Ute-Ulay Mine Complex Hinsdale County, Colorado	
SOIL CLASSIFICATION AND LOG KEY	
September 2012	23-1-01187-141
SHANNON & WILSON, INC. Geotechnical and Environmental Consultants	FIG. 3 Sheet 2 of 2

STRENGTH

TERM	APPROX. UCS (psi x 1000)	INDEX
Very Low	<0.7	R1
Low	0.7 to 4	R2
Moderate	4 to 7	R3
Medium High	7 to 15	R4
High	15 to 36	R5
Very High	>36	R6

WEATHERING OR ALTERATION

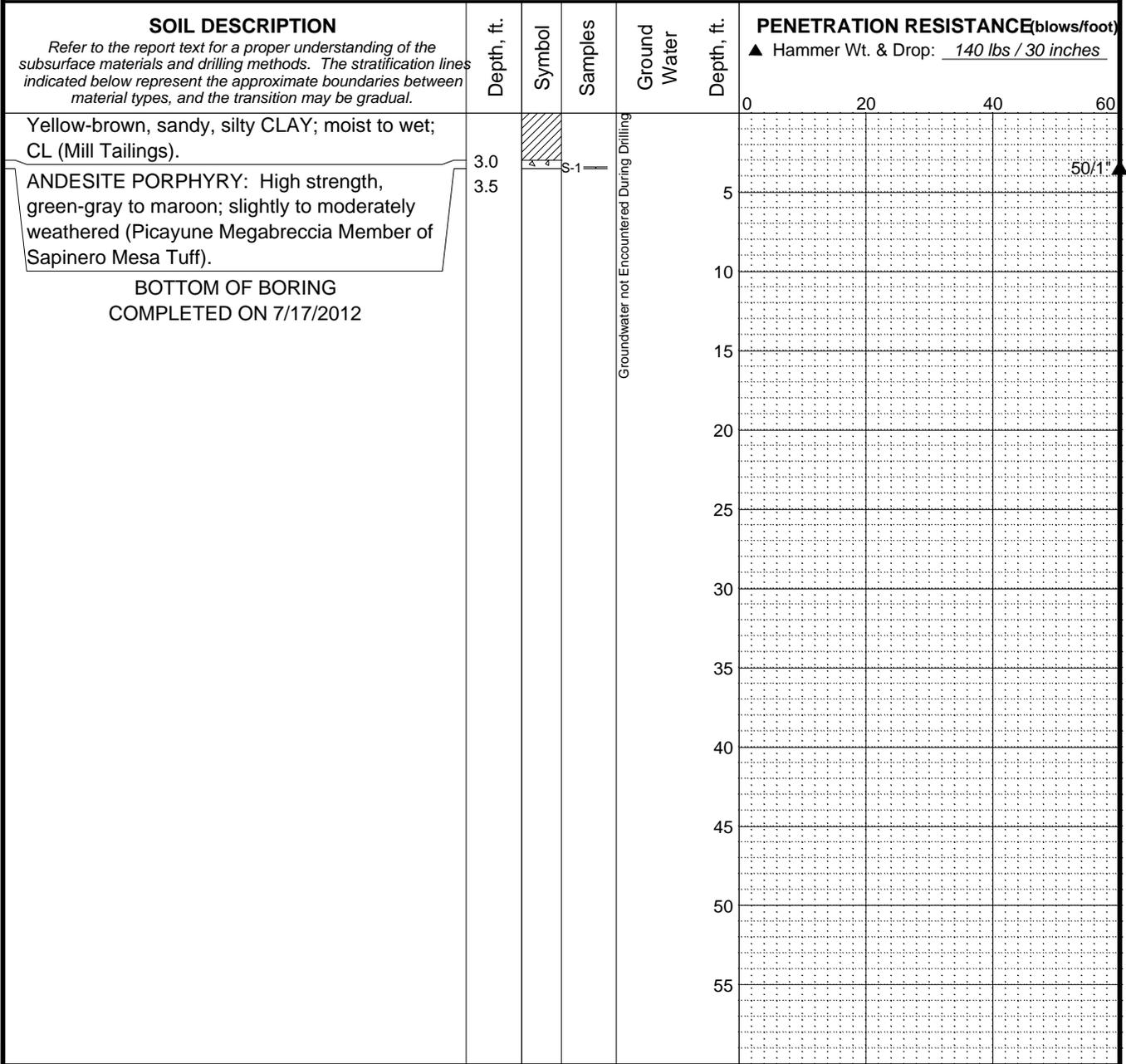
TERM	DESCRIPTION
Fresh	No evidence of alteration
Slightly	Slight discoloration on surface
Moderately	Discoloring evident; Alteration penetrating well below rock surface
Highly	Entire rock mass discolored
Completely	Rock reduced to a soil with relict rock texture

DISCONTINUITY DATA

SPACING		INFILLING		SYMBOL	ANGLE
TERM	SPACING	TERM	DESCRIPTION		
Very Wide	>10 ft.	BO	Discolored		Degrees relative to horizontal plane, (-) below plane
Wide	3 to 10 ft.	M	Mineralization		
Moderately Close	1 to 3 ft.	CL	Clay		
Close	2 in. to 1 ft.	SS	Slickensides		
Very Close	<2	F	Faint Slickensides		

DRMS Ute-Ulay Mine Complex Drilling Hinsdale County, Colorado	
ROCK CLASSIFICATION AND LOG KEY	
September 2012	23-1-01187-141
SHANNON & WILSON, INC. Geotechnical and Environmental Consultants	FIG. 4

Total Depth: 3.5 ft. Northing: 38.0 ft. Drilling Method: Hollow Stem Auger Hole Diam.: 8 in.
 Top Elevation: _____ Easting: -107.4 ft. Drilling Company: Precision Sampling Rod Diam.: AWJ
 Vert. Datum: _____ Station: - Drill Rig Equipment: CME 55 Track Hammer Type: _____
 Horiz. Datum: _____ Offset: - Other Comments: _____



LEGEND

- * Sample Not Recovered
- Standard Penetration Test

NOTES

1. Refer to Figures 3 and 4 for explanation of symbols, codes, abbreviations and definitions.
2. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
3. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface materials.
4. Groundwater level, if indicated above, is for the date specified and may vary.
5. USCS designation is based on visual-manual classification and selected lab testing.

DRMS
 Ute-Ulay Mine Complex
 Hinsdale County, Colorado

LOG OF BORING UU-SA-07

September 2012

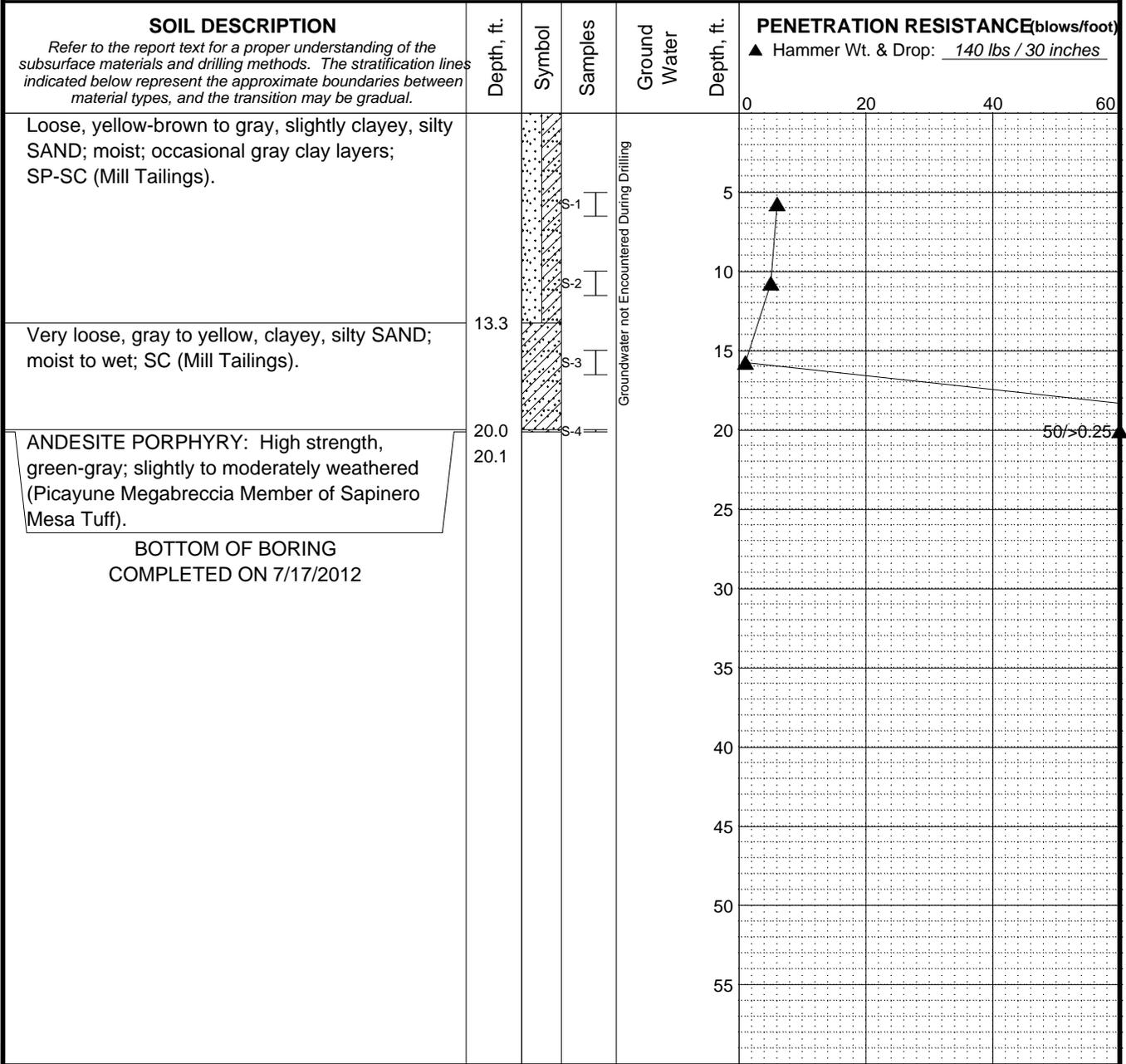
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FIG. 5

