

Mineral Extraction in Great Britain

Business Monitor PA1007

Mineral extraction in Great Britain is a publication based on the Annual Minerals Raised Inquiry, carried out by ONS for the Office of the Deputy Prime Minister and the Department of Trade & Industry.

2003

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REGIONAL DEFINITION USED IN THIS REPORT

Government Offices for the Regions (GoR) were formed in 1994 and it was agreed that, as from 1 April 1997, these boundaries would become the primary classification for presenting statistical information at a regional level. These boundaries are now being used in this report in respect of data for 2003. Information for previous years used Economic Planning Regions (EPR) and the table below shows how these two definitions are related to enable information for 2003 to be compared with that for previous years.

Co-incident with the adoption of GoR boundaries for statistical purposes, local authorities were also re-organised and the relationship between the old and new structures is also shown in the table below. The tables in the report all use the old county names since each of the new unitary authorities would, in general, cover fewer quarries, which could result in more figures being disclosive.

Note: London is now classed as a Region, however, in this report it is presented under the South East to provide continuity with earlier publications.

REGION (EPR)	COUNTY	COUNTY/UNITARY	REGION (GoR)		
North	Northumberland Durham	Northumberland	North East		
		Durham			
	Tyne & Wear	Darlington			
		Newcastle upon Tyne			
		Gateshead			
		Sunderland			
		North Tyneside			
		South Tyneside			
		Cleveland			
	North West	Cumbria Lancashire		Cumbria	North West
				Lancashire	
		Greater Manchester		Blackburn	
				Blackpool	
Tameside					
Stockport					
Manchester					
Trafford					
Salford					
Oldham					
Rochdale					
Bury					
Bolton					
Cheshire	Cheshire				
Merseyside	Halton				
	Warrington				
	Sefton				
	Wirral				
	Liverpool				
	Knowsley				
	St. Helens				
Wigan					

REGION (EPR)	COUNTY	COUNTY/UNITARY	REGION (GoR)	
Yorkshire & Humberside	North Yorkshire	North Yorkshire	Yorkshire & the Humber	
	West Yorkshire	York		
		Leeds Bradford Calderdale Kirklees Wakefield		
	South Yorkshire	Sheffield Rotherham Doncaster Barnsley		
Humberside	East Riding of Yorkshire Kingston-upon-Hull North East Lincolnshire North Lincolnshire			
West Midlands	Hereford & Worcester	Herefordshire Worcestershire	West Midlands	
	Shropshire	Shropshire The Wrekin		
	Staffordshire	Staffordshire Stoke-on-Trent		
	Warwickshire	Warwickshire		
	West Midlands	Birmingham		Birmingham Wolverhampton Dudley Walsall Sandwell Solihull Coventry
East Midlands	Derbyshire	Derbyshire Derby	East Midlands	
	Leicestershire	Leicestershire Leicester Rutland		
	Lincolnshire	Lincolnshire		
	Northamptonshire Nottinghamshire	Northamptonshire Nottinghamshire Nottingham		
East Anglia	Cambridgeshire	Cambridgeshire Peterborough	East of England	
	Norfolk	Norfolk		
	Suffolk	Suffolk		
	Bedfordshire	Bedfordshire		
	Luton	Luton		
	Essex	Essex		
Southend-on-Sea	Thurrock Southend on Sea			
Hertfordshire	Hertfordshire			

REGION (EPR)	COUNTY	COUNTY/UNITARY	REGION (GoR)
South East	Berkshire Buckinghamshire East Sussex Hampshire Isle of Wight Kent Oxfordshire Surrey West Sussex Inner London Boroughs Outer London Boroughs	Bracknell Forest	South East
		Newbury	
		Reading	
		Slough	
		Windsor & Maidenhead	
		Wokingham	
		Buckinghamshire	
		Milton Keynes	
		East Sussex	
		Brighton & Hove	
		Hampshire	
		Portsmouth	
		Southampton	
		Isle of Wight	
Kent			
Medway			
Oxfordshire			
Surrey			
West Sussex			
Inner London Boroughs			
Outer London Boroughs			
South West	Avon Cornwall Devon Dorset Gloucestershire Somerset Wiltshire	Bath &	South West
		North East Somerset	
		Bristol	
		North Somerset	
		South Gloucestershire	
		Cornwall	
		Devon	
		Plymouth	
		Torbay	
		Dorset	
		Bournemouth	
		Poole	
		Gloucestershire	
		Somerset	
Wiltshire			
Thamesdown/Swindon			
Wales	Gwynedd Clwyd Powys Dyfed West Glamorgan Mid Glamorgan South Glamorgan Gwent	Anglesey	Wales
		Gwynedd	
		Conwy	
		Denbighshire	
		Flintshire	
		Wrexham	
		Powys	
		Ceredigion	
		Pembrokeshire	
		Carmarthenshire	
		Swansea	
		Neath Port Talbot	
		Bridgend	
		Rhondda Cynon Taff	
Merthyr Tydfil			
Vale of Glamorgan			
Cardiff			
Caerphilly			
Blaenau Gwent			
Torfaen			
Monmouthshire			
Newport			

REGION (EPR)	COUNTY	COUNTY/UNITARY	REGION (GoR)
Scotland	The Borders Strathclyde	The Scottish Borders	Scotland
		Argyll & Bute	
	Lothian	East Dunbartonshire	
		West Dunbartonshire	
		South Lanarkshire	
		North Lanarkshire	
		East Ayrshire	
		South Ayrshire	
		North Ayrshire	
		Glasgow City	
		Inverclyde	
		East Renfrewshire	
	Renfrewshire		
	Dumfries & Galloway Central	City of Edinburgh	
		East Lothian	
		Mid Lothian	
		West Lothian	
	Fife Tayside	Dumfries & Galloway	
		Clackmannanshire	
		Falkirk	
Stirling			
Grampian	Fife		
	Angus		
	Dundee City		
	Perth & Kinross		
Highland Orkney Islands area Shetland Islands area Western Isles area	Aberdeen City		
	Aberdeenshire		
	Moray		
	Highland		
	Orkney Islands		
	Shetland Islands		
	Western Isles		

NOTES TO TABLES

1. Introduction

This monitor covers all mines and quarries in Great Britain except for coal. The register of some 2,200 different sites is supplied and kept up-to-date by HM Inspectorate of Mines and the Health and Safety Executive.

