APPENDIX G

TARGOST SURVEY RESULTS

Table of Contents

Figures G1 through G4: DNAPL Screening With TarGOST

TarGOST Logs

Cone Penetrometer Logs

Table: TarGOST DNAPL Presence Screening Results

Boring ID	Boring Depth (ft bgs)	Depths of DNAPL Indication (Alluvial)
TG-1	150'	NONE
TG-2	150'	28.7'-30.6'
TG-3	150'	58.8'-60.6'
TG-4	150'	NONE
TG-5	100'	51.6'-53.3',57.8'-58.8',59.3'-63.2' 64.8'-65.1'
TG-5A	150'	51.3' ?
TG-6	125'	NONE
TG-7	150'	NONE
TG-8	150'	25'-39',41.4'-43.6',44.1'-45.3' 48.7'-48.9',51.5'-52.3',54.9'-61.1'

NOTES:
Borings within outlined areas identified the presence of DNAPL at some depth or depth interval within the Alluvial water-bearing zone at depths shallower than 100' bgs.
Tables 2 and 3 of *Summary Report - Former MGP Operations and DNAPL Occurrence* (HAI, November 2005) provide a description of the DNAPL presence at each boring.
TG-Series borings are approximate - not yet surveyed.
TarGOST ™ = Tar-Specific Green Optical Screening Tool by Dakota Technologies.

N

Interpreted Extent of DNAPL deemed potentially mobile (visually saturated and/or with well entry).

LEGEND

- Monitoring Well
- Soil Boring
- Property Line (Approximate)
- TarGost/CPT Boring Locations (TG-Series)

HAHN AND ASSOCIATES, INC.

ENVIRONMENTAL CONSULTANTS
434 NW 6th AVENUE, SUITE 203
PORTLAND, OREGON 97209
503-796-0717

Scale: 1 inch = 200 feet

200 0 200 400 feet

Project No. 2708-5237 REV. SEPT. 2007

Figure G1
DNAPL Screening with TarGOST Boring Locations Showing Estimated DNAPL within Alluvial - Above 100' BGS

NW Natural Gasco Facility
7900 NW St. Helens Road
Portland, Oregon

X:\Hahn\Gasco Site 2007\TarGost Results\DNAPL Alluvial Shallow-TarGOST.dwg 10/5/07

Table: TarGOST DNAPL Presence Screening Results

Boring ID	Boring Depth (ft bgs)	Depths of DNAPL Indication (Alluvial)
TG-1	150'	NONE
TG-2	150'	28.7'-30.6'
TG-3	150'	58.8'-60.6'
TG-4	150'	NONE
TG-5	100'	51.6'-53.3',57.8'-58.8',59.3'-63.2' 64.8'-65.1'
TG-5A	150'	51.3' ?
TG-6	125'	NONE
TG-7	150'	NONE
TG-8	150'	25'-39',41.4'-43.6',44.1'-45.3' 48.7'-48.9',51.5'-52.3',54.9'-61.1'

NOTES:
Borings within outlined areas identified the presence of DNAPL at some depth or depth interval within the Alluvial water-bearing zone at depths shallower than 100' bgs.
Tables 2 and 3 of *Summary Report - Former MGP Operations and DNAPL Occurrence* (HAI, November 2005) provide a description of the DNAPL presence at each boring.
TG-Series borings are approximate - not yet surveyed.
TarGOST ™ = Tar-Specific Green Optical Screening Tool by Dakota Technologies.

N

Interpreted Extent of DNAPL deemed potentially mobile (visually saturated and/or with well entry).

LEGEND

- Monitoring Well
- Soil Boring
- Property Line (Approximate)
- TarGost/CPT Boring Locations (TG-Series)

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ENVIRONMENTAL CONSULTANTS
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PORTLAND, OREGON 97209
503-796-0717

Scale: 1 inch = 200 feet

200 0 200 400 feet

Project No. 2708-5237 REV. SEPT. 2007

Figure G2
DNAPL Screening with TarGOST Boring Locations Showing Estimated DNAPL within Alluvial - Below 100' BGS

NW Natural Gasco Facility
7900 NW St. Helens Road
Portland, Oregon

x:\Hahn\Gasco Site 2007\TarGost Results\DNAPL Alluvial Deep-TarGOST.dwg 10/5/07

Table: TarGOST DNAPL Presence Screening Results

Boring ID	Boring Depth (ft bgs)	Depths of DNAPL Indication (Alluvial)
TG-1S	150'	116.2-118.6'
TG-2S	150'	NONE
TG-3S	150'	34'-78' in multiple intervals
TG-4S	150'	36.7'-36.9',62.8'-63.5',63.8'-65.6' 67.3'-68.6',79.0'-80.8',91.8'-93.2' 93.9'-94.5',98.6'-100'
TG-5S	150'	30'-38.6',40.2'-41.5',42.9'-44.2'
TG-6S	150'	NONE

NOTES:
Borings within outlined areas identified the presence of DNAPL at some depth or depth interval within the Alluvial water-bearing zone at depths shallower than 100' bgs.
Tables 2 and 3 of *Summary Report - Former MGP Operations and DNAPL Occurrence* (HAI, November 2005) provide a description of the DNAPL presence at each boring.
TG-Series borings are approximate - not yet surveyed.
TarGOST ™ = Tar-Specific Green Optical Screening Tool by Dakota Technologies.

Interpreted Extent of DNAPL deemed potentially mobile (visually saturated and/or with well entry).

LEGEND
- Monitoring Well
- Soil Boring
- Property Line (Approximate)
- TarGost/CPT Boring Locations (TG-Series)

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PORTLAND, OREGON 97209
503-796-0717

Scale: 1 inch = 250 feet
250 0 250 500
feet

Project No. 2708-5237 REV. SEPT. 2007

Figure G3
DNAPL Screening with TarGOST Boring Locations Showing Estimated DNAPL within Alluvial - Above 100' BGS

Siltronic Corporation Property
7200 NW Front Avenue
Portland, Oregon

X:\Hahn\Gasco Site 2007\TarGost Results\DNAPL Alluvial Shallow-TarGOST.dwg 10/5/07

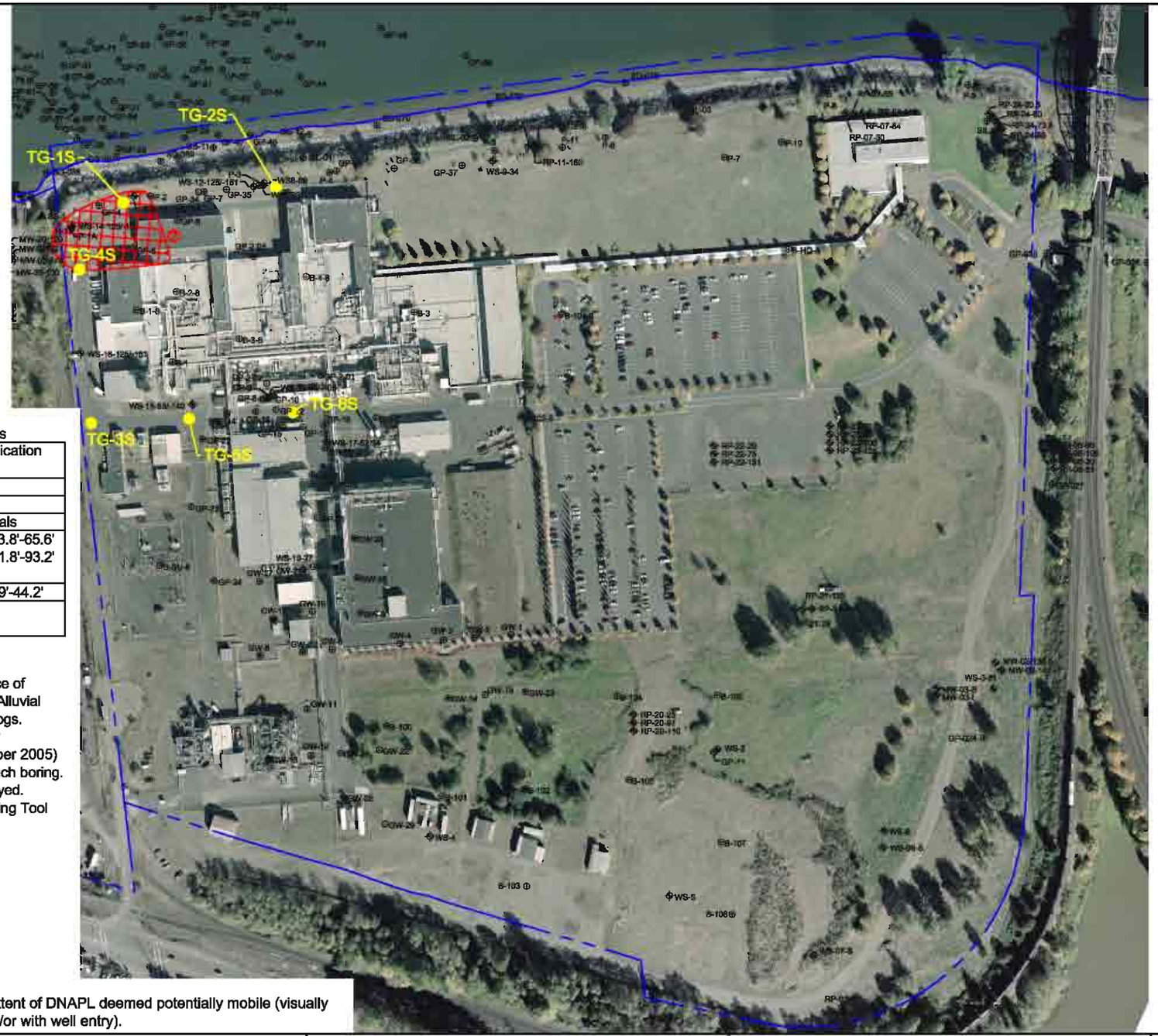

Table: TarGOST DNAPL Presence Screening Results

Boring ID	Boring Depth (ft bgs)	Depths of DNAPL Indication (Alluvial)
TG-1S	150'	116.2-118.6'
TG-2S	150'	NONE
TG-3S	150'	34'-78' in multiple intervals
TG-4S	150'	36.7'-36.9',62.8'-63.5',63.8'-65.6' 67.3'-68.6',79.0'-80.8',91.8'-93.2' 93.9'-94.5',98.6'-100'
TG-5S	150'	30'-38.6',40.2'-41.5',42.9'-44.2'
TG-6S	150'	NONE

NOTES:
Borings within outlined areas identified the presence of DNAPL at some depth or depth interval within the Alluvial water-bearing zone at depths shallower than 100' bgs.
Tables 2 and 3 of *Summary Report - Former MGP Operations and DNAPL Occurrence* (HAI, November 2005) provide a description of the DNAPL presence at each boring.
TG-Series borings are approximate - not yet surveyed.
TarGOST ™ = Tar-Specific Green Optical Screening Tool by Dakota Technologies.

Interpreted Extent of DNAPL deemed potentially mobile (visually saturated and/or with well entry).

LEGEND
- Monitoring Well
- Soil Boring
- Property Line (Approximate)
- TarGost/CPT Boring Locations (TG-Series)

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ENVIRONMENTAL CONSULTANTS
434 NW 6th AVENUE, SUITE 203
PORTLAND, OREGON 97209
503-796-0717

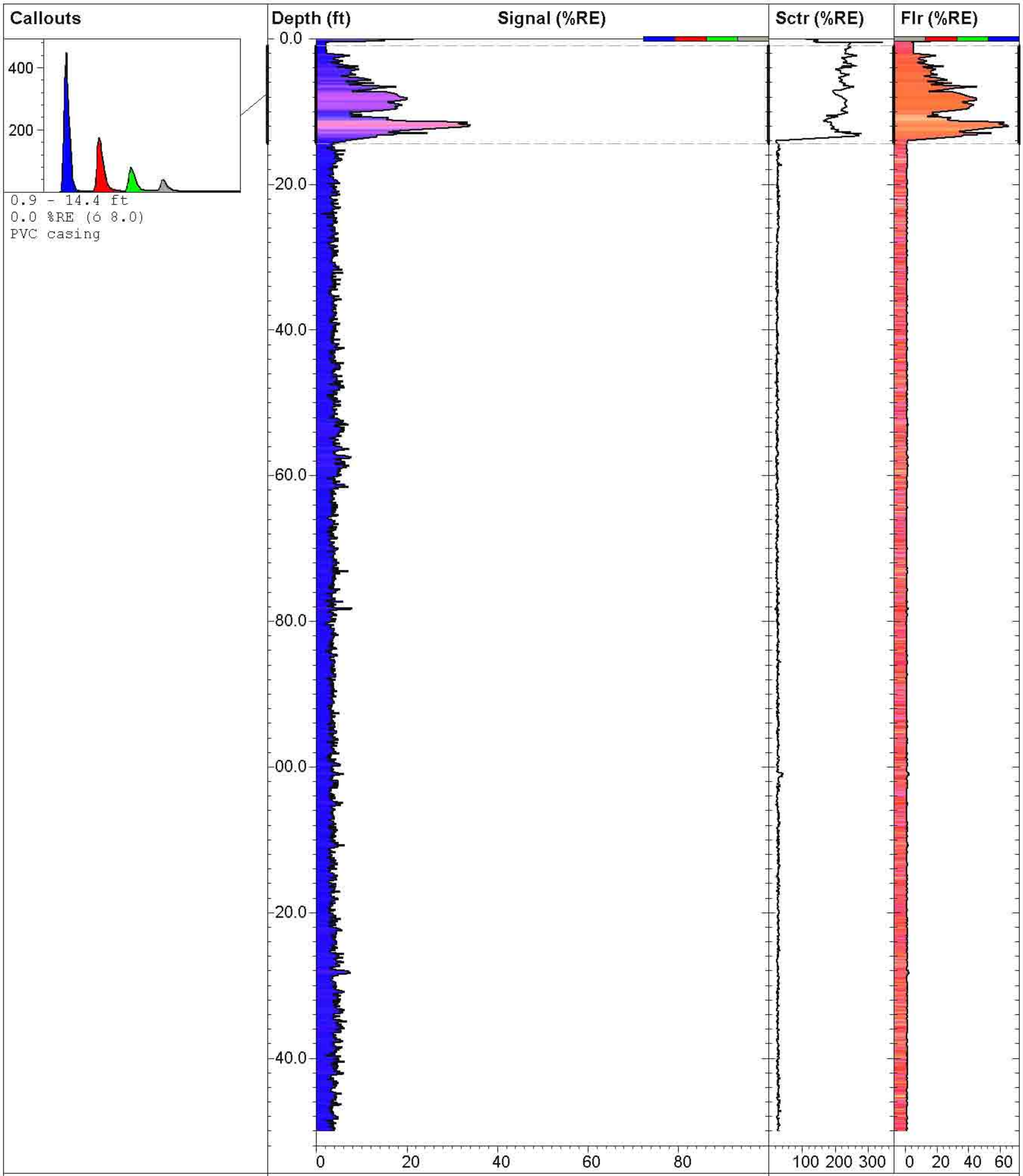
Scale: 1 inch = 250 feet
250 0 250 500
feet

Project No. 2708-5237 REV. SEPT. 2007

Figure G4
DNAPL Screening with TarGOST Boring Locations Showing Estimated DNAPL within Alluvial - Below 100' BGS

Siltronic Corporation Property
7200 NW Front Avenue
Portland, Oregon

X:\Hahn\Gasco Site 2007\TarGost Results\DNAPL Alluvial Deep-TarGOST.dwg 10/5/07



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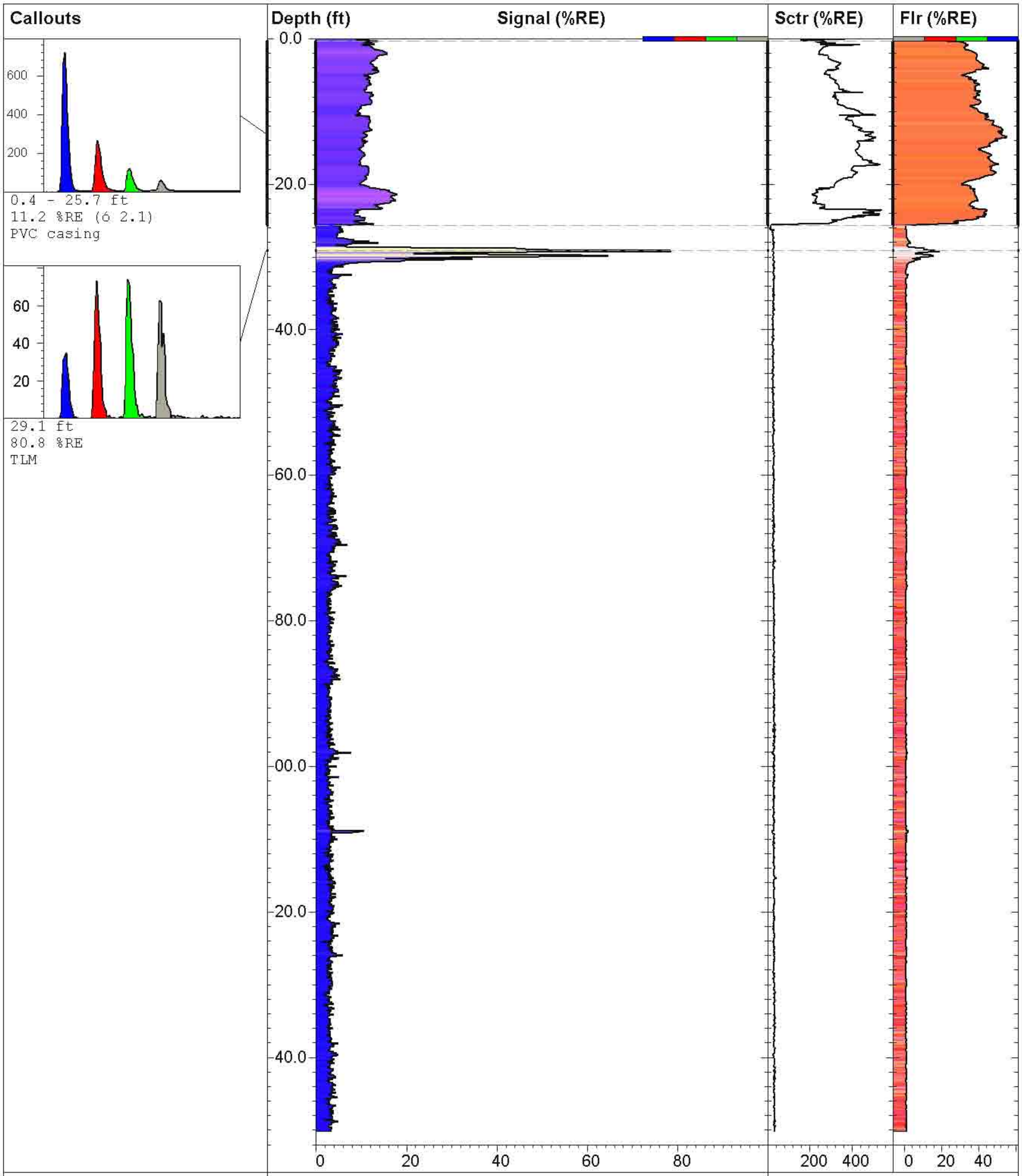
Fargo, ND (701)237-4908
www.DakotaTechnologies.com