ROCK&SOIL LOG-DAA-N&EASTING UTE ULAY II LOGS.GPJ SHANNON&WILSON\RDDT\0925\MZG Typ: RDD

Total Depth: <u>20.2 ft.</u>	Northing: <u>38.0 ft.</u>	Drilling Method: <u>Hollow Stem Auger</u>	Hole Diam.: <u>8 in.</u>
Top Elevation: _____	Easting: <u>-107.4 ft.</u>	Drilling Company: <u>Precision Sampling</u>	Rod Diam.: <u>AWJ</u>
Vert. Datum: _____	Station: <u>-</u>	Drill Rig Equipment: <u>CME 55 Track</u>	Hammer Type: _____
Horiz. Datum: _____	Offset: <u>-</u>	Other Comments: _____	



LEGEND

- * Sample Not Recovered
- ┆ Standard Penetration Test

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Ute-Ulay Mine Complex
Hinsdale County, Colorado

LOG OF BORING UU-SA-08

September 2012

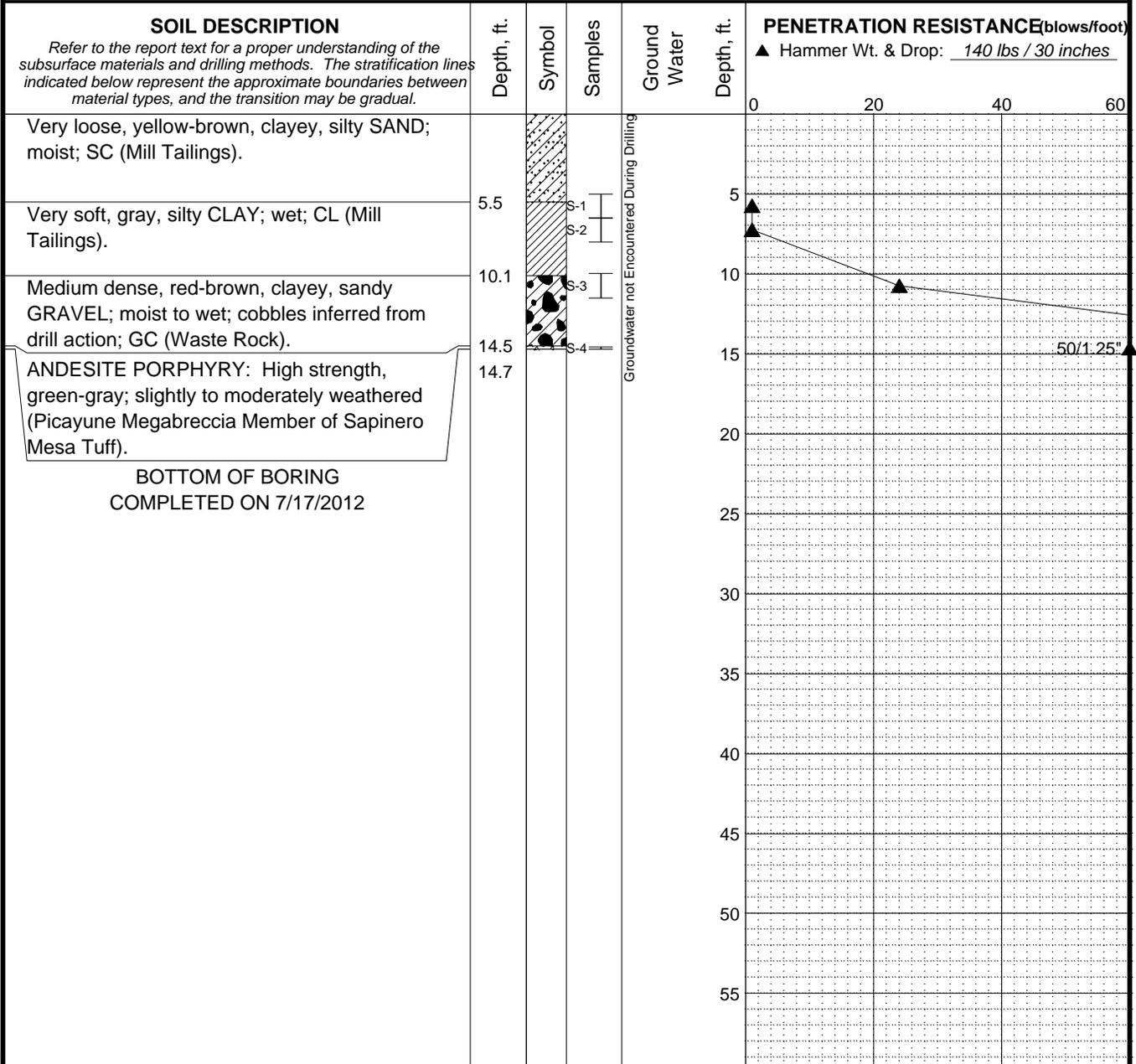
23-1-01187-141

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FIG. 6

ROCK&SOIL LOG-DAA-N&EASTING UTE ULAY II LOGS.GPJ SHANNON&WILSON.DWG 09/25/12 RDD Typ: RDD

Total Depth: <u>14.7 ft.</u>	Northing: <u>38.0 ft.</u>	Drilling Method: <u>Hollow Stem Auger</u>	Hole Diam.: <u>8 in.</u>
Top Elevation: _____	Easting: <u>-107.4 ft.</u>	Drilling Company: <u>Precision Sampling</u>	Rod Diam.: <u>AWJ</u>
Vert. Datum: _____	Station: <u>-</u>	Drill Rig Equipment: <u>CME 55 Track</u>	Hammer Type: _____
Horiz. Datum: _____	Offset: <u>-</u>	Other Comments: _____	



LEGEND

- * Sample Not Recovered
- ┃ Standard Penetration Test

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DRMS
Ute-Ulay Mine Complex
Hinsdale County, Colorado

