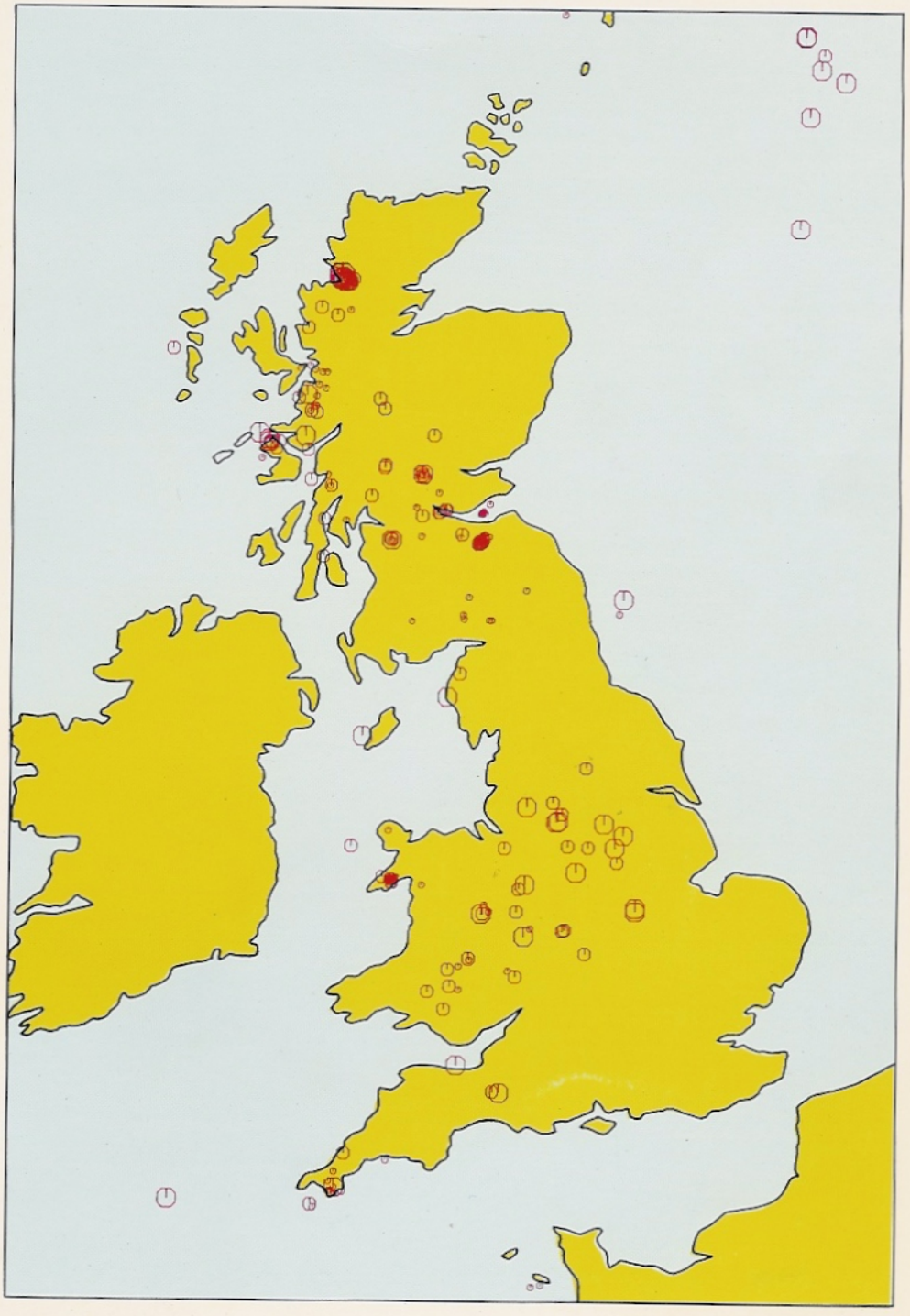
BRITISH GEOLOGICAL SURVEY

BULLETIN OF BRITISH EARTHQUAKES

1987



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British Geological Survey

Technical Report WL/89/9

Global Seismology Series

Bulletin of British earthquakes 1987

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Turbitt, T (editor). 1989. Bulletin of British earthquakes 1987. *British Geological Survey Technical Report* WL/89/9.

Issued July 1989

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Edinburgh British Geological Survey 1989

BRITISH GEOLOGICAL SURVEY

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1. Introduction

1.1 The Bulletin

Seismic phase data, location details and magnitudes are presented for all earthquakes detected and located by BGS during 1987. The land areas of Great Britain and Northern Ireland and their coastal waters are covered within the limits of the detection capabilities of the seismograph network. A map of seismic activity in the North Sea is included using data from the Bulletin of North Sea Earthquakes, 1987, by Marrow et al (1988).

The seismicity of the UK since 1969 is illustrated using data extracted from the previous catalogues of Burton and Neilson (1980) and Turbitt (1984, 1985, 1987 and 1988).

1.2 Summary of 1987 seismicity

Lleyn Peninsula aftershock activity continued to decline with 22 events detected, none felt and the largest having a magnitude of 1.8 ML. Thirty two aftershocks were detected in the previous year (1986) with several felt and the largest 2.7 ML.

Seismicity in the Midlothian coalfield continued at a high level. One hundred and fifty one events were recorded, 23 felt, the largest having a magnitude of 1.8. Intensity 4 was reported on three occasions.

The largest events of the year occurred at Ullapool both 3.0 ML on 4 October and both were felt at intensity 4. Twenty two further events, 4 of them felt, followed during the next 3 months.

A series of 10 earthquakes commenced on Mull with a magnitude 2.5 on 3 May. None were felt.

A magnitude 2.3 event in Renfrew on 10 October was felt at intensity 4 and was the largest in a swarm of 12.

In general, earthquakes with magnitudes around 2.5 and above were felt, for example: Isle of Man, 9 November (2.3 ML, Intensity 4), Manchester, 5 December (2.6 ML, Intensity 4), Ardnamurchan, 20 November (2.6 ML, Intensity 3), Melton Mowbray, 1 May (2.7 ML, Intensity 4, and 2.1 ML, Intensity 2). Shallow coalfield events were felt at lower magnitudes. Exceptions, for which no felt reports were received are: Market Drayton (2.6 ML), Bridgnorth, Salop (2.5 ML) and, of course, offshore events.

2. Catalogue Format

2.1 Tables

Hypocentral parameters, for each earthquake, are tabulated under the headings:

Date - day, month, year

Time - Hours, minutes, seconds of origin time

Lat - Latitude, positive North

Lon - Longitude, positive East

KmE - Grid reference, easting from National Grid origin near the Scilly Isles.

KmN - Grid reference, northing

Dep - Hypocentral depth in km, blank indicates depth unknown. Note that depths for events of quality C, D and possibly B, are unreliable due to the large errors involved.

Mag - Richter local magnitude

Locality - A geographical indication of the epicentral area, usually the nearest town followed by the region.

Int - Maximum felt intensity on the MSK scale (Medvedev et al, 1964), when known. + indicates that an event was reported felt at the intensity given but no survey was initiated to determine the maximum intensity. Comments and felt areas, where appropriate, are included on the next line.

No - Total number of P and S readings used in the event location

DM - Epicentral distance in kilometres to the closest station

Gap - Largest azimuthal separation in degrees between stations

RMS - Root mean square error of arrival time residuals in seconds

ERH - Standard error of the epicentre in kilometres

ERZ - Standard error of the focal depth in kilometres

Q - Solution quality of the hypocentre averaged from QS and QD (below). A, excellent; B, good; C, fair; D, poor.

SQD - S is quality factor ascribed to RMS, D is quality ascribed to number and distribution of stations.

Data on the earthquakes and seismograph stations operated in 1987 are arranged as follows:

TABLE 1 is a chronological listing of all earthquakes near the UK for which a reliable epicentral location could be obtained.

TABLE 2 is a listing of the events in Table 1 arranged in order of decreasing latitude to facilitate identification of earthquakes in selected regions.

TABLE 3 is a chronological listing of events which, although detected by the seismograph network, had arrival patterns too weak to permit the computation of reliable locations. An indication of the estimated epicentre is given but errors could be very large. These events are not included in Tables 1 or 2.

TABLE 4 is an alphabetical listing of the geographic coordinates of seismograph stations operated in 1987 by BGS, DIAS, and Leeds University.

TABLE 5 lists the arrival times of phases for the events in Table 1 at each station, together with amplitude information used for magnitude calculation.

TABLE 6 is the crustal seismic velocity model used for event location.

2.2 Figures

FIGURE 1: the detection threshold of the network of seismograph stations in Table 4 for average background noise conditions where the detection criterion is signal received above 4 nanometres at 10 Hz on 3 stations.

FIGURE 2: the variation of epicentral location errors within the UK area for a magnitude 2.0 earthquake.

FIGURE 3: the epicentral location map of all the events in 1987 that are listed in Table 1.

FIGURE 4: the locations of earthquakes in the UK of magnitude 2.5 ML and above from 1979 to 1987.

FIGURE 5: the locations of earthquakes in the UK of magnitude 3.5 ML and above from 1969 to 1987.

FIGURE 6: the locations of earthquakes in the North Sea area in 1987.

3. The BGS UK Seismograph Network

3.1 Instrumentation

A typical seismic network consists of up to seven 'outstation' vertical seismometers radio-linked over distances of up to 100 km to a central site where the data, along with that from a local 3-component set of two horizontal and one vertical seismometers, are recorded on magnetic tape by a Geostore recorder. Tapes are dispatched, usually once per week, to Edinburgh for analysis.

A more detailed description of the system is given by Browitt et al (1985) and the response of the system is described by Turbitt and Stewart (1982).

At some locations, on-line paper chart recorders display three channels to permit rapid investigation of reported felt tremors. Microprocessor controlled event-triggered recorders 'detect' earthquakes at selected sites to produce a digital magnetic tape and an on-line paper record. At other stations, low-gain vertical seismometers extend the dynamic range of the system to stronger motions and low frequency microphones are used to aid the discrimination of sonic booms.

The improvements in geographic coverage of the UK with the installation of more seismic networks in the last fifteen years is described in Turbitt (1985).

3.2 Detection Threshold

The detection capabilities of a network depend upon station distribution, instrument sensitivity and background noise levels. For the BGS UK network the lower limit of sensitivity is governed by the background noise level. The contours in Figure 1 illustrate the lower threshold magnitude for an earthquake to exceed 4 nanometres at 10 Hz on at least three seismographs. Noise sources such as wind, waves, traffic and livestock vary considerably with time (about 0.5 to 15 nanometres, typically at 10 Hz) causing the magnitude thresholds to increase or decrease. In conditions of high noise 0.8 ML should be added to the contour values.

The detection contours in Figure 1 hold true only if all stations are continuously monitored and this is not always the case. Small events in unmonitored areas may then go undetected unless felt and reported to BGS by local inhabitants. The detection capabilities by this process are strongly dependent on population density with the consequence that areas such as the Scottish Highlands have a high threshold magnitude when local networks are not continuously analysed.

4. Hypocentre Parameters and their Errors

4.1 Epicentre Location

By accurately timing the signal onsets at a minimum of three stations a location can be found for an earthquake which satisfies the observed pattern of arrivals. Instrumental locations in the catalogue were obtained using the computer program HYPO71 (Lee and Lahr, 1975) which iteratively adjusts a trial hypocentre (latitude, longitude, depth, and origin time) until the observed and computed arrival times coincide closely.

The accuracy of locations is dependant on distances from the closest stations, the distribution of the stations around the epicentre, the resolution to which signal onsets can be timed from the records, and the accuracy with which the seismic wave velocity through the earth can be modelled.

Figure 2 illustrates the likely variation of epicentral location errors within the UK area for a

magnitude 2.0 earthquake, 5 km deep. These errors have been determined by the computer program HYPOERR (Lienert et al, 1986) assuming P and S arrival time variances of 0.2 and 0.4 seconds respectively at all detecting stations. The rapid increase in epicentral uncertainty to 20 km and above is apparent as the epicentre moves beyond the detecting range of the seismograph network. For convenience in the tables, epicentre grid references and depths have been given to 0.1 km although this accuracy does not apply in all cases.

The general velocity model used is given in Table 6 and was derived from a series of refraction profiles traversing Britain, LISPB (Bamford et al, 1976; Bamford et al, 1978; Assumpcao and Bamford, 1978). However, for some localised areas of activity, different models have been employed and these are explained in detail in BGS reports on the particular series.

4.2 Depth Determination

The accurate determination of earthquake depth presents a more difficult problem, mainly because phase arrival patterns at the seismographs can still be satisfied for a large range of depths merely by adjusting the origin time to suit. Constraints on the depth can usually only be imposed when a station is very near the epicentre and even then the accuracy depends on the velocity model.

The best depth determinations have been obtained when a series occurred almost beneath a network, as for example in the Lleyn Peninsula. Tremors in the Midlothian coalfield area usually have small depth errors due to the proximity of LOWNET stations and can be seen to lie in the first one or two kilometres near the coal workings.

For events at larger distances, depth errors may be up to tens of kilometres. The quality factor of the event as listed in the tables (Q), is an indication of the depth error. As a general guide only A, and possibly B class events have reliable depths.

4.3 Seismicity Distribution

Owing to variability in the earthquake detection threshold, which is governed by ambient noise conditions and the geometry of the observing network (see 3.2 above), the catalogue is biased towards certain localities. In order to present a consistent picture of UK seismic activity, earthquakes with magnitude 2.5 ML or greater, in the period 1979-1987 have been plotted in Figure 4. The data set is considered complete for these magnitudes in all localities. Seismicity for 1969-1987 is shown in Figure 5 with a threshold magnitude of 3.5. This is the period covered by BGS instrumentation which consisted only of the network around Edinburgh (LOWNET) and Eskdalemuir (ESK) in the early years.

4.4 Magnitude

Almost all earthquakes in the catalogue have been assigned a local magnitude (ML) as defined by Richter (1935):

$$ML = \log_{10} (A/Ao)$$

where A is the deflection (centre to peak in mm) registered by the earthquake on a Wood-Anderson seismograph and Ao is that for a "standard" magnitude zero earthquake at the same distance. The Ao term is thus a distance correction factor tabulated by Richter to 200, and later 600 km. Although Richter intended his method to be an approximate quantification of earthquake size and his attenuation term, Ao, strictly only applies to California, the formula is still used world-wide today. The ML magnitudes in this catalogue have been calculated according to Richter by converting the output of the

BGS instruments to an equivalent Wood-Anderson deflection. Ideally the measurements are made on two horizontal instruments and averaged but, if this was not possible, the mean of the magnitudes from a number of verticals has been used. Ground motion registered at a seismograph varies with site conditions, direction from the earthquake, and the nature of the ray path. Consequently, it is important to take the mean from a good distribution of stations. The resulting errors on magnitudes quoted in the catalogue will normally be less than 0.4 ML.

4.5 Intensity

Intensity is a measure of the effect of the shaking on people, structures and objects. It decreases with distance from a maximum value (Io) usually found close to the epicentre. The maximum felt intensity is quoted, where known, on the MSK scale (Medvedev et al, 1964).

