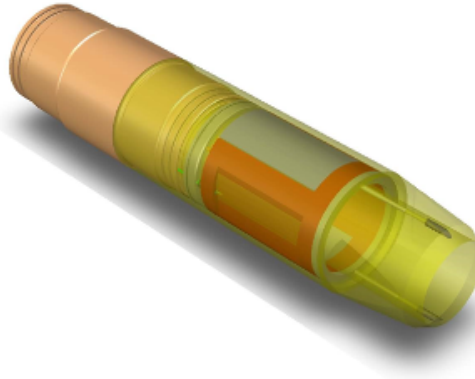
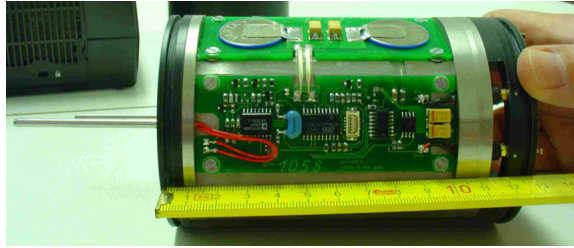


# APCT-3 Run Procedure

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APCT-3 Electronics

APCT-3 Shoe

## Tool assembly

1. Check pressure case and cutting shoe for damage. Ensure they are in good working order.
2. Check O-Rings on the case. Ensure they are not damaged. Apply a light coat of **Dow Corning 111** grease to the O-Rings and install on the case. Ensure threads are clean and apply a light coat of **Lubriplate No. 630-2 Multipurpose Grease P/N 07298**.
3. Install electronics package into the pressure case using the installation tool. Apply a liberal amount of **Thermal Joint Compound Type 120 from Wakefield Engineering** to the temp sensor and install in the case.
4. Install data cable in the electronics package.

## Initialization

1. Launch **WinTemp** from the desktop (Snowflake)
2. Select-Logger
3. Select-Battery. Battery Voltage 3005mv. If below 2750mv return logger to shore.
4. Select-Exit
5. Select-Logger
6. Select-Setup. A warning message may appear: "The logger contains data. Please clear memory before proceeding."
7. Select-OK
8. Select-Logger
9. Select-Clear Data. A warning message may appear: "Do you really want to clear data?"
10. Select-Yes
11. Select-Logger
12. Select-Setup (If no additions)
13. Select-Start Now!
14. Select-OK Select after tool starts to run. Verification window will come up. Tool can run for 18 hours.

## Deployment and tool retrieval

1. Remove cable from electronics package.
2. Using the installation tool, insert the electronics package into the cutting shoe.
3. Attach cutting shoe to pressure case. Tighten snugly with special wrench.
4. Run Tool. Recommended 5 min at mud line and 10 min after shooting into the hole.
5. When tool returns from the hole, ensure it is loosened on the drill floor and power washed off on the core receiving deck.
6. Put the tool in the vice. Use the wrench to remove the cutting shoe from the pressure case.
7. Using the installation tool remove the stainless steel spacer with the O-Ring.

## Data download

1. Install data cable in the electronics package.
2. Run **WinTemp**:
  - a. Select-**WinTemp** from desktop. (Snowflake)
  - b. Select-Logger
  - c. Select-Read data. You will see the following message: "The logger is still active. Do you want to stop acquisition?"
  - d. Select-Yes
  - e. Select-File
  - f. Select-Save As. >Move wtf. file to where you wish to process it. (395E-1560-07H)
  - g. Select-file
  - h. Select-Export. Move dat. file to where you wish to process it. (395E-1560-07H)
  - i. Select-Save
  - j. Select-Logger
  - k. Select-Clear Data. Verification message will appear: "Do you really want to clear the logger memory?"
  - l. Select-Yes
  - m. Select-Setup
  - n. Select-Deactivate

## Data processing

1. Launch **TPFIT/MATLAB shortcut** from the desktop.
2. In MATLAB
3. Select-Run (Green Arrow on the top task bar)
4. Select-Load Data
5. Select-Exp 395E Folder
6. Select-U1561A Folder
7. Select-Hole A Folder
8. Select-395E-U1561A-04H Folder
9. Select-.dat file
10. Select-Open
11. Select-Edit Meta Data
12. Enter- Expedition 395E / Site 1560 / Hole A / Core 07 / Core Type H / Depth 50 / Comments
13. Select-Accept
14. Select-Pick
15. Select-tO Pick- Expand window if needed. Pick a point just before the start of the temperature curve.
16. Select-Start Pick. Pick the highest stable point on the temperature curve.
17. Select-End Pick. Pick the lowest stable point on the temperature curve.
18. Select-Save
19. Select-Compute Contours
20. Select-Make Report.
21. Select-Save Session
22. Select-Save
23. Select-Quit. The following message is displayed. "Save Session?"
24. Select-No
25. Close Window.

## Credits

This document originated from Word document APCT-3 Run Procedure\_374.docx (see Archived Versions below for a pdf copy) that was written by R. Gjesvold (2017-07-17). Credits for subsequent changes to this document are given in the page history.