LOG OF BORING UU-SA-09

September 2012

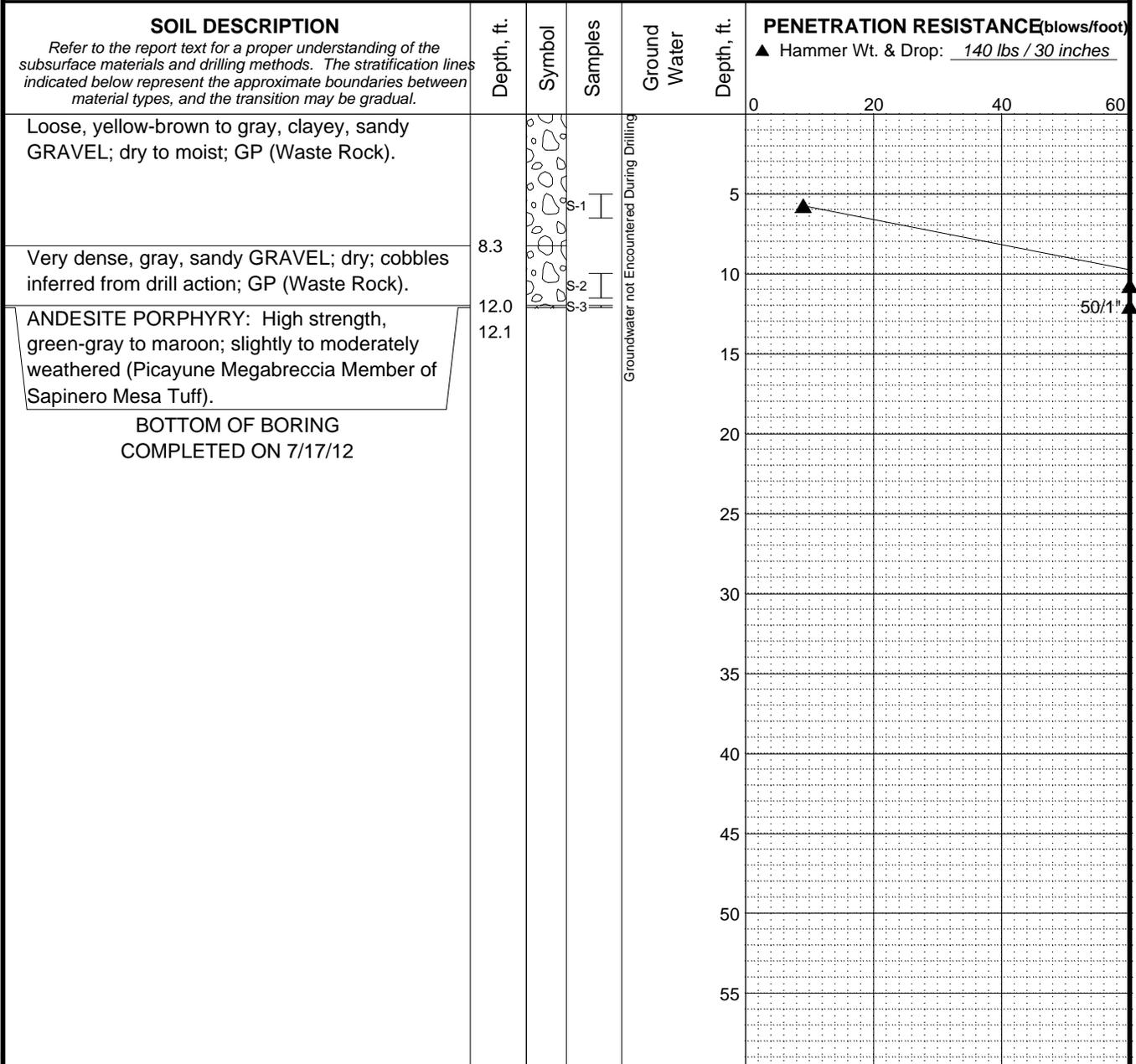
23-1-01187-141

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FIG. 7

ROCK&SOIL LOG-DAA-N&EASTING UTE ULAY II LOGS.GPJ SHANNON&WILSON.DWG 09/25/12 RDD Typ: RDD

Total Depth: <u>12.1 ft.</u>	Northing: <u>38.0 ft.</u>	Drilling Method: <u>Hollow Stem Auger</u>	Hole Diam.: <u>8 in.</u>
Top Elevation: _____	Easting: <u>-107.4 ft.</u>	Drilling Company: <u>Precision Sampling</u>	Rod Diam.: <u>AWJ</u>
Vert. Datum: _____	Station: <u>-</u>	Drill Rig Equipment: <u>CME 55 Track</u>	Hammer Type: _____
Horiz. Datum: _____	Offset: <u>-</u>	Other Comments: _____	



LEGEND

- * Sample Not Recovered
- ┃ Standard Penetration Test

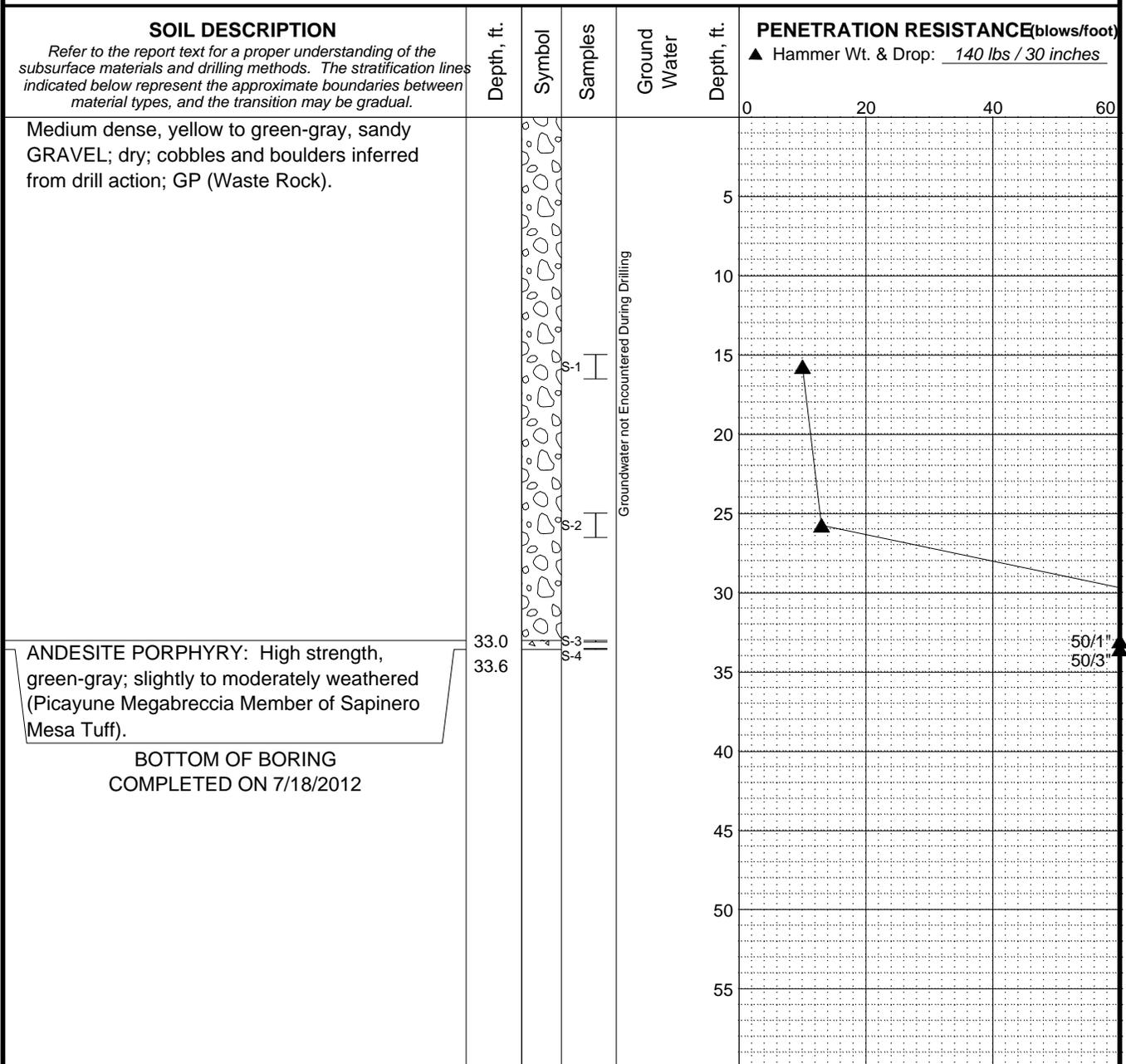
NOTES

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DRMS Ute-Ulay Mine Complex Hinsdale County, Colorado	
LOG OF BORING UU-SA-10	
September 2012	23-1-01187-141
SHANNON & WILSON, INC. Geotechnical and Environmental Consultants	FIG. 8

ROCK&SOIL LOG-DAA-N&EASTING UTE ULAY II LOGS.GPJ SHANNON&WILSON.DWG 09/25/12 Typ: RDD

Total Depth: <u>33.6 ft.</u>	Northing: <u>38.0 ft.</u>	Drilling Method: <u>Hollow Stem Auger</u>	Hole Diam.: <u>8 in.</u>
Top Elevation: _____	Easting: <u>-107.4 ft.</u>	Drilling Company: <u>Precision Sampling</u>	Rod Diam.: <u>AWJ</u>
Vert. Datum: _____	Station: <u>-</u>	Drill Rig Equipment: <u>CME 55 Track</u>	Hammer Type: _____
Horiz. Datum: _____	Offset: <u>-</u>	Other Comments: _____	



LEGEND

- * Sample Not Recovered
- ┃ Standard Penetration Test

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DRMS
Ute-Ulay Mine Complex
Hinsdale County, Colorado