5. Catalogue content and completeness

5.1 The geographical area

The catalogue covers all of the UK land mass and its coastal waters including the North Sea to 3°E and 60°N. The North Sea as a whole is covered in the BGS catalogue for that area (eg Newmark and Turbitt, 1985, Newmark et al, 1986, and Marrow et al, 1987 and 1988).

5.2 Events included

All events believed to be due to true tectonic origins have been included. That is, events caused by natural stresses with the earth.

Coalfield events are also included. These are small events occurring near the coal workings and are believed to be caused by the redistribution of stress as the coal is extracted and subsidence takes places.

5.3 Events excluded

Events that are known, or suspected to be of explosive origin are excluded from the catalogue. Explosions due to quarrying, mining, weapon testing or disposal, naval exercises, geophysical prospecting and civil engineering are all excluded where possible. Unfortunately, identification by record character, location and time of occurrence is not always positive and some man-made events may have been included in the catalogue or, more rarely, a small natural event may have been excluded.

Acoustic disturbances, such as sonic booms from supersonic aircraft are also excluded although when felt they are included in Table 3. The air-borne waves are readily identified by their slow travel time across an array or by their signature on a microphone.

5.4 Completeness

The contours of detection threshold in Figure 1 show that the whole of the UK is covered by the seismograph network for approximately magnitude 1.7, and above, at times of low ambient noise levels. High noise levels may cause this threshold to rise to about 2.5. Normally, however, an earthquake of this size would be felt if not detected in the areas of poorer instrumental coverage. The catalogue can, therefore, be assumed to be complete for all earthquakes of magnitude 2.5 and above.

ACKNOWLEDGEMENTS

Interchange of data with the Dublin Institute of Advanced Studies, the University of Bergen, NORSAR, LDG (France) and other European agencies through the International Seismological Centre, made the location of many of these events possible.

We are indebted to Mobil Exploration (Norway), the Camborne School of Mines, The States of Jersey Meteorological Office, the Universities of East Anglia, Leeds and Leicester and many other individuals who assisted with station operation.

The work was funded in part by the Department of Energy, The Jersey New Waterworks Company, Renfrew District Council, the Department of the Environment, the Central Electricity Generating Board, the North of Scotland Hydro Board, and the Natural Environment Research Council. It is published with the approval of the Director of the British Geological Survey (NERC).

REFERENCES

Assumpcao, M. and Bamford, D. 1978. LISPB.V. Studies of crustal shear waves. *Geophys.J.R.astr.Soc.*, **54**, 61-73.

Bamford, D., Faber, S., Jacob, A.W.B., Kaminski, W., Nunn, K., Prodehl, C., Fuchs, K., King, R. and Willmore, P.L., 1976. A lithospheric seismic profile in Britain - I preliminary results. *Geophys.J.R.astr.Soc.*, **44**, 145-160.

Bamford, D., Nunn, K., Prodehl, C. and Jacob, A.W.B., 1978. LISPB - IV. Crustal structure of northern Britain. *Geophys.J.R.astr.Soc.*, **54**, 43-60.

Browitt, C.W.A, Turbitt, T. and Morgan, S.N., 1985. Investigation of British earthquakes using the national monitoring network of the British Geological Survey. *Earthquake Engineering in Britain*, Thomas Telford Ltd., London. 33-47.

Burton, P.W. and Neilson, G., 1980. Annual catalogues of British earthquakes recorded on LOWNET (1967-1978). *Seismo.Bull.Inst.Geol.Sci.*, **No. 7.** HMSO.

Lee, W. and Lahr, J., 1975. HYPO'71 (revised). A computer program for determining hypocentre, magnitude and first motion pattern of local earthquakes. *Open File Rep. U.S. Geol.Surv.* **75.**

Lienert, B.R., Frazer, L.N. and Rudman, A.J., 1986. Evaluation of Seismometer Arrays for Earthquake Location. *Indiana Geological Survey Geophysical Computer Programs No. 11.* (Occasional Paper 52).

Marrow, P.C., Turbitt, T., Atkins, M.J. and Newmark, R.H., 1987. Bulletin of North Sea earthquakes, 1986. *Brit.Geol.Surv.Glob.Seism.* Rep. No. 333.

Marrow, P.C., Turbitt, T., and Simpson, B.A., 1988. Bulletin of North Sea earthquakes, 1987. *Brit.Geol.Surv.Glob.Seism.* Rep. No. WL/88/13.

Medvedev, S., Sponheuer, W. and Karnik, V., 1964. Neue sesmiche skala. (New seismic scale). 69-76 in W. Sponheuer, editor, *European Seismological Commission, 7th Symposium, held at Jena, Sept. 24-30, 1962.* Veroff. Inst. f. bodendyn. U. Erdbebenforsch. Jena d. Deutschen Akad. d. Wiss., No 77.

Newmark, R.H. and Turbitt, T., 1985. Catalogue of North Sea earthquakes 1980 to 1984 and brief project summary. *Brit.Geol.Surv.Glob.Seism.* Rep. No. 246.

Newmark, R.H., Turbitt, T., Kjaergaard, A. and Optun, P., 1986. Bulletin of North Sea Earthquakes, 1985 recorded by the BGS and Bergen University seismograph networks. *Brit.Geol.Surv.Glob.Seism.* Rep. No. 299.

Richter, C., 1935. An instrumental earthquake magnitude scale. *Bull.Seism. Soc.Am.*, **25**, 1-32.

Turbitt, T. and Stewart, D.A., 1982. Calibration of the Willmore MK IIIA/Geostore seismic recording system. *Inst.Geol.Sci.Glob.Seism.* Rep. No. 158.

Turbitt, T. (editor), 1984. Catalogue of British earthquakes recorded by the BGS seismograph network 1979, 1980, 1981. *Brit.Geol.Surv.Glob.Seism.* Rep. No. 210.

Turbitt, T. (editor), 1985. Catalogue of British earthquakes recorded by the BGS seismograph network 1982, 1983, 1984. *Brit.Geol.Surv.Glob.Seism.* Rep. No. 260.

Turbitt, T. (editor), 1987. Bulletin of British earthquakes, 1985. *Brit. Geol.Surv.Glob.Seism.* Rep. No. 303.

Turbitt, T. (editor), 1988. Bulletin of British earthquakes 1986. *Brit.Geol.Surv.* Tech. Rep. No. WL/88/11.

Table 1

CATALOGUE OF EVENTS : 1987

Listed Chronologically

Date	HrMnSecs	Lat	Lon	KmE	KmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	Q	SQD	Comments...
010187	095303.8	56.14	-4.07	271.5	695.8	0.0	-0.2	GARGUNNOCK,CENTRAL		6	18	218	0.23	3.3	2.7	D	C*D	
030187	003417.5	55.85	-3.13	329.1	662.2	0.0	0.1	ROSEWELL,LOTHIAN		6	9	167	0.07	2.8	2.7	C	C*C	COALFIELD TYPE
030187	165819.9	55.86	-3.10	330.9	664.0	7.2	-0.1	ROSEWELL,LOTHIAN		6	8	197	0.09	1.8	1.4	C	B*D	COALFIELD TYPE
060187	063957.4	54.76	-3.41	309.1	541.6	1.0	1.4	MARYPORT,CUMBRIA		10	50	337	0.26	17.5	12.7	D	D*D	
070187	232537.6	55.85	-3.14	328.7	662.0	0.0	0.0	ROSEWELL,LOTHIAN		6	9	162	0.04	2.3	2.3	C	B*C	COALFIELD TYPE
080187	172232.4	55.85	-3.13	329.3	662.5	0.7	1.2	ROSEWELL,LOTHIAN		9	9	120	0.11	0.6	0.8	B	A*B	COALFIELD TYPE
090187	174332.3	55.85	-3.14	329.0	662.9	1.1	0.5	ROSEWELL,LOTHIAN		8	8	120	0.14	1.0	1.3	B	B*B	COALFIELD TYPE
130187	143430.1	52.21	-3.39	305.0	258.4	32.6	-0.2	LLANDRINDOD,POWYS		5	17	152	0.19	16.0	10.3	D	D*D	
130187	170534.7	52.97	-4.40	239.2	344.3	23.0	0.5	LLEYN AFTERSHOCK		18	2	155	0.09	0.4	0.7	B	A*C	
140187	033750.9	55.85	-3.14	328.8	662.4	2.2	1.2	ROSEWELL,LOTHIAN		9	9	123	0.11	0.5	0.9	B	A*B	COALFIELD TYPE
140187	123601.6	55.85	-3.13	329.1	662.9	1.1	1.0	ROSEWELL,LOTHIAN	2+	9	8	118	0.13	0.8	0.9	B	A*B	COALFIELD TYPE,FELT ROSEWELL:UNDERGROUND
150187	011910.7	56.53	-6.34	133.4	746.4	5.0	0.8	ARDNAMURCHAN,HIGHLAND		4	99	278	0.08			C	A*D	
150187	180015.2	56.09	-3.10	331.4	688.7	0.2	0.2	KIRKCALDY,FIFE		9	19	115	0.18	1.0	1.8	C	B*C	OFFSHORE,COALFIELD TYPE
150187	232712.4	55.85	-3.15	327.7	662.7	0.6	0.0	ROSEWELL,LOTHIAN		6	8	156	0.10	0.6	0.8	B	A*C	COALFIELD TYPE
160187	005641.2	55.87	-3.14	328.6	664.2	1.4	0.7	ROSEWELL,LOTHIAN		8	7	114	0.28	1.8	2.0	B	B*B	COALFIELD TYPE
160187	044100.2	55.85	-3.14	329.0	662.6	2.1	1.3	ROSEWELL,LOTHIAN		9	9	121	0.08	0.3	0.7	B	A*B	COALFIELD TYPE
160187	090653.7	52.96	-4.39	239.7	342.8	23.4	0.2	LLEYN AFTERSHOCK		10	21	215	0.06	0.6	0.7	C	A*D	
160187	111345.6	51.82	-3.60	290.1	215.3	35.3	1.0	YSTRADFELLTE,POWYS		5	36	288	0.03	1.5	2.9	C	B*D	
160187	223302.4	56.10	-3.10	331.9	689.7	0.1	-0.4	KIRKCALDY,FIFE		7	20	180	0.09	0.6	1.1	B	A*C	
190187	063658.2	55.85	-3.14	329.0	662.9	1.9	0.3	ROSEWELL,LOTHIAN		7	8	170	0.08	0.6	0.7	B	A*C	COALFIELD TYPE
200187	145957.3	55.85	-3.14	328.6	662.4	1.6	0.7	ROSEWELL,LOTHIAN		8	9	124	0.11	0.6	0.9	B	A*B	COALFIELD TYPE
200187	164943.7	55.86	-3.14	328.6	663.4	1.2	0.3	ROSEWELL,LOTHIAN		7	8	169	0.11	1.5	1.5	C	B*C	COALFIELD TYPE
210187	163934.9	52.70	-2.96	335.4	311.7	2.5	0.7	HALFWAY HOUSE,SALOP		6	21	209	0.17	3.5	6.4	D	C*D	
220187	101308.9	55.88	-3.13	329.4	665.5	2.4	0.5	POLTON,LOTHIAN		8	6	112	0.08	0.5	0.8	B	A*B	COALFIELD TYPE
220187	155725.7	55.85	-3.13	329.0	662.9	1.5	1.1	ROSEWELL,LOTHIAN		10	8	119	0.05	0.2	0.3	B	A*B	COALFIELD TYPE
220187	185209.2	52.97	-4.43	237.0	344.3	21.6	0.9	LLEYN AFTERSHOCK		18	1	209	0.13	0.7	1.0	C	A*D	
230187	000338.8	56.40	-5.37	192.2	728.0	1.2	0.9	OBAN,STRATHCLYDE		4	68	322	0.04			C	A*D	
230187	030238.5	55.21	-2.99	336.7	591.4	0.5	0.4	LANGHOLM,DUM & GALL		6	9	230	0.17	2.3	1.9	C	B*D	
240187	125305.2	52.76	-3.03	330.3	318.0	7.2	0.5	N.WELSHPOOL,SALOP		10	23	202	0.08	0.6	2.4	C	B*D	
260187	001233.7	57.25	-5.79	171.6	824.3	7.1	0.0	LOCH CARRON,HIGHLAND		4	13	216	0.02			C	A*D	
290187	091845.9	56.03	-5.10	207.0	686.1	0.5	0.9	GLENDARUEL,STRATHCLYDE		7	30	297	0.13	12.8	10.4	D	D*D	
300187	105457.3	56.38	-3.96	278.8	722.8	2.3	1.0	COMRIE,TAYSIDE		11	18	190	0.48	1.3	1.5	D	C*D	
300187	224016.6	55.85	-3.10	331.1	662.4	0.5	0.7	ROSEWELL,LOTHIAN		4	31	250	0.22			C	B*D	COALFIELD TYPE
310187	064032.9	56.31	-5.33	194.0	718.5	9.8	0.8	LOCH AWE,STRATHCLYDE		4	63	318	0.09			C	A*D	
310187	171608.2	55.85	-3.12	329.6	662.4	0.4	1.8	ROSEWELL,LOTHIAN		7	9	102	0.04	0.2	0.2	B	A*B	COALFIELD TYPE
030287	083233.4	56.31	-5.32	194.9	717.9	5.0	1.7	OBAN,STRATHCLYDE		5	101	349	0.10	12.0	10.7	D	D*D	
030287	231032.1	53.27	-1.51	432.4	374.8	3.0	1.8	CHESTERF'LD,DERBYSHIRE	3+	3	70	349	0.01	0.0	0.0	C	A*D	FELT BOLSOVER VILLAGE NEAR CHESTERFIELD
050287	072607.1	57.24	-5.58	183.9	822.7	3.2	-0.2	KYLE,HIGHLAND		6	10	227	0.07	0.8	8.3	D	C*D	
060287	110303.4	51.31	-3.41	301.4	157.8	0.3	2.1	BRISTOL CHANNEL		7	56	196	0.17	3.3	36.4	D	C*D	
070287	042719.6	55.85	-3.15	328.1	662.4	3.4	0.7	ROSEWELL,LOTHIAN		10	9	126	0.18	0.8	2.3	B	B*B	COALFIELD TYPE
070287	043840.8	55.86	-3.13	329.3	663.1	3.6	0.7	ROSEWELL,LOTHIAN		8	8	117	0.13	0.2	0.8	B	A*B	COALFIELD TYPE
070287	170823.6	55.85	-3.12	330.1	662.9	0.5	0.7	ROSEWELL,LOTHIAN		9	9	114	0.09	0.4	0.4	B	A*B	COALFIELD TYPE
090287	221315.3	56.40	-3.98	277.6	724.9	3.2	1.0	COMRIE,TAYSIDE	2+	11	18	202	0.29	1.8	3.3	C	B*D	FELT COMRIE
100287	001345.5	59.96	-1.96	402.3	1119.4	5.0	0.6	OFFSHORE SHETLAND		3	41	345	0.00	0.0	0.0	C	A*D	
110287	034504.0	56.09	-3.12	330.0	689.2	0.5	-0.4	KIRKCALDY,FIFE		6	19	225	0.08	0.6	0.4	C	A*D	
110287	063806.7	55.85	-3.14	328.6	662.8	2.7	0.0	ROSEWELL,LOTHIAN		6	8	166	0.13	0.9	31.1	C	C*C	COALFIELD TYPE
110287	064239.3	55.86	-3.12	329.9	663.4	4.0	0.3	ROSEWELL,LOTHIAN		6	8	183	0.14	1.6	7.6	D	C*D	COALFIELD TYPE
110287	102439.1	53.96	-1.55	429.6	451.3	13.3	1.0	LEEDS,YORKSHIRE		4	5	334	0.07			C	A*D	COALFIELD TYPE