## LIMS Component Table

ANALYSIS	TABLE	NAME	ABOUT TEXT
DH_TEMP	SAMPLE	Exp	Exp: expedition number
DH_TEMP	SAMPLE	Site	Site: site number
DH_TEMP	SAMPLE	Hole	Hole: hole number
DH_TEMP	SAMPLE	Core	Core: core number
DH_TEMP	SAMPLE	Type	Type: type indicates the coring tool used to recover the core (typical types are F, H, R, X).

DH_TEMP	SAMPLE	text_id	Text_ID: automatically generated database identifier for a sample, also carried on the printed labels. This identifier is guaranteed to be unique across all samples.
DH_TEMP	SAMPLE	sample_number	Sample Number: automatically generated database identifier for a sample. This is the primary key of the SAMPLE table.
DH_TEMP	SAMPLE	label_id	Label identifier: automatically generated, human readable name for a sample that is printed on labels. This name is not guaranteed unique across all samples.
DH_TEMP	SAMPLE	sample_name	Sample name: short name that may be specified for a sample. You can use an advanced filter to narrow your search by this parameter.
DH_TEMP	SAMPLE	x_sample_state	Sample state: Single-character identifier always set to "W" for samples; standards can vary.
DH_TEMP	SAMPLE	x_project	Project: similar in scope to the expedition number, the difference being that the project is the current cruise, whereas expedition could refer to material/results obtained on previous cruises
DH_TEMP	SAMPLE	x_capt_loc	Captured location: "captured location," this field is usually null and is unnecessary because any sample captured on the JR has a sample_number ending in 1, and GCR ending in 2
DH_TEMP	SAMPLE	location	Location: location that sample was taken; this field is usually null and is unnecessary because any sample captured on the JR has a sample_number ending in 1, and GCR ending in 2
DH_TEMP	SAMPLE	x_sampling_tool	Sampling tool: sampling tool used to take the sample (e.g., syringe, spatula)
DH_TEMP	SAMPLE	changed_by	Changed by: username of account used to make a change to a sample record
DH_TEMP	SAMPLE	changed_on	Changed on: date/time stamp for change made to a sample record
DH_TEMP	SAMPLE	sample_type	Sample type: type of sample from a predefined list (e.g., HOLE, CORE, LIQ)
DH_TEMP	SAMPLE	x_offset	Offset (m): top offset of sample from top of parent sample, expressed in meters.
DH_TEMP	SAMPLE	x_offset_cm	Offset (cm): top offset of sample from top of parent sample, expressed in centimeters. This is a calculated field (offset, converted to cm)
DH_TEMP	SAMPLE	x_bottom_offset_cm	Bottom offset (cm): bottom offset of sample from top of parent sample, expressed in centimeters. This is a calculated field (offset + length, converted to cm)
DH_TEMP	SAMPLE	x_diameter	Diameter (cm): diameter of sample, usually applied only to CORE, SECT, SHLF, and WRND samples; however this field is null on both Exp. 390 and 393, so it is no longer populated by Sample Master
DH_TEMP	SAMPLE	x_orig_len	Original length (m): field for the original length of a sample; not always (or reliably) populated
DH_TEMP	SAMPLE	x_length	Length (m): field for the length of a sample [as entered upon creation]
DH_TEMP	SAMPLE	x_length_cm	Length (cm): field for the length of a sample. This is a calculated field (length, converted to cm).
DH_TEMP	SAMPLE	status	Status: single-character code for the current status of a sample (e.g., active, canceled)
DH_TEMP	SAMPLE	old_status	Old status: single-character code for the previous status of a sample; used by the LIME program to restore a canceled sample
DH_TEMP	SAMPLE	original_sample	Original sample: field tying a sample below the CORE level to its parent HOLE sample
DH_TEMP	SAMPLE	parent_sample	Parent sample: the sample from which this sample was taken (e.g., for PWDR samples, this might be a SHLF or possibly another PWDR)
DH_TEMP	SAMPLE	standard	Standard: T/F field to differentiate between samples (standard=F) and QAQC standards (standard=T)
DH_TEMP	SAMPLE	login_by	Login by: username of account used to create the sample (can be the LIMS itself [e.g., SHLFs created when a SECT is created])
DH_TEMP	SAMPLE	login_date	Login date: creation date of the sample
DH_TEMP	SAMPLE	legacy	Legacy flag: T/F indicator for when a sample is from a previous expedition and is locked/uneditable on this expedition
DH_TEMP	TEST	test changed_on	TEST changed on: date/time stamp for a change to a test record.
DH_TEMP	TEST	test status	TEST status: single-character code for the current status of a test (e.g., active, in process, canceled)
DH_TEMP	TEST	test old_status	TEST old status: single-character code for the previous status of a test; used by the LIME program to restore a canceled test