TG001

TarGOST By Dakota
www.DakotaTechnologies.com

Site: **Portland, OR MGP**	*Latitude / System:* **Unavailable / NAD83**	*Final depth:* **150.10 ft**
Client: **Hahn & Associates, Inc.**	*Longitude:* **Unavailable**	*Max signal:* **34.1 % @ 11.43 ft**
Job: **2708**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **8/27/2007 8:48:44 AM**



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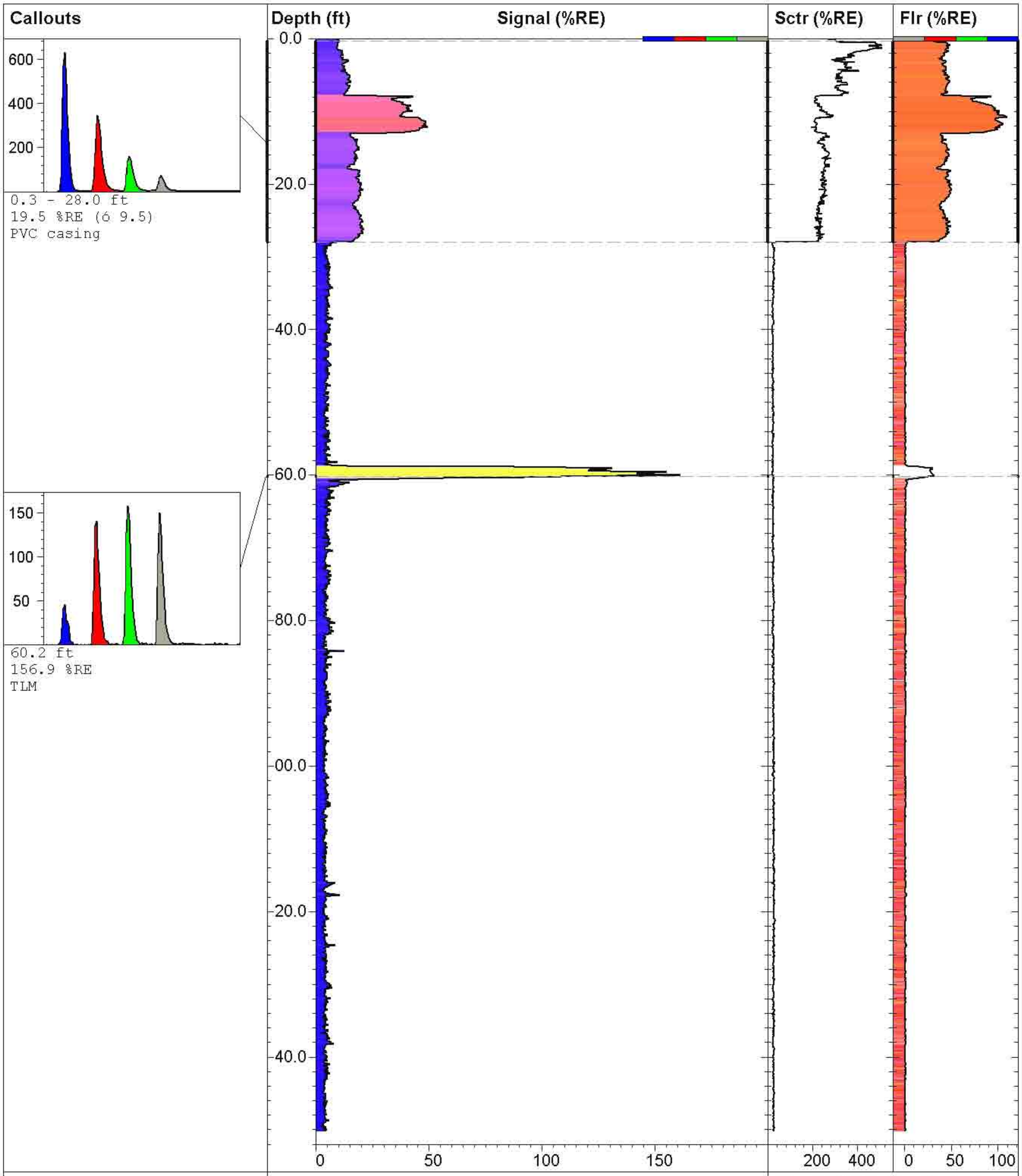
www.DakotaTechnologies.com

TG002

TarGOST By Dakota
www.DakotaTechnologies.com

Site: **Portland, OR MGP**	*Latitude / System:* **Unavailable / NAD83**	*Final depth:* **150.27 ft**
Client: **Hahn & Associates, Inc.**	*Longitude:* **Unavailable**	*Max signal:* **80.8 % @ 29.09 ft**
Job: **2708**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **8/24/2007 8:17:54 AM**



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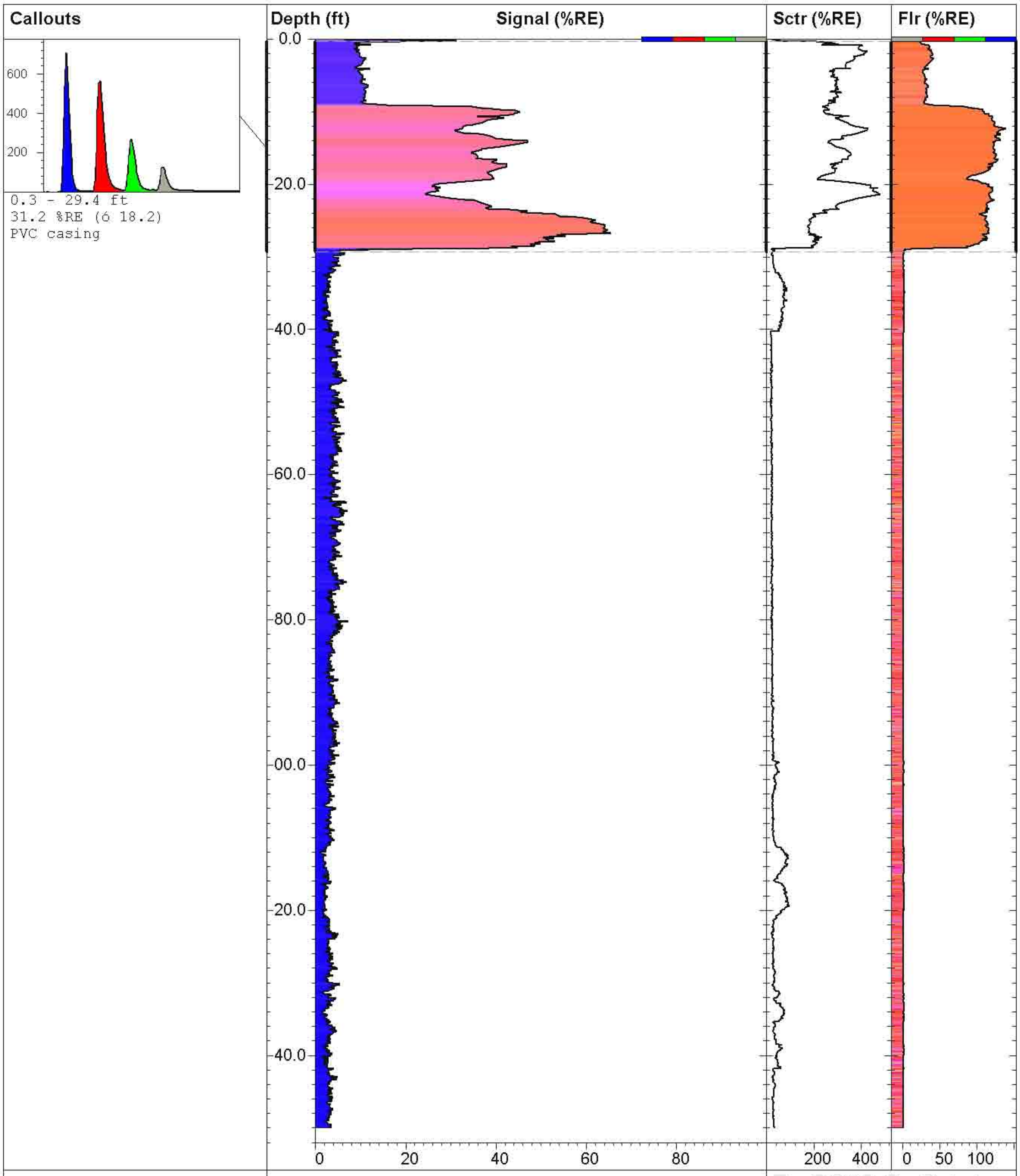
www.DakotaTechnologies.com

TG003

TarGOST By Dakota
www.DakotaTechnologies.com

Site: **Portland, OR MGP**	*Latitude / System:* **Unavailable / NAD83**	*Final depth:* **150.32 ft**
Client: **Hahn & Associates, Inc.**	*Longitude:* **Unavailable**	*Max signal:* **165.2 % @ 59.93 ft**
Job: **2708**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **8/23/2007 10:06:34 AM**



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TG004

TarGOST By Dakota
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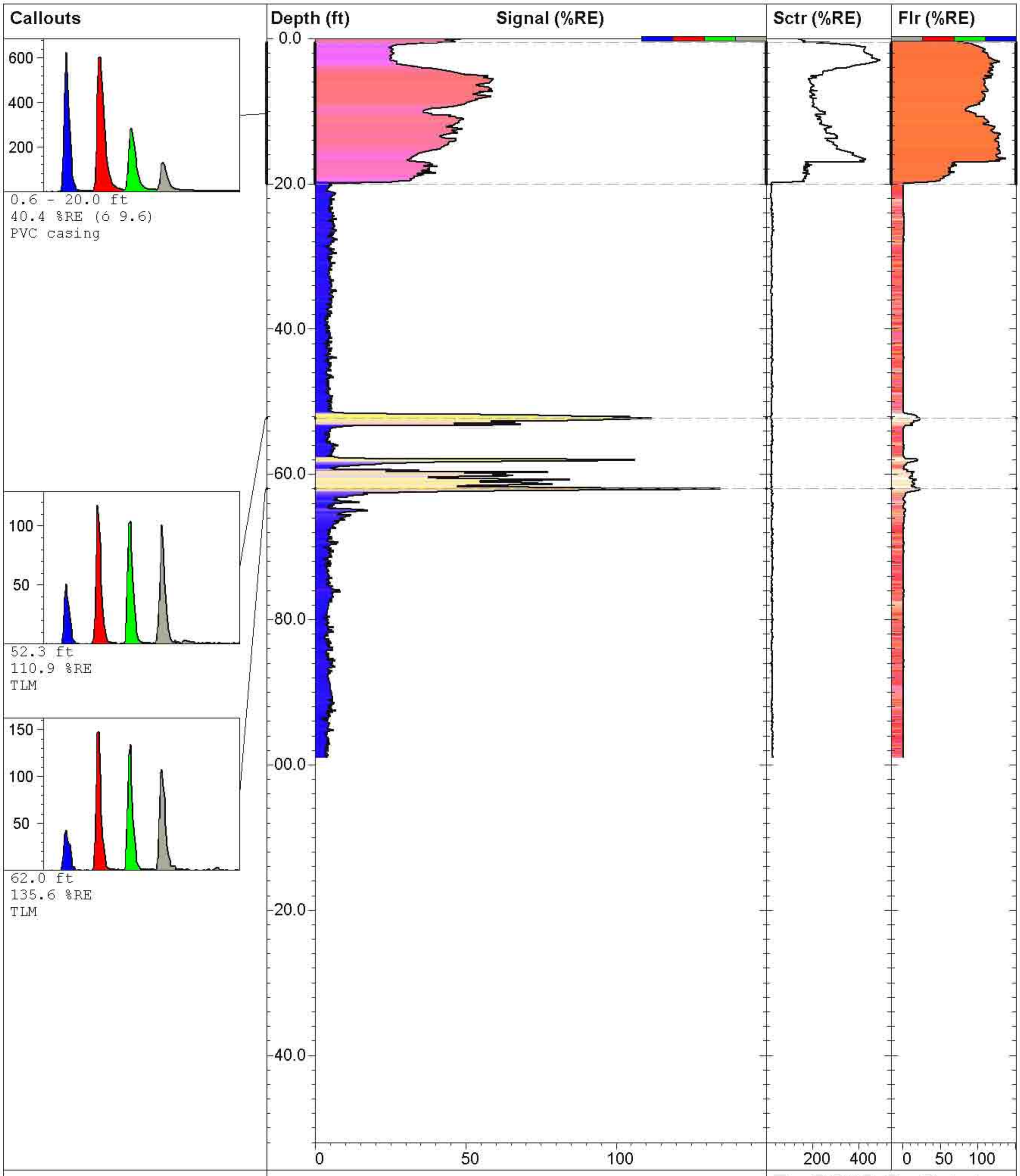
Site: **Portland, OR MGP**	*Latitude / System:* **Unavailable / NAD83**	*Final depth:* **150.01 ft**
Client: **Hahn & Associates, Inc.**	*Longitude:* **Unavailable**	*Max signal:* **66.1 % @ 26.64 ft**
Job: **2708**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **8/26/2007 12:05:47 PM**



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TG005

TarGOST By Dakota
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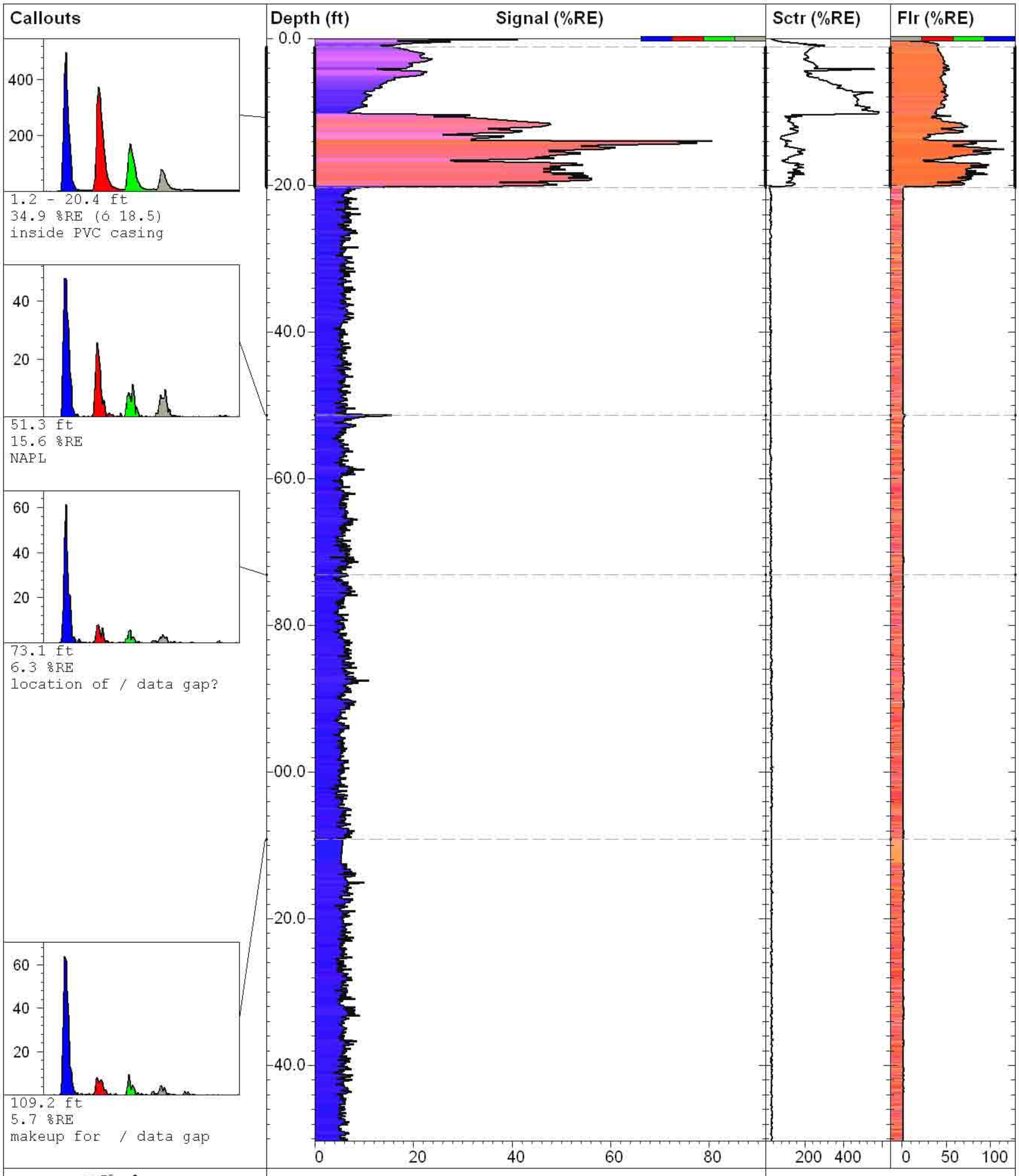
Site: **Portland, OR MGP**	*Latitude / System:* **Unavailable / NAD83**	*Final depth:* **99.06 ft**
Client: **Hahn & Associates, Inc.**	*Longitude:* **Unavailable**	*Max signal:* **135.6 % @ 61.97 ft**
Job: **2708**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **8/26/2007 8:10:34 AM**