2. Coverage

Mineral Extraction in Great Britain is a business monitor which presents the results of the Annual Minerals Raised Inquiry conducted by the Office for National Statistics under Section 1 of the Statistics of Trade Act 1947 for the Office of the Deputy Prime Minister and the Department of Trade & Industry.

3. Response

The results in this monitor are based on a response of 99 per cent of the total number of forms sent out. Estimates for non-response are included throughout the tables as appropriate.

4. Area information

Data is arranged in each table to provide the maximum amount of area information consistent with the need to prevent disclosure. Areas shown are basically counties for England and Wales and regions for Scotland, grouped where possible into Government Office Regions (GoRs) and country. Where counties and GoRs are shown together the GoR totals appear in bold type.

To ensure that the data reported for sites are ascribed to the correct administrative areas contributors are asked to confirm the site location when completing the inquiry forms.

5. Employment

The figures show the number of persons employed directly and indirectly during the week ended 6 September 2003 (or in the nearest normal working week) who were subject to the provisions of the Mines and Quarries Acts 1954 and 1969.

Included are working proprietors, drivers of external and internal haulage and other vehicles (whether or not on the quarry payroll) and persons employed by contractors and sub-contractors to carry out drilling, blasting, plant installation and modification etc. (excluded are persons who were employed on any operations subject to the provisions of the Factories Act 1961).

Where more than one mineral is extracted at a mine or quarry, all employment is attributed to the chief mineral (in terms of tonnage sold).

6. Marine dredged sand & gravel

Table 2 (Sand & gravel) includes data for marine dredged material. This data is allocated to the county in which the port of landing is situated.

7. Crushed rock summary

Table 7 (Crushed rock summary) presents combined data for the minerals, sandstone, igneous rock, limestone and dolomite in respect of their uses as aggregates for construction i.e. roadstone, concrete aggregate, railway ballast and other constructional uses (fill and ballast). Figures for these minerals are shown separately in Tables 3, 4, and 5 respectively.

8. Limestone, dolomite and chalk

Regional and county figures are given where possible in Tables 5 and 7. Tables A and B on page 10 summarise useful totals for Great Britain.

9. Guarding against disclosure

The Statistics of Trade Act 1947 prohibits the disclosure of any information relating to an individual undertaking without the consent of the person carrying on that undertaking. Rigorous checks have been made to ensure that information relating to individual businesses has not been disclosed, directly or by deduction, in any of the figures published in this Business Monitor. Where necessary, figures have been withheld or combined with others.

10. Rounding

Because of rounding, the sums of constituent items may not always agree with the totals shown.

11. Symbols

The following symbols are used throughout this monitor:

- * withheld to avoid disclosure
- nil or less than 500 tonnes
- † includes marine dredged material

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TABLE A - Limestone, dolomite and chalk:
Extractors' sales by broad end-use, 2003.

PA1007

Thousand tonnes

Mineral	Constructional uses (b)	Cement	Agricultural uses (a)	Industrial uses (a)	Total
Limestone	56668	9573	1007	6799	74048
Dolomite	10398	-	*	*	12167
Chalk	561	5360	*	*	8066
Total	67627	14933	2036	9684	94281

(a) Includes material for calcination

(b) Includes building stone

TABLE B - Limestone, dolomite and chalk:
Extractors' sales of material for agricultural and industrial uses, 2003(a).

PA1007

Thousand tonnes

Use	Limestone	Dolomite	Chalk	Total	Of which for conversion by calcination
Agricultural	1007	*	*	2036	*
Iron and steel	1948	940	*	*	1353
Glass making	96	*	-	*	-
Asphalt filler	320	5	-	325	-
Other fillers	1333	-	*	*	-
Chemical use	1687	-	*	*	1858
Building materials	450	-	*	*	*
Other uses	966	3	*	*	*
Total	7807	1770	2145	11722	3906

(a) Includes material for calcination

TABLE 1 - INDUSTRIAL SAND:
Extractors' sales by end-use and area of origin, 2003.

PA1007

Thousand tonnes

Area of origin	Moulding sand for foundry uses		Sand for glass manufacture	Sand for other industrial uses	Total
	Naturally bonded	Other			
North East	2	-	-	-	2
Yorkshire & the Humber	-	*	*	77	*
North West	*	251	*	*	1113
West Midlands	9	-	*	*	*
East Midlands	*	*	-	*	*
East of England	*	*	*	396	*
South East	*	*	*	*	540
South West	-	*	-	*	334
England	*	*	*	1585	3588
Wales	-	-	-	*	*
Scotland	*	*	*	*	*
Great Britain	*	*	1896	1645	4073