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Date	HrMnSecs	Lat	Lon	KmE	KmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	Q	SQD	Comments...
120287	022223.8	56.17	-3.00	338.0	697.8	6.9	0.0	BUCKHAVEN,FIFE		9	30	141	0.59	3.9	24.1	D	D*C	
120287	104612.7	55.86	-3.13	329.4	663.5	3.1	0.0	ROSEWELL,LOTHIAN		6	8	178	0.08	0.7	8.6	C	C*C	COALFIELD TYPE
130287	012100.6	56.09	-3.13	329.5	689.2	0.0	-0.5	KIRKCALDY,FIFE		5	19	224	0.05	0.9	0.9	C	A*D	
130287	031522.4	56.09	-3.11	330.7	689.0	2.4	-0.5	KIRKCALDY,FIFE		6	19	176	0.16	0.5	1.7	C	B*C	
130287	201156.5	57.73	-5.49	192.5	876.9	5.0	1.9	LOCH MAREE,HIGHLAND		8	28	242	0.11	1.5	1.2	C	B*D	
130287	224811.9	56.10	-3.11	331.2	689.7	5.5	-0.4	KIRKCALDY,FIFE		6	20	179	0.08	0.9	1.6	B	A*C	
140287	055641.5	52.97	-4.39	239.4	344.4	23.9	0.6	LLEYN AFTERSHOCK		18	2	150	0.13	0.7	1.0	B	A*C	
140287	075222.4	55.86	-3.13	329.0	663.5	2.4	0.3	ROSEWELL,LOTHIAN		5	8	174	0.07	0.5	1.1	C	A*D	COALFIELD TYPE
140287	230355.8	56.41	-3.98	277.6	725.5	2.9	2.2	COMRIE,TAYSIDE	3+	14	18	204	0.25	1.6	2.6	C	B*D	FELT COMRIE & CRIEFF
140287	230738.8	56.41	-3.98	277.6	725.8	4.0	0.4	COMRIE,TAYSIDE		6	18	206	0.21	0.5	7.3	D	C*D	
150287	210222.3	55.85	-3.09	331.8	661.9	4.1	-0.2	CARRINGTON,LOTHIAN		4	9	196	0.06			C	A*D	COALFIELD TYPE
150287	211849.1	55.85	-3.14	328.6	662.7	0.6	-0.2	ROSEWELL,LOTHIAN		4	8	165	0.08			C	A*D	COALFIELD TYPE
190287	083018.2	55.89	-3.16	327.4	666.4	0.9	0.3	STRAITON,LOTHIAN		6	4	170	0.65	5.5	6.2	D	D*C	COALFIELD TYPE
190287	161657.5	56.12	-3.65	297.4	692.6	0.6	1.4	SALINE,FIFE		5	17	233	0.14	0.6	0.7	C	A*D	
190287	171527.5	49.26	-2.14			5.6	0.0	ST.JOHN'S BAY,JERSEY		7	4	266	0.21	2.3	4.2	C	B*D	
210287	044528.6	56.09	-3.10	331.6	689.6	0.4	-0.3	KIRKCALDY,FIFE		8	20	179	0.19	0.6	0.7	C	B*C	
210287	172112.1	52.96	-4.38	240.0	342.5	21.9	0.6	LLEYN AFTERSHOCK		23	4	171	0.10	0.4	0.4	B	A*C	
220287	072045.7	55.46	-2.45	371.7	618.1	0.5	0.5	JEDBURGH,BORDERS		6	13	163	0.45	3.3	2.5	C	C*C	
230287	020837.7	52.94	-2.43	371.2	338.1	10.5	2.6	MARKET DRAYTON,SALOP		18	47	115	0.08	0.3	0.8	B	A*C	
230287	085101.0	52.93	-3.94	269.6	339.2	15.5	-0.2	L.TRAWSFYNYDD,GWYNEDD		17	6	86	0.16	0.7	0.9	B	B*A	
240287	175127.4	55.85	-3.13	329.5	662.7	6.0	0.5	ROSEWELL,LOTHIAN		7	9	118	0.10	0.7	1.0	B	A*B	COALFIELD TYPE
250287	020355.9	55.87	-3.12	329.9	664.2	6.8	-0.5	POLTON,LOTHIAN		5	8	188	0.01	0.2	0.2	C	A*D	COALFIELD TYPE
250287	142544.0	56.41	-4.00	276.8	726.0	2.3	0.9	COMRIE,TAYSIDE		7	19	209	0.24	0.6	0.6	C	B*D	
270287	010243.3	55.85	-3.14	328.7	662.6	0.0	1.3	ROSEWELL,LOTHIAN		10	9	122	0.10	0.4	0.4	B	A*B	COALFIELD TYPE
070387	034737.7	55.92	-3.07	333.1	670.4	0.4	0.0	DANDERHALL,LOTHIAN		6	7	180	0.16	2.0	1.9	C	B*D	COALFIELD TYPE
070387	234218.1	57.71	-5.06	217.4	873.2	11.1	0.7	BRAEMORE,HIGHLAND		6	27	341	0.10	3.3	4.8	D	C*D	
080387	193011.3	55.86	-3.13	329.1	664.1	2.8	-0.3	ROSEWELL,LOTHIAN		6	7	177	0.07	0.8	13.5	C	C*C	COALFIELD TYPE
090387	230857.5	52.70	-2.55	362.8	311.7	3.4	1.3	TELFORD,SHROPSHIRE		10	28	166	0.19	1.1	2.5	C	B*C	
110387	025215.5	55.85	-3.13	329.0	662.5	3.8	0.4	ROSEWELL,LOTHIAN		6	9	169	0.11	1.2	7.4	C	C*C	COALFIELD TYPE
120387	092859.0	52.48	-2.44	370.1	287.2	14.0	2.5	BRIDGNORTH,SALOP		16	15	86	0.14	0.6	0.9	B	A*B	
130387	074350.2	55.89	-3.14	328.6	666.5	6.1	0.1	LOANHEAD,LOTHIAN	2+	6	5	189	0.12	1.5	2.5	C	B*D	COALFIELD TYPE,FELT LOANHEAD
140387	133921.9	55.20	-4.12	265.2	591.9	20.0	0.5	MONIAIVE,DUM & GALL		4	59	345	0.15	0.0	0.0	C	B*D	
170387	223750.2	55.87	-3.10	331.1	664.4	6.2	0.1	BONNYRIGG,LOTHIAN		6	8	201	0.06	1.0	1.6	C	A*D	COALFIELD TYPE
180387	012657.0	56.10	-3.11	331.1	690.0	5.8	0.0	KIRKCALDY,FIFE		9	20	179	0.08	0.5	0.9	B	A*C	OFFSHORE,COALFIELD TYPE
230387	190246.0	55.86	-3.16	327.1	663.7	0.5	-0.4	ROSEWELL,LOTHIAN		4	7	153	0.04			C	A*D	COALFIELD TYPE
240387	034239.7	55.89	-3.09	332.2	667.0	4.4	-0.2	ESKBANK, LOTHIAN		5	7	230	0.15	4.7	7.0	D	C*D	COALFIELD TYPE
240387	042302.5	55.91	-3.10	331.5	668.7	7.8	0.1	DANDERHALL,LOTHIAN		6	6	240	0.17	3.0	2.7	D	C*D	COALFIELD TYPE
300387	035250.8	56.46	-4.54	243.2	732.4	8.3	1.1	CRIANLARICH,CENTRAL		5	33	291	0.07	4.9	115.4	D	C*D	
010487	194745.9	55.86	-3.09	332.0	664.0	8.4	0.2	DALHOUSIE,LOTHIAN		6	9	208	0.00	0.0	0.1	C	A*D	COALFIELD TYPE
020487	175538.4	55.90	-3.09	332.1	668.0	7.2	-0.1	SHERIFFHALL,LOTHIAN		5	7	238	0.03	1.4	0.7	C	B*D	COALFIELD TYPE
030487	045619.3	56.09	-3.07	333.5	689.0	15.0	-0.3	KIRKCALDY,FIFE		7	20	181	0.13	2.6	4.2	D	C*D	
030487	051759.8	55.85	-3.14	328.5	661.9	2.4	0.0	ROSEWELL,LOTHIAN		5	9	160	0.14	0.1	0.2	C	A*D	COALFIELD TYPE
040487	224300.5	50.32	-5.18	173.4	51.1	3.4	0.3	PERRANPORTH,CORNWALL		10	13	246	0.06	0.8	2.9	C	B*D	
120487	110456.0	52.68	-3.07	327.6	309.6	10.8	2.4	WELSHPOOL,POWYS		25	22	61	0.15	0.4	0.6	B	A*C	
130487	040640.4	56.48	-4.53	243.9	734.3	9.0	1.6	CRAINLARICH,CENTRAL		5	34	291	0.14	5.1	68.4	D	D*D	
140487	110340.1	52.68	-3.05	329.0	309.7	14.7	1.0	WELSHPOOL,POWYS		7	21	178	0.06	1.0	2.8	C	B*C	
160487	234419.4	52.33	-1.55	430.6	270.0	0.3	1.8	COVENTRY,WEST MIDLANDS		22	33	230	0.31	1.6	1.3	D	C*D	
180487	112930.3	53.28	-1.81	412.8	375.7	2.2	1.9	BUXTON,DERBYSHIRE		11	66	169	0.23	2.0	1.3	C	B*D	
180487	162802.8	57.22	-5.47	190.5	820.0	1.9	0.3	SHIEL BRIDGE,HIGHLAND		4	3	202	0.05	0.0	0.0	C	A*D	

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Date	HrMnSecs	Lat	Lon	KmE	KmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	Q	SQD	Comments...
190487	053454.8	55.22	-3.36	313.6	592.7	2.7	0.6	BORELAND,DUM & GALL		8	14	248	0.07	0.8	2.0	C	B*D	
200487	051852.0	59.57	1.78			10.6	2.5	NORTH SEA		18	177	185	0.65	5.0	6.1	D	D*D	
210487	113310.9	56.42	-3.99	277.0	726.9	2.4	1.5	COMRIE,TAYSIDE	2+	11	18	212	0.15	0.6	0.7	C	A*D	FELT COMRIE
230487	185210.8	50.13	-5.06	181.7	30.6	0.6	-0.7	FALMOUTH BAY,CORNWALL		6	5	269	0.02	0.6	4.2	C	B*D	
260487	085206.1	56.07	-3.98	276.6	688.5	2.7	1.1	CHARTERSHALL,CENTRAL		11	26	172	0.07	0.3	1.3	B	A*C	
280487	211035.9	52.98	-4.40	239.2	344.9	24.9	1.1	LLEYN AFTERSHOCK		21	2	81	0.10	0.3	0.7	A	A*A	
290487	094218.9	53.00	-4.33	243.9	347.8	17.1	0.1	LLEYN AFTERSHOCK		6	7	214	0.23	3.5	3.5	D	C*D	
010587	052151.8	52.71	-0.82	479.9	313.6	7.6	2.1	MELTON MOWBRAY,LEICS	2+	18	23	135	0.13	0.6	1.1	B	A C	FELT OAKHAM
010587	060952.1	52.74	-0.82	479.4	316.7	10.5	2.7	MELTON MOWBRAY,LEICS	4+	22	24	129	0.34	1.4	2.0	C	C C	FELT OAKHAM
020587	133623.1	57.01	-4.62	241.1	794.4	5.9	1.5	INVERGARRY,HIGHLAND		18	54	155	0.27	1.2	3.5	C	B*D	
030587	140829.8	56.26	-3.74	292.0	708.3	3.6	0.6	BLACKFORD,TAYSIDE		11	15	106	0.11	0.4	1.1	B	A*C	
030587	224820.8	56.68	-6.24	140.2	761.9	11.3	2.5	MULL,HIGHLAND		16	37	255	0.25	1.6	1.6	C	B*D	
040587	002218.5	56.66	-6.21	142.2	760.1	4.1	1.8	MULL AFTERSHOCK		12	37	249	0.14	1.2	1.2	C	B*D	
040587	165209.8	57.09	-5.42	192.9	804.8	4.8	0.1	LOCH HOURN,HIGHLAND		6	14	224	0.10	2.2	2.7	C	B*D	
050587	032915.7	56.66	-6.23	140.6	759.9	7.3	2.0	MULL AFTERSHOCK		10	38	251	0.09	2.9	5.1	D	C*D	
070587	020837.0	52.17	-2.67	354.2	252.4	19.5	0.9	LEOMINSTER,HEREFORD		10	17	92	0.09	0.8	1.4	B	A*B	
080587	004154.2	56.61	-6.13	146.6	754.2	7.1	1.7	MULL AFTERSHOCK		10	39	267	0.11	4.4	6.9	D	C*D	
080587	010406.2	56.65	-6.21	142.2	758.8	3.9	1.9	MULL AFTERSHOCK		11	38	270	0.20	1.9	2.1	C	B*D	
080587	020406.2	56.73	-6.38	132.2	768.2	12.9	2.0	MULL AFTERSHOCK		5	40	335	0.41	4.5	2.9	D	C*D	
140587	234213.7	56.11	-3.09	332.1	691.1	1.2	-0.3	KIRKCALDY,FIFE		7	21	234	0.09	2.2	1.3	C	B*D	OFFSHORE,COALFIELD TYPE
150587	054201.3	52.98	-4.41	238.3	344.7	21.6	0.5	LLEYN AFTERSHOCK		13	1	81	0.17	0.8	1.2	B	B*A	
150587	155217.4	56.12	-3.63	298.4	692.6	0.0	1.4	BLAIRHALL,FIFE		10	17	121	0.20	0.9	1.2	C	B*C	COALFIELD TYPE
150587	202218.7	53.48	-1.28	447.7	398.4	0.6	2.0	SWINTON,S.YORKSHIRE		11	58	222	0.23	2.3	1.3	C	B*D	
150587	225821.3	56.10	-3.09	332.0	690.0	0.0	-0.4	KIRKCALDY,FIFE		6	20	181	0.11	1.4	1.5	C	B*D	OFFSHORE,COALFIELD TYPE
160587	000159.8	50.11	-5.17	173.3	27.7	5.2	0.5	CONSTANTINE,CORNWALL		12	4	171	0.03	0.4	0.3	B	A C	
160587	140638.0	56.66	-6.23	141.1	760.0	10.2	2.1	MULL AFTERSHOCK		9	38	270	0.14	1.8	2.3	C	B*D	
170587	040852.5	55.87	-3.13	329.4	664.5	1.2	0.4	LASSWADE,LOTHIAN		6	7	183	0.02	0.4	0.3	C	A*D	COALFIELD TYPE
180587	074657.0	55.90	-3.06	333.5	668.3	2.7	0.3	DALKEITH,LOTHIAN		5	8	249	0.03	0.2	4.9	C	B*D	COALFIELD TYPE
180587	132825.4	53.66	-2.03	397.9	417.9	11.4	1.8	HUDDERSFIELD,W.YORKS		21	43	140	0.20	1.4	2.6	C	B*C	
180587	235130.2	55.90	-3.01	336.6	668.3	3.7	0.0	COUSLAND,LOTHIAN		5	11	165	0.09	0.0	0.2	C	A*D	COALFIELD TYPE
190587	035111.3	55.85	-3.14	328.9	662.8	1.1	1.0	ROSEWELL,LOTHIAN		10	8	120	0.06	0.3	0.3	B	A*B	COALFIELD TYPE
210587	094755.9	55.85	-3.12	330.0	663.0	0.5	0.2	ROSEWELL,LOTHIAN		6	9	182	0.08	9.8	7.5	D	D*D	COALFIELD TYPE
260587	130702.7	56.66	-6.09	149.1	759.6	6.7	1.8	MULL AFTERSHOCK		8	120	338	0.69	28.6	21.7	D	D*D	
290587	082620.7	55.84	-3.15	328.1	661.8	0.3	1.1	ROSEWELL,LOTHIAN		9	9	130	0.14	0.3	0.4	B	A*B	COALFIELD TYPE
290587	084118.3	55.85	-3.14	328.6	662.6	0.5	0.6	ROSEWELL,LOTHIAN		6	9	165	0.06	1.0	1.1	B	A*C	COALFIELD TYPE
290587	120320.6	56.60	-5.67	174.9	750.9	11.4	1.5	LOCH LINNHE,HIGHLAND		9	70	242	0.25	3.0	2.1	D	C*D	
290587	144533.1	55.84	-3.15	328.0	661.6	0.2	1.1	ROSEWELL,LOTHIAN		9	9	132	0.16	0.4	0.4	B	B*B	COALFIELD TYPE
290587	205245.3	55.86	-3.11	330.3	663.3	0.5	0.4	ROSEWELL,LOTHIAN		6	9	187	0.03	0.7	0.6	C	A*D	COALFIELD TYPE
300587	130226.1	51.98	-3.84	273.4	233.4	13.0	1.5	S.LLANDOVERY,POWYS		29	40	212	0.16	0.7	1.7	C	B*D	
310587	180054.0	55.85	-3.12	330.1	663.0	0.5	0.4	ROSEWELL,LOTHIAN		6	9	183	0.04	5.4	4.1	D	D*D	COALFIELD TYPE
010687	131008.4	52.96	-4.39	239.5	343.5	20.0	0.8	LLEYN AFTERSHOCK		16	3	85	0.15	0.6	1.0	B	B*A	
020687	122431.5	55.85	-3.14	328.7	662.9	0.5	0.4	ROSEWELL,LOTHIAN		6	8	168	0.07	1.1	1.3	C	B*C	COALFIELD TYPE
050687	001920.1	52.95	-4.39	239.3	342.2	24.0	1.6	LLEYN AFTERSHOCK		22	4	95	0.15	0.6	1.3	B	B*B	
050687	063253.5	55.86	-3.12	330.0	663.4	0.5	0.4	ROSEWELL,LOTHIAN		6	8	184	0.07	1.5	1.4	C	B*D	COALFIELD TYPE
050687	074031.4	55.85	-3.14	328.7	662.8	1.0	1.3	ROSEWELL,LOTHIAN		9	8	121	0.06	0.3	0.4	B	A*B	COALFIELD TYPE
050687	160331.7	52.12	-2.56	361.5	247.5	13.6	1.2	GREAT MALVERN,WORCS		5	10	201	0.01	0.5	0.9	C	A*D	
050687	175959.2	55.85	-3.14	328.7	662.5	0.5	0.9	ROSEWELL,LOTHIAN		8	9	123	0.06	0.5	0.6	B	A*B	COALFIELD TYPE
060687	112602.1	56.66	-6.20	142.5	760.2	13.0	1.6	MULL AFTERSHOCK		7	77	269	0.34	7.0	6.0	D	D*D	
060687	161633.6	56.66	-6.23	141.1	760.2	14.6	1.6	MULL AFTERSHOCK		8	78	270	0.41	7.2	5.1	D	D*D	
080687	011403.5	52.18	-3.55	294.4	254.6	16.6	1.7	BUILTH,POWYS		8	18	195	0.06	0.9	0.8	C	A*D	

