

Title : Science course unit 23

Contributors : M.J. Pents (introduction)
P.J. Smith
R.L. Wilson
F.J. Lowes

Producer: Nat Taylor

CU S100/23

Tape No. 6LT/70192

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Form VTR
538.72
549.127
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Seq.	Time	Footage	Sequence List	Sound Cue
1.	1'09"		Pents introduces the unit on <u>paleomagnetism</u> .	
	2'37"		P.J. Smith explains what sort of rocks are suitable for <u>paleomagnetic analysis</u> . He explains and shows how to drill for and orient a rock core sample on location at Ballycastle, Northern Ireland. Smith shows and demonstrates the diamond tipped, water cooled <u>drill</u> .	Smith, P.J. 538.784161 621.952
	5'58"		Smith shows how to orient the rock sample to a fixed set of co-ordinates (vertical and horizontal)	
	7'41"		Smith removes the rock sample from the rock face and prepares it for laboratory inspection.	
				top of the rock
2.	9'21"		Smith introduces the sequence on measuring the direction of the magnetic field in a rock sample. He explains the procedure.	Well, I measured ... Wilson, R.L.
	14'32"		R.L. Wilson explains the process of measuring direction of magnetic field in rocks. He demonstrates the apparatus, a <u>magnetometer</u> , and then measures X, Y, and Z components of magnetization of the rock sample drills in sequence 1 above.	538.79028 magnetometer
	17'35"		Wilson corrects the readings by eliminating secondary magnetization in the rock sample. He explains how this is done and demonstrates.	

PROGRAMME SEQUENCE LIST

Continuation

Seq.	Time	Footage	Sequence List	Sound Cue
2.	18'30"		The result of the correction shows the direction of the ancient magnetic field in which the lava, from which the rock sample was taken, cooled.	here in Britain.
	19'23"		Pentg introduces the discussion on the origin of the ea r th's magnetic field	Well, now let's take..
3.	22'47"		Frank Lowes explains and demonstrates, his <u>mechanical model of the earth's magnetic field</u> which can create a self-exciting magnetic field. A compass attached to the model records the direction and reversals of the field while a magnetometer measures its strength.	538.720184 Lowes, Frank itself here reverses
4.	23'02"		Credits	