England				Wales		Scotland	
County	Total sales	County	Total sales	County	Total sales	Region	Total sales
Durham	2	Norfolk	*	Clwyd	*	Strathclyde	*
North Yorkshire	28	Essex	*			Lothian	*
West Yorkshire	*	Bedfordshire	*			Central	1
South Yorkshire	6	Oxfordshire	*			Fife	*
Humberside	*	Surrey	*			Highland	73
Gtr Manchester	24	Kent	*			Western Isles	1
Cheshire	1031	Wiltshire	*			Orkney Isles	*
Merseyside	58	Dorset	*				
Staffordshire	*	Devon	*				
West Midlands	-	Cornwall	*				
Hereford & Worcester	9						
Leicestershire	-						
Nottinghamshire	*						

**TABLE 2 – SAND AND GRAVEL FOR CONSTRUCTION:
Extractors' sales by end-use and area of origin, 2003.**

PA1007

Thousand tonnes

Area of origin	Sand			Gravel			Sand, gravel & hoggin for fill	Total	Of which marine dredged material
	Building sand		Concreting sand	Coated with a bituminous binder	Concrete aggregate	Other screened & graded gravels			
	For asphalt	For use in mortar							
Northumberland	-	16	*	-	61	75	*	421	-
Tyne & Wear	38	20	25	-	10	7	7	106	-
Durham	*	221	*	-	-	-	*	247	-
Cleveland	-	-	168 †	-	313 †	-	-	480 †	447
North East	*	257	414 †	-	384 †	81	*	1254 †	447
North Yorkshire	*	*	1090	*	1053	*	*	2442	-
West Yorkshire	-	*	*	-	101	*	*	592	-
South Yorkshire	*	224	*	-	187	-	72	784	-
Humberside	*	210	409 †	-	179 †	106	*	952 †	166
Yorkshire & the Humber	*	646	2035 †	*	1519 †	271	*	4770 †	166
Lancashire	-	*	*	-	*	*	*	542	-
Cumbria	*	1093	562	-	*	*	*	1905	-
Greater Manchester	*	111	*	-	-	-	*	543	-
Cheshire	51	*	843	-	-	*	*	1838	-
Merseyside	-	188 †	204 †	-	-	-	-	392 †	252
North West	104	2169 †	1970 †	-	189	373	415	5220 †	252
Shropshire	*	125	422	42	204	*	*	820	-
Staffordshire	*	544	2320	*	2754	*	*	5997	-
West Midlands	-	301	203	-	56	-	*	*	-
Warwickshire	*	126	510	-	398	*	*	1146	-
Hereford & Worcester	-	85	547	-	302	*	121	*	-
West Midlands	120	1181	4003	*	3714	*	289	9590	-
Derbyshire	-	*	*	*	752	*	*	1618	-
Northamptonshire	*	*	*	*	*	*	*	*	-
Leicestershire	*	*	755	-	*	2	*	*	-
Nottinghamshire	73	456	1517	-	1094	30	67	3233	-
Lincolnshire	*	256	1284	*	1179	*	161	3188	-
East Midlands	*	893	4472	*	3418	427	346	9842	-

TABLE 2 – (continued)

PA1007

Thousand tonnes

Area of origin	Sand			Gravel			Sand, gravel & hoggin for fill	Total	Of which Marine dredged Material
	Building sand		Concreting sand	Coated with a bituminous binder	Concrete aggregate	Other screened & graded gravels			
	For asphalt	For use in mortar							
Cambridgeshire	*	30	1150	*	925	*	70	2397	-
Norfolk	*	*	793	*	899	129	317	2449	-
Suffolk	*	174 †	654 †	*	531 †	85 †	238 †	1721 †	290
Essex	45	421	1966 †	-	2116 †	199	150 †	4897 †	1421
Hertfordshire	-	*	492	-	567	*	94	1253	-
Bedfordshire	39	423	716	-	339	10	137	1663	-
East of England	274	1305 †	5770 †	47	5377 †	602 †	1007 †	14381 †	1711
Buckinghamshire	-	78	271	-	452	15	182	998	-
Oxfordshire	*	278	*	-	*	*	84	1166	-
Berkshire	-	83	321	-	481	35	121	1041	-
Surrey	*	626	421	-	466	*	29	1779	-
Kent	71	660 †	1580 †	-	1928 †	240	195 †	4675 †	2793
East Sussex	-	3 †	158 †	-	358 †	-	9 †	528 †	528
West Sussex	-	339	485 †	-	318 †	3	104 †	1249 †	273
Hampshire	-	224 †	876 †	-	1860 †	126 †	108 †	3194 †	1779
Isle of Wight	-	* †	* †	-	* †	*	6 †	217 †	113
Greater London	5	* †	1334 †	-	1694 †	*	24 †	3068 †	2300
South East	316	2325 †	5905 †	-	7964 †	543 †	862 †	17915 †	7786

TABLE 2 – (continued)

PA1007

Thousand tonnes

Area of origin	Sand			Gravel			Sand, gravel & hoggin for fill	Total	Of which marine dredged material
	Building sand		Concreting sand	Coated with a bituminous binder	Concrete aggregate	Other screened & graded gravels			
	For asphalt	For use in mortar							
Gloucestershire	-	30	363	-	577	89	27	1085	-
Wiltshire	-	87	*	-	*	*	*	922	-
Avon	-	116 †	230 †	-	58 †	-	- †	405 †	405
Somerset	-	-	* †	-	* †	*	*	* †	56
Dorset	*	320	905 †	*	258 †	*	25 †	1567 †	74
Devon	*	*	325 †	43	156 †	176	*	1218 †	3
Cornwall	-	*	660	-	*	-	*	*	-
South West	*	1035 †	2884 †	*	1545 †	*	462 †	6413 †	538
England	*	9810 †	27452 †	*	24110 †	2927 †	3718 †	69385 †	10901
Clwyd	*	226	581	-	173	*	62	1089	-
Gwynedd	-	51 †	44	-	60	52	24 †	232 †	48
Dyfed	4 †	166 †	113 †	-	47	32	20 †	381 †	151
West Glamorgan	-	202 †	113 †	-	13 †	-	1 †	330 †	330
South Glamorgan	-	152 †	72 †	-	62 †	-	- †	286 †	286
Gwent	-	190 †	149 †	-	75 †	-	1 †	415 †	415
Powys	-	-	-	-	-	-	-	-	-
Wales	* †	987 †	1073 †	-	430 †	*	107 †	2733 †	1230