LOG OF BORING UU-SA-11

September 2012

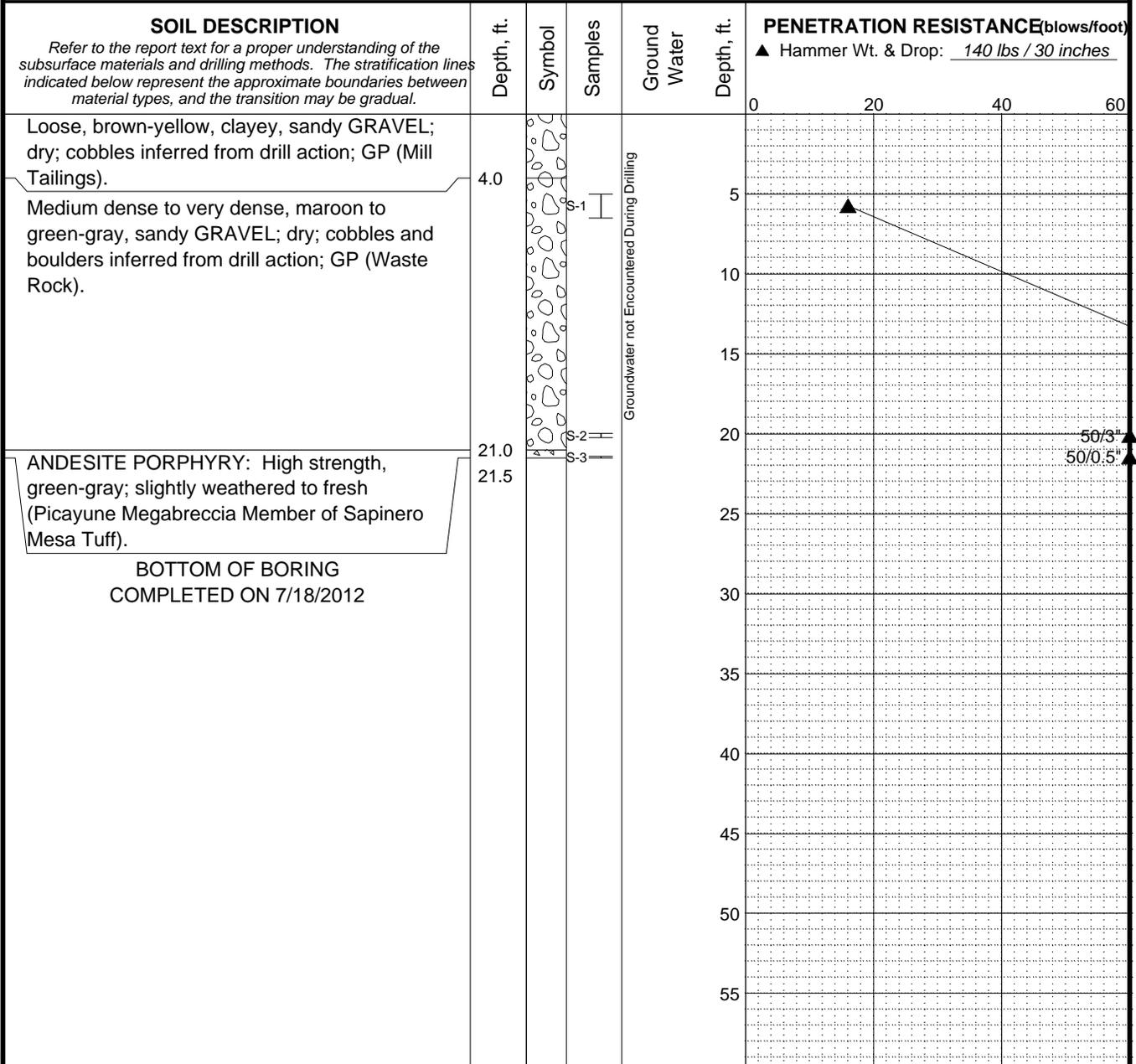
23-1-01187-141

SHANNON & WILSON, INC.
Geotechnical and Environmental Consultants

FIG. 9

ROCK&SOIL LOG-DAA-N&EASTING UTE ULAY II LOGS.GPJ SHANNON&WILSON\RDD\T\0925\MZG Typ: RDD

Total Depth: <u>21.5 ft.</u>	Northing: <u>38.0 ft.</u>	Drilling Method: <u>Hollow Stem Auger</u>	Hole Diam.: <u>8 in.</u>
Top Elevation: _____	Easting: <u>-107.4 ft.</u>	Drilling Company: <u>Precision Sampling</u>	Rod Diam.: <u>AWJ</u>
Vert. Datum: _____	Station: <u>-</u>	Drill Rig Equipment: <u>CME 55 Track</u>	Hammer Type: _____
Horiz. Datum: _____	Offset: <u>-</u>	Other Comments: _____	



LEGEND

- * Sample Not Recovered
- Standard Penetration Test

NOTES

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DRMS
Ute-Ulay Mine Complex
Hinsdale County, Colorado

LOG OF BORING UU-SA-12

September 2012

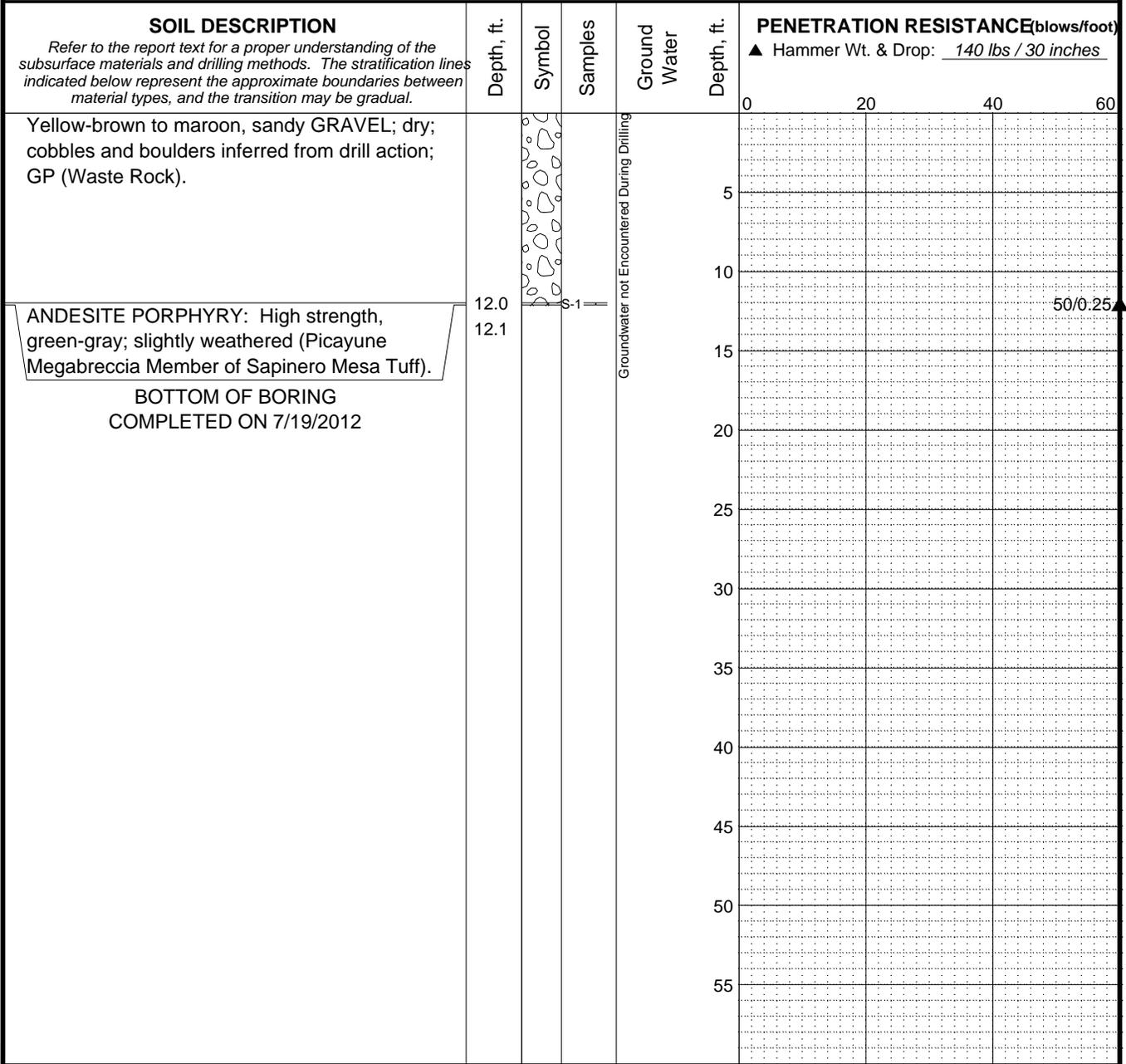
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FIG. 10