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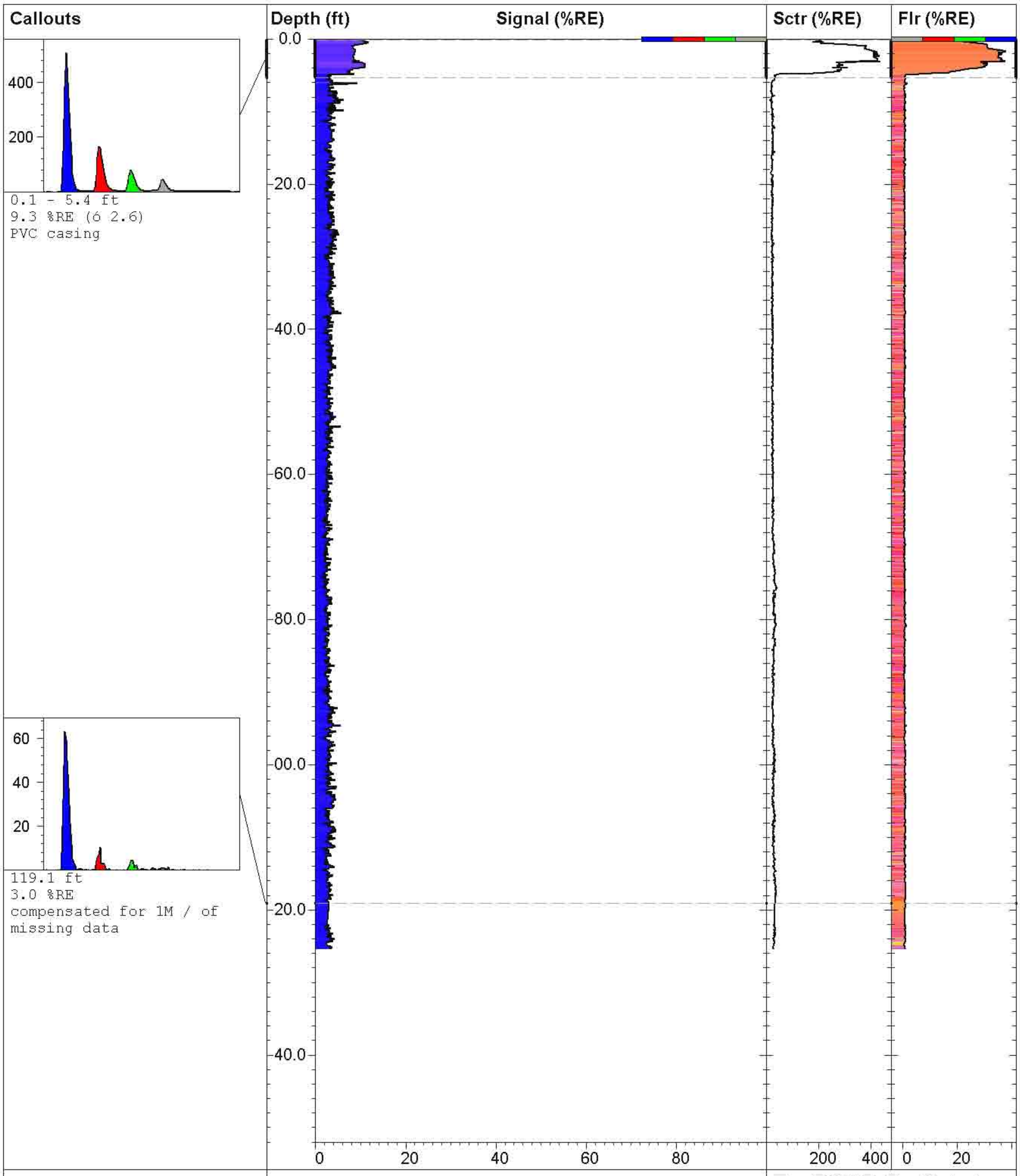
2201-A 12th St N, Fargo, ND
P:(701)237-4908 F:(701)237-4926
www.DakotaTechnologies.com

TG005A

TarGOST

Site: **Portland, OR MGP**	*Latitude / System:* **Unavailable / NAD83**	*Final depth:* **150.27 ft**
Client: **Hahn & Associates, Inc.**	*Longitude:* **Unavailable**	*Max signal:* **83.3 % @ 13.99 ft**
Job: **2708**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **9/9/2007 8:16:33 AM**



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TG006

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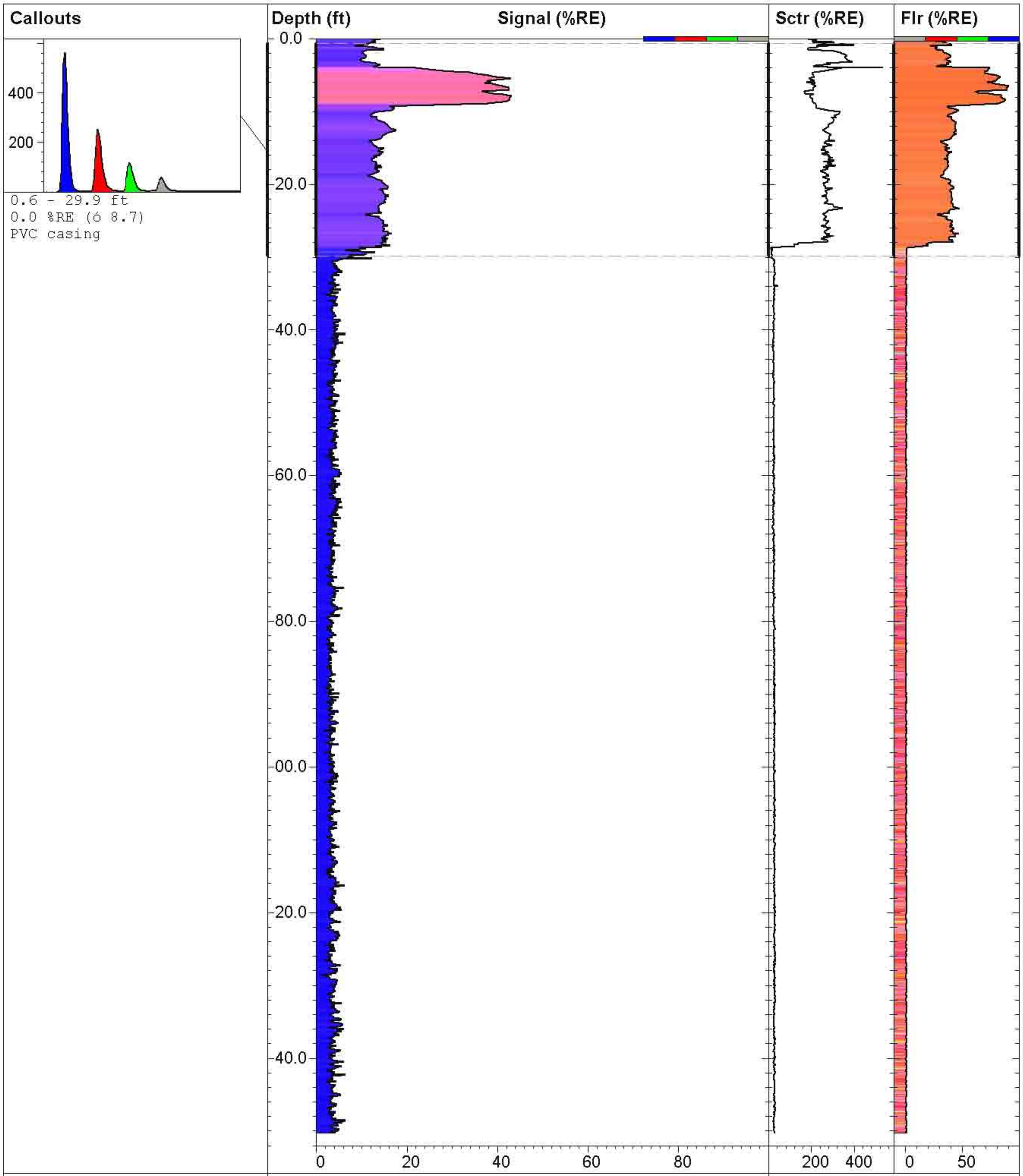
Site: **Portland, OR MGP**	*Latitude / System:* **Unavailable / NAD83**	*Final depth:* **125.50 ft**
Client: **Hahn & Associates, Inc.**	*Longitude:* **Unavailable**	*Max signal:* **12.8 % @ 0.39 ft**
Job: **2708**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **8/28/2007 1:01:59 AM**



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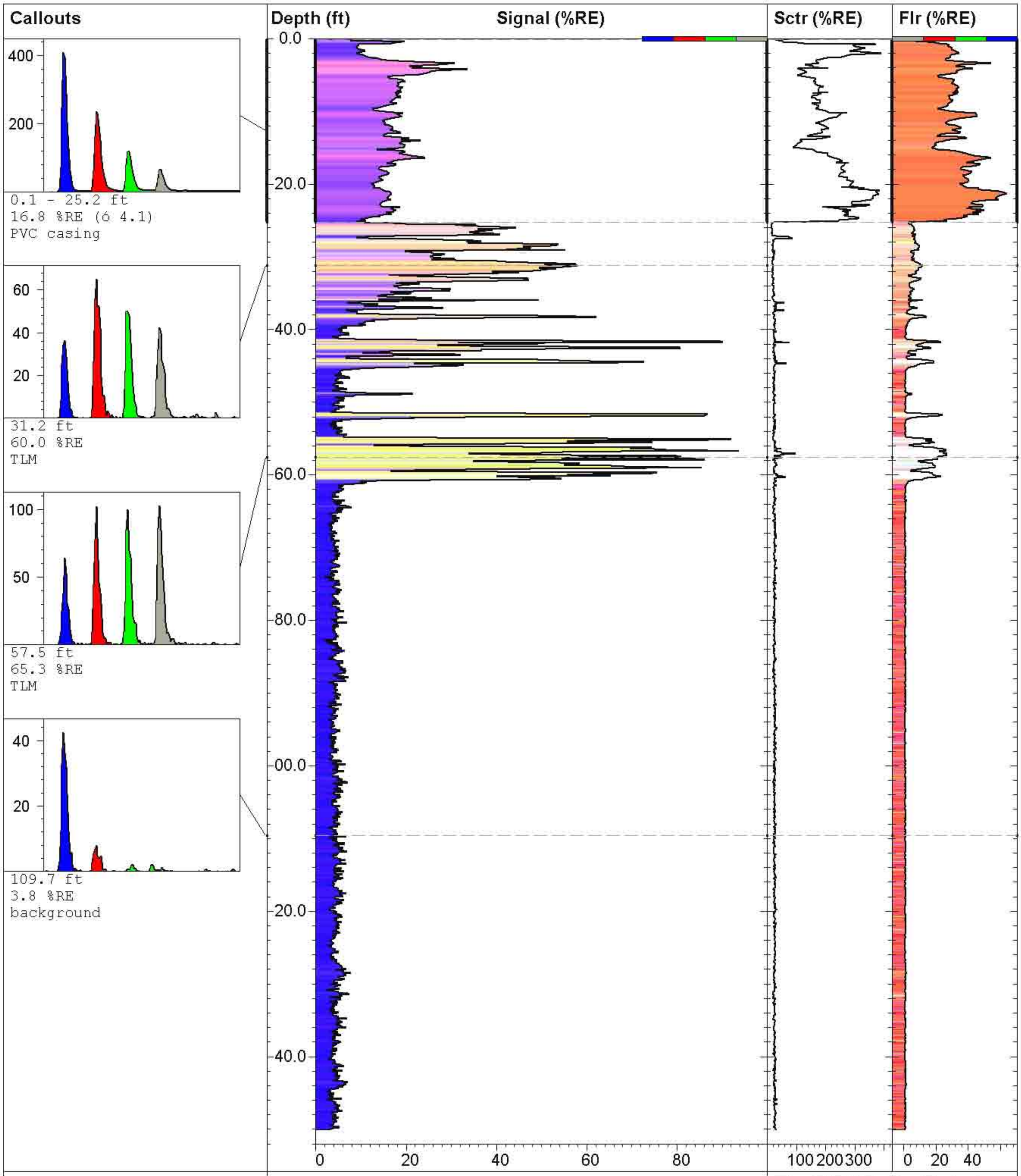
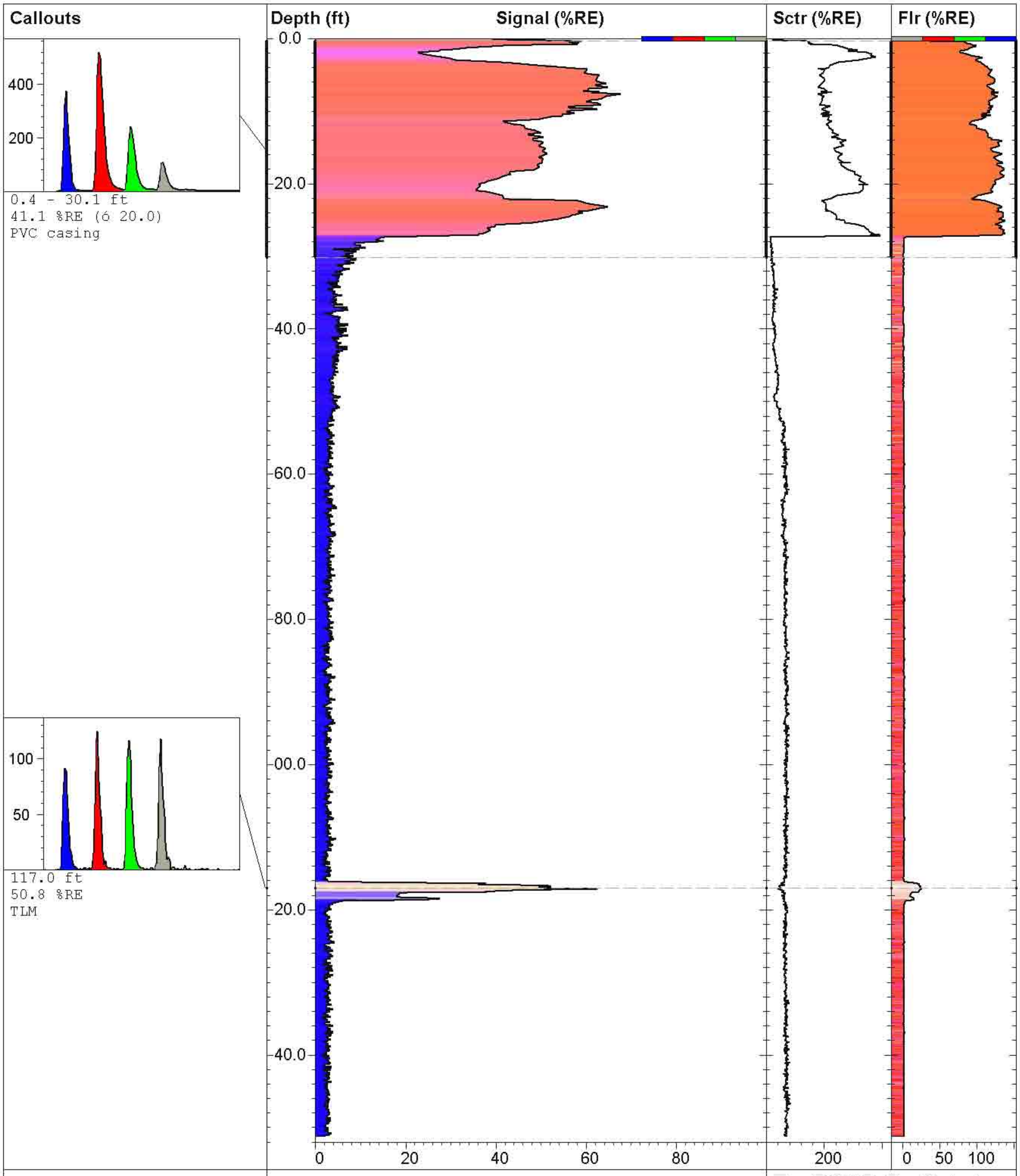
TG007

TarGOST By Dakota
www.DakotaTechnologies.com

Site: **Portland, OR MGP**	*Latitude / System:* **Unavailable / NAD83**	*Final depth:* **150.37 ft**
Client: **Hahn & Associates, Inc.**	*Longitude:* **Unavailable**	*Max signal:* **43.1 % @ 7.77 ft**
Job: **2708**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **8/24/2007 1:53:18 PM**



Dakota Technologies, Inc. Fargo, ND (701)237-4908 www.DakotaTechnologies.com	**TG008**		**TarGOST By Dakota** www.DakotaTechnologies.com
	Site: **Portland, OR MGP**	*Latitude / System:* **Unavailable / NAD83**	*Final depth:* **150.16 ft**
	Client: **Hahn & Associates, Inc.**	*Longitude:* **Unavailable**	*Max signal:* **102.3 % @ 41.66 ft**
	Job: **2708**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **8/25/2007 8:26:38 AM**