DH_TEMP	TEST	test test_number	TEST test number: automatically generated database identifier for a test record. This is the primary key of the TEST table.
DH_TEMP	TEST	test date_received	TEST date received: date/time stamp for the creation of the test record.
DH_TEMP	TEST	test instrument	TEST instrument [instrument group]: field that describes the instrument group (most often this applies to loggers with multiple sensors); often obscure (e.g., user_input)
DH_TEMP	TEST	test analysis	TEST analysis: analysis code associated with this test (foreign key to the ANALYSIS table)
DH_TEMP	TEST	test x_project	TEST project: similar in scope to the expedition number, the difference being that the project is the current cruise, whereas expedition could refer to material/results obtained on previous cruises
DH_TEMP	TEST	test sample_number	TEST sample number: the sample_number of the sample to which this test record is attached; a foreign key to the SAMPLE table
DH_TEMP	CALCULATED	Top depth CSF-A (m)	Top depth CSF-A (m): position of observation expressed relative to the top of the hole.
DH_TEMP	CALCULATED	Bottom depth CSF-A (m)	Bottom depth CSF-A (m): position of observation expressed relative to the top of the hole.
DH_TEMP	CALCULATED	Top depth CSF-B (m)	Top depth [other] (m): position of observation expressed relative to the top of the hole. The location is presented in a scale selected by the science party or the report user.
DH_TEMP	CALCULATED	Bottom depth CSF-B (m)	Bottom depth [other] (m): position of observation expressed relative to the top of the hole. The location is presented in a scale selected by the science party or the report user.
DH_TEMP	RESULT	contour_image_asman_id	RESULT contour image ASMAN_ID: serial number of ASMAN record for the heat model contour image (EPS format)
DH_TEMP	RESULT	contour_image_filename	RESULT contour image filename: file name for the heat model contour image (EPS format)
DH_TEMP	RESULT	core_name	RESULT core name: record of the core for which the temperature tool was deployed
DH_TEMP	RESULT	depth (m)	RESULT depth (m): field to enter measurement depth (not usually used)
DH_TEMP	RESULT	depth_uncertainty (m)	RESULT depth uncertainty (m): field to enter uncertainty in depth (if known) (not usually used)
DH_TEMP	RESULT	heat_capacity_by_volume (MJ/(m <sup>3</sup> -K))	RESULT heat capacity by volume (MJ/(m <sup>3</sup> -K)): heat capacity of the formation as calculated from heat decay curve
DH_TEMP	RESULT	measurement_quality	RESULT measurement quality: field to enter estimate of measurement quality (not usually used)
DH_TEMP	RESULT	raw_data_asman_id	RESULT raw data ASMAN_ID: serial number of ASMAN record for the raw data file (Wintemp format, or WTF)
DH_TEMP	RESULT	raw_data_filename	RESULT raw data filename: file name for the raw data file (Wintemp format, or WTF)
DH_TEMP	RESULT	report_asman_id	RESULT report ASMAN_ID: serial number of ASMAN record for the downhole temperature report (TXT format)
DH_TEMP	RESULT	report_filename	RESULT report filename: file name for the downhole temperature report (TXT format)
DH_TEMP	RESULT	results_image_asman_id	RESULT result image ASMAN_ID: serial number of ASMAN record for the results in image format (EPS format)
DH_TEMP	RESULT	results_image_filename	RESULT result image filename: file name of the results in image format (EPS format)
DH_TEMP	RESULT	session_asman_id	RESULT session file ASMAN_ID: serial number of ASMAN record for the session file in MATLAB (MAT) format
DH_TEMP	RESULT	session_filename	RESULT session filename: file name for the session file in MATLAB (MAT) format
DH_TEMP	RESULT	software_used	RESULT software used: name and version number of the software used to fit the heating curves (e.g., TP-Fit Version 1.1)
DH_TEMP	RESULT	ssup_asman_id	RESULT spreadsheet uploader ASMAN_ID: serial number of ASMAN record for the spreadsheet uploader (if used instead of the normal upload path)
DH_TEMP	RESULT	ssup_filename	RESULT spreadsheet uploader filename: file name of the spreadsheet uploader (if used instead of the normal upload path)
DH_TEMP	RESULT	temperature (°C)	RESULT temperature (deg. C): downhole temperature determined by the temperature curve fit
DH_TEMP	RESULT	temperature_uncertainty (°C)	RESULT temperature uncertainty (deg. C): uncertainty estimate in the downhole temperature (appears to always be 1 deg. C; doubt this is true value)

DH_TEMP	RESULT	thermal_conductivity (W/(m*K))	RESULT thermal conductivity (W/(m*K)): calculated thermal conductivity of formation in watts per meter-Kelvin
DH_TEMP	RESULT	tool_serial_number	RESULT tool serial number: serial number of the tool used
DH_TEMP	RESULT	tool_type	RESULT tool type: type of tool used (e.g., APCT-3, SET2, SETP)
DH_TEMP	SAMPLE	sample description	SAMPLE comment: contents of the SAMPLE.description field, usually shown on reports as "Sample comments"
DH_TEMP	TEST	test test_comment	TEST comment: contents of the TEST.comment field, usually shown on reports as "Test comments"
DH_TEMP	RESULT	result comments	RESULT comment: contents of a result parameter with name = "comment," usually shown on reports as "Result comments"

## Archived Versions

- [APCT-3 Run Procedure\\_374.docx](#): Original source file written by R. Gjesvold (2017-07-17).
- [APCT-3RunProcedure.pdf](#) - Feb. 24, 2020