ROCK&SOIL LOG-DAA-N&EASTING UTE ULAY II LOGS.GPJ SHANNON&WILSON.DWG 09/25/12 Typ: RDD

Total Depth: 12.1 ft. Northing: 38.0 ft. Drilling Method: Hollow Stem Auger Hole Diam.: 8 in.
 Top Elevation: _____ Easting: -107.4 ft. Drilling Company: Precision Sampling Rod Diam.: AWJ
 Vert. Datum: _____ Station: - Drill Rig Equipment: CME 55 Track Hammer Type: _____
 Horiz. Datum: _____ Offset: - Other Comments: _____



LEGEND

- * Sample Not Recovered
- Standard Penetration Test

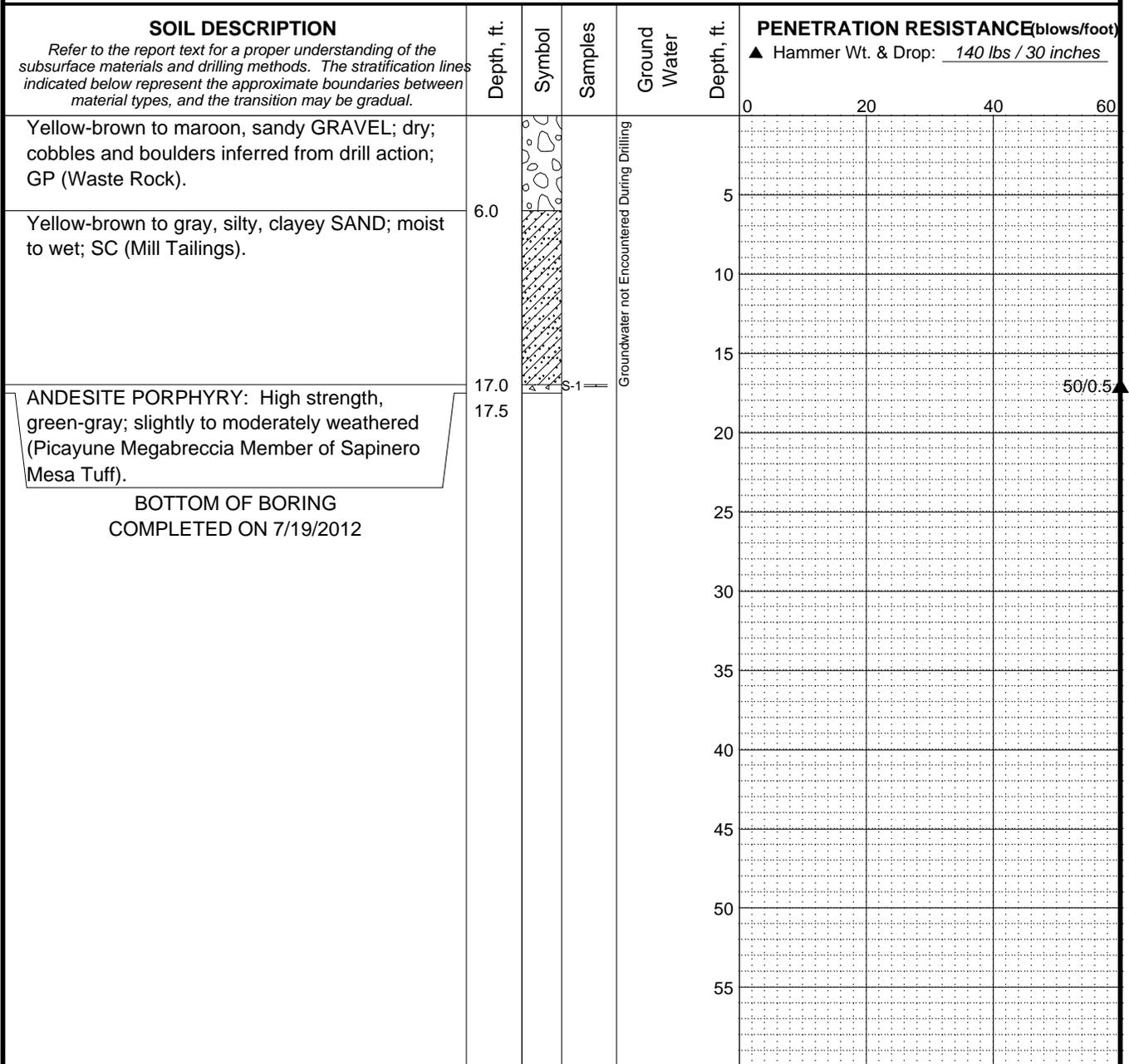
NOTES

1. Refer to Figures 3 and 4 for explanation of symbols, codes, abbreviations and definitions.
2. The stratification lines represent the approximate boundaries between soil types, and the transition may be gradual.
3. The discussion in the text of this report is necessary for a proper understanding of the nature of the subsurface materials.
4. Groundwater level, if indicated above, is for the date specified and may vary.
5. USCS designation is based on visual-manual classification and selected lab testing.

DRMS Ute-Ulay Mine Complex Hinsdale County, Colorado	
LOG OF BORING UU-SA-13	
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ROCK&SOIL LOG-DAA-N&EASTING UTE ULAY II LOGS.GPJ SHANNON&WILSON.DWG 09/25/12 Typ: RDD

Total Depth: 17.5 ft. Northing: 38.0 ft. Drilling Method: Hollow Stem Auger Hole Diam.: 8 in.
 Top Elevation: _____ Easting: -107.4 ft. Drilling Company: Precision Sampling Rod Diam.: AWJ
 Vert. Datum: _____ Station: - Drill Rig Equipment: CME 55 Track Hammer Type: _____
 Horiz. Datum: _____ Offset: - Other Comments: _____



LEGEND

- * Sample Not Recovered
- Standard Penetration Test

NOTES

1. Refer to Figures 3 and 4 for explanation of symbols, codes, abbreviations and definitions.
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LOG OF BORING UU-SA-14

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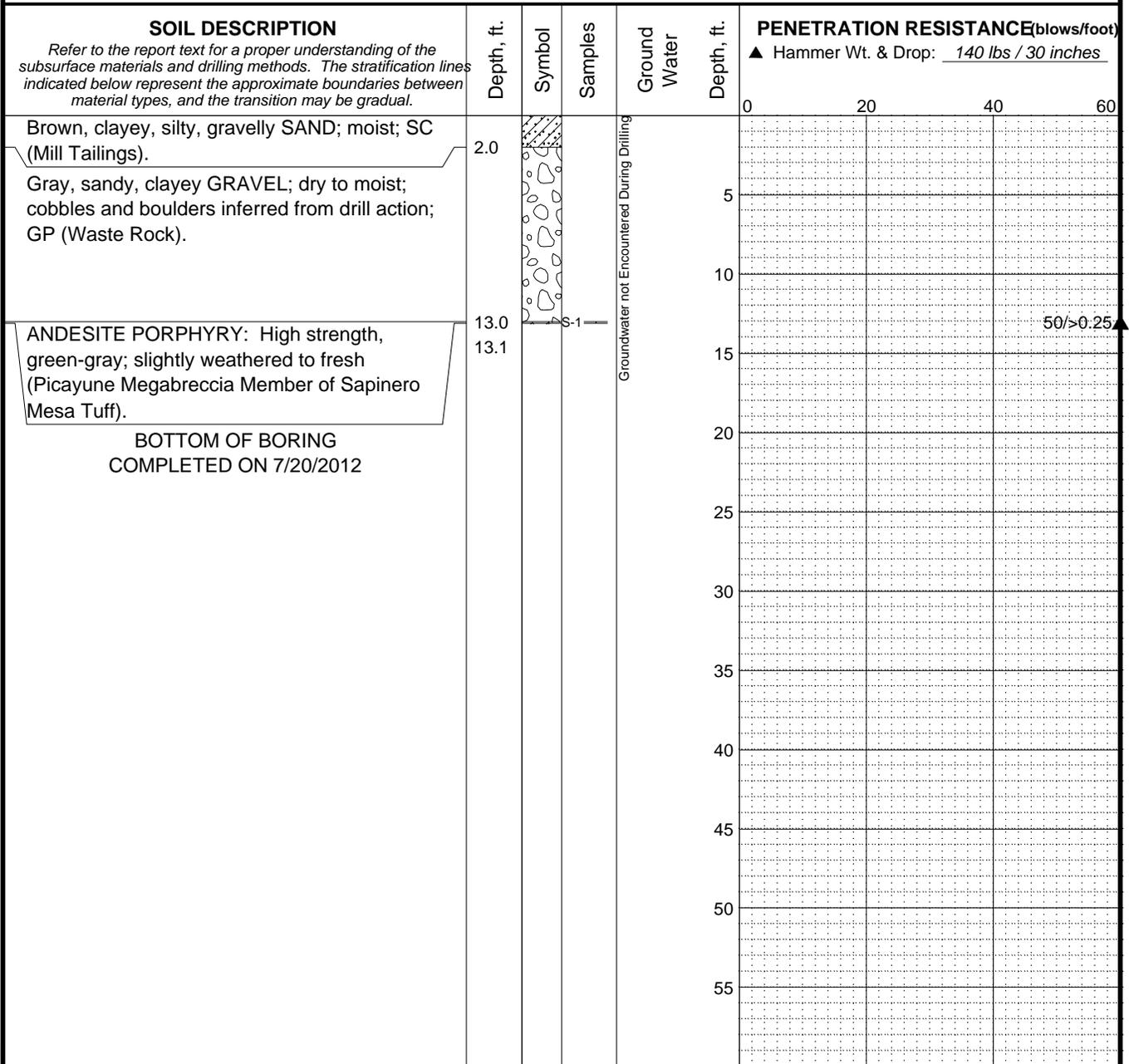
23-1-01187-141