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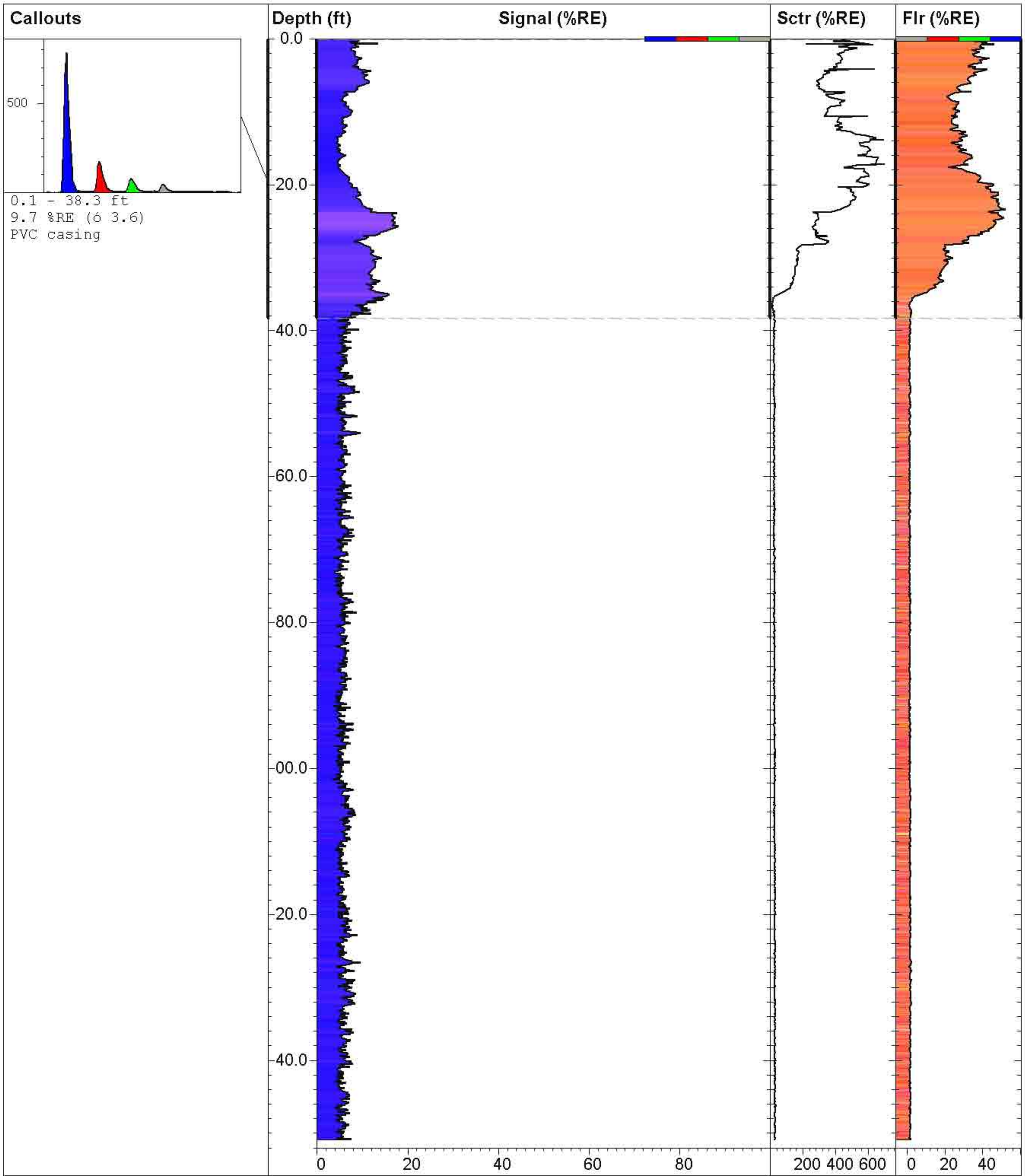
TG01S

TarGOST By Dakota
www.DakotaTechnologies.com

Site: **Portland, OR MGP**	*Latitude / System:* **Unavailable / NAD83**	*Final depth:* **151.27 ft**
Client: **Hahn & Associates, Inc.**	*Longitude:* **Unavailable**	*Max signal:* **67.7 % @ 7.64 ft**
Job: **2708**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **9/5/2007 2:43:17 PM**



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TG02Sc

TarGOST By Dakota
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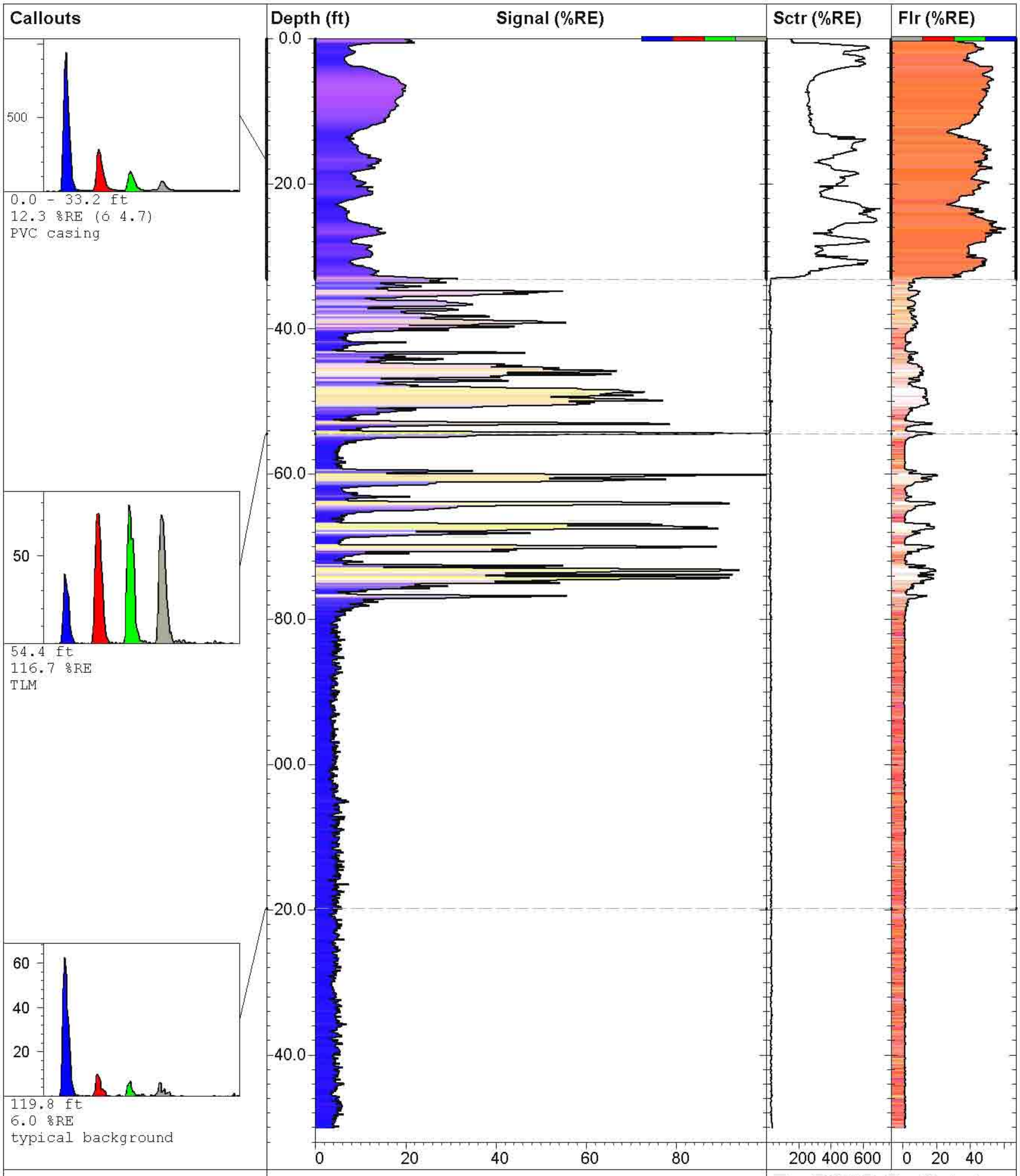
Site: **Portland, OR MGP**	*Latitude / System:* **Unavailable / NAD83**	*Final depth:* **151.04 ft**
Client: **Hahn & Associates, Inc.**	*Longitude:* **Unavailable**	*Max signal:* **19.4 % @ 35.72 ft**
Job: **2708**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **9/7/2007 10:14:17 AM**



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TG03S

TarGOST By Dakota
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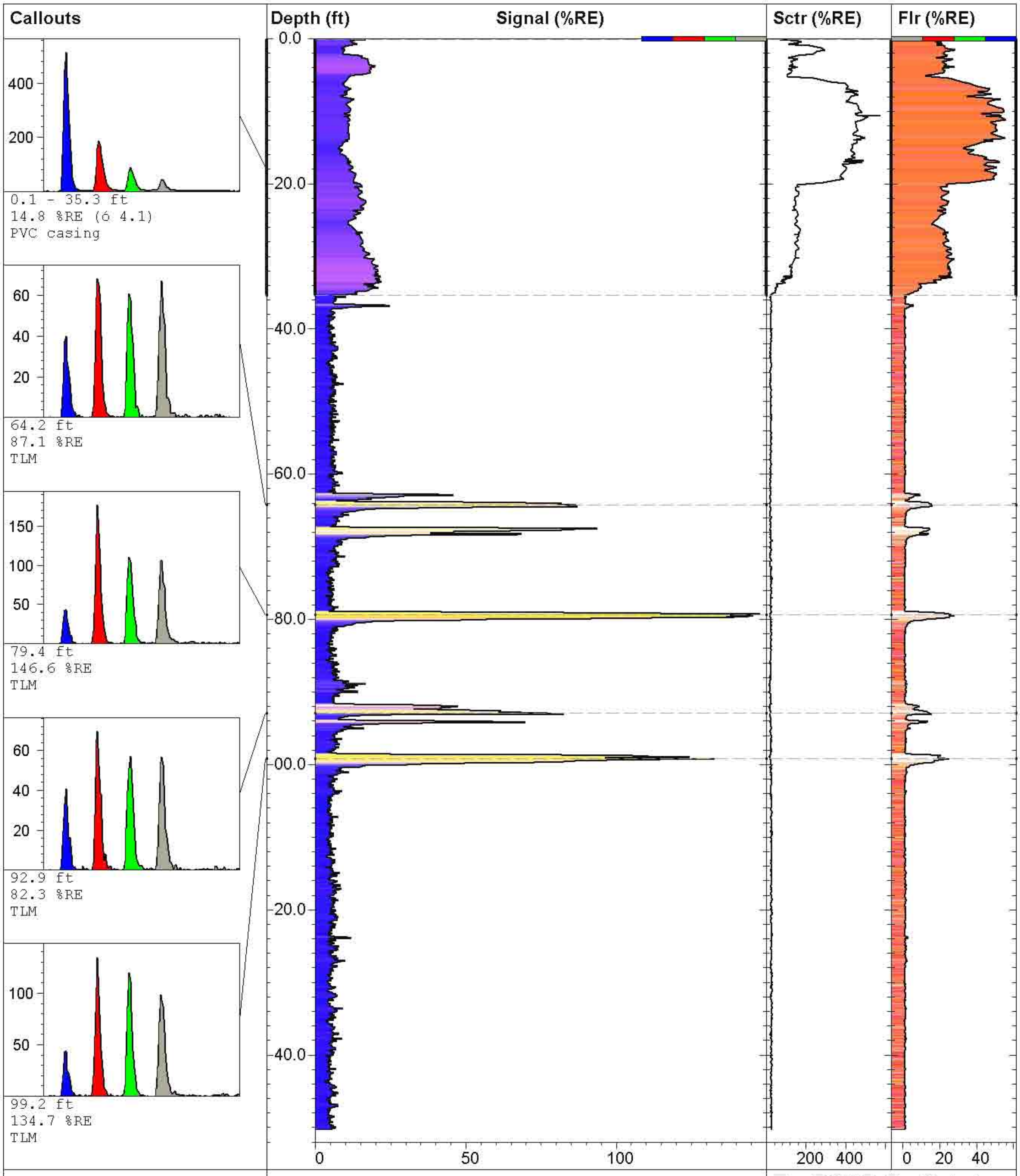
Site: **Portland, OR MGP**	*Latitude / System:* **Unavailable / NAD83**	*Final depth:* **150.19 ft**
Client: **Hahn & Associates, Inc.**	*Longitude:* **Unavailable**	*Max signal:* **116.7 % @ 54.40 ft**
Job: **2708**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **9/8/2007 1:29:13 PM**



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TG04S

TarGOST By Dakota
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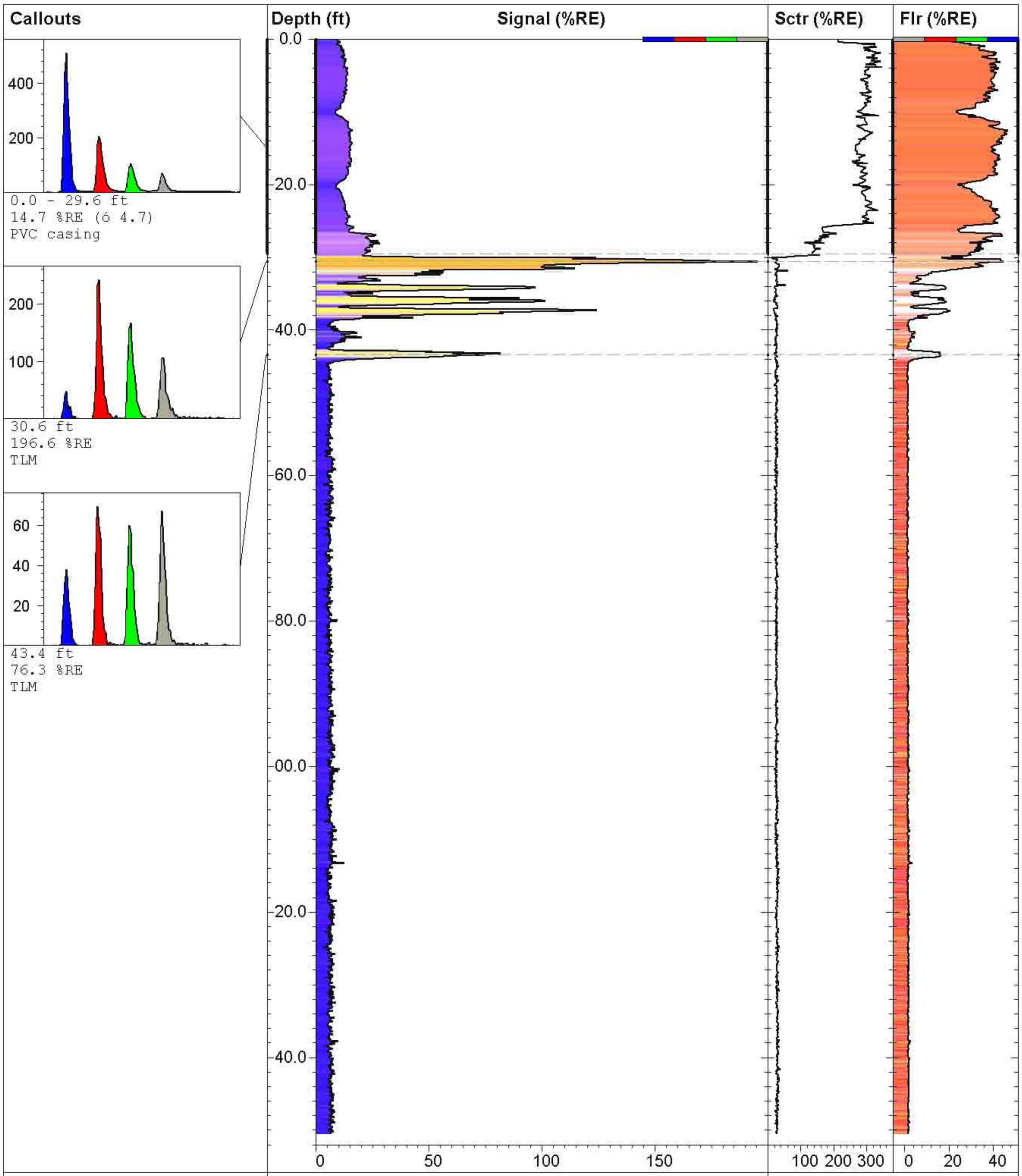
Site: **Portland, OR MGP**	*Latitude / System:* **Unavailable / NAD83**	*Final depth:* **150.33 ft**
Client: **Hahn & Associates, Inc.**	*Longitude:* **Unavailable**	*Max signal:* **150.2 % @ 79.23 ft**
Job: **2708**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **9/7/2007 2:37:45 PM**



TG05S		**TarGOST By Dakota** www.DakotaTechnologies.com
Site: **Portland, OR MGP**	*Latitude / System:* **Unavailable / NAD83**	*Final depth:* **150.57 ft**
Client: **Hahn & Associates, Inc.**	*Longitude:* **Unavailable**	*Max signal:* **210.4 % @ 30.24 ft**
Job: **2708**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **9/6/2007 1:41:05 PM**