TABLE 2 – (continued)

PA1007

Thousand tonnes

Area of origin	Sand			Gravel			Sand, gravel & hoggin for fill	Total	Of which marine dredged material
	Building sand		Concreting sand	Coated with a bituminous binder	Concrete aggregate	Other screened & graded gravels			
	For asphalt	For use in mortar							
Dumfries & Galloway	14	50	165	-	160	58	84	531	-
Strathclyde	*	489	1170	-	433	307	*	2793	-
Borders	10	32	65	-	46	3	56	211	-
Lothian	-	55	79	*	*	86	54	322	-
Central	*	*	*	-	*	-	*	*	-
Fife	*	94	*	-	220	210	16	1065	-
Tayside	18	97	349	-	300	106	121	990	-
Grampian	39	70	302	-	153	78	280	922	-
Highland	13	43	155	-	226	43	101	580	-
Western Isles area	-	*	3	-	5	*	*	16	-
Orkney Islands area	-	*	-	-	-	-	-	*	-
Shetland Islands area	-	-	-	-	*	26	*	*	-
Scotland	359	1053	2886	*	1724	*	1132	8103	-
Great Britain	1544 †	11851 †	31411 †	222	26264 †	3972 †	4957 †	80221 †	12131
Marine Dredged	4	925	4468	-	6535	76	124	12131	

† Includes marine dredged material

See also note 6

TABLE 3 – SANDSTONE:
Extractors' sales by end-use and area of origin, 2003.

Area of origin	Building stone	Roadstone		
		Coated where extracted	Transported for coating	For use uncoated
North East	44	-	-	-
Yorkshire & the Humber	69	*	617	212
North West	*	-	475	*
West Midlands	2	*	327	314
East Midlands	*	95	-	*
East of England	*	-	-	-
South East	*	-	-	-
South West	13	*	224	67
England	*	511	1644	854
Wales	*	433	792	430
Scotland	63	103	104	457
Great Britain	327	1047	2539	1741

England

County	Total sales	County	Total sales
Northumberland	70	Norfolk	123
Durham	26	Bedfordshire	*
North Yorkshire	1003	Oxfordshire	*
West Yorkshire	619	Surrey	1
South Yorkshire	1	West Sussex	37
Cumbria	*	Greater London	1
Lancashire	1357	Gloucestershire)
Gtr Manchester	800	Wiltshire)
Cheshire	*	Somerset)
Shropshire	1265	Avon	70
Staffordshire	43	Devon	460
Hereford & Worcester	9	Cornwall	92
Derbyshire	250		

Thousand tonnes

Railway ballast	Concrete aggregate	Other constructional uses	Other uses	Total
-	-	52	-	96
-	*	584	*	1622
-	565	1626	-	2927
-	*	*	*	1317
-	-	*	-	250
-	-	123	-	*
-	-	38	-	*
80	*	*	-	628
80	891	2713	*	7005
*	641	871	-	3179
65	245	442	1	1481
*	1778	4026	*	11665

Wales

County	Total sales
Gwynedd	-
Dyfed	*
West Glamorgan	551
Mid Glamorgan	*
Gwent	280
Powys	1554

Scotland

Region	Total sales
Dumfries and Galloway	343
Strathclyde	128
Borders	432
Central	8
Fife	1
Grampian	*
Highland	160
Orkney Islands area	*
Shetland Islands area	*

TABLE 4 – IGNEOUS ROCK:
Extractors' sales by end-use and area of origin, 2003.

Area of origin	Building stone	Roadstone		
		Coated where extracted	Transported for coating	For use uncoated
North East	*	404	377	612
North West	1	-	294	*
West Midlands	*	831	373	454
East Midlands	*	1435	2860	*
South East	-	-	-	-
South West	*	304	161	653
England	28	2974	4066	3185
Wales	5	375	257	327
Scotland	179	2101	1246	7251
Great Britain	212	5450	5569	10764

England

County	Total sales
Northumberland	1603
Durham	258
Cumbria	*
Shropshire	*
West Midlands	*
Warwickshire	*
Leicestershire	14083
Surrey	-
Somerset	*
Devon	*
Cornwall	2107

Wales

County	Total sales
Powys	*
Dyfed	*
Gwynedd	*

Thousand tonnes

Railway ballast	Concrete aggregate	Other Constructional uses	Other uses	Total
6	*	407	-	1861
-	80	312	-	*
-	*	412	-	*
*	2694	3922	5	14083
-	-	*	-	-
*	533	1407	-	3062
1701	3458	6460	5	21878
-	*	*	-	2507
967	*	*	308	20920
2669	6613	13716	312	45305

Scotland

Region	Total Sales
Tayside	862
Dumfries & Galloway	637
Strathclyde	7341
Borders	224
Lothian	1870
Central	892
Fife	*
Grampian	1530
Highland	6169
Western Isles Area	157
Shetland Islands Area	*

**TABLE 5 – LIMESTONE (including Dolomite for constructional uses):
Extractors' sales by end-use and area of origin, 2003.**