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FIG. 12

ROCK&SOIL LOG-DAA-N&EASTING UTE ULAY II LOGS.GPJ SHANNON&WILSON.DWG 09/25/12 Typ: RDD

Total Depth: 13.1 ft. Northing: 38.0 ft. Drilling Method: Hollow Stem Auger Hole Diam.: 8 in.
 Top Elevation: _____ Easting: -107.4 ft. Drilling Company: Precision Sampling Rod Diam.: AWJ
 Vert. Datum: _____ Station: - Drill Rig Equipment: CME 55 Track Hammer Type: _____
 Horiz. Datum: _____ Offset: - Other Comments: _____



LEGEND

- * Sample Not Recovered
- ┃ Standard Penetration Test

NOTES

1. Refer to Figures 3 and 4 for explanation of symbols, codes, abbreviations and definitions.
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LOG OF BORING UU-SA-15

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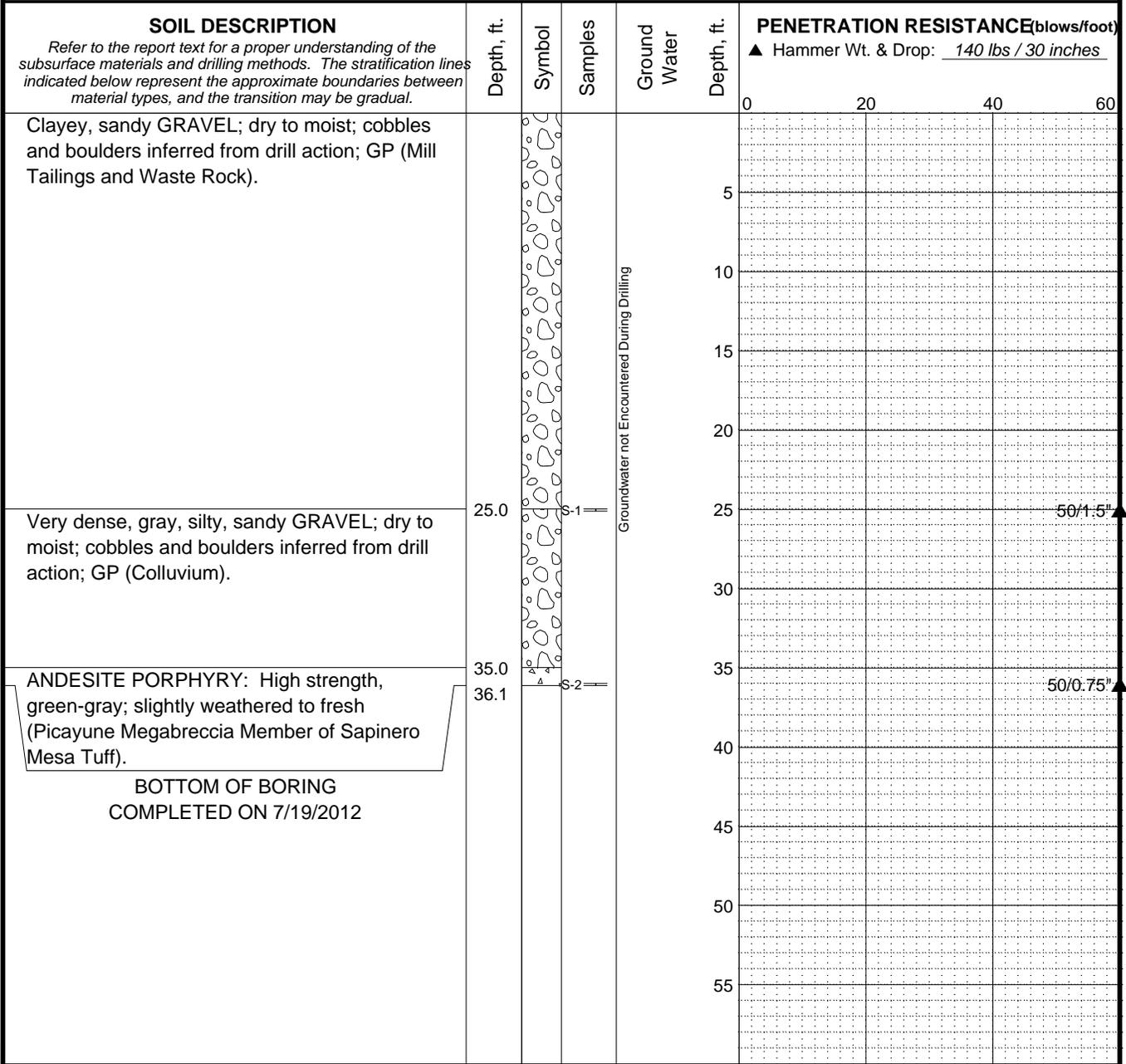
23-1-01187-141

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FIG. 13

ROCK&SOIL LOG-DAA-N&EASTING UTE ULAY II LOGS.GPJ SHANNON&WILSON.DWG 09/25/12 Typ: RDD

Total Depth: <u>36.1 ft.</u>	Northing: <u>38.0 ft.</u>	Drilling Method: <u>Hollow Stem Auger</u>	Hole Diam.: <u>8 in.</u>
Top Elevation: _____	Easting: <u>-107.4 ft.</u>	Drilling Company: <u>Precision Sampling</u>	Rod Diam.: <u>AWJ</u>
Vert. Datum: _____	Station: <u>-</u>	Drill Rig Equipment: <u>CME 55 Track</u>	Hammer Type: _____
Horiz. Datum: _____	Offset: <u>-</u>	Other Comments: _____	



LEGEND

- * Sample Not Recovered
- ┃ Standard Penetration Test

NOTES

- Refer to Figures 3 and 4 for explanation of symbols, codes, abbreviations and definitions.
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LOG OF BORING UU-SA-16