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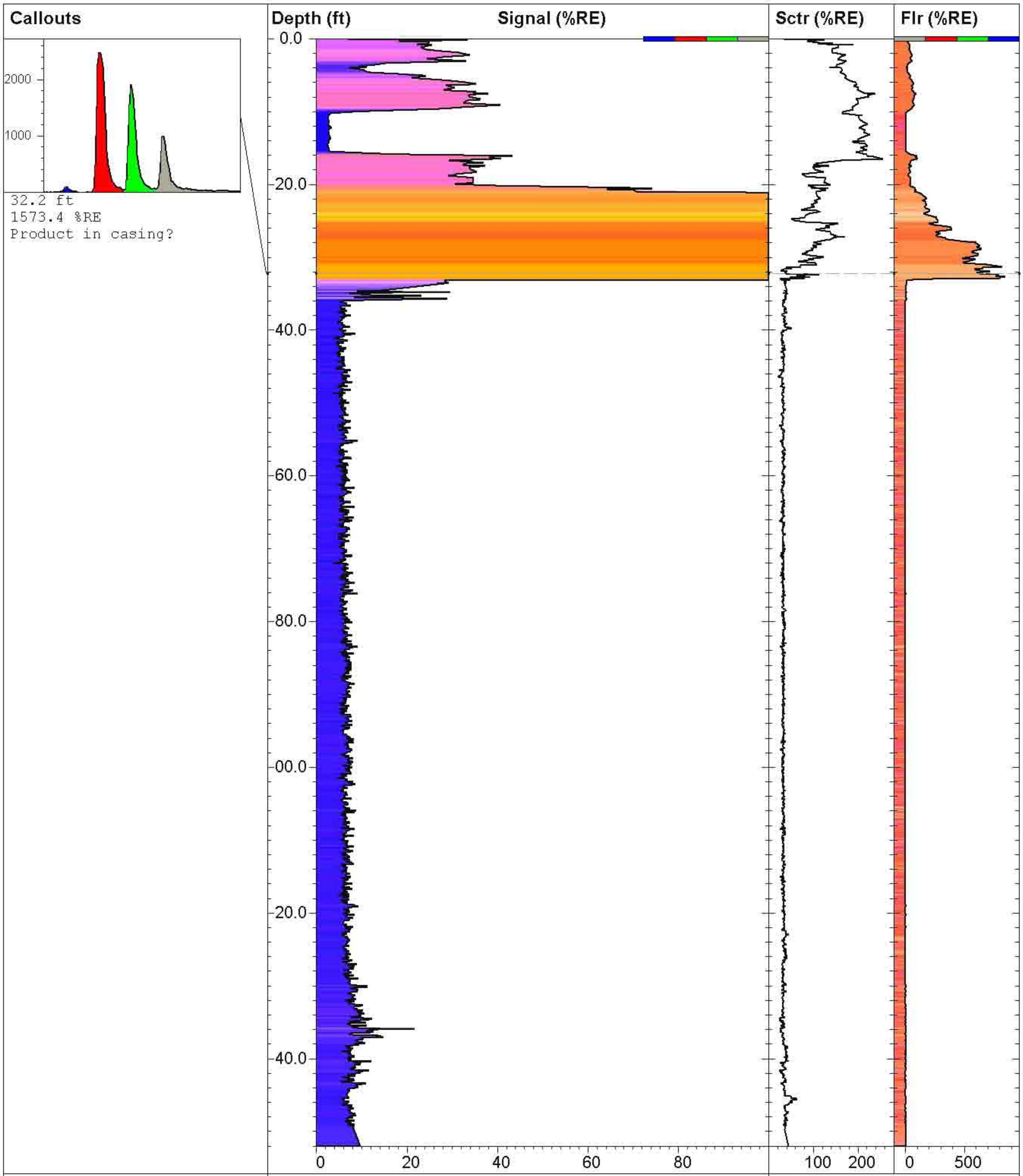

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TG06S

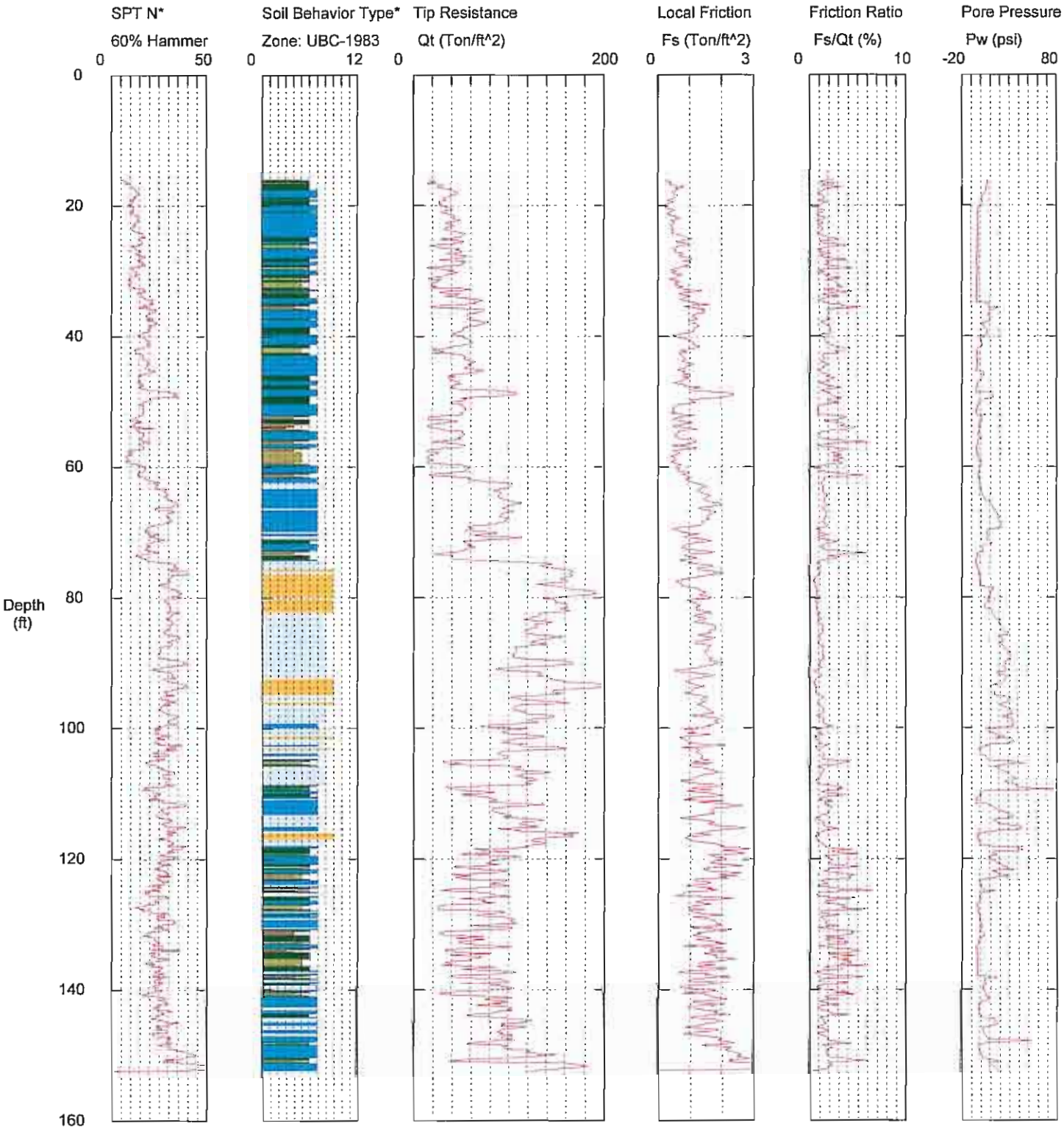
TarGOST By Dakota
www.DakotaTechnologies.com

Site: **Portland, OR MGP**	*Latitude / System:* **Unavailable / NAD83**	*Final depth:* **152.00 ft**
Client: **Hahn & Associates, Inc.**	*Longitude:* **Unavailable**	*Max signal:* **2233.8 % @ 31.81 ft**
Job: **2708**	*Operator/Unit:* **Steve Adamek/DTI01**	*Date & Time:* **9/8/2007 8:54:59 AM**

HAHN & ASSOC. / TG1 / NW 7900 ST HELENS RD

Operator: JSP/SVAN/VAN EXP
Sounding: FILO21
Cone Used: 4CH

CPT Date/Time: 08-27-07 06:41
Location: TG1 NW7900ST.H R
Job Number: HAHN/2708/GASCO



Maximum Depth = 152.56 feet

Depth Increment = 0.164 feet

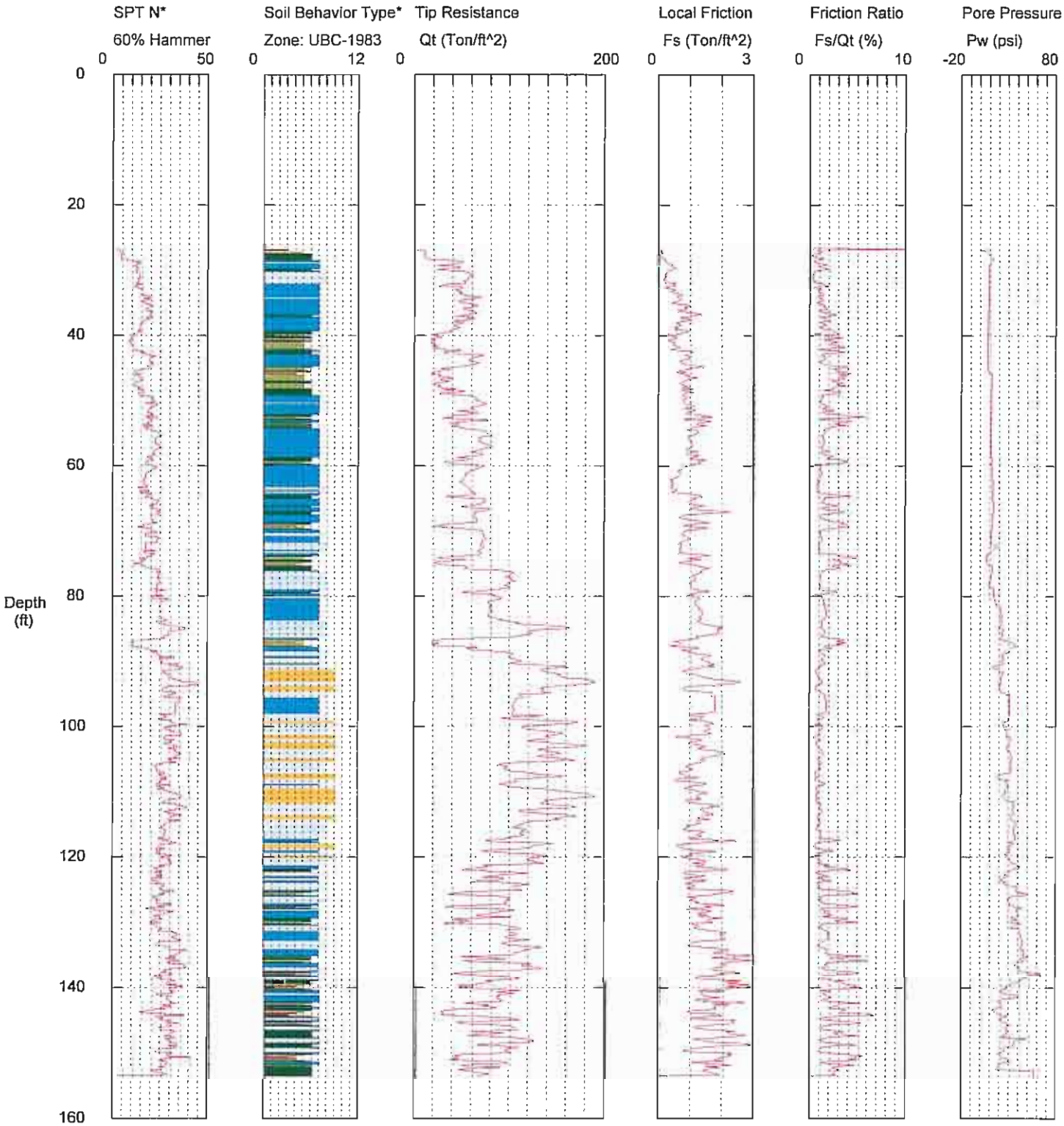
1 sensitive fine grained
2 organic material
3 clay
4 silty clay to clay
5 clayey silt to silty clay
6 sandy silt to clayey silt
7 silty sand to sandy silt
8 sand to silty sand
9 sand
10 gravelly sand to sand
11 very stiff fine grained (*)
12 sand to clayey sand (*)

*Soil behavior type and SPT based on data from UBC-1983

HAHN & ASSOC. / TG2 / NW 7900 ST HELENS RD

Operator: JSP/SVAN/VAN EXP
Sounding: FILO15
Cone Used: 4CH

CPT Date/Time: 08-24-07 06:27
Location: TG2 NW7900 ST HR
Job Number: HAHN/2708/GASCO



Maximum Depth = 153.71 feet

Depth Increment = 0.164 feet

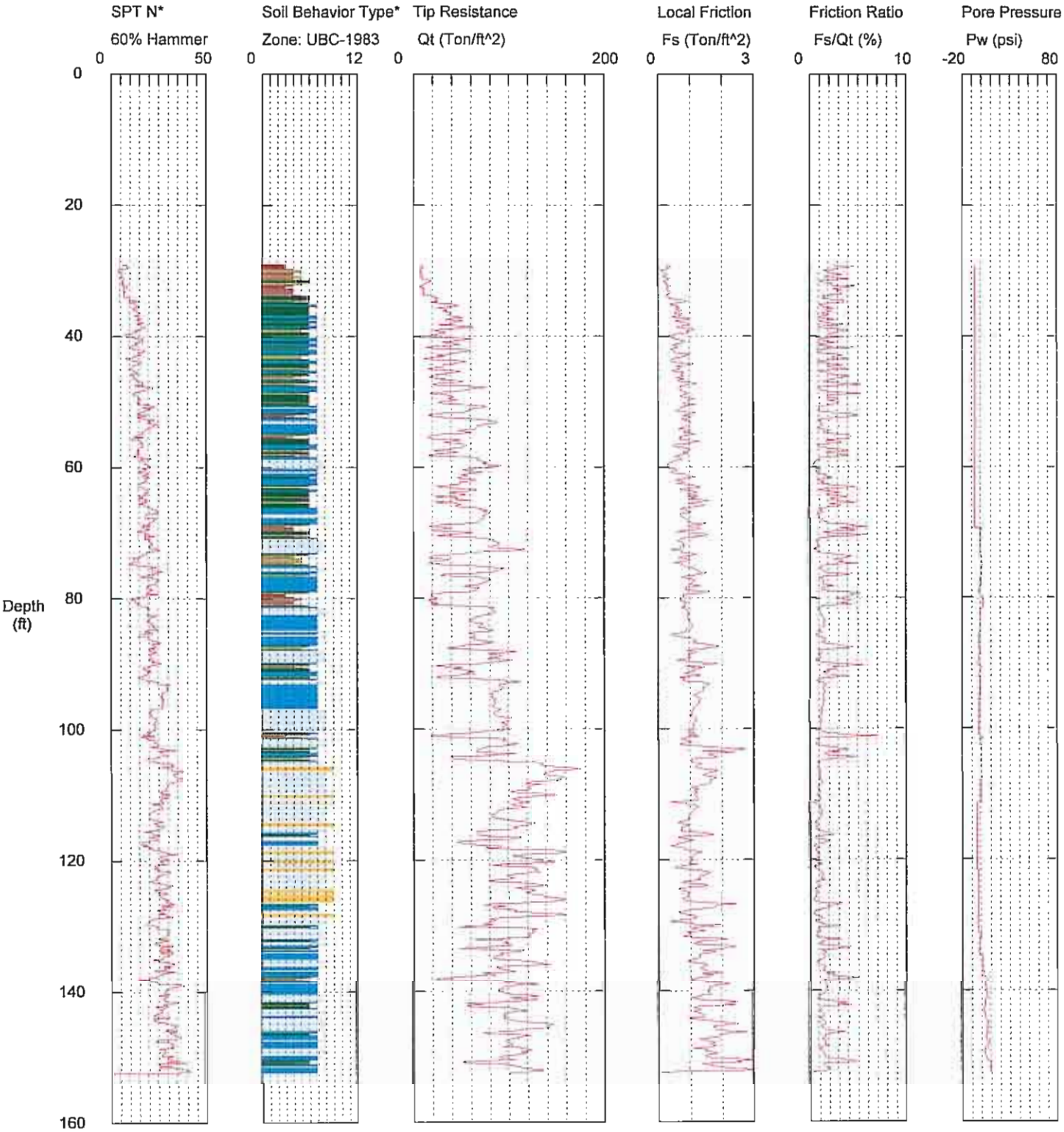
1 sensitive fine grained
2 organic material
3 clay
4 silty clay to clay
5 clayey silt to silty clay
6 sandy silt to clayey silt
7 silty sand to sandy silt
8 sand to silty sand
9 sand
10 gravelly sand to sand
11 very stiff fine grained (*)
12 sand to clayey sand (*)

*Soil behavior type and SPT based on data from UBC-1983

HAHN & ASSOC. / TG3 / NW 7900 ST HELENS RD

Operator: JSP/SVAN/VAN EXP
Sounding: FILO14
Cone Used: 4CH

CPT Date/Time: 08-23-07 08:02
Location: TG3 NW7900ST H R
Job Number: HAHN/2708/GASCO