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090687	114835.6	55.85	-3.14	328.9	662.9	1.8	0.9	ROSEWELL,LOTHIAN		7	8	119	0.04	0.2	0.4	B	A*B	COALFIELD TYPE
090687	145505.5	50.23	-5.26	167.8	41.4	0.6	-0.3	CAMBORNE,CORNWALL		6	5	322	0.02	0.4	4.8	C	B*D	
100687	063808.8	55.86	-3.15	327.9	663.7	1.0	0.7	ROSEWELL,LOTHIAN		8	7	119	0.08	0.5	0.7	B	A*B	COALFIELD TYPE
100687	162317.7	53.41	-4.44	238.1	392.7	11.6	0.0	NORTH ANGLESEY,GWYNEDD		7	8	210	0.03	0.3	0.3	C	A*D	
110687	120350.9	56.36	-5.62	176.5	724.3	8.4	1.2	FIRTH OF LORN,HIGHLAND		5	64	339	0.11	4.2	3.0	D	C*D	
140687	110211.2	55.85	-3.15	327.8	662.3	0.4	1.2	ROSEWELL,LOTHIAN		8	9	128	0.28	1.5	1.9	B	B*B	COALFIELD TYPE
150687	010345.3	55.85	-3.15	327.9	662.1	0.6	1.2	ROSEWELL,LOTHIAN	2+	9	9	129	0.14	0.9	1.1	B	A*B	COALFIELD TYPE,FELT ROSLIN
150687	053159.7	55.85	-3.13	329.0	662.3	0.0	0.5	ROSEWELL,LOTHIAN		7	9	123	0.04	0.3	0.3	B	A*B	COALFIELD TYPE
160687	085232.6	57.01	-5.81	168.5	797.6	3.9	1.6	MALLAIG,HIGHLAND		14	11	189	0.28	2.4	2.2	C	B*D	
170687	005736.4	55.84	-3.16	327.4	661.6	0.1	1.3	ROSEWELL,LOTHIAN	2+	8	9	134	0.14	0.3	0.3	B	A*B	COALFIELD TYPE,FELT ROSLIN
180687	064539.3	52.96	-4.40	238.8	343.4	23.1	0.7	LLEYN AFTERSHOCK		18	3	93	0.08	0.3	0.5	B	A*B	
220687	184509.5	55.85	-3.14	328.9	662.6	0.2	1.4	ROSEWELL,LOTHIAN	2+	9	9	121	0.04	0.2	0.2	B	A*B	COALFIELD TYPE,FELT ROSLIN
230687	041839.1	55.85	-3.12	330.0	662.7	0.5	-0.2	ROSEWELL,LOTHIAN		6	9	180	0.03	6.1	4.7	D	D*C	COALFIELD TYPE
240687	150510.1	55.85	-3.15	327.7	662.3	0.1	1.2	ROSEWELL,LOTHIAN		5	9	134	0.04	0.0	0.0	C	A*D	COALFIELD TYPE
250687	192609.2	55.85	-3.15	327.7	661.9	0.0	1.3	ROSEWELL,LOTHIAN		5	9	131	0.10	0.4	0.5	C	A*D	COALFIELD TYPE
270687	032835.1	55.85	-3.16	327.6	662.1	0.0	1.1	ROSEWELL,LOTHIAN		5	9	130	0.06	0.4	0.4	C	A*D	COALFIELD TYPE
300687	033358.3	55.84	-3.16	327.6	661.8	0.4	1.4	ROSEWELL,LOTHIAN		6	9	132	0.16	0.7	0.8	B	B*B	COALFIELD TYPE
300687	054851.6	55.85	-3.14	328.8	662.9	1.5	0.8	ROSEWELL,LOTHIAN		4	8	120	0.01	0.0	0.0	C	A*D	COALFIELD TYPE
010787	062852.9	48.55	-5.18			5.0	2.1	BREST AREA FRANCE		5	167	348	0.21	86.5	14.8	D	D*D	
010787	225148.3	52.53	-1.88	408.0	292.3	13.8	1.2	BIRMINGHAM,W.MIDLANDS		8	11	181	0.07	2.4	1.8	C	B*D	
070787	145409.9	55.89	-3.42	311.2	667.5	5.3	0.3	KIRKNEWTON,LOTHIAN		4	6	234	0.00	0.0	0.0	C	A*D	
090787	145241.3	56.04	-5.42	186.7	688.4	5.0	1.2	LOCHGILPHEAD,HIGHLAND		11	48	309	0.24	11.7	24.7	D	D*D	
110787	221353.2	52.97	-4.40	238.7	344.0	23.5	0.7	LLEYN AFTERSHOCK		22	2	86	0.10	0.3	0.6	A	A*A	
120787	030743.1	50.17	-5.18	173.2	35.1	3.8	2.0	STITHIANS,CORNWALL	3+	6	1	102	0.01	0.2	0.5	B	A*B	FELT STITHIANS AREA
120787	052847.7	55.86	-3.12	329.8	663.2	3.0	0.7	ROSEWELL,LOTHIAN		3	8	181	0.01	0.0	0.0	C	A*D	COALFIELD TYPE
190787	032912.5	50.17	-5.18	173.2	35.1	3.1	0.7	STITHIANS,CORNWALL	2+	8	1	104	0.02	0.2	0.2	B	A*B	FELT ROSEMANOWES AREA
200787	190942.5	57.67	-5.25	206.3	869.4	6.1	1.8	KINLOCHEWE,HIGHLAND		7	20	213	0.13	2.0	1.9	C	B*D	
240787	180429.7	55.85	-3.12	329.6	662.7	1.9	0.2	ROSEWELL,LOTHIAN		6	9	176	0.03	0.3	0.4	B	A*C	COALFIELD TYPE
250787	074532.0	50.14	-5.23	169.5	31.5	3.6	0.4	NE WENDRON,CORNWALL		13	2	262	0.04	0.3	0.3	C	A*D	
250787	074818.2	50.14	-5.23	169.4	31.3	3.1	0.5	NE WENDRON,CORNWALL		15	2	269	0.04	0.3	0.3	C	A*D	
250787	074929.5	50.14	-5.22	169.6	31.5	3.7	0.4	NE WENDRON,CORNWALL		15	2	259	0.07	0.5	0.4	C	A*D	
300787	002032.5	54.56	-3.59	296.9	519.1	1.1	2.1	WHITEHAVEN,CUMBRIA		15	9	216	0.16	3.7	1.8	D	C*D	COALFIELD TYPE EVENT
300787	034313.0	55.86	-3.11	330.6	663.6	1.9	0.0	ROSEWELL,LOTHIAN		6	8	192	0.12	1.2	1.3	C	B*D	COALFIELD TYPE
310787	002413.0	55.85	-3.14	328.9	662.6	0.2	1.6	ROSEWELL,LOTHIAN	3+	10	9	99	0.05	0.2	0.2	B	A*B	COALFIELD TYPE, FELT LOANHEAD
040887	113045.1	55.85	-3.14	328.9	662.7	0.3	1.5	ROSEWELL,LOTHIAN	4+	9	9	121	0.06	0.2	0.2	B	A*B	COALFIELD TYPE,FELT ROSLIN
040887	223556.3	52.97	-4.41	238.1	343.9	21.9	0.2	LLEYN AFTERSHOCK		6	2	120	0.24	2.3	1.3	B	B*B	
050887	231533.1	53.38	-1.00	466.4	387.9	0.4	2.0	NE WORKSOP,NOTTS	3+	11	75	229	0.72	6.8	9.3	D	D*D	FELT THORPE SALVIN
050887	231547.9	53.27	-1.12	458.8	375.7	0.2	2.3	NE WORKSOP,NOTTS	3+	11	61	298	0.81	5.5	4.2	D	D*D	FELT THORPE SALVIN
070887	131515.2	50.49	-5.04	184.4	70.0	5.5	1.4	TREVOSE HEAD,CORNWALL		16	18	279	0.07	1.4	4.6	C	B*D	
070887	145547.6	55.87	-3.09	331.7	664.8	5.7	0.4	BONNYRIGG,LOTHIAN		6	8	210	0.05	0.7	1.4	C	A*D	COALFIELD TYPE
070887	175258.4	55.87	-3.09	331.7	665.1	1.3	0.1	BONNYRIGG,LOTHIAN		4	8	212	0.01	0.0	0.0	C	A*D	COALFIELD TYPE
070887	183927.4	55.85	-3.15	328.2	662.7	0.9	0.2	ROSEWELL,LOTHIAN		6	8	161	0.09	1.4	1.5	C	B*C	COALFIELD TYPE
070887	215511.8	55.85	-3.15	328.3	662.3	0.7	1.5	ROSEWELL,LOTHIAN	4+	10	9	94	0.19	0.8	1.0	B	B*B	COALFIELD TYPE,FELT ROSLIN
080887	093731.8	56.23	-4.73	230.7	707.8	5.6	1.2	ARROCHAR,STRATHCLYDE		7	25	309	0.14	2.5	1.8	D	C*D	