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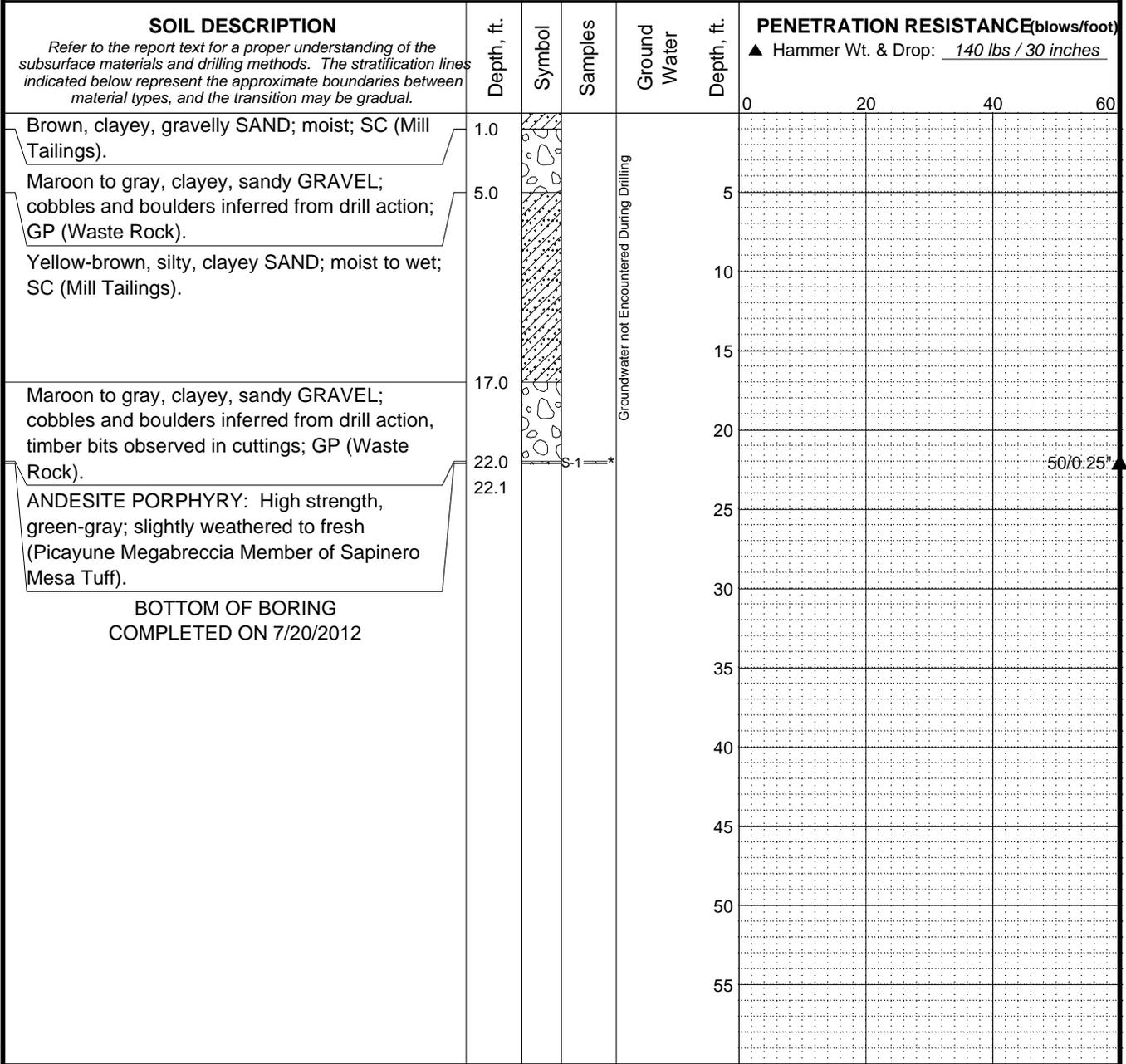
23-1-01187-141

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FIG. 14

ROCK&SOIL LOG-DAA-N&EASTING UTE ULAY II LOGS.GPJ SHANNON&WILSON\RDD\T\0925\MZG Typ: RDD

Total Depth: <u>22.1 ft.</u>	Northing: <u>38.0 ft.</u>	Drilling Method: <u>Hollow Stem Auger</u>	Hole Diam.: <u>8 in.</u>
Top Elevation: _____	Easting: <u>-107.4 ft.</u>	Drilling Company: <u>Precision Sampling</u>	Rod Diam.: <u>AWJ</u>
Vert. Datum: _____	Station: <u>-</u>	Drill Rig Equipment: <u>CME 55 Track</u>	Hammer Type: _____
Horiz. Datum: _____	Offset: <u>-</u>	Other Comments: _____	



LEGEND

- * Sample Not Recovered
- Standard Penetration Test

NOTES

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LOG OF BORING UU-SA-17

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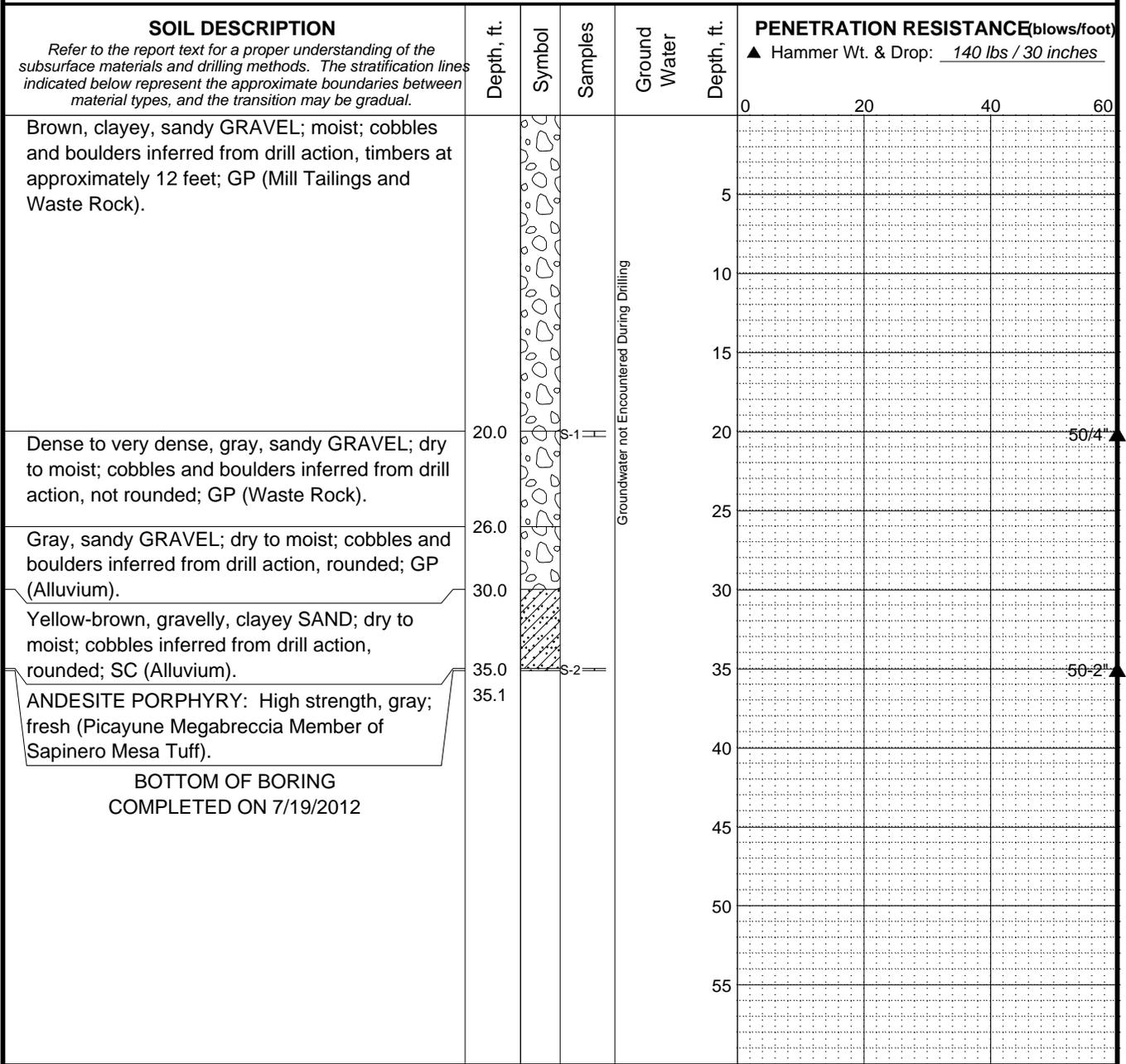
23-1-01187-141

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FIG. 15

ROCK&SOIL LOG-DAA-N&EASTING UTE ULAY II LOGS.GPJ SHANNON&WILSON\RDDT\0925\MZG Typ: RDD

Total Depth: <u>35.1 ft.</u>	Northing: <u>38.0 ft.</u>	Drilling Method: <u>Hollow Stem Auger</u>	Hole Diam.: <u>8 in.</u>
Top Elevation: _____	Easting: <u>-107.4 ft.</u>	Drilling Company: <u>Precision Sampling</u>	Rod Diam.: <u>AWJ</u>
Vert. Datum: _____	Station: <u>-</u>	Drill Rig Equipment: <u>CME 55 Track</u>	Hammer Type: _____
Horiz. Datum: _____	Offset: <u>-</u>	Other Comments: _____	