Maximum Depth = 152.56 feet

Depth Increment = 0.164 feet

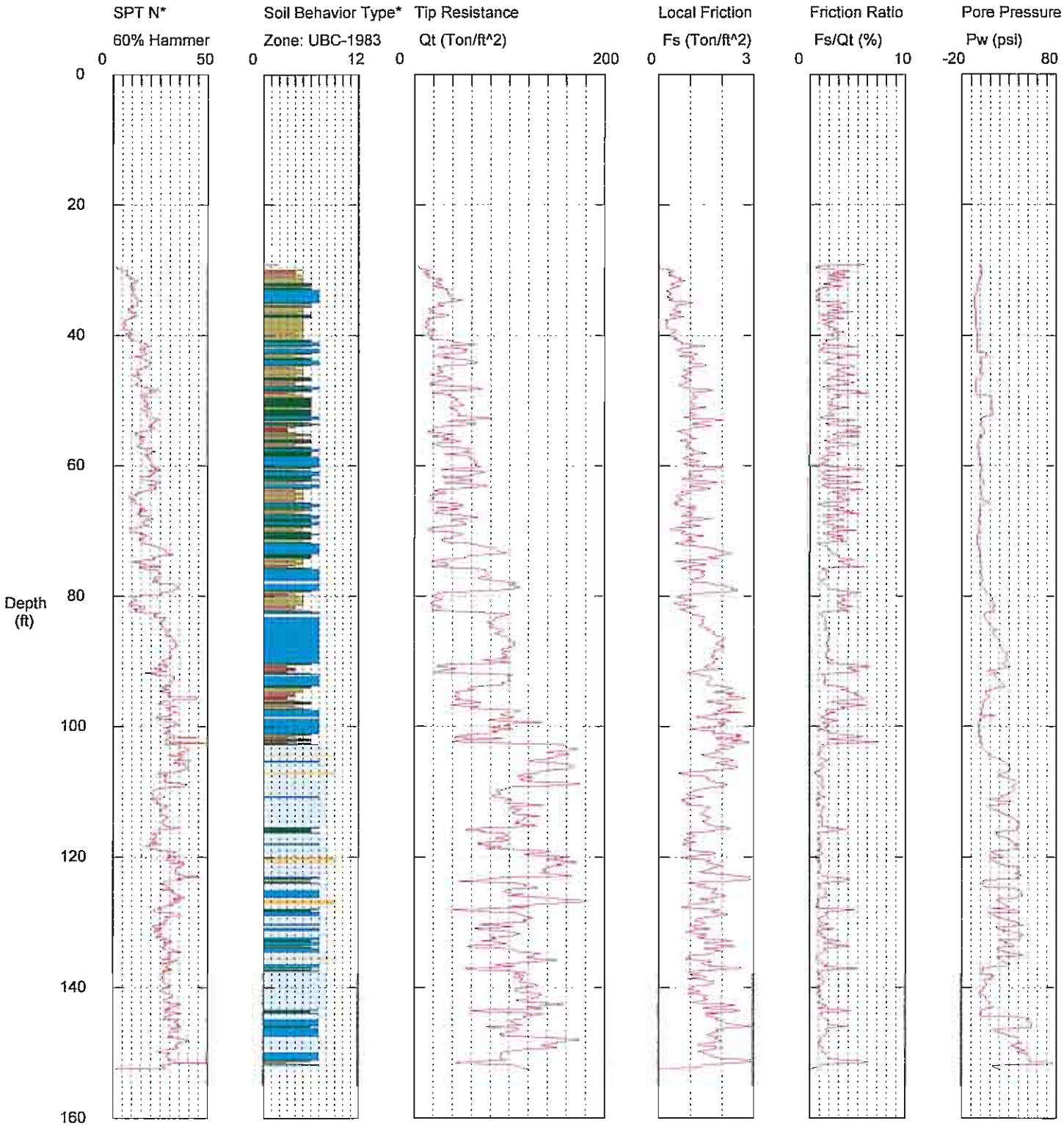
1 sensitive fine grained
2 organic material
3 clay
4 silty clay to clay
5 clayey silt to silty clay
6 sandy silt to clayey silt
7 silty sand to sandy silt
8 sand to silty sand
9 sand
10 gravelly sand to sand
11 very stiff fine grained (*)
12 sand to clayey sand (*)

*Soil behavior type and SPT based on data from UBC-1983

HAHN & ASSOC. / TG4 / NW 7900 ST HELENS RD

Operator: JSP/SVAN/VAN EXP
Sounding: FILO20
Cone Used: 4CH

CPT Date/Time: 08-26-07 10:19
Location: TG4 NW7900ST.H R
Job Number: HAHN/2708/GASCO



Maximum Depth = 152.56 feet

Depth Increment = 0.164 feet

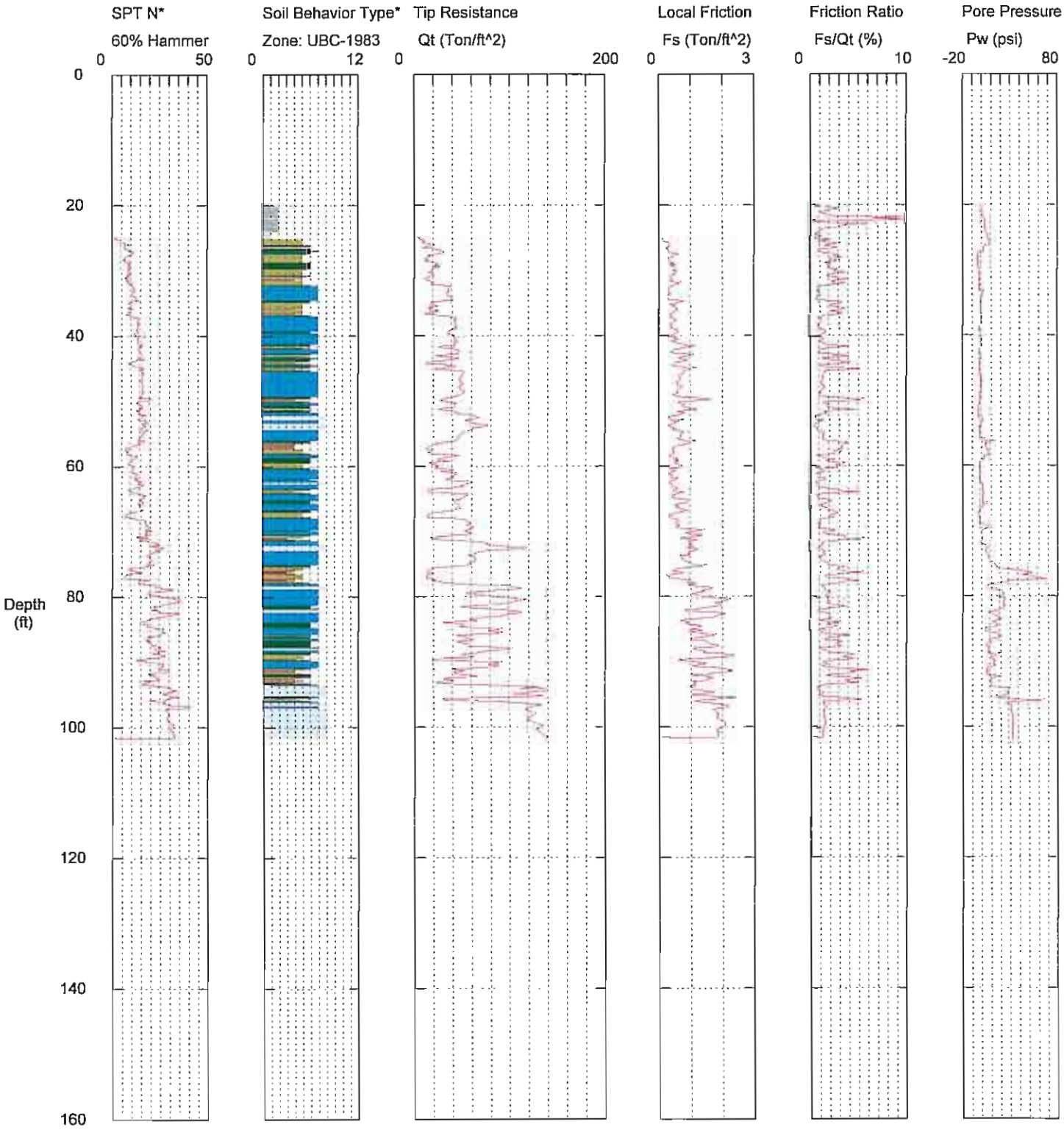
1 sensitive fine grained
2 organic material
3 clay
4 silty clay to clay
5 clayey silt to silty clay
6 sandy silt to clayey silt
7 silty sand to sandy silt
8 sand to silty sand
9 sand
10 gravelly sand to sand
11 very stiff fine grained (*)
12 sand to clayey sand (*)

*Soil behavior type and SPT based on data from UBC-1983

HAHN & ASSOC. / TG5 / NW 7900 ST HELENS RD

Operator: JSP/SVAN/VAN EXP
Sounding: FILO18
Cone Used: 4CH

CPT Date/Time: 08-26-07 06:15
Location: TG5 NW7900ST.H R
Job Number: HAHN/2708/GASCO



Maximum Depth = 101.71 feet

Depth Increment = 0.164 feet

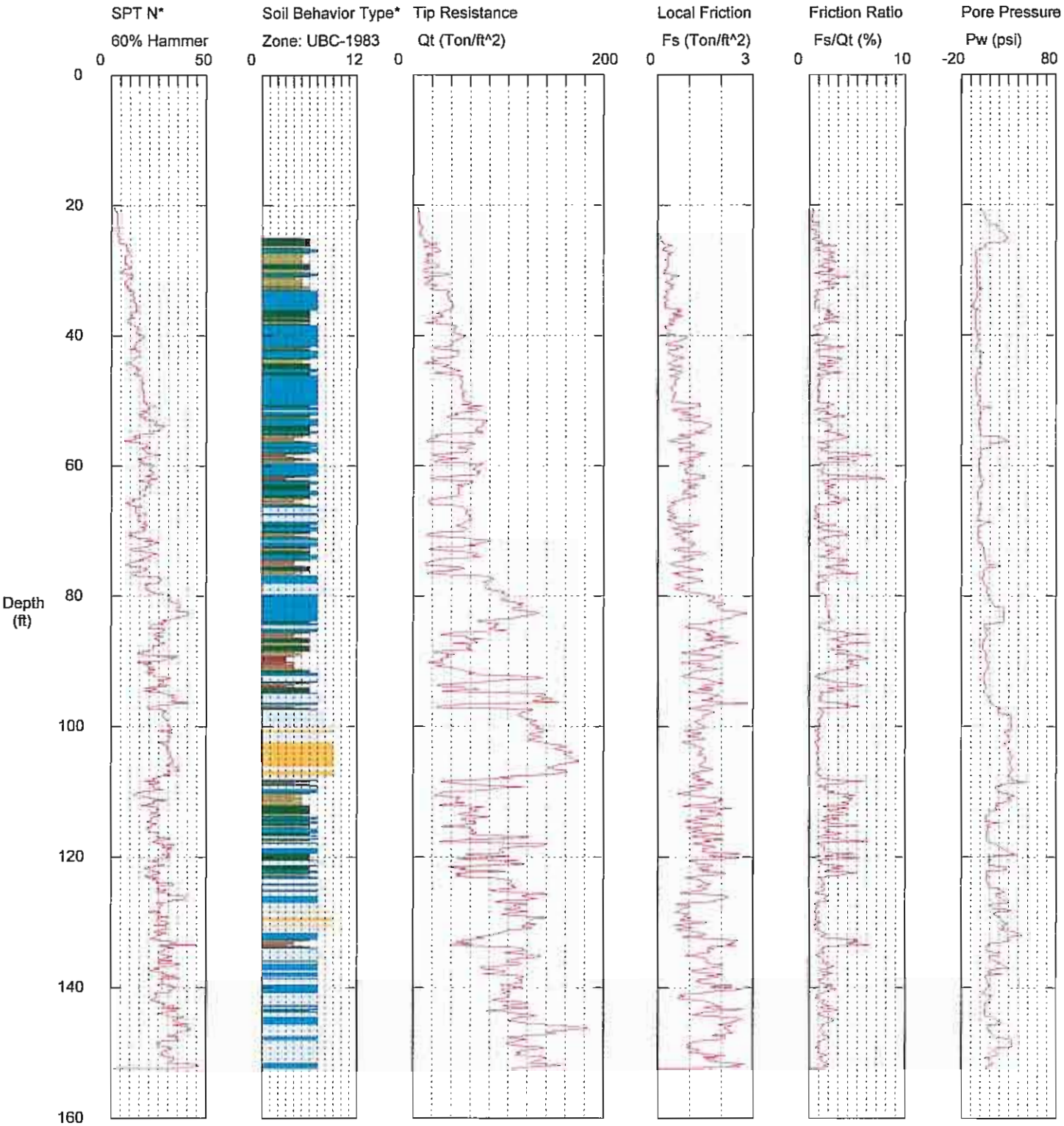
1 sensitive fine grained
2 organic material
3 clay
4 silty clay to clay
5 clayey silt to silty clay
6 sandy silt to clayey silt
7 silty sand to sandy silt
8 sand to silty sand
9 sand
10 gravelly sand to sand
11 very stiff fine grained (*)
12 sand to clayey sand (*)

*Soil behavior type and SPT based on data from UBC-1983

HAHN & ASSOC. / TG5A / NW 7900 ST HELENS RD

Operator: JSP/SVAN/VAN EXP
Sounding: FILO31
Cone Used: R4CH

CPT Date/Time: 09-08-07 06:31
Location: TG5A NW7900 ST H
Job Number: HAHN/2708-43/GC



Maximum Depth = 152.56 feet

Depth Increment = 28.215 feet

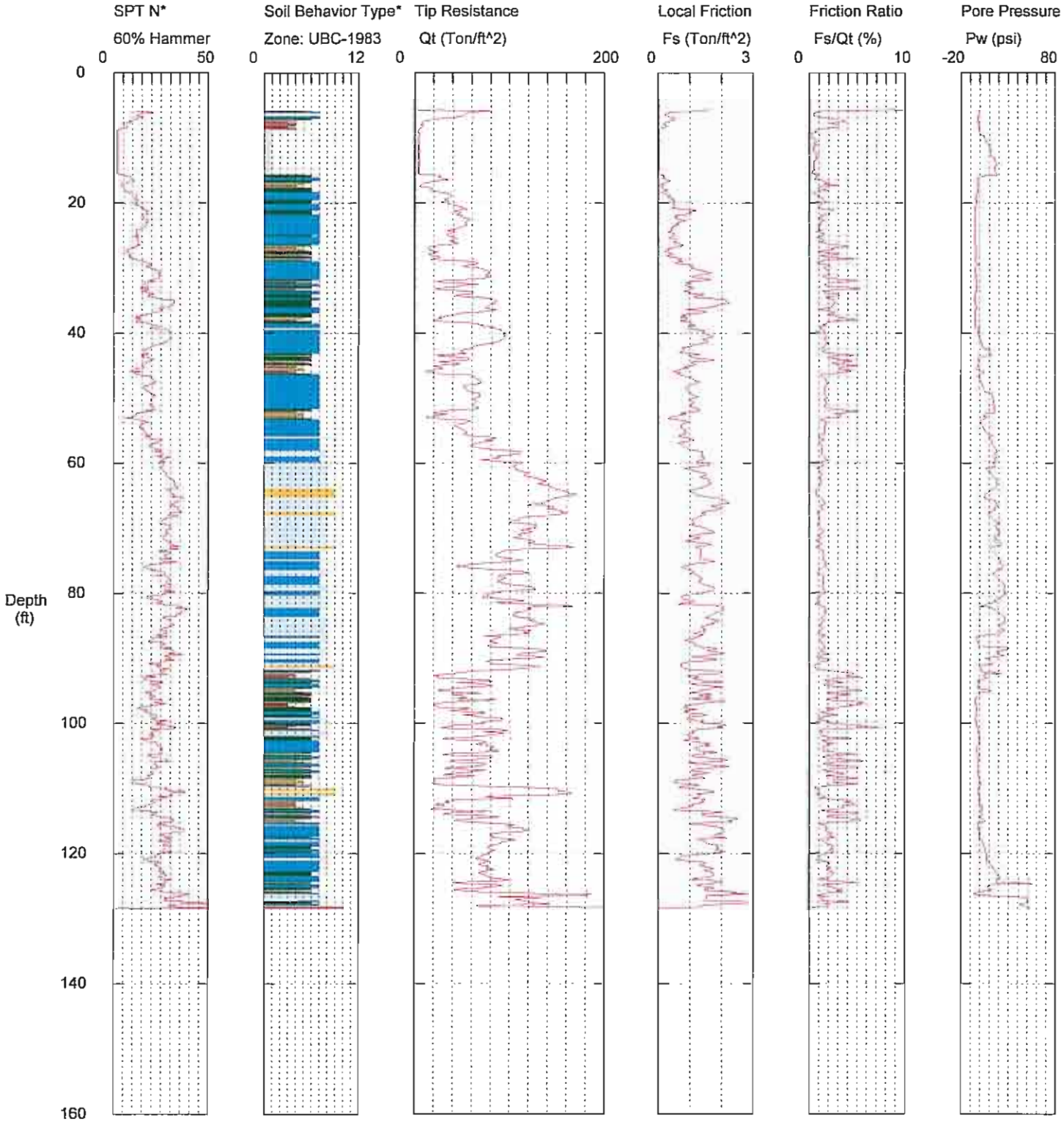
1 sensitive fine grained
2 organic material
3 clay
4 silty clay to clay
5 clayey silt to silty clay
6 sandy silt to clayey silt
7 silty sand to sandy silt
8 sand to silty sand
9 sand
10 gravelly sand to sand
11 very stiff fine grained (*)
12 sand to clayey sand (*)

*Soil behavior type and SPT based on data from UBC-1983

HAHN & ASSOC. / TG6 / NW 7900 ST HELENS RD

Operator: JSP/SVAN/VAN EXP
Sounding: FILO22
Cone Used: 4CH

CPT Date/Time: 08-27-07 11:12
Location: TG6 NW7900ST.H R
Job Number: HAHN/2708/GASCO