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080887	173152.1	55.21	-2.96	338.7	590.8	5.6	0.2	LANGHOLM,DUM & GALL		5	11	199	0.08	2.1	5.2	D	C*D	
090887	161049.7	55.40	-3.29	318.4	612.2	4.7	0.8	MOFFAT WATER,DUM & GAL		16	10	166	0.40	3.5	8.3	C	C*C	
100887	193300.6	55.84	-3.20	324.9	661.0	2.2	0.5	ROSEWELL,LOTHIAN		6	10	147	0.27	1.9	2.7	C	B*C	COALFIELD TYPE
110887	214328.6	55.25	-3.37	313.2	595.7	1.0	-0.3	JOHNSTONEBRIDGE,D & G		4	13	297	0.08	0.0	0.0	C	A*D	
130887	122844.1	52.00	-3.39	304.4	234.8	14.5	0.6	BRECON,POWYS.		7	12	198	0.08	1.8	2.0	C	B*D	
130887	160154.8	55.85	-3.11	330.2	663.0	5.1	0.9	ROSEWELL,LOTHIAN		6	9	184	0.05	0.7	1.6	C	A*D	COALFIELD TYPE
140887	031624.5	55.86	-3.14	328.9	663.6	1.0	-0.1	ROSEWELL,LOTHIAN		4	8	187	0.22	0.0	0.0	C	B*D	COALFIELD TYPE
140887	233603.6	50.01	-5.53	146.8	17.7	12.7	1.0	S.PENZANCE,CORNWALL		7	27	328	0.08	3.0	6.1	D	C*D	
150887	005019.1	55.85	-3.17	326.9	662.8	3.7	-0.1	ROSEWELL,LOTHIAN		4	8	147	0.06	0.0	0.0	C	A*D	COALFIELD TYPE
170887	193011.1	55.85	-3.14	328.5	662.4	0.2	1.4	ROSEWELL,LOTHIAN	2+	10	9	124	0.10	0.3	0.3	B	A*B	COALFIELD TYPE,FELT ROSLIN
200887	032926.6	55.85	-3.11	330.6	662.6	2.0	-0.2	ROSEWELL,LOTHIAN		4	9	299	0.03	0.0	0.0	C	A*D	COALFIELD TYPE
200887	095608.5	55.85	-3.14	328.7	663.0	1.2	0.7	ROSEWELL,LOTHIAN		6	8	168	0.01	0.2	0.2	B	A*C	COALFIELD TYPE
200887	195256.1	53.26	-2.73	351.3	374.4	6.8	1.1	RUNCORN,CHESHIRE		18	76	310	0.29	2.6	2.7	D	C*D	
220887	183113.3	52.96	-4.43	237.1	343.3	21.9	-0.2	LLEYN AFTERSHOCK		9	2	302	0.08	0.8	0.7	C	A*D	
220887	223603.3	56.10	-3.10	331.4	689.8	0.6	0.2	KIRKCALDY,FIFE		8	20	179	0.11	0.7	1.2	B	A*C	COALFIELD TYPE
230887	084510.1	55.86	-3.15	328.3	663.1	4.5	-0.1	ROSEWELL,LOTHIAN		6	8	164	0.05	0.6	2.5	C	B*C	COALFIELD TYPE
230887	180520.9	57.04	-5.80	169.7	800.4	2.6	0.5	MALLAIG,HIGHLAND		5	13	186	0.06	1.8	3.6	C	B*D	
260887	172042.9	53.14	-1.09	460.8	360.2	0.1	1.9	NW OLLERTON,NOTTS.	4+	10	47	298	0.56	4.2	3.5	D	D*D	FELT OLLERTON,NOTTS.
260887	173115.6	55.85	-3.14	328.7	662.6	0.2	1.4	ROSEWELL,LOTHIAN	4+	10	9	122	0.06	0.2	0.2	B	A*B	COALFIELD TYPE,FELT ROSLIN
280887	092256.5	55.85	-3.15	328.3	662.5	0.1	1.3	ROSEWELL,LOTHIAN	2+	10	9	125	0.18	0.6	0.6	B	B*B	COALFIELD TYPE,FELT ROSLIN
310887	034650.8	55.85	-3.14	328.4	662.6	0.1	1.1	ROSEWELL,LOTHIAN	2+	10	9	124	0.11	0.4	0.4	B	A*B	COALFIELD TYPE,FELT ROSLIN
020987	063033.1	52.97	-4.38	240.3	343.9	24.5	0.8	LLEYN AFTERSHOCK		24	3	84	0.22	0.6	1.3	B	B*A	
020987	072957.6	55.85	-3.14	328.6	662.7	0.0	1.1	ROSEWELL,LOTHIAN	3+	10	8	122	0.10	0.3	0.3	B	A*B	COALFIELD TYPE,FELT ROSLIN
030987	121319.0	55.84	-3.15	327.7	661.7	0.4	1.0	ROSEWELL,LOTHIAN		10	9	132	0.27	0.3	0.3	B	B*B	COALFIELD TYPE
050987	161321.8	57.12	-5.52	187.1	808.2	1.0	0.4	LOCH HOURN,HIGHLAND		5	12	192	0.02	0.4	0.5	C	A*D	
050987	161433.0	57.04	-5.69	176.2	800.5	6.5	2.0	LOCH NEVIS,HIGHLAND		8	16	152	0.15	2.3	3.0	C	B*C	
060987	093204.2	52.98	-4.41	238.2	345.0	20.0	1.8	LLEYN AFTERSHOCK		23	1	146	0.28	1.1	1.9	C	B*C	
070987	104240.8	53.00	-4.52	231.0	348.0	11.3	1.3	LLEYN,GWYNEDD		23	7	151	0.14	0.4	1.0	B	A*C	
070987	170809.7	55.86	-3.14	328.9	663.1	0.4	1.2	ROSEWELL,LOTHIAN		10	8	119	0.21	0.9	1.0	B	B*B	COALFIELD TYPE
080987	120201.5	50.43	-4.43	227.2	61.4	9.1	0.9	SE LISKEARD, CORNWALL		7	36	149	0.10	0.3	9.7	C	C*C	
080987	225654.4	55.27	-1.09	457.8	597.2	8.2	0.8	NORTHUMBRIAN COAST		6	78	309	0.05	0.8	1.0	C	A*D	OFFSHORE EPICENTRE
080987	225711.4	55.39	-1.03	461.6	610.8	10.4	2.1	NORTHUMBRIAN COAST		18	78	276	0.18	1.3	1.4	C	B*D	OFFSHORE EPICENTRE
100987	161703.6	52.99	-4.43	237.1	345.9	20.0	0.8	LLEYN AFTERSHOCK		22	0	123	0.22	0.7	1.6	B	B*B	
130987	221530.4	50.26	-5.18	173.2	44.7	5.6	-0.3	N ST DAY, CORNWALL		10	7	334	0.01	0.3	0.2	C	A*D	
160987	074324.8	52.54	-1.85	410.3	294.0	1.5	1.6	BIRMINGHAM,W.MIDLANDS		22	71	280	0.35	3.3	5.2	D	C*D	
180987	093348.1	56.72	-3.82	288.6	760.0	2.4	1.4	LOCH TUMMEL,TAYSIDE		10	28	263	0.12	1.2	1.3	C	B*D	
200987	095002.6	55.85	-3.14	328.5	662.2	1.8	1.0	ROSEWELL,LOTHIAN		11	1	125	0.09	0.4	0.2	B	A*B	COALFIELD TYPE
210987	080718.7	59.82	1.56			5.0	2.3	NORTH SEA		18	157	170	0.81	5.3	6.6	D	D*D	
210987	080952.2	59.81	1.55			17.2	2.3	NORTH SEA		19	156	171	0.36	3.1	3.3	D	C*D	
220987	072154.9	55.88	-4.44	247.6	667.9	2.3	1.8	RENFREW,STRATHCLYDE		18	8	111	0.12	0.3	0.5	B	A*B	
230987	094014.5	55.88	-4.43	247.8	667.7	3.1	1.2	RENFREW,STRATHCLYDE		18	8	110	0.08	0.2	0.7	B	A*B	
230987	201131.8	55.86	-3.14	328.5	663.1	1.4	1.2	ROSEWELL,LOTHIAN	3+	12	1	120	0.14	0.6	0.3	B	A*B	COALFIELD TYPE,FELT ROSLIN
260987	020823.8	55.86	-3.14	328.7	663.5	2.1	0.2	ROSEWELL,LOTHIAN		5	8	170	0.07	1.0	1.2	C	B*D	COALFIELD TYPE
270987	072502.8	52.90	-2.52	365.0	334.0	11.2	1.0	MARKET DRAYTON,SALOP		9	50	271	0.35	2.2	3.3	D	C*D	

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280987	034504.7	55.87	-4.43	247.9	666.7	4.8	0.6	RENFREW,STRATHCLYDE		4	7	302	0.01	0.0	0.0	C	A*D	
280987	070649.0	55.88	-4.43	247.7	667.8	2.4	1.1	RENFREW,STRATHCLYDE		17	8	110	0.08	0.2	0.3	B	A*B	
300987	013744.4	55.86	-3.13	329.2	663.1	4.7	0.2	ROSEWELL,LOTHIAN		5	8	174	0.01	0.3	0.9	C	A*D	COALFIELD TYPE
300987	133714.6	55.85	-3.13	329.0	662.2	0.5	0.4	ROSEWELL,LOTHIAN		6	9	167	0.05	5.7	5.2	D	D*C	COALFIELD TYPE
300987	194925.7	55.86	-3.14	328.6	663.1	1.5	1.2	ROSEWELL,LOTHIAN	3+	12	1	120	0.08	0.3	0.2	B	A*B	COALFIELD TYPE,FELT ROSLIN
011087	084945.7	56.41	-3.99	277.2	726.4	3.7	0.7	COMRIE,TAYSIDE		7	18	209	0.13	1.1	3.0	C	B*D	
011087	113645.4	56.11	-3.64	298.2	691.6	0.5	0.9	BLAIRHALL,FIFE		8	18	195	0.05	0.1	0.1	C	A*D	COALFIELD TYPE
021087	130525.8	55.85	-3.15	328.1	662.1	4.9	0.5	ROSEWELL,LOTHIAN		6	9	157	0.03	0.3	1.1	B	A*C	COALFIELD TYPE
031087	012933.6	55.85	-3.13	329.4	662.9	2.0	0.1	ROSEWELL,LOTHIAN		3	9	293	0.00	0.0	0.0	C	A*D	COALFIELD TYPE
031087	022043.2	55.85	-3.15	327.7	662.6	1.1	-0.2	ROSEWELL,LOTHIAN		4	8	282	0.02	0.0	0.0	C	A*D	COALFIELD TYPE
031087	024054.3	55.87	-4.44	247.6	667.3	2.4	0.5	RENFREW,STRATHCLYDE		4	8	299	0.01	0.0	0.0	C	A*D	
031087	025400.7	55.87	-4.44	247.6	666.8	4.8	0.7	RENFREW,STRATHCLYDE		7	7	156	0.01	0.1	0.3	B	A*C	F/S DOUBLE EVT,2ND(0.5ML) 3.42 SECS LATER
031087	025427.7	55.87	-4.44	247.2	666.9	2.2	0.4	RENFREW,STRATHCLYDE		4	7	296	0.01	0.0	0.0	C	A*D	
041087	022504.0	58.37	1.49			2.4	2.9	NORTH SEA		26	236	179	0.53	2.4	1.7	D	D*D	
041087	125828.3	57.98	-5.20	210.5	903.0	0.4	3.0	ULLAPOOL,HIGHLAND	4+	12	53	231	0.13	1.4	1.1	C	B*D	FELT ULLAPOOL,ARDMAIR AND RHIROY
041087	130127.4	57.96	-5.18	212.0	901.3	0.7	1.6	ULLAPOOL,HIGHLAND	2+	10	52	228	0.19	2.2	2.3	C	B*D	FELT ARDMAIR
041087	131628.2	57.98	-5.18	211.9	903.1	0.2	1.4	ULLAPOOL,HIGHLAND		8	54	244	0.18	3.5	3.4	D	C*D	
041087	145022.2	57.97	-5.18	211.7	902.7	0.2	2.0	ULLAPOOL,HIGHLAND	2+	9	53	229	0.17	2.5	2.7	C	B*D	FELT ARDMAIR
041087	172816.4	57.97	-5.19	211.5	902.3	0.5	3.0	ULLAPOOL,HIGHLAND	4+	13	53	229	0.17	1.6	1.2	C	B*D	FELT ULLAPOOL,ARDMAIR AND RHIROY
041087	173416.1	57.94	-5.06	219.0	898.9	0.1	1.3	ULLAPOOL,HIGHLAND		8	51	232	0.19	2.5	3.1	C	B*D	
051087	121908.6	52.96	-4.39	239.7	342.4	23.1	0.7	LLEYN AFTERSHOCK		20	4	88	0.08	0.3	0.7	A	A*A	
061087	025542.5	59.22	1.62			0.2	2.4	NORTH SEA		92	07	302	0.77	25.2	12.7	D	D*D	
061087	044056.9	57.96	-5.16	212.7	900.9	0.6	1.7	ULLAPOOL,HIGHLAND		10	52	227	0.15	1.8	2.1	C	B*D	
061087	074130.6	57.91	-5.07	218.0	895.9	0.7	1.5	ULLAPOOL,HIGHLAND		8	48	230	0.34	4.3	6.7	D	C*D	
061087	075214.5	57.97	-5.22	209.5	902.7	0.9	2.2	ULLAPOOL,HIGHLAND		6	53	246	0.07	2.1	1.8	C	B*D	
061087	180227.9	55.85	-3.13	329.2	662.5	0.4	1.6	ROSEWELL,LOTHIAN	3+	12	2	120	0.04	0.1	0.1	B	A*B	COALFIELD TYPE,FELT ROSLIN
071087	045545.5	49.98	-5.49	150.0	14.6	10.1	0.5	S PENZANCE,CORNWALL		6	24	328	0.06	3.2	8.6	D	C*D	
071087	045850.4	57.96	-5.14	214.3	900.7	0.5	1.6	ULLAPOOL,HIGHLAND		5	57	289	0.11	6.1	3.0	D	D*D	
071087	060435.8	57.96	-5.17	212.2	900.8	8.1	2.1	ULLAPOOL,HIGHLAND		7	51	242	0.30	3.0	5.1	D	C*D	
071087	183040.9	55.85	-3.14	328.4	662.7	0.7	1.1	ROSEWELL,LOTHIAN	2+	12	1	123	0.12	0.5	0.4	B	A*B	COALFIELD TYPE,FELT ROSLIN
081087	014440.1	55.90	-3.99	275.5	669.5	1.3	0.8	AIRDRIE,STRATHCLYDE		7	12	136	0.02	0.1	0.2	B	A*C	
081087	165411.4	57.95	-5.02	221.1	899.4	0.2	1.6	ULLAPOOL,HIGHLAND		7	50	283	0.31	2.5	5.4	D	C*D	
101087	123548.3	55.87	-4.43	247.9	666.9	4.8	2.3	RENFREW,STRATHCLYDE	4+	15	7	107	0.25	0.8	2.2	B	B*B	FELT IN RENFREW,ERSKINE & INCHINNAN
101087	192833.2	55.87	-4.44	247.4	666.2	7.4	0.7	RENFREW,STRATHCLYDE		9	7	106	0.15	0.8	0.8	B	B*B	
131087	181841.0	55.86	-3.13	329.3	663.2	1.0	1.0	ROSEWELL,LOTHIAN		6	8	176	0.02	0.3	0.3	B	A*C	COALFIELD TYPE
131087	192841.0	55.87	-4.43	247.8	666.9	4.9	0.7	RENFREW,STRATHCLYDE		8	7	157	0.04	0.2	0.7	B	A*C	
151087	032604.2	55.86	-3.15	327.9	663.2	1.6	1.0	ROSEWELL,LOTHIAN		11	0	101	0.12	0.6	0.2	B	A*B	COALFIELD TYPE
161087	140534.6	57.95	-5.26	207.1	900.6	1.0	1.1	ULLAPOOL,HIGHLAND		10	64	294	0.73	6.4	5.3	D	D*D	
161087	163526.4	55.86	-3.15	327.9	663.1	2.5	0.9	ROSEWELL,LOTHIAN		6	8	159	0.09	1.0	1.0	C	B*C	COALFIELD TYPE
171087	074438.8	57.93	-5.14	214.0	897.8	2.0	2.9	ULLAPOOL,HIGHLAND	3+	10	49	223	0.10	1.3	0.8	C	B*D	FELT ULLAPOOL
171087	074715.6	57.94	-5.14	214.0	898.4	5.6	2.1	ULLAPOOL,HIGHLAND		12	49	224	0.27	2.2	1.6	C	B*D	
171087	095407.6	57.96	-5.19	211.3	900.8	4.8	2.5	ULLAPOOL,HIGHLAND	3+	10	51	228	0.08	0.9	2.2	C	B*D	FELT ULLAPOOL
171087	204502.4	57.92	-5.05	219.6	896.2	3.6	1.2	ULLAPOOL,HIGHLAND		7	51	284	0.04	1.3	2.7	C	B*D	