Area of origin	For constructional uses						
	Building stone	Roadstone Coated where extracted	Transported for coating	For use uncoated	Railway ballast	Concrete aggregate	Other constructional uses
North East	3	237	283	1126	2	*	1711
Yorkshire & the Humber	6	*	499	2767	-	3012	2557
North West	*	471	398	*	-	1924	1927
West Midlands	6	*	393	830	-	53	*
East Midlands	29	709	1264	3467	-	3687	5094
East of England	-	-	-	*	-	*	-
South East	1	-	-	*	-	*	*
South West	*	1579	883	5515	-	6120	5266
England	160	3597	3720	14586	2	15925	17627
Wales	39	866	*	1756	*	*	3845
Scotland	*	30	*	104	-	*	98
Great Britain	*	4513	4020	16455	*	20197	21571

England

County	Total sales	County	Total sales	County	Total sales
Northumberland	646	Staffordshire	2522	Oxfordshire	618
Tyne and Wear	151	Shropshire	803	Isle of Wight	*
Cleveland	3419	Hereford and Worcester	2	Kent	345
Durham	6534	Warwickshire	17954	Gloucestershire	1583
North Yorkshire	2858	Derbyshire	2	Wiltshire	16
West Yorkshire	52	Nottinghamshire	820	Dorset	*
South Yorkshire	4879	Lincolnshire	420	Somerset	11394
Humberside	3409	Northamptonshire	3848	Avon	4509
Lancashire		Leicestershire	*	Devon	1862
Cumbria		Cambridgeshire		Cornwall	*

(a) For filler in asphalt and as mine dust

(b) For other fillers, powders and whittings (eg in animal feed, polymers, paint, paper and pharmaceuticals)

See also note 8.

PA1007

Thousand tonnes

For other uses (including material for calcination)

Agricultural use	Iron & steel	Cement	Glass making	Asphalt filler (a)	Other fillers (b)	Other uses	Total
*	-	-	-	-	-	-	4216
35	*	-	-	*	-	6	9443
54	*	1907	-	*	*	170	8287
*	-	1181	-	*	-	-	3327
234	227	4000	96	112	1202	2928	23043
-	-	-	-	*	-	-	*
-	-	-	-	-	-	-	*
315	*	-	-	*	*	-	19976
700	1382	7087	96	209	1313	3103	69507
133	565	1238	-	*	*	-	13208
174	-	1248	-	*	*	-	1730
1007	1948	9573	96	320	*	3103	84445

Wales		Scotland	
County	Total sales	Region	Total sales
Clwyd	6033	Strathclyde) 180
Gwynedd	*	Tayside)
Dyfed	1197	Grampian	155
Mid Glamorgan	4317	Highland	147
South Glamorgan	1030	Lothian	1248
Gwent	*		
Powys	145		

TABLE 5A – DOLOMITE:
Extractors' sales by end-use and area of origin, 2003.

PA1007

Thousand tonnes

Area of origin	Building stone	Other constructional uses	Non constructional uses		Total
			Agricultural use	Other uses	
North East	2	2429	499	350	3280
Yorkshire & the Humber	*	*	*	*	3072
West Midlands	1	254	45	-	300
East Midlands	*	*	74	564	*
South West	-	*	*	1	*
England	7	*	676	*	10327
Wales	-	*	*	-	*
Scotland	-	*	*	-	*
Great Britain	7	10391	*	*	*

Other constructional uses are included in Table 5

TABLE 6 – PEAT:
Extractors' sales by end-use and area of origin, 2003.

PA1007

Thousand cubic metres

Area of origin	Horticultural use	Other uses	Total
North East	2	-	2
Yorkshire & the Humber	446	-	446
North West	657	-	657
East of England	16	1	17
South West	106	-	106
England	1227	1	1228
Dumfries & Galloway	*	-	*
Strathclyde	*	*	*
Borders	*	-	*
Lothian	*	-	*
Central	*	-	*
Grampian	*	*	*
Highland	*	*	2
Shetland Islands area	-	*	*
Scotland	741	38	779
Great Britain	1968	39	2008

**TABLE 7 – CRUSHED ROCK SUMMARY:
Extractors' sales by end-use and area of origin, 2003.**

PA1007

Thousand tonnes

Area of origin	Roadstone			Fill & ballast	Concrete aggregate	Total
	Coated where extracted	Transported for coating	For use uncoated			
Northumberland	297	*	709	611	341	*
Tyne & Wear	-	-	151	-	-	151
Durham	344	*	*	1567	523	3598
Cleveland	-	-	*	-	-	*
North East	641	660	1738	2178	864	6081
North Yorkshire	313	1064	2019	1724	2083	7203
West Yorkshire	-	-	*	*	*	882
South Yorkshire	-	52	*	*	*	2515
Humberside	-	-	-	52	-	52
Yorkshire & the Humber	313	1116	2978	3141	3104	10652
Lancashire	352	*	*	2031	*	4284
Cumbria	118	*	*	1242	1224	3736
Greater Manchester	-	-	*	*	*	*
Cheshire	-	-	-	*	-	*
North West	471	1168	816	3864	2568	8887
Shropshire	635	390	*	355	*	2312
Staffordshire	245	362	372	270	48	1298
West Midlands	*	*	*	*	*	*
Warwickshire	*	*	41	*	*	*
Hereford & Worcester	*	-	*	68	-	*
West Midlands	1496	1093	1598	1047	303	5538
Derbyshire	804	1264	*	*	3677	11678
Northamptonshire	-	-	124	293	-	417
Leicestershire	1435	2860	2703	5957	2697	15652
Nottinghamshire	-	-	-	-	-	-
Lincolnshire	-	-	*	*	-	696
East Midlands	2238	4124	4970	10737	6374	28443
Cambridgeshire	-	-	*	-	*	*
Norfolk	-	-	-	123	-	123
East of England	-	-	*	123	*	*
Oxfordshire	-	-	*	*	*	618
Surrey	-	-	-	1	-	1
Kent	-	-	-	94	251	344
West Sussex	-	-	-	36	-	36
Isle of Wight	-	-	-	*	-	*
Greater London	-	-	-	1	-	1
South East	-	-	*	620	*	*