Maximum Depth = 128.61 feet

Depth Increment = 0.164 feet

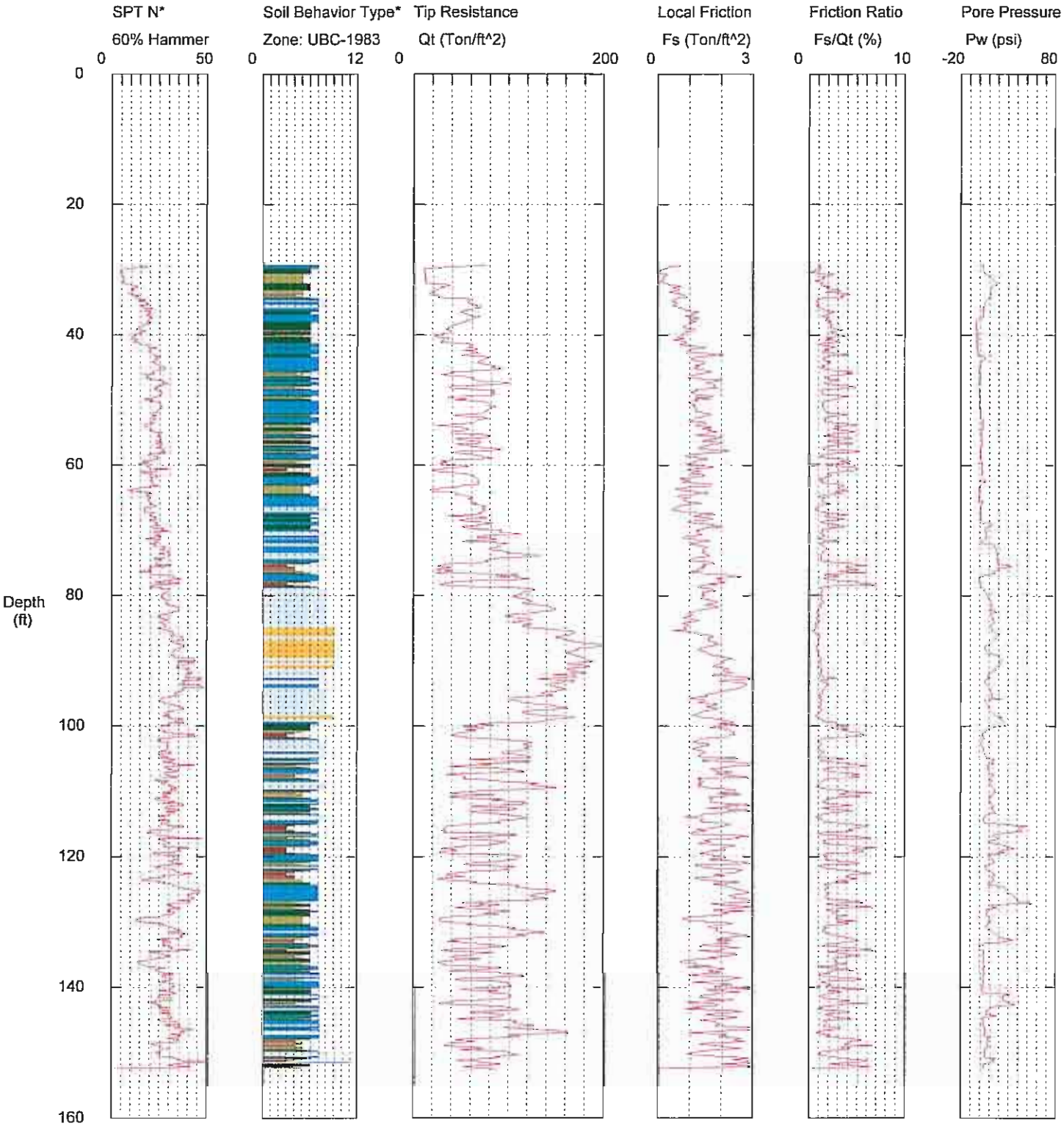
1 sensitive fine grained
2 organic material
3 clay
4 silty clay to clay
5 clayey silt to silty clay
6 sandy silt to clayey silt
7 silty sand to sandy silt
8 sand to silty sand
9 sand
10 gravelly sand to sand
11 very stiff fine grained (*)
12 sand to clayey sand (*)

*Soil behavior type and SPT based on data from UBC-1983

HAHN & ASSOC. / TG7 / NW 7900 ST HELENS RD

Operator: JSP/SVAN/VAN EXP
Sounding: FILO16
Cone Used: 4CH

CPT Date/Time: 08-24-07 11:02
Location: TG7 NW7900 STH R
Job Number: HAHN/2708/GASCO



Maximum Depth = 152.56 feet

Depth Increment = 0.164 feet

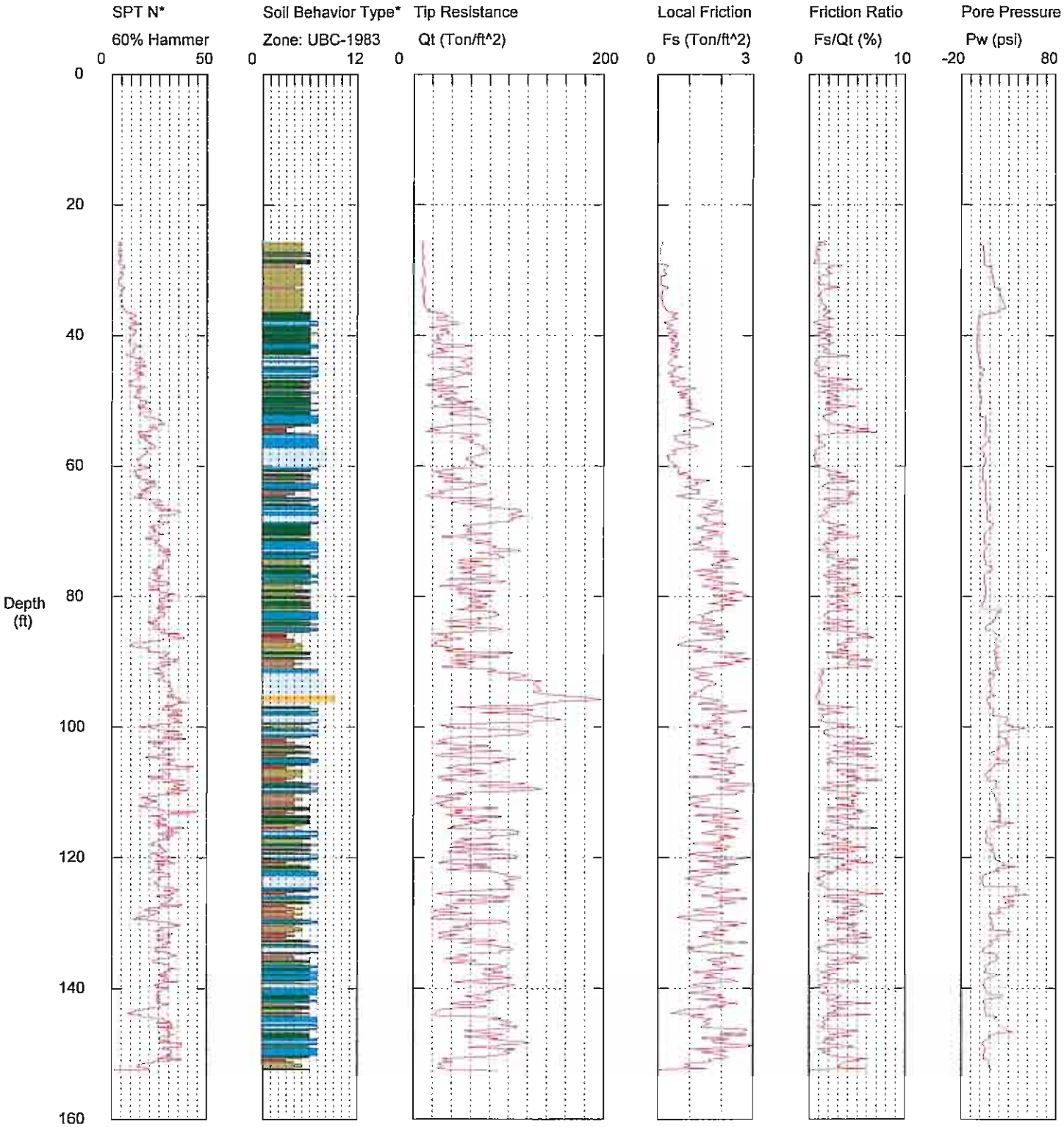
1 sensitive fine grained
2 organic material
3 clay
4 silty clay to clay
5 clayey silt to silty clay
6 sandy silt to clayey silt
7 silty sand to sandy silt
8 sand to silty sand
9 sand
10 gravelly sand to sand
11 very stiff fine grained (*)
12 sand to clayey sand (*)

*Soil behavior type and SPT based on data from UBC-1983

HAHN & ASSOC. / TG8 / NW 7900 ST HELENS RD

Operator: JSP/SVAN/VAN EXP
Sounding: FILO17
Cone Used: 4CH

CPT Date/Time: 08-25-07 06:36
Location: TG8 NW7900 ST.HR
Job Number: HAHN/2708/GASCO



Maximum Depth = 152.56 feet

Depth Increment = 0.164 feet

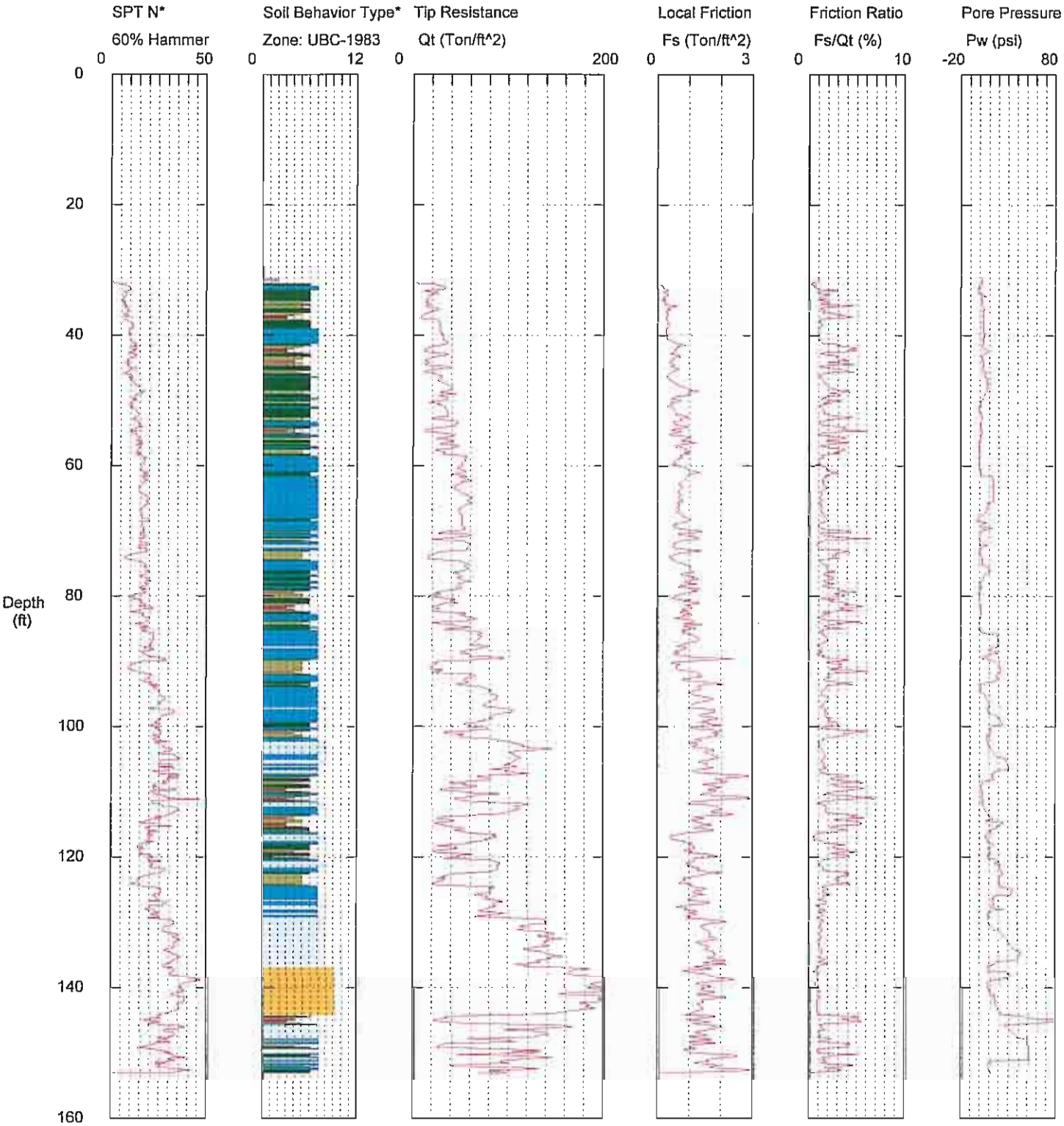
1 sensitive fine grained
2 organic material
3 clay
4 silty clay to clay
5 clayey silt to silty clay
6 sandy silt to clayey silt
7 silty sand to sandy silt
8 sand to silty sand
9 sand
10 gravelly sand to sand
11 very stiff fine grained (*)
12 sand to clayey sand (*)

*Soil behavior type and SPT based on data from UBC-1983

HAHN & ASSOC. / TG1S / NW 7900 ST HELENS RD

Operator: JSP/SVAN/VAN EXP
Sounding: FILO23
Cone Used: 4CH

CPT Date/Time: 09-04-07 12:49
Location: TG1S NW7900ST HR
Job Number: HAHN/5237-41/SIL



Maximum Depth = 153.22 feet

Depth Increment = 0.164 feet

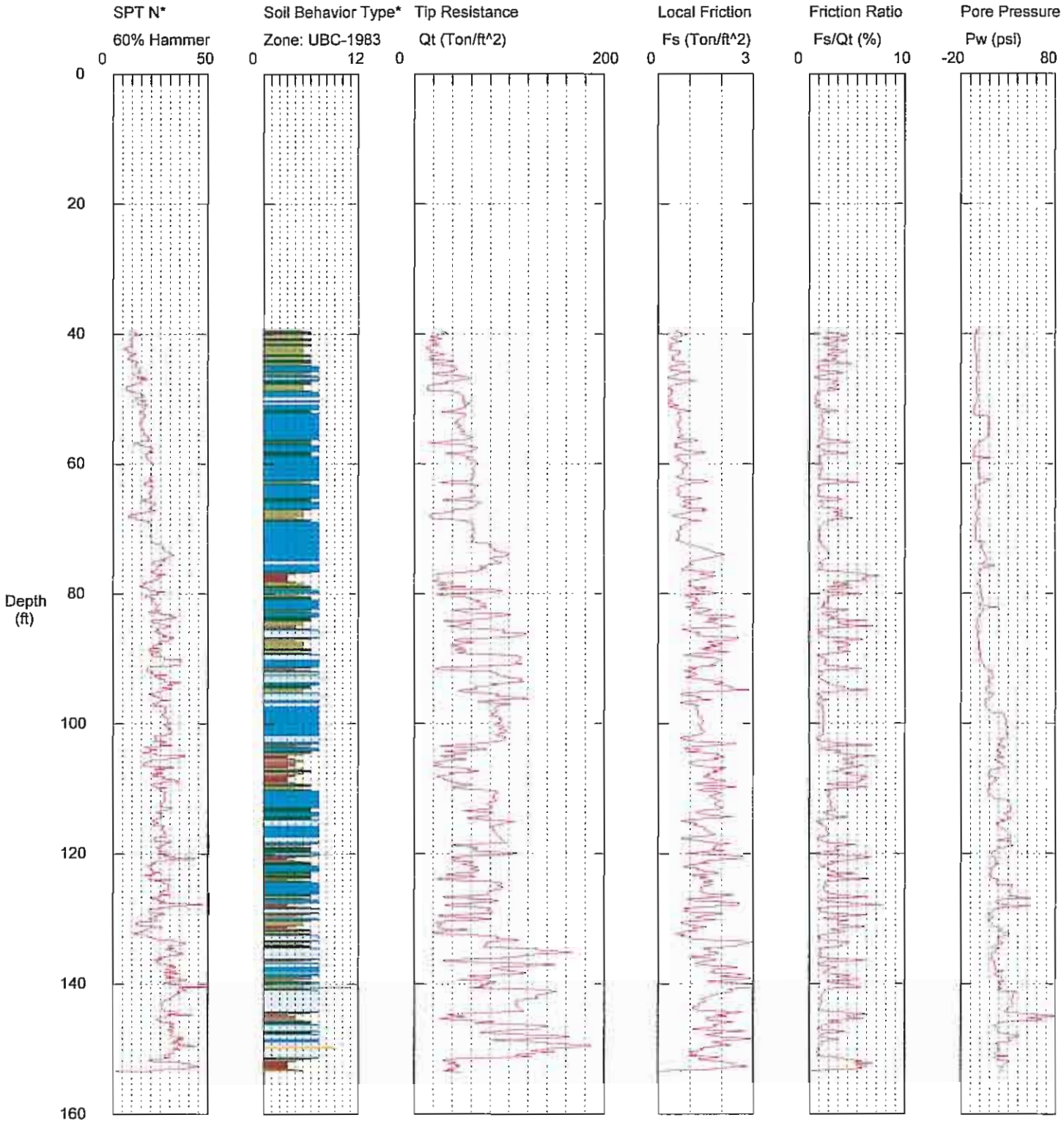
1 sensitive fine grained
2 organic material
3 clay
4 silty clay to clay
5 clayey silt to silty clay
6 sandy silt to clayey silt
7 silty sand to sandy silt
8 sand to silty sand
9 sand
10 gravelly sand to sand
11 very stiff fine grained (*)
12 sand to clayey sand (*)

*Soil behavior type and SPT based on data from UBC-1983

HAHN & ASSOC. / TG2S / NW 7900 ST HELENS RD

Operator: JSP/SVAN/VAN EXP
Sounding: FILO27
Cone Used: 4CH

CPT Date/Time: 09-06-07 08:30
Location: TG2S NW7900 STHR
Job Number: HAHN/5237-41/SIL