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Date	HrMnSecs	Lat	Lon	KmE	KmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	Q	SQD	Comments...
181087	013009.9	57.95	-5.20	210.5	899.5	7.0	2.3	ULLAPOOL,HIGHLAND		11	50	228	0.09	1.3	2.6	C	B*D	
191087	025913.1	55.87	-4.43	247.9	667.2	3.5	1.0	RENFREW,STRATHCLYDE		12	8	109	0.06	0.3	0.7	B	A*B	
191087	194438.6	52.96	-4.33	243.4	342.7	12.9	0.6	LLEYN,GWYNEDD		20	7	88	0.08	0.2	0.3	A	A*A	
201087	124443.3	55.85	-3.13	329.2	662.6	0.4	0.9	ROSEWELL,LOTHIAN		8	9	120	0.08	0.5	0.4	B	A*B	COALFIELD TYPE
201087	191929.7	55.84	-3.16	327.6	661.7	0.3	1.1	ROSEWELL,LOTHIAN	2+	8	9	132	0.13	0.2	0.2	B	A*B	COALFIELD TYPE,FELT ROSLIN
231087	131046.7	52.96	-4.40	239.1	343.4	23.8	0.6	LLEYN AFTERSHOCK		17	3	88	0.08	0.3	0.7	A	A*A	
251087	032353.6	49.24	-2.28			7.4	0.2	SW GRONEZ POINT,JERSEY		7	6	322	0.01	0.3	0.2	C	A*D	
261087	205148.9	55.85	-3.15	328.0	662.9	4.4	0.0	ROSEWELL,LOTHIAN		6	8	159	0.07	1.3	4.0	C	B*C	COALFIELD TYPE
261087	224703.6	55.85	-3.15	328.3	662.2	2.2	0.0	ROSEWELL,LOTHIAN		6	9	160	0.07	0.6	0.7	B	A*C	COALFIELD TYPE
261087	230639.8	56.10	-3.74	291.6	691.6	2.8	1.4	CLACKMANNAN,CENTRAL	2+	6	22	136	0.02	0.1	26.6	C	C*C	COALFIELD TYPE,FELT ALLOA
271087	114247.2	57.93	-5.13	214.9	897.1	5.0	1.5	ULLAPOOL,HIGHLAND		8	48	222	0.21	2.7	2.4	D	C*D	
281087	070149.6	56.93	-4.55	244.7	785.3	0.2	1.9	SPEAN BRIDGE,HIGHLAND		9	61	234	0.20	1.7	3.1	C	B*D	
291087	021807.8	55.85	-3.14	328.4	662.5	0.2	1.2	ROSEWELL,LOTHIAN	3+	12	8	124	0.04	0.1	0.2	B	A*B	COALFIELD TYPE,FELT ROSLIN
301087	034948.8	55.85	-3.16	327.4	662.8	2.2	0.1	ROSEWELL,LOTHIAN		6	8	153	0.09	0.7	1.0	B	A*C	COALFIELD TYPE
301087	210840.3	57.93	-5.12	215.2	898.0	5.8	1.6	ULLAPOOL,HIGHLAND		5	56	288	0.03	0.9	0.7	C	A*D	
301087	233417.8	55.85	-3.15	328.3	662.4	2.1	0.2	ROSEWELL,LOTHIAN		6	9	161	0.06	0.5	0.6	B	A*C	COALFIELD TYPE
311087	031125.1	55.85	-3.12	329.6	662.8	0.9	0.6	ROSEWELL,LOTHIAN		8	9	117	0.08	0.5	0.5	B	A*B	COALFIELD TYPE
311087	032934.9	57.94	-5.12	215.2	899.1	0.6	2.5	ULLAPOOL,HIGHLAND		11	56	262	0.11	2.2	1.1	C	B*D	
011187	045222.9	55.73	-5.43	184.6	653.2	0.9	1.4	KINTYRE,STRATHCLYDE		8	45	339	0.07	1.5	1.1	C	B*D	
051187	191040.4	55.87	-3.08	332.5	664.8	2.1	0.3	LASSWADE,LOTHIAN		5	9	218	0.02	0.8	0.4	C	A*D	COALFIELD TYPE
061187	175536.4	55.85	-3.14	328.4	662.7	2.4	0.2	ROSEWELL,LOTHIAN		6	8	163	0.08	0.5	0.7	B	A*C	COALFIELD TYPE
061187	230239.1	55.85	-3.15	327.8	662.1	0.1	1.1	ROSEWELL,LOTHIAN	3+	9	9	129	0.09	0.3	0.4	B	A*B	COALFIELD TYPE,FELT ROSLIN
071187	030746.4	55.86	-3.14	328.8	663.2	1.4	-0.2	ROSEWELL,LOTHIAN		5	8	170	0.00	0.0	0.0	C	A*D	COALFIELD TYPE
071187	040830.3	55.86	-3.10	330.9	663.7	4.7	-0.3	ROSEWELL,LOTHIAN		5	9	195	0.06	1.7	3.4	C	B*D	COALFIELD TYPE
071187	043403.3	55.86	-3.14	329.0	663.3	1.8	-0.1	ROSEWELL,LOTHIAN		6	8	173	0.04	0.3	0.4	B	A*C	COALFIELD TYPE
071187	044006.4	55.86	-3.13	329.3	663.3	1.4	0.0	ROSEWELL,LOTHIAN		5	8	176	0.03	0.5	0.6	C	A*D	COALFIELD TYPE
071187	175920.3	55.87	-3.08	332.3	664.8	1.0	-0.2	LASSWADE,LOTHIAN		3	9	216	0.01	0.0	0.0	C	A*D	COALFIELD TYPE
081187	152856.0	55.85	-3.16	327.6	662.8	0.7	0.1	ROSEWELL,LOTHIAN		6	8	154	0.07	0.9	1.1	B	A*C	COALFIELD TYPE
081187	161328.7	55.85	-3.16	327.3	663.0	2.4	-0.4	ROSEWELL,LOTHIAN		5	8	153	0.03	0.4	0.4	C	A*D	COALFIELD TYPE
091187	013314.9	54.22	-4.83	215.3	484.4	17.7	2.3	W.PEEL,ISLE OF MAN	4	39	13	146	0.27	0.6	0.5	C	B*C	FELT THROUGHOUT I.O.M
091187	112811.1	55.86	-3.12	329.8	663.9	0.4	-0.2	ROSEWELL,LOTHIAN		5	8	185	0.14	1.6	1.4	C	B*D	COALFIELD TYPE
091187	203008.5	55.86	-3.13	329.3	663.6	1.5	0.0	ROSEWELL,LOTHIAN		5	8	178	0.04	0.7	0.8	C	A*D	COALFIELD TYPE
101187	085628.5	55.86	-3.13	329.2	663.6	1.8	-0.1	ROSEWELL,LOTHIAN		5	8	176	0.02	0.3	0.3	C	A*D	COALFIELD TYPE
101187	135259.8	56.91	-5.64	178.5	785.3	14.4	0.7	LOCHAILORT,HIGHLAND		5	36	338	0.25	4.8	10.9	D	C*D	
111187	093915.3	55.86	-3.11	330.4	663.2	1.0	-0.1	ROSEWELL,LOTHIAN		6	9	187	0.04	1.0	0.9	C	B*D	COALFIELD TYPE
121187	193828.5	55.86	-3.15	328.1	663.4	2.2	0.0	ROSEWELL,LOTHIAN		5	8	163	0.06	0.8	1.1	C	A*D	COALFIELD TYPE
131187	161811.1	50.14	-5.26	167.2	31.6	3.3	0.5	NW WENDRON,CORNWALL		9	4	289	0.03	0.4	0.7	C	A*D	
131187	170015.5	50.14	-5.25	167.5	31.3	3.6	-0.5	NW WENDRON,CORNWALL		8	4	314	0.01	0.2	0.2	C	A*D	
141187	014207.8	55.85	-3.16	327.1	662.9	1.5	-0.3	ROSEWELL,LOTHIAN		5	8	149	0.04	0.6	0.9	C	A*D	COALFIELD TYPE
141187	080948.4	56.91	-5.63	178.9	786.3	2.4	1.5	LOCHAILORT,HIGHLAND		5	35	337	0.06	5.0	4.6	D	C*D	
141187	224840.7	55.85	-3.14	328.8	662.6	0.7	1.6	ROSEWELL,LOTHIAN	2+	9	9	122	0.08	0.5	0.6	B	A B	COALFIELD TYPE,FELT ROSLIN
161187	011908.1	52.96	-4.39	239.4	343.1	23.4	0.6	LLEYN AFTERSHOCK		19	3	86	0.10	0.3	0.6	A	A*A	
161187	025449.9	53.62	-2.41	372.7	414.2	16.8	2.3	BOLTON,LANCASHIRE		21	48	130	0.19	1.0	1.7	C	B*C	
171187	191019.4	56.10	-3.72	292.8	690.5	4.5	1.1	CLACKMANNAN,CENTRAL		7	22	136	0.26	1.9	5.0	C	C*C	COALFIELD TYPE
171187	201822.0	55.86	-3.15	328.1	663.1	2.4	0.2	ROSEWELL,LOTHIAN		6	8	162	0.09	0.6	0.9	B	A*C	COALFIELD TYPE
181187	015848.8	56.10	-3.73	292.1	690.6	1.1	0.2	CLACKMANNAN,CENTRAL		7	22	137	0.16	1.1	2.0	C	B*C	COALFIELD TYPE EVENT

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Listed Chronologically

Date	HrMnSecs	Lat	Lon	KmE	KmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	Q	SQD	Comments...
181187	091950.1	59.68	1.82			6.2	1.7	NORTH SEA		15	175	177	0.83	6.3	7.0	D	D*D	
201187	030739.3	56.71	-5.71	173.1	763.8	0.5	2.6	ARDNAMURCHAN,HIGHLAND	3+	21	58	214	0.16	1.6	1.0	C	B*D	FELT LOCHAILORT
211187	155626.9	55.86	-3.13	329.1	663.4	0.2	-0.4	ROSEWELL,LOTHIAN		4	8	174	0.04	0.0	0.0	C	A*D	COALFIELD TYPE
231187	074215.2	55.87	-4.44	247.6	666.7	6.0	0.5	RENFREW,STRATHCLYDE		6	7	247	0.04	0.5	0.6	C	A*D	
231187	201133.4	55.86	-3.13	329.5	663.3	0.5	-0.1	ROSEWELL,LOTHIAN		5	8	179	0.03	0.7	0.9	C	A*D	COALFIELD TYPE
241187	022104.2	55.86	-3.13	329.5	663.7	2.1	0.1	ROSEWELL,LOTHIAN		6	8	181	0.05	0.5	0.5	C	A*D	COALFIELD TYPE
241187	080242.9	55.86	-3.11	330.4	663.5	0.5	-0.1	ROSEWELL,LOTHIAN		6	8	189	0.09	2.0	1.8	C	B*D	COALFIELD TYPE
251187	064525.4	55.87	-3.09	331.6	664.8	2.3	0.3	LASSWADE,LOTHIAN		6	8	209	0.04	0.5	0.4	C	A*D	COALFIELD TYPE
251187	165045.9	55.86	-3.11	330.7	663.9	2.2	0.2	ROSEWELL,LOTHIAN		6	8	195	0.06	0.7	0.7	C	A*D	COALFIELD TYPE,LOW FREQ.
261187	004418.0	55.85	-3.14	328.7	662.8	0.5	0.5	ROSEWELL,LOTHIAN		6	8	167	0.06	0.7	0.8	B	A*C	COALFIELD TYPE
261187	195816.6	55.85	-3.14	328.7	662.8	0.2	1.1	ROSEWELL,LOTHIAN		9	8	121	0.06	0.3	0.3	B	A*B	COALFIELD TYPE
271187	134137.4	55.85	-3.11	330.3	663.0	1.2	1.0	ROSEWELL,LOTHIAN		8	9	113	0.09	0.6	1.0	B	A*B	COALFIELD TYPE,LOW FREQ.
281187	124622.0	59.48	2.13			5.0	2.9	NORTH SEA		23	199	171	0.42	1.9	2.8	D	C*D	
291187	202042.7	53.56	-1.90	406.6	406.6	7.1	1.1	MOSSLEY,LANCASHIRE		5	20	288	0.09	2.3	3.8	C	B*D	
291187	223420.2	53.27	-4.98	201.1	379.2	10.0	1.1	W.OF HOLYHEAD,GWYNEDD		19	27	196	0.10	0.4	0.6	C	A*D	
021287	060535.6	57.27	-5.65	179.7	825.6	8.3	-0.4	LOCH ALSH,HIGHLAND		4	8	246	0.22	0.0	0.0	C	B*D	
021287	101724.9	50.05	-7.62	-2.1	31.5	6.0	2.6	WEST OF SCILLY ISLES		51	46	358	0.24	9.8	0.9	D	D*D	
031287	090824.6	52.96	-4.41	238.4	342.7	23.9	0.9	LLEYN AFTERSHOCK		21	3	106	0.11	0.4	0.6	B	A*B	
031287	155245.5	56.95	-5.56	183.8	789.9	1.4	0.6	LOCH MORAR,HIGHLAND		5	30	337	0.16	10.9	9.5	D	D*D	
031287	160114.9	57.40	-7.65	60.5	849.1	20.0	1.3	BENBECULA,W.ISLES		41	21	352	0.20	0.0	0.0	C	B*D	
031287	203339.6	51.06	-2.78	345.0	129.4	6.3	2.1	SE BRIDGWATER,SOMERSET		10	64	328	0.08	2.2	4.3	C	B*D	
051287	074437.0	55.86	-3.14	328.7	663.2	2.9	1.3	ROSEWELL,LOTHIAN	3+	8	8	119	0.06	0.3	1.3	B	A*B	COALFIELD TYPE,FELT ROSLIN
051287	102258.5	53.49	-1.98	401.6	399.2	8.8	2.6	MANCHESTER	4+	31	27	108	0.20	0.7	1.9	C	B*C	FELT OVER WIDE AREA OF GREATER MANCHESTER
051287	164722.3	53.50	-1.95	403.2	400.7	7.7	2.1	MANCHESTER		28	25	127	0.31	0.9	1.9	C	C*C	POSSIBLE A/S OF EVENT @ 10:23 GMT ON 05-12-87
061287	002058.3	51.07	-2.88	338.5	130.6	2.0	1.5	SE BRIDGWATER,SOMERSET		10	63	327	0.15	12.8	9.8	D	D*D	
071287	200229.4	55.85	-3.14	328.6	662.8	1.6	0.1	ROSEWELL,LOTHIAN		6	8	165	0.14	0.9	1.2	B	A*C	COALFIELD TYPE
081287	160539.9	57.22	-5.40	194.4	819.5	1.2	-0.3	SHIEL BRIDGE,HIGHLAND		4	2	210	0.13	0.0	0.0	C	A*D	
101287	122155.2	56.90	-5.55	183.8	784.7	18.0	1.2	SOUTH MORAR,HIGHLAND		5	35	340	0.12	2.1	2.7	C	B*D	
121287	142843.1	55.87	-3.09	331.9	664.6	0.3	1.3	LASSWADE,LOTHIAN	3+	7	9	112	0.04	0.3	0.5	B	A*B	COALFIELD TYPE,FELT LASSWADE
121287	223734.5	57.95	-5.23	208.6	900.2	7.1	1.7	ULLAPOOL,HIGHLAND		7	50	230	0.09	1.6	2.4	C	B*D	
121287	233438.8	52.28	-3.25	314.5	265.0	8.5	1.7	L'DRINDOD WELLS,POWYS		23	22	98	0.14	0.5	1.8	B	A*C	
131287	031506.7	52.27	-3.24	315.3	264.9	7.4	0.0	L'DRINDOD WELLS,POWYS		8	22	121	0.07	0.4	1.5	B	A*C	POSSIBLE A/S OF EVENT @ 23:34 GMT ON 12-12-87
161287	231556.3	52.03	-3.52	296.0	238.2	12.6	1.4	NW OF BRECON,POWYS		23	18	238	0.18	1.0	1.0	C	B*D	
171287	140432.8	57.03	-5.55	184.9	798.3	9.0	0.3	KNOYDART,HIGHLAND		4	22	330	0.01	0.0	0.0	C	A*D	
171287	231602.4	55.85	-3.14	328.6	661.9	0.1	0.6	ROSEWELL,LOTHIAN		8	9	127	0.06	0.3	0.4	B	A*B	COALFIELD TYPE
181287	235254.2	52.96	-4.39	239.4	343.4	23.8	1.0	LLEYN AFTERSHOCK		25	3	85	0.09	0.3	0.5	A	A*A	
201287	003150.0	57.93	-5.18	211.6	898.4	8.4	1.3	ULLAPOOL,HIGHLAND		11	49	226	0.32	2.9	4.6	D	C*D	
201287	182803.9	57.94	-5.22	209.7	899.1	8.0	1.5	ULLAPOOL,HIGHLAND		7	49	244	0.09	1.4	2.2	C	B*D	
221287	063346.9	53.05	-1.69	420.9	351.0	12.3	2.2	ASHBOURNE,DERBYSHIRE		21	44	138	0.17	0.7	1.6	C	B*C	
221287	214220.1	55.85	-3.14	328.7	662.9	0.7	1.2	ROSEWELL,LOTHIAN	2+	9	8	121	0.09	0.5	0.7	B	A B	COALFIELD TYPE,FELT ROSLIN
231287	015150.4	55.85	-3.14	328.7	662.3	0.3	1.1	ROSEWELL,LOTHIAN		8	9	124	0.05	0.2	0.2	B	A*B	COALFIELD TYPE
241287	185041.8	52.55	-2.35	376.5	294.7	13.5	0.5	BRIDGNORTH,SALOP		11	8	176	0.20	1.8	1.6	C	B*C	
291287	030505.8	57.57	-5.68	179.7	859.2	4.2	1.1	LOCH TORRIDON,HIGHLAND		6	24	293	0.04	0.6	0.7	C	A*D	