TABLE 7 – (continued)

PA1007

Thousand tonnes

Area of origin	Roadstone			Fill & ballast	Concrete aggregate	Total
	Coated where extracted	Transported for coating	For use uncoated			
Gloucestershire	169	*	525	390	605	*
Wiltshire	-	-	-	*	-	*
Avon	593	*	*	1249	1609	4565
Somerset	705	800	3741	3262	3163	11671
Dorset	-	-	*	*	*	*
Devon	247	*	562	*	*	2613
Cornwall	209	161	289	1098	434	2192
South West	1924	1267	6234	6835	6737	22998
England	7082	9429	18625	28545	20275	83957
Clwyd	448	228	725	2107	1805	5312
Gwynedd	*	168	131	590	*	1409
Dyfed	*	*	272	569	542	1583
West Glamorgan	45	234	141	*	-	*
Mid Glamorgan	*	*	*	1105	2044	4111
South Glamorgan	122	*	184	*	*	*
Gwent	*	124	*	164	310	*
Powys	*	415	*	*	419	2517
Wales	1694	1345	2514	5640	5644	16837
Dumfries & Galloway	52	-	328	425	153	957
Strathclyde	836	564	2041	2056	1562	7058
Borders	35	104	197	255	63	655
Lothian	11	*	592	*	157	1868
Central	473	93	189	71	73	899
Fife	*	*	83	*	64	*
Tayside	*	*	294	481	-	938
Grampian	302	-	579	387	360	1628
Highland	81	128	3313	2756	82	6360
Western Isles area	*	-	*	76	33	157
Orkney Islands area	*	-	*	*	*	*
Shetland Islands area	64	-	*	*	*	245
Scotland	2234	1355	7812	8023	2669	22092
Great Britain	11010	12129	28950	42208	28588	122885

See note 7

TABLE 8 – CLAY & SHALE:
Extractors' sales by end-use and area of origin, 2003.

PA1007

Thousand tonnes

Area of origin	Bricks, pipes & tiles	Pottery	Cement	Light aggregate	Constructional uses	Other uses	Total
Northumberland	31	-	-	-	-	-	31
Tyne & Wear	85	-	-	-	-	-	85
Durham	*	-	-	-	*	-	*
North East	*	-	-	-	*	-	*
North Yorkshire	12	*	-	*	*	-	162
West Yorkshire	283	-	-	-	-	-	283
South Yorkshire	*	-	-	-	*	-	170
Humberside	*	-	*	-	-	*	241
Yorkshire & the Humber	511	*	*	*	118	*	856
Lancashire	*	-	-	-	*	-	463
Cumbria	32	-	-	-	-	-	32
Greater Manchester	*	-	-	-	79	2	*
Cheshire	-	-	-	-	*	-	*
Merseyside	*	-	-	-	-	-	*
North West	543	-	-	-	689	2	1234
Shropshire	*	-	-	-	*	-	*
Staffordshire	*	*	*	*	-	72	1166
West Midlands	265	-	-	-	-	-	265
Warwickshire	146	-	333	-	-	-	479
Hereford & Worcester	*	-	-	-	20	-	*
West Midlands	1670	*	*	*	*	72	2367
Derbyshire	*	-	489	-	*	-	788
Northamptonshire	-	-	-	-	*	-	*
Leicestershire	*	-	*	-	-	-	880
Nottinghamshire	*	-	-	-	-	-	*
East Midlands	1335	-	*	-	*	-	2174
Cambridgeshire	*	-	*	-	-	-	*
Norfolk	-	-	-	-	-	*	*
Suffolk	3	-	-	-	-	-	3
Essex	*	-	297	-	-	-	*
Hertfordshire	-	-	-	-	*	-	*
Bedfordshire	*	-	-	-	-	-	*
East of England	*	-	*	-	*	*	1728
Buckinghamshire	11	-	-	-	-	-	11
Oxfordshire	-	-	-	-	-	-	-
Berkshire	-	-	-	-	-	-	-
Surrey	219	-	-	-	-	-	219
Kent	*	-	-	-	39	-	*
East Sussex	*	-	-	-	-	-	*
West Sussex	313	-	-	-	-	-	313
Hampshire	*	-	-	-	-	12	*
Greater London	-	-	-	-	-	-	-
South East	858	-	-	-	39	12	910

TABLE 8 – (continued)

PA1007

Thousand tonnes							
Area of origin	Bricks, Pipes & tiles	Pottery	Cement	Light Aggregate	Constructional uses	Other uses	Total
Gloucestershire	*	-	-	-	*	39	*
Wiltshire	-	-	132	-	-	-	132
Avon	*	-	-	-	-	-	*
Dorset	14	-	-	-	-	-	14
Devon	138	-	-	-	-	-	138
Cornwall	-	-	-	-	*	-	*
South West	337	-	132	-	*	39	*
England	6717	*	2043	*	1068	*	10021
Clwyd	-	-	84	-	-	-	84
Gwynedd	*	-	-	-	-	-	*
Dyfed	-	-	-	-	*	-	*
Powys	96	-	-	-	*	-	*
Wales	*	-	84	-	*	-	348
Dumfries & Galloway	-	-	-	-	38	-	38
Strathclyde	*	-	-	-	46	-	*
Lothian	-	-	89	-	*	-	*
Central	79	-	-	-	-	-	79
Scotland	*	-	89	-	*	-	311
Great Britain	7090	*	2215	*	1181	*	10680

TABLE 9 – CHALK:
Extractors' sales by end-use and area of origin, 2003.