Maximum Depth = 153.54 feet

Depth Increment = 0.164 feet

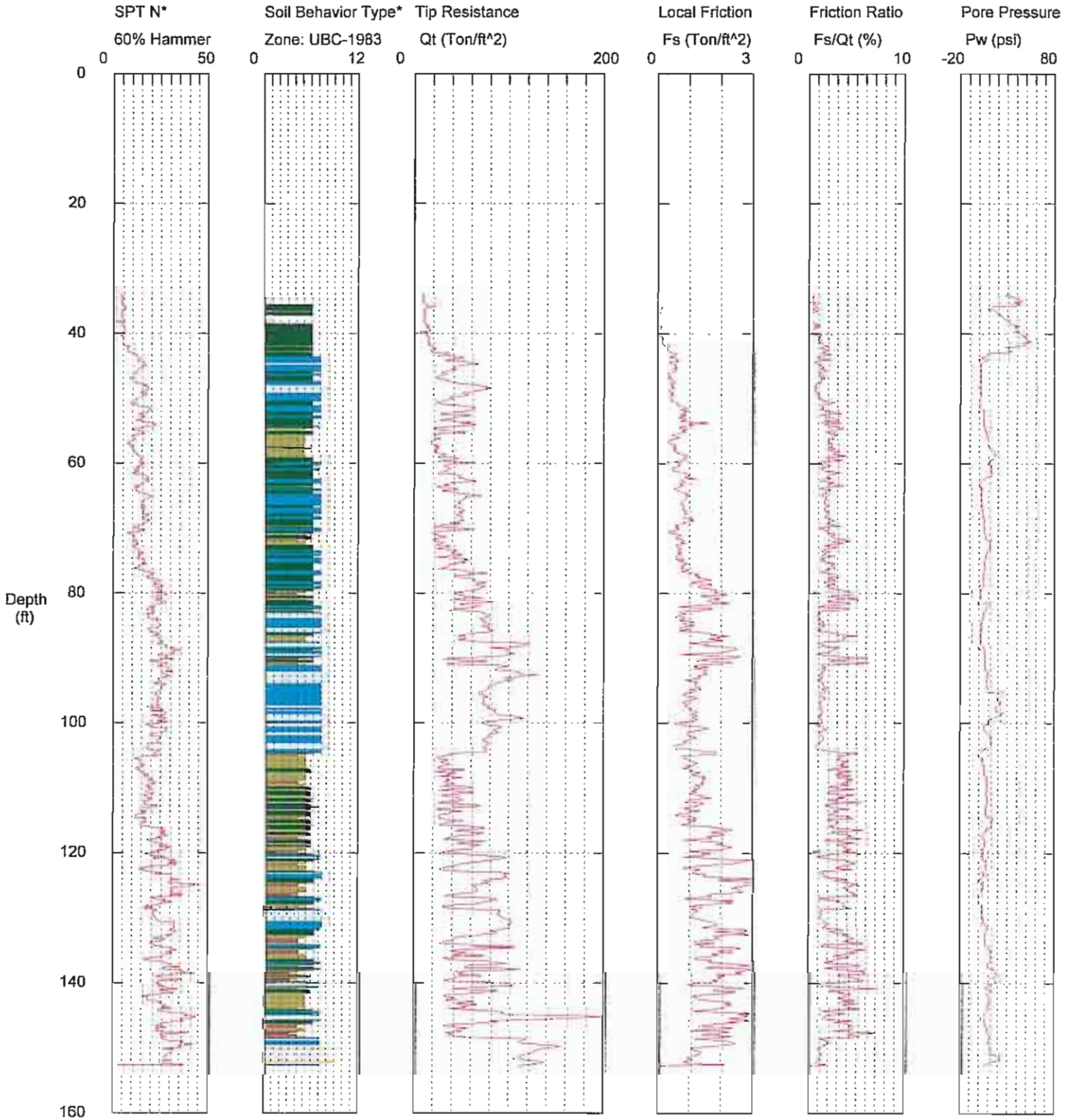
1 sensitive fine grained
2 organic material
3 clay
4 silty clay to clay
5 clayey silt to silty clay
6 sandy silt to clayey silt
7 silty sand to sandy silt
8 sand to silty sand
9 sand
10 gravelly sand to sand
11 very stiff fine grained (*)
12 sand to clayey sand (*)

*Soil behavior type and SPT based on data from UBC-1983

HAHN & ASSOC. / TG3S / NW 7900 ST HELENS RD

Operator: JSP/SVAN/VAN EXP
Sounding: FILO30
Cone Used: 4CH

CPT Date/Time: 09-07-07 11:36
Location: TG3S NW7900 STHR
Job Number: HAHN/5237-41/SIL



Maximum Depth = 152.89 feet

Depth Increment = 0.164 feet

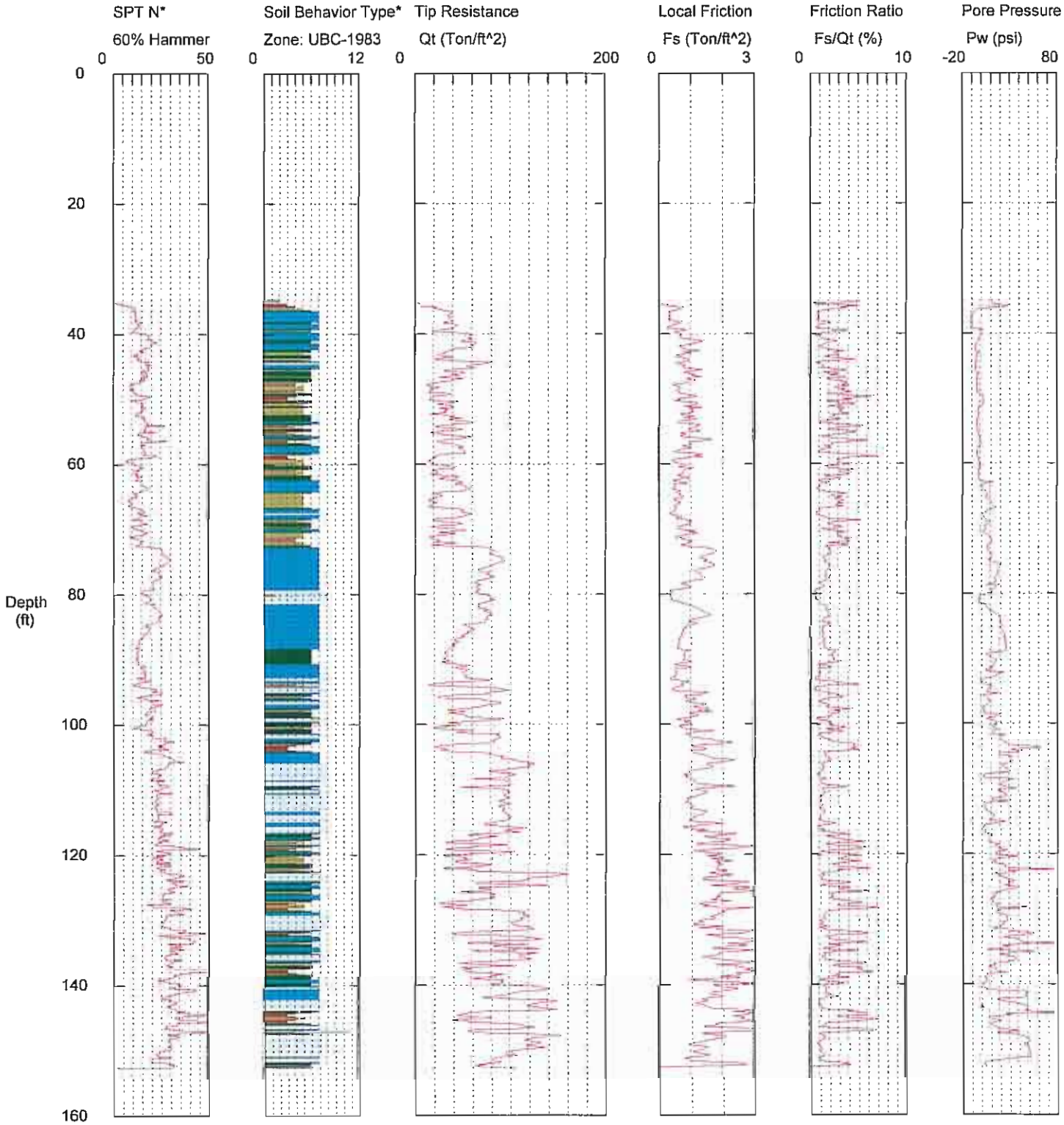
1 sensitive fine grained
2 organic material
3 clay
4 silty clay to clay
5 clayey silt to silty clay
6 sandy silt to clayey silt
7 silty sand to sandy silt
8 sand to silty sand
9 sand
10 gravelly sand to sand
11 very stiff fine grained (*)
12 sand to clayey sand (*)

*Soil behavior type and SPT based on data from UBC-1983

HAHN & ASSOC. / TG4S / NW 7900 ST HELENS RD

Operator: JSP/SVAN/VAN EXP
Sounding: FILO28
Cone Used: 4CH

CPT Date/Time: 09-06-07 12:52
Location: TG4S NW7900 STHR
Job Number: HAHN/5237-41/SIL



Maximum Depth = 152.72 feet

Depth Increment = 0.164 feet

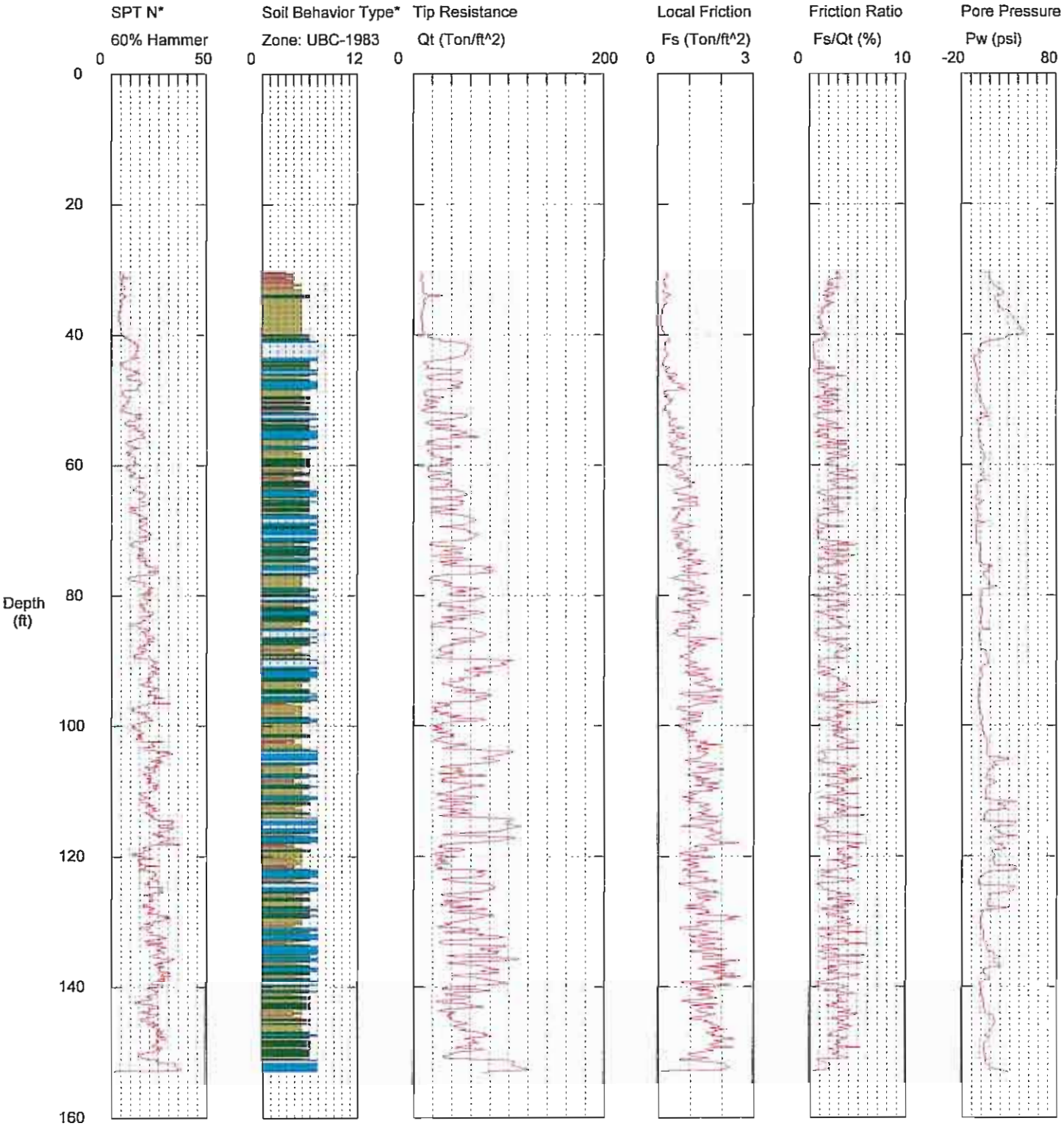
1 sensitive fine grained
2 organic material
3 clay
4 silty clay to clay
5 clayey silt to silty clay
6 sandy silt to clayey silt
7 silty sand to sandy silt
8 sand to silty sand
9 sand
10 gravelly sand to sand
11 very stiff fine grained (*)
12 sand to clayey sand (*)

*Soil behavior type and SPT based on data from UBC-1983

HAHN & ASSOC. / TG5S / NW 7900 ST HELENS RD

Operator: JSP/SVAN/VAN EXP
Sounding: FILO25
Cone Used: 4CH

CPT Date/Time: 09-05-07 11:05
Location: TG5S NW7900 STHR
Job Number: HAHN/5237-41/SIL



Maximum Depth = 153.05 feet

Depth Increment = 0.164 feet

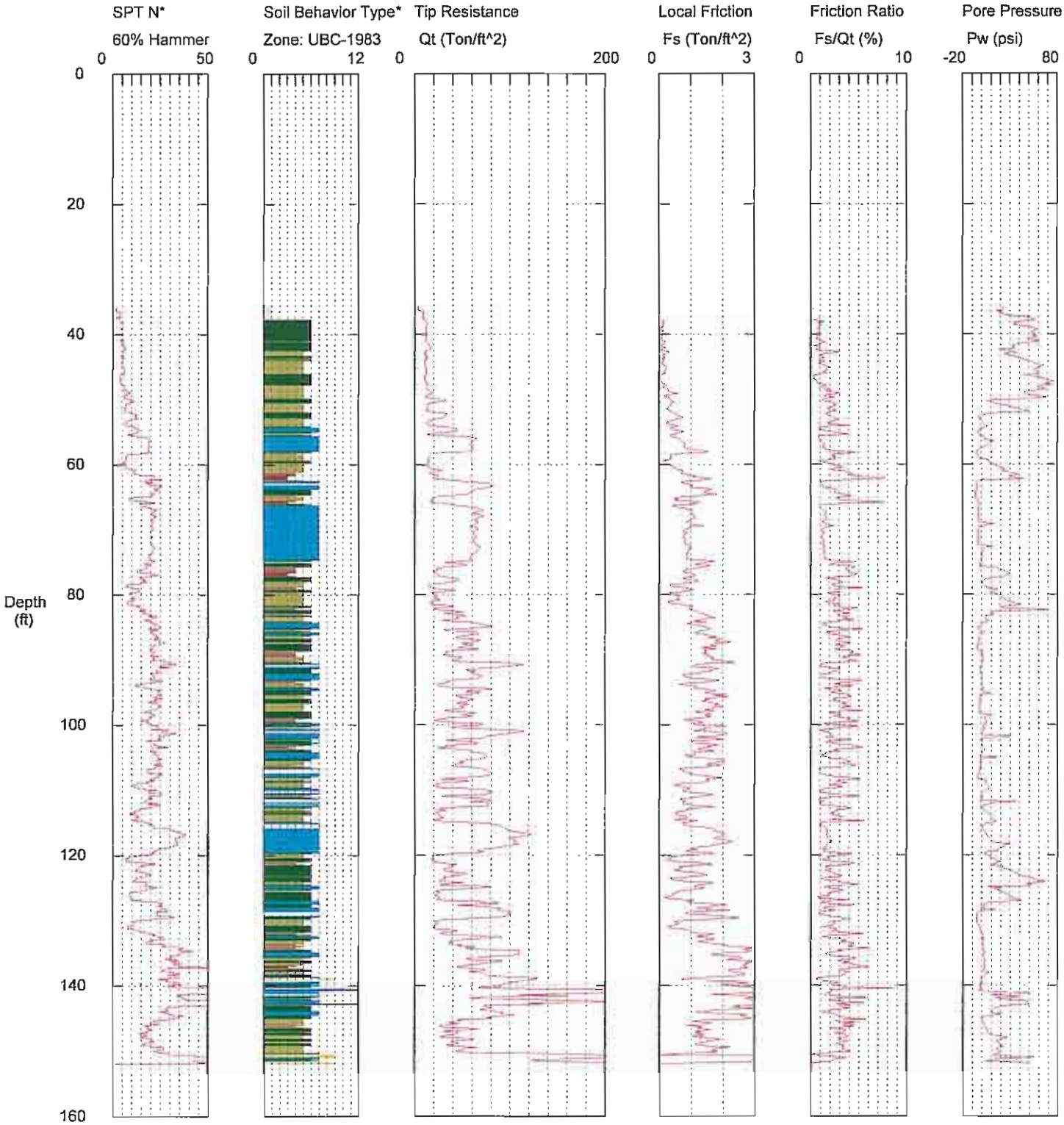
1 sensitive fine grained
2 organic material
3 clay
4 silty clay to clay
5 clayey silt to silty clay
6 sandy silt to clayey silt
7 silty sand to sandy silt
8 sand to silty sand
9 sand
10 gravelly sand to sand
11 very stiff fine grained (*)
12 sand to clayey sand (*)

*Soil behavior type and SPT based on data from UBC-1983

HAHN & ASSOC. / T6S / NW 7900 ST HELENS RD

Operator: JSP/SVAN/VAN EXP
Sounding: FILO29
Cone Used: 4CH

CPT Date/Time: 09-07-07 07:05
Location: TG6S NW7900 STHR
Job Number: HAHN/5237-41/SIL



Maximum Depth = 152.07 feet

Depth Increment = 0.164 feet

1 sensitive fine grained
2 organic material
3 clay
4 silty clay to clay
5 clayey silt to silty clay
6 sandy silt to clayey silt
7 silty sand to sandy silt
8 sand to silty sand
9 sand
10 gravelly sand to sand
11 very stiff fine grained (*)
12 sand to clayey sand (*)

*Soil behavior type and SPT based on data from UBC-1983