Table 2

CATALOGUE OF EVENTS : 1987

Listed in order of decreasing latitude

Date	HrMnSecs	Lat	Lon	KmE	KmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	Q	SQD	Comments...
100287	001345.5	59.96	-1.96	402.3	1119.4	5.0	0.6	OFFSHORE SHETLAND		3	41	345	0.00	0.0	0.0	C	A*D	
210987	080718.7	59.82	1.56			5.0	2.3	NORTH SEA		18	157	170	0.81	5.3	6.6	D	D*D	
210987	080952.2	59.81	1.55			17.2	2.3	NORTH SEA		19	156	171	0.36	3.1	3.3	D	C*D	
181187	091950.1	59.68	1.82			6.2	1.7	NORTH SEA		15	175	177	0.83	6.3	7.0	D	D*D	
200487	051852.0	59.57	1.78			10.6	2.5	NORTH SEA		18	177	185	0.65	5.0	6.1	D	D*D	
281187	124622.0	59.48	2.13			5.0	2.9	NORTH SEA		23	199	171	0.42	1.9	2.8	D	C*D	
061087	025542.5	59.22	1.62			0.2	2.4	NORTH SEA		9	207	302	0.77	25.2	12.7	D	D*D	
041087	022504.0	58.37	1.49			2.4	2.9	NORTH SEA		26	236	179	0.53	2.4	1.7	D	D*D	
041087	125828.3	57.98	-5.20	210.5	903.0	0.4	3.0	ULLAPOOL,HIGHLAND	4+	12	53	231	0.13	1.4	1.1	C	B*D	FELT ULLAPOOL,ARDMAIR AND RHIROY
041087	131628.2	57.98	-5.18	211.9	903.1	0.2	1.4	ULLAPOOL,HIGHLAND		8	54	244	0.18	3.5	3.4	D	C*D	
061087	075214.5	57.97	-5.22	209.5	902.7	0.9	2.2	ULLAPOOL,HIGHLAND		6	53	246	0.07	2.1	1.8	C	B*D	
041087	172816.4	57.97	-5.19	211.5	902.3	0.5	3.0	ULLAPOOL,HIGHLAND	4+	13	53	229	0.17	1.6	1.2	C	B*D	FELT ULLAPOOL,ARDMAIR AND RHIROY
041087	145022.2	57.97	-5.18	211.7	902.7	0.2	2.0	ULLAPOOL,HIGHLAND	2+	9	53	229	0.17	2.5	2.7	C	B*D	FELT ARDMAIR
171087	095407.6	57.96	-5.19	211.3	900.8	4.8	2.5	ULLAPOOL,HIGHLAND	3+	10	51	228	0.08	0.9	2.2	C	B*D	FELT ULLAPOOL
041087	130127.4	57.96	-5.18	212.0	901.3	0.7	1.6	ULLAPOOL,HIGHLAND	2+	10	52	228	0.19	2.2	2.3	C	B*D	FELT ARDMAIR
071087	060435.8	57.96	-5.17	212.2	900.8	8.1	2.1	ULLAPOOL,HIGHLAND		7	51	242	0.30	3.0	5.1	D	C*D	
061087	044056.9	57.96	-5.16	212.7	900.9	0.6	1.7	ULLAPOOL,HIGHLAND		10	52	227	0.15	1.8	2.1	C	B*D	
071087	045850.4	57.96	-5.14	214.3	900.7	0.5	1.6	ULLAPOOL,HIGHLAND		5	57	289	0.11	6.1	3.0	D	D*D	
161087	140534.6	57.95	-5.26	207.1	900.6	1.0	1.1	ULLAPOOL,HIGHLAND		10	64	294	0.73	6.4	5.3	D	D*D	
121287	223734.5	57.95	-5.23	208.6	900.2	7.1	1.7	ULLAPOOL,HIGHLAND		7	50	230	0.09	1.6	2.4	C	B*D	
181087	013009.9	57.95	-5.20	210.5	899.5	7.0	2.3	ULLAPOOL,HIGHLAND		11	50	228	0.09	1.3	2.6	C	B*D	
081087	165411.4	57.95	-5.02	221.1	899.4	0.2	1.6	ULLAPOOL,HIGHLAND		7	50	283	0.31	2.5	5.4	D	C*D	
201287	182803.9	57.94	-5.22	209.7	899.1	8.0	1.5	ULLAPOOL,HIGHLAND		7	49	244	0.09	1.4	2.2	C	B*D	
171087	074715.6	57.94	-5.14	214.0	898.4	5.6	2.1	ULLAPOOL,HIGHLAND		12	49	224	0.27	2.2	1.6	C	B*D	
311087	032934.9	57.94	-5.12	215.2	899.1	0.6	2.5	ULLAPOOL,HIGHLAND		11	56	262	0.11	2.2	1.1	C	B*D	
041087	173416.1	57.94	-5.06	219.0	898.9	0.1	1.3	ULLAPOOL,HIGHLAND		8	51	232	0.19	2.5	3.1	C	B*D	
201287	003150.0	57.93	-5.18	211.6	898.4	8.4	1.3	ULLAPOOL,HIGHLAND		11	49	226	0.32	2.9	4.6	D	C*D	
171087	074438.8	57.93	-5.14	214.0	897.8	2.0	2.9	ULLAPOOL,HIGHLAND	3+	10	49	223	0.10	1.3	0.8	C	B*D	FELT ULLAPOOL
271087	114247.2	57.93	-5.13	214.9	897.1	5.0	1.5	ULLAPOOL,HIGHLAND		8	48	222	0.21	2.7	2.4	D	C*D	
301087	210840.3	57.93	-5.12	215.2	898.0	5.8	1.6	ULLAPOOL,HIGHLAND		5	56	288	0.03	0.9	0.7	C	A*D	
171087	204502.4	57.92	-5.05	219.6	896.2	3.6	1.2	ULLAPOOL,HIGHLAND		7	51	284	0.04	1.3	2.7	C	B*D	
061087	074130.6	57.91	-5.07	218.0	895.9	0.7	1.5	ULLAPOOL,HIGHLAND		8	48	230	0.34	4.3	6.7	D	C*D	
130287	201156.5	57.73	-5.49	192.5	876.9	5.0	1.9	LOCH MAREE,HIGHLAND		8	28	242	0.11	1.5	1.2	C	B*D	
070387	234218.1	57.71	-5.06	217.4	873.2	11.1	0.7	BRAEMORE,HIGHLAND		6	27	341	0.10	3.3	4.8	D	C*D	
200787	190942.5	57.67	-5.25	206.3	869.4	6.1	1.8	KINLOCHEWE,HIGHLAND		7	20	213	0.13	2.0	1.9	C	B*D	
291287	030505.8	57.57	-5.68	179.7	859.2	4.2	1.1	LOCH TORRIDON,HIGHLAND		6	24	293	0.04	0.6	0.7	C	A*D	
031287	160114.9	57.40	-7.65	60.5	849.1	20.0	1.3	BENBECULA,W.ISLES		41	21	352	0.20	0.0	0.0	C	B*D	
021287	060535.6	57.27	-5.65	179.7	825.6	8.3	-0.4	LOCH ALSH,HIGHLAND		4	8	246	0.22	0.0	0.0	C	B*D	
260187	001233.7	57.25	-5.79	171.6	824.3	7.1	0.0	LOCH CARRON,HIGHLAND		4	13	216	0.02			C	A*D	
050287	072607.1	57.24	-5.58	183.9	822.7	3.2	-0.2	KYLE,HIGHLAND		6	10	227	0.07	0.8	8.3	D	C*D	
180487	162802.8	57.22	-5.47	190.5	820.0	1.9	0.3	SHIEL BRIDGE,HIGHLAND		4	3	202	0.05	0.0	0.0	C	A*D	
081287	160539.9	57.22	-5.40	194.4	819.5	1.2	-0.3	SHIEL BRIDGE,HIGHLAND		4	2	210	0.13	0.0	0.0	C	A*D	
050987	161321.8	57.12	-5.52	187.1	808.2	1.0	0.4	LOCH HOURN,HIGHLAND		5	12	192	0.02	0.4	0.5	C	A*D	
040587	165209.8	57.09	-5.42	192.9	804.8	4.8	0.1	LOCH HOURN,HIGHLAND		6	14	224	0.10	2.2	2.7	C	B*D	
230887	180520.9	57.04	-5.80	169.7	800.4	2.6	0.5	MALLAIG,HIGHLAND		5	13	186	0.06	1.8	3.6	C	B*D	
050987	161433.0	57.04	-5.69	176.2	800.5	6.5	2.0	LOCH NEVIS,HIGHLAND		8	16	152	0.15	2.3	3.0	C	B*C	
171287	140432.8	57.03	-5.55	184.9	798.3	9.0	0.3	KNOYDART,HIGHLAND		4	22	330	0.01	0.0	0.0	C	A*D	
160687	085232.6	57.01	-5.81	168.5	797.6	3.9	1.6	MALLAIG,HIGHLAND		14	11	189	0.28	2.4	2.2	C	B*D	

Table 2 (cont'd)