PA1007

Thousand tonnes

Area of origin	Cement	Constructional use	Agricultural use	Fillers, powders, whittings	Other uses	Total
North Yorkshire	-	*	*	-	-	*
Humberside	895	350	*	*	*	*
Yorkshire & the Humber	895	*	30	*	*	2900
Lincolnshire	-	*	*	-	*	*
East Midlands	-	*	*	-	*	*
Cambridgeshire	226	-	*	*	-	*
Norfolk	-	-	*	-	4	*
Suffolk	-	-	*	*	*	*
Essex	-	-	*	-	-	*
Hertfordshire	-	-	23	-	-	23
Bedfordshire	1570	-	-	-	-	1570
East of England	1796	-	142	*	*	*
Buckinghamshire	-	-	*	-	-	*
Berkshire	-	1	*	-	-	*
Surrey	-	10	-	-	-	10
Kent	1806	2	48	-	-	1856
East Sussex	-	-	-	-	*	*
West Sussex	-	1	25	-	-	25
Hampshire	-	*	*	-	-	*
Isle of Wight	-	22	2	-	-	24
South East	1806	*	142	-	*	1995
Wiltshire	863	-	-	24	*	*
Dorset	-	*	-	-	-	*
Devon	-	23	15	-	*	*
South West	863	*	15	24	*	*
England	5360	561	*	*	*	8066

NB Only those parts of GB producing chalk are identified

See also note 8

**TABLE 10 – FIRECLAY:
Extractors' sales by end-use and area of origin, 2003.**

Thousand tonnes

Area of origin	Refractory uses	Bricks, pipes and tiles	Other uses	Total
Northumberland	79	-	-	79
Tyne and Wear	12	-	-	12
North East	91	-	-	91
West Yorkshire	-	10	-	10
South Yorkshire	-	*	-	*
Yorkshire & the Humber	-	*	-	*
Shropshire	60	-	-	60
Staffordshire	-	25	-	25
West Midlands	60	25	-	86
Leicestershire	70	162	43	274
East Midlands	70	162	43	274
England	222	219	43	483
Central	45	-	-	45
Scotland	45	-	-	45
Great Britain	267	219	43	528

**TABLE 11 – ORE MINERALS:
Extractors' sales by area of origin, 2003.**

PA1007

Thousand tonnes

Mineral	Area of origin	Estimated recoverable mineral and metal content
Iron (Crude ore sold -th. tonnes)	Cumbria, Gloucestershire	-
Other Ore minerals: (Total crude ore sold 69 th. tonnes)		
Barium sulphate	Cumbria, Derbyshire	*
Calcium fluoride	Derbyshire	*
Lead	Derbyshire	*

**TABLE 12 – OTHER MINERALS:
Extractors' sales by area of origin, 2003.**

PA1007

Thousand tonne

Mineral	Area of origin	Sales
Ball clay	Devon, Dorset	*
Calcspars	Derbyshire, Gloucestershire	-
Chert and Flint	Norfolk, Kent, Essex, West Sussex	*
China clay	Devon, Cornwall	2378
Fuller's earth	Bedfordshire	19
Gypsum	Cumbria, Staffordshire, Nottinghamshire, Leicestershire, East Sussex	*
Honestone	Strathclyde	*
Potash (refined)	Cleveland	*
Rock salt	Cheshire, Cleveland	*
Salt from brine	Cheshire	*
Salt in brine	Cheshire	*
Silica stone	Durham, Essex	*
Slate	Cumbria, Devon, Cornwall, Gwynedd, Clwyd, Dyfed, Central, Tayside, Grampian	832 (a)
Soapstone & talc	Shetland Islands area	6

(a) Roofing (including roofing slates used vertically) 35; Cladding and other decorative uses *; Powder and granules
Crude blocks 33; Fill and other uses 728