LEGEND

- * Sample Not Recovered
- ┃ Standard Penetration Test

NOTES

- Refer to Figures 3 and 4 for explanation of symbols, codes, abbreviations and definitions.
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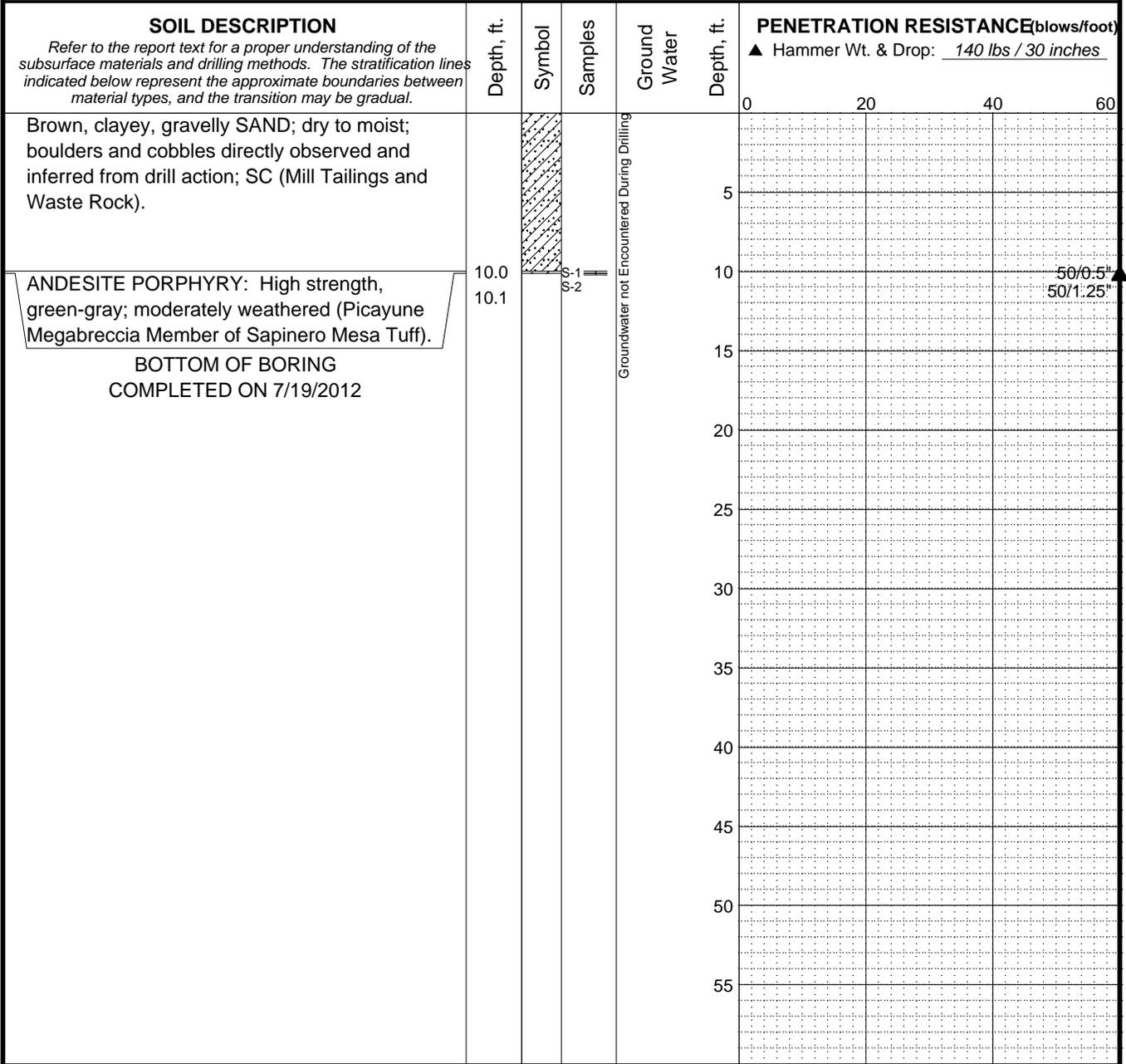
23-1-01187-141

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FIG. 16

ROCK&SOIL LOG-DAA-N&EASTING UTE ULAY II LOGS.GPJ SHANNON&WILSON.DWG 09/25/12 RDD Typ: RDD

Total Depth: 10.1 ft. Northing: 38.0 ft. Drilling Method: Hollow Stem Auger Hole Diam.: 8 in.
 Top Elevation: _____ Easting: -107.4 ft. Drilling Company: Precision Sampling Rod Diam.: AWJ
 Vert. Datum: _____ Station: - Drill Rig Equipment: CME 55 Track Hammer Type: _____
 Horiz. Datum: _____ Offset: - Other Comments: _____



LEGEND

- * Sample Not Recovered
- Standard Penetration Test

NOTES

1. Refer to Figures 3 and 4 for explanation of symbols, codes, abbreviations and definitions.
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LOG OF BORING UU-SA-19

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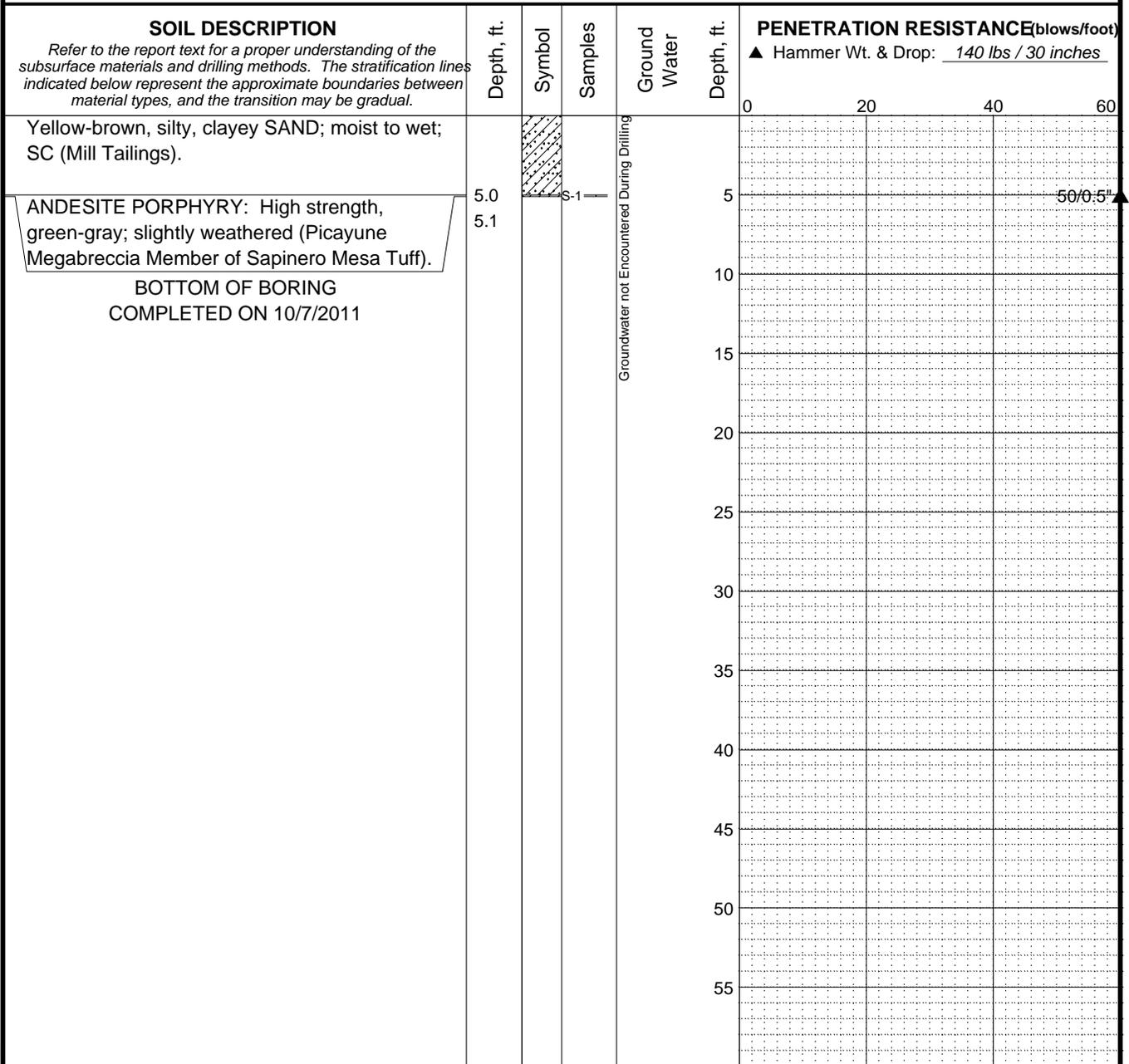
23-1-01187-141

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FIG. 17

ROCK&SOIL LOG-DAA-N&EASTING UTE ULAY II LOGS.GPJ SHANNON&WILSON\RDDT\0925\MZG Typ: RDD

Total Depth: 5.1 ft. Northing: 38.0 ft. Drilling Method: Hollow Stem Auger Hole Diam.: 8 in.
 Top Elevation: _____ Easting: -107.4 ft. Drilling Company: Precision Sampling Rod Diam.: AWJ
 Vert. Datum: _____ Station: - Drill Rig Equipment: CME 55 Track Hammer Type: _____
 Horiz. Datum: _____ Offset: - Other Comments: _____



LEGEND

- * Sample Not Recovered
-  Standard Penetration Test

NOTES

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FIG. 18

ROCK&SOIL LOG-DAA-N&EASTING UTE ULAY II LOGS.GPJ SHANNON&WILSON.DWG 09/25/2012 Typ: RDD