**TABLE 13 – ALL MINERALS:
Employment by mineral and area, 2003**

PA1007

Area	Mineral											Total number
	Industrial Sand	Sand & Gravel (a)	Sandstone	Igneous Rock	Limestone	Dolomite	Chalk	Clay & Shale	Fireclay	Peat	Ore & other minerals	
Cleveland	-	3	-	-	-	12	-	-	-	-	753	768
Durham	2	4	97	15	48	168	-	2	-	-	2	338
Northumberland	-	193	23	156	20	-	-	2	-	2	-	396
Tyne & Wear	-	33	-	-	-	14	-	1	-	-	-	48
North East	2	233	120	171	68	194	-	5	-	2	755	1550
Humberside	26	105	-	-	4	-	200	7	-	-	-	342
North Yorkshire	2	213	102	-	430	9	5	25	-	-	-	786
South Yorkshire	30	65	5	-	-	205	-	88	1	31	-	425
West Yorkshire	-	59	171	-	-	11	-	24	9	-	-	274
Yorkshire & the Humber	58	442	278	-	434	225	205	144	10	31	-	1827
Cumbria	-	102	43	51	302	-	-	1	-	47	70	616
Cheshire	247	189	42	-	-	-	-	5	-	2	58	543
Greater Manchester	-	96	75	-	-	-	-	18	-	12	-	201
Lancashire	-	73	113	-	290	-	-	98	-	17	-	591
Merseyside	-	16	-	-	-	-	-	18	-	-	-	34
North West	247	476	273	51	592	-	-	140	-	78	128	1985
Hereford & Worcester	36	122	2	-	69	-	-	10	-	-	-	239
Shropshire	-	158	73	97	16	19	-	4	11	-	-	378
Staffordshire	116	551	16	-	117	-	-	62	1	-	44	907
Warwickshire	-	91	-	76	24	-	-	19	-	-	-	210
West Midlands	-	69	-	36	-	-	-	18	-	-	-	123
West Midlands	152	991	91	209	226	19	-	113	12	-	44	1857
Derbyshire	-	244	70	-	911	88	-	52	-	-	34	1399
Leicestershire	-	69	-	305	32	77	-	29	10	-	48	570
Lincolnshire	-	226	-	-	92	-	8	-	-	-	-	326
Northamptonshire	-	98	-	-	16	-	-	15	-	-	-	129
Nottinghamshire	-	286	-	-	-	2	-	8	-	-	15	311
East Midlands	-	923	70	305	1051	167	8	104	10	-	97	2735

TABLE 13 – (continued)

PA1007

Area	Mineral											Total number
	Industrial Sand	Sand & Gravel (a)	Sandstone	Igneous Rock	Limestone	Dolomite	Chalk	Clay & Shale	Fireclay	Peat	Ore & other minerals	
Essex	1	261	-	-	-	-	2	47	-	-	-	311
Bedfordshire	-	73	-	-	-	-	12	8	-	-	2	95
Hertfordshire	-	64	-	-	-	-	11	-	-	-	-	75
Cambridgeshire	-	286	-	-	13	-	18	5	-	-	-	322
Norfolk	84	222	26	-	-	-	7	-	-	1	-	340
Suffolk	-	323	-	-	-	-	13	4	-	1	-	341
East of England	85	1229	26	-	13	-	63	64	-	2	2	1484
Berkshire	-	391	-	-	-	-	3	50	-	-	-	444
Buckinghamshire	-	60	-	-	-	-	4	1	1	-	-	66
East Sussex	-	3	-	-	-	-	1	29	-	-	8	41
Greater London	-	139	-	-	-	-	-	-	-	-	-	139
Hampshire	-	438	-	-	-	-	4	1	-	-	-	443
Isle of Wight	-	41	-	-	17	-	9	-	-	-	-	67
Kent	20	390	-	-	48	-	87	9	2	-	1	557
Oxfordshire	-	411	-	-	81	-	-	-	-	-	-	492
Surrey	31	272	1	-	-	-	5	21	-	-	-	330
West Sussex	-	98	9	-	-	-	6	87	-	-	-	200
South East	51	2243	10	-	146	-	119	198	3	-	9	2779
Avon	-	3	7	-	248	-	-	6	-	-	-	264
Cornwall	5	17	16	224	4	-	-	2	-	-	423	691
Devon	13	163	85	58	267	-	2	6	-	-	436	1030
Dorset	-	102	-	-	153	-	1	4	-	-	47	307
Gloucestershire	-	295	13	-	199	75	-	239	-	-	5	826
Somerset	-	36	3	28	721	-	-	-	-	51	-	839
Wiltshire	-	135	1	-	30	-	86	2	-	-	-	254
South West	18	751	125	310	1622	75	89	259	-	51	911	4211
England	613	7288	993	1046	5142	680	484	1027	35	164	1946	18428

TABLE 13 – (continued)

PA1007

Area	Mineral											Total number
	Industrial Sand	Sand & Gravel (a)	Sandstone	Igneous Rock	Limestone	Dolomite	Chalk	Clay & Shale	Fireclay	Peat	Ore & other Minerals	
Clwyd	18	175	-	-	469	-	-	2	-	-	4	668
Dyfed	-	65	51	39	84	-	-	3	-	-	3	245
Gwent	-	4	12	-	15	36	-	-	-	-	-	67
Gwynedd	-	55	1	85	8	-	-	1	-	-	347	497
Mid Glamorgan	-	-	84	-	215	67	-	-	-	-	-	366
Powys	-	1	123	122	-	-	-	5	-	-	-	251
South Glamorgan	-	3	-	-	21	1	-	-	-	-	-	25
West Glamorgan	-	5	16	-	-	-	-	-	-	-	-	21
Wales	18	308	287	246	812	104	-	11	-	-	354	2140
Borders	-	28	18	21	-	-	-	-	-	1	-	68
Central	-	33	6	6	-	-	-	13	4	8	5	75
Dumfries & Galloway	-	101	114	83	-	-	-	13	-	8	-	319
Fife	37	105	1	36	-	-	-	-	-	-	-	179
Grampian	-	157	16	173	29	-	-	-	-	3	5	383
Highland	13	88	56	238	19	9	-	-	-	5	-	428
Lothian	-	44	-	85	31	-	-	3	-	22	-	185
Strathclyde	-	200	52	624	9	-	-	4	-	14	3	906
Tayside	-	52	-	60	6	-	-	-	-	-	15	133
Orkney Islands area	-	1	40	-	-	-	-	-	-	-	-	41
Shetland Islands area	-	2	17	22	-	-	-	-	-	2	2	45
Western Isles area	-	5	-	57	-	-	-	-	-	-	-	62
Scotland	50	816	320	1405	94	9	-	33	4	63	30	2824
Great Britain	681	8412	1600	2697	5058	793	484	1071	39	227	2330	23392

(a) Sand and gravel for construction: employment in quarries only