CATALOGUE OF EVENTS : 1987

Listed in order of decreasing latitude

Date	HrMnSecs	Lat	Lon	KmE	KmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	Q	SQD	Comments...
020587	133623.1	57.01	-4.62	241.1	794.4	5.9	1.5	INVERGARRY,HIGHLAND		18	54	155	0.27	1.2	3.5	C	B*D	
031287	155245.5	56.95	-5.56	183.8	789.9	1.4	0.6	LOCH MORAR,HIGHLAND		5	30	337	0.16	10.9	9.5	D	D*D	
281087	070149.6	56.93	-4.55	244.7	785.3	0.2	1.9	SPEAN BRIDGE,HIGHLAND		9	61	234	0.20	1.7	3.1	C	B*D	
101187	135259.8	56.91	-5.64	178.5	785.3	14.4	0.7	LOCHAILORT,HIGHLAND		5	36	338	0.25	4.8	10.9	D	C*D	
141187	080948.4	56.91	-5.63	178.9	786.3	2.4	1.5	LOCHAILORT,HIGHLAND		5	35	337	0.06	5.0	4.6	D	C*D	
101287	122155.2	56.90	-5.55	183.8	784.7	18.0	1.2	SOUTH MORAR,HIGHLAND		5	35	340	0.12	2.1	2.7	C	B*D	
080587	020406.2	56.73	-6.38	132.2	768.2	12.9	2.0	MULL AFTERSHOCK		5	40	335	0.41	4.5	2.9	D	C*D	
180987	093348.1	56.72	-3.82	288.6	760.0	2.4	1.4	LOCH TUMMEL,TAYSIDE		10	28	263	0.12	1.2	1.3	C	B*D	
201187	030739.3	56.71	-5.71	173.1	763.8	0.5	2.6	ARDNAMURCHAN,HIGHLAND	3+	21	58	214	0.16	1.6	1.0	C	B*D	FELT LOCHAILORT
030587	224820.8	56.68	-6.24	140.2	761.9	11.3	2.5	MULL,HIGHLAND		16	37	255	0.25	1.6	1.6	C	B*D	
050587	032915.7	56.66	-6.23	140.6	759.9	7.3	2.0	MULL AFTERSHOCK		10	38	251	0.09	2.9	5.1	D	C*D	
160587	140638.0	56.66	-6.23	141.1	760.0	10.2	2.1	MULL AFTERSHOCK		9	38	270	0.14	1.8	2.3	C	B*D	
060687	161633.6	56.66	-6.23	141.1	760.2	14.6	1.6	MULL AFTERSHOCK		8	78	270	0.41	7.2	5.1	D	D*D	
040587	002218.5	56.66	-6.21	142.2	760.1	4.1	1.8	MULL AFTERSHOCK		12	37	249	0.14	1.2	1.2	C	B*D	
060687	112602.1	56.66	-6.20	142.5	760.2	13.0	1.6	MULL AFTERSHOCK		7	77	269	0.34	7.0	6.0	D	D*D	
260587	130702.7	56.66	-6.09	149.1	759.6	6.7	1.8	MULL AFTERSHOCK		8	120	338	0.69	28.6	21.7	D	D*D	
080587	010406.2	56.65	-6.21	142.2	758.8	3.9	1.9	MULL AFTERSHOCK		11	38	270	0.20	1.9	2.1	C	B*D	
080587	004154.2	56.61	-6.13	146.6	754.2	7.1	1.7	MULL AFTERSHOCK		10	39	267	0.11	4.4	6.9	D	C*D	
290587	120320.6	56.60	-5.67	174.9	750.9	11.4	1.5	LOCH LINNHE,HIGHLAND		9	70	242	0.25	3.0	2.1	D	C*D	
150187	011910.7	56.53	-6.34	133.4	746.4	5.0	0.8	ARDNAMURCHAN,HIGHLAND		4	99	278	0.08			C	A*D	
130487	040640.4	56.48	-4.53	243.9	734.3	9.0	1.6	CRAINLARICH,CENTRAL		5	34	291	0.14	5.1	68.4	D	D*D	
300387	035250.8	56.46	-4.54	243.2	732.4	8.3	1.1	CRIANLARICH,CENTRAL		5	33	291	0.07	4.9	115.4	D	C*D	
210487	113310.9	56.42	-3.99	277.0	726.9	2.4	1.5	COMRIE,TAYSIDE	2+	11	18	212	0.15	0.6	0.7	C	A*D	FELT COMRIE
250287	142544.0	56.41	-4.00	276.8	726.0	2.3	0.9	COMRIE,TAYSIDE		7	19	209	0.24	0.6	0.6	C	B*D	
011087	084945.7	56.41	-3.99	277.2	726.4	3.7	0.7	COMRIE,TAYSIDE		7	18	209	0.13	1.1	3.0	C	B*D	
140287	230355.8	56.41	-3.98	277.6	725.5	2.9	2.2	COMRIE,TAYSIDE	3+	14	18	204	0.25	1.6	2.6	C	B*D	FELT COMRIE & CRIEFF
140287	230738.8	56.41	-3.98	277.6	725.8	4.0	0.4	COMRIE,TAYSIDE		6	18	206	0.21	0.5	7.3	D	C*D	
230187	000338.8	56.40	-5.37	192.2	728.0	1.2	0.9	OBAN,STRATHCLYDE		4	68	322	0.04			C	A*D	
090287	221315.3	56.40	-3.98	277.6	724.9	3.2	1.0	COMRIE,TAYSIDE	2+	11	18	202	0.29	1.8	3.3	C	B*D	FELT COMRIE
300187	105457.3	56.38	-3.96	278.8	722.8	2.3	1.0	COMRIE,TAYSIDE		11	18	190	0.48	1.3	1.5	D	C*D	
110687	120350.9	56.36	-5.62	176.5	724.3	8.4	1.2	FIRTH OF LORN,HIGHLAND		5	64	339	0.11	4.2	3.0	D	C*D	
310187	064032.9	56.31	-5.33	194.0	718.5	9.8	0.8	LOCH AWE,STRATHCLYDE		4	63	318	0.09			C	A*D	
030287	083233.4	56.31	-5.32	194.9	717.9	5.0	1.7	OBAN,STRATHCLYDE		5	101	349	0.10	12.0	10.7	D	D*D	
030587	140829.8	56.26	-3.74	292.0	708.3	3.6	0.6	BLACKFORD,TAYSIDE		11	15	106	0.11	0.4	1.1	B	A*C	
080887	093731.8	56.23	-4.73	230.7	707.8	5.6	1.2	ARROCHAR,STRATHCLYDE		7	25	309	0.14	2.5	1.8	D	C*D	
120287	022223.8	56.17	-3.00	338.0	697.8	6.9	0.0	BUCKHAVEN,FIFE		9	30	141	0.59	3.9	24.1	D	D*C	
010187	095303.8	56.14	-4.07	271.5	695.8	0.0	-0.2	GARGUNNOCK,CENTRAL		6	18	218	0.23	3.3	2.7	D	C*D	
190287	161657.5	56.12	-3.65	297.4	692.6	0.6	1.4	SALINE,FIFE		5	17	233	0.14	0.6	0.7	C	A*D	
150587	155217.4	56.12	-3.63	298.4	692.6	0.0	1.4	BLAIRHALL,FIFE		10	17	121	0.20	0.9	1.2	C	B*C	COALFIELD TYPE
011087	113645.4	56.11	-3.64	298.2	691.6	0.5	0.9	BLAIRHALL,FIFE		8	18	195	0.05	0.1	0.1	C	A*D	COALFIELD TYPE
140587	234213.7	56.11	-3.09	332.1	691.1	1.2	-0.3	KIRKCALDY,FIFE		7	21	234	0.09	2.2	1.3	C	B*D	OFFSHORE,COALFIELD TYPE
261087	230639.8	56.10	-3.74	291.6	691.6	2.8	1.4	CLACKMANNAN,CENTRAL	2+	6	22	136	0.02	0.1	26.6	C	C*C	COALFIELD TYPE,FELT ALLOA
181187	015848.8	56.10	-3.73	292.1	690.6	1.1	0.2	CLACKMANNAN,CENTRAL		7	22	137	0.16	1.1	2.0	C	B*C	COALFIELD TYPE EVENT
171187	191019.4	56.10	-3.72	292.8	690.5	4.5	1.1	CLACKMANNAN,CENTRAL		7	22	136	0.26	1.9	5.0	C	C*C	COALFIELD TYPE
130287	224811.9	56.10	-3.11	331.2	689.7	5.5	-0.4	KIRKCALDY,FIFE		6	20	179	0.08	0.9	1.6	B	A*C	
180387	012657.0	56.10	-3.11	331.1	690.0	5.8	0.0	KIRKCALDY,FIFE		9	20	179	0.08	0.5	0.9	B	A*C	OFFSHORE,COALFIELD TYPE
160187	223302.4	56.10	-3.10	331.9	689.7	0.1	-0.4	KIRKCALDY,FIFE		7	20	180	0.09	0.6	1.1	B	A*C	
220887	223603.3	56.10	-3.10	331.4	689.8	0.6	0.2	KIRKCALDY,FIFE		8	20	179	0.11	0.7	1.2	B	A*C	COALFIELD TYPE
150587	225821.3	56.10	-3.09	332.0	690.0	0.0	-0.4	KIRKCALDY,FIFE		6	20	181	0.11	1.4	1.5	C	B*D	OFFSHORE,COALFIELD TYPE
130287	012100.6	56.09	-3.13	329.5	689.2	0.0	-0.5	KIRKCALDY,FIFE		5	19	224	0.05	0.9	0.9	C	A*D	

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Date	HrMnSecs	Lat	Lon	KmE	KmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	Q	SQD	Comments...
110287	034504.0	56.09	-3.12	330.0	689.2	0.5	-0.4	KIRKCALDY,FIFE		6	19	225	0.08	0.6	0.4	C	A*D	
130287	031522.4	56.09	-3.11	330.7	689.0	2.4	-0.5	KIRKCALDY,FIFE		6	19	176	0.16	0.5	1.7	C	B*C	
150187	180015.2	56.09	-3.10	331.4	688.7	0.2	0.2	KIRKCALDY,FIFE		9	19	115	0.18	1.0	1.8	C	B*C	OFFSHORE,COALFIELD TYPE
210287	044528.6	56.09	-3.10	331.6	689.6	0.4	-0.3	KIRKCALDY,FIFE		8	20	179	0.19	0.6	0.7	C	B*C	
030487	045619.3	56.09	-3.07	333.5	689.0	15.0	-0.3	KIRKCALDY,FIFE		7	20	181	0.13	2.6	4.2	D	C*D	
260487	085206.1	56.07	-3.98	276.6	688.5	2.7	1.1	CHARTERSHALL,CENTRAL		11	26	172	0.07	0.3	1.3	B	A*C	
090787	145241.3	56.04	-5.42	186.7	688.4	5.0	1.2	LOCHGILPHEAD,HIGHLAND		11	48	309	0.24	11.7	24.7	D	D*D	
290187	091845.9	56.03	-5.10	207.0	686.1	0.5	0.9	GLENDARUEL,STRATHCLYDE		7	30	297	0.13	12.8	10.4	D	D*D	
070387	034737.7	55.92	-3.07	333.1	670.4	0.4	0.0	DANDERHALL,LOTHIAN		6	7	180	0.16	2.0	1.9	C	B*D	COALFIELD TYPE
240387	042302.5	55.91	-3.10	331.5	668.7	7.8	0.1	DANDERHALL,LOTHIAN		6	6	240	0.17	3.0	2.7	D	C*D	COALFIELD TYPE
081087	014440.1	55.90	-3.99	275.5	669.5	1.3	0.8	AIRDRIE,STRATHCLYDE		7	12	136	0.02	0.1	0.2	B	A*C	
020487	175538.4	55.90	-3.09	332.1	668.0	7.2	-0.1	SHERIFFHALL,LOTHIAN		5	7	238	0.03	1.4	0.7	C	B*D	COALFIELD TYPE
180587	074657.0	55.90	-3.06	333.5	668.3	2.7	0.3	DALKEITH,LOTHIAN		5	8	249	0.03	0.2	4.9	C	B*D	COALFIELD TYPE
180587	235130.2	55.90	-3.01	336.6	668.3	3.7	0.0	COUSLAND,LOTHIAN		5	11	165	0.09	0.0	0.2	C	A*D	COALFIELD TYPE
070787	145409.9	55.89	-3.42	311.2	667.5	5.3	0.3	KIRKNEWTON,LOTHIAN		4	6	234	0.00	0.0	0.0	C	A*D	
190287	083018.2	55.89	-3.16	327.4	666.4	0.9	0.3	STRAITON,LOTHIAN		6	4	170	0.65	5.5	6.2	D	D*C	COALFIELD TYPE
130387	074350.2	55.89	-3.14	328.6	666.5	6.1	0.1	LOANHEAD,LOTHIAN	2+	6	5	189	0.12	1.5	2.5	C	B*D	COALFIELD TYPE,FELT LOANHEAD
240387	034239.7	55.89	-3.09	332.2	667.0	4.4	-0.2	ESKBANK, LOTHIAN		5	7	230	0.15	4.7	7.0	D	C*D	COALFIELD TYPE
220987	072154.9	55.88	-4.44	247.6	667.9	2.3	1.8	RENFREW,STRATHCLYDE		18	8	111	0.12	0.3	0.5	B	A*B	
230987	094014.5	55.88	-4.43	247.8	667.7	3.1	1.2	RENFREW,STRATHCLYDE		18	8	110	0.08	0.2	0.7	B	A*B	
280987	070649.0	55.88	-4.43	247.7	667.8	2.4	1.1	RENFREW,STRATHCLYDE		17	8	110	0.08	0.2	0.3	B	A*B	
220187	101308.9	55.88	-3.13	329.4	665.5	2.4	0.5	POLTON,LOTHIAN		8	6	112	0.08	0.5	0.8	B	A*B	COALFIELD TYPE
031087	024054.3	55.87	-4.44	247.6	667.3	2.4	0.5	RENFREW,STRATHCLYDE		4	8	299	0.01	0.0	0.0	C	A*D	
031087	025400.7	55.87	-4.44	247.6	666.8	4.8	0.7	RENFREW,STRATHCLYDE		7	7	156	0.01	0.1	0.3	B	A*C	F/S DOUBLE EVT,2ND(0.5ML) 3.42 SECS LATER
031087	025427.7	55.87	-4.44	247.2	666.9	2.2	0.4	RENFREW,STRATHCLYDE		4	7	296	0.01	0.0	0.0	C	A*D	
101087	192833.2	55.87	-4.44	247.4	666.2	7.4	0.7	RENFREW,STRATHCLYDE		9	7	106	0.15	0.8	0.8	B	B*B	
231187	074215.2	55.87	-4.44	247.6	666.7	6.0	0.5	RENFREW,STRATHCLYDE		6	7	247	0.04	0.5	0.6	C	A*D	
280987	034504.7	55.87	-4.43	247.9	666.7	4.8	0.6	RENFREW,STRATHCLYDE		4	7	302	0.01	0.0	0.0	C	A*D	
101087	123548.3	55.87	-4.43	247.9	666.9	4.8	2.3	RENFREW,STRATHCLYDE	4+	15	7	107	0.25	0.8	2.2	B	B*B	FELT IN RENFREW,ERSKINE & INCHINNAN
131087	192841.0	55.87	-4.43	247.8	666.9	4.9	0.7	RENFREW,STRATHCLYDE		8	7	157	0.04	0.2	0.7	B	A*C	
191087	025913.1	55.87	-4.43	247.9	667.2	3.5	1.0	RENFREW,STRATHCLYDE		12	8	109	0.06	0.3	0.7	B	A*B	
160187	005641.2	55.87	-3.14	328.6	664.2	1.4	0.7	ROSEWELL,LOTHIAN		8	7	114	0.28	1.8	2.0	B	B*B	COALFIELD TYPE
170587	040852.5	55.87	-3.13	329.4	664.5	1.2	0.4	LASSWADE,LOTHIAN		6	7	183	0.02	0.4	0.3	C	A*D	COALFIELD TYPE
250287	020355.9	55.87	-3.12	329.9	664.2	6.8	-0.5	POLTON,LOTHIAN		5	8	188	0.01	0.2	0.2	C	A*D	COALFIELD TYPE
170387	223750.2	55.87	-3.10	331.1	664.4	6.2	0.1	BONNYRIGG,LOTHIAN		6	8	201	0.06	1.0	1.6	C	A*D	COALFIELD TYPE
070887	145547.6	55.87	-3.09	331.7	664.8	5.7	0.4	BONNYRIGG,LOTHIAN		6	8	210	0.05	0.7	1.4	C	A*D	COALFIELD TYPE
070887	175258.4	55.87	-3.09	331.7	665.1	1.3	0.1	BONNYRIGG,LOTHIAN		4	8	212	0.01	0.0	0.0	C	A*D	COALFIELD TYPE
251187	064525.4	55.87	-3.09	331.6	664.8	2.3	0.3	LASSWADE,LOTHIAN		6	8	209	0.04	0.5	0.4	C	A*D	COALFIELD TYPE
121287	142843.1	55.87	-3.09	331.9	664.6	0.3	1.3	LASSWADE,LOTHIAN	3+	7	9	112	0.04	0.3	0.5	B	A*B	COALFIELD TYPE,FELT LASSWADE
051187	191040.4	55.87	-3.08	332.5	664.8	2.1	0.3	LASSWADE,LOTHIAN		5	9	218	0.02	0.8	0.4	C	A*D	COALFIELD TYPE
071187	175920.3	55.87	-3.08	332.3	664.8	1.0	-0.2	LASSWADE,LOTHIAN		3	9	216	0.01	0.0	0.0	C	A*D	COALFIELD TYPE
230387	190246.0	55.86	-3.16	327.1	663.7	0.5	-0.4	ROSEWELL,LOTHIAN		4	7	153	0.04			C	A*D	COALFIELD TYPE
100687	063808.8	55.86	-3.15	327.9	663.7	1.0	0.7	ROSEWELL,LOTHIAN		8	7	119	0.08	0.5	0.7	B	A*B	COALFIELD TYPE
230887	084510.1	55.86	-3.15	328.3	663.1	4.5	-0.1	ROSEWELL,LOTHIAN		6	8	164	0.05	0.6	2.5	C	B*C	COALFIELD TYPE
151087	032604.2	55.86	-3.15	327.9	663.2	1.6	1.0	ROSEWELL,LOTHIAN		11	0	101	0.12	0.6	0.2	B	A*B	COALFIELD TYPE
161087	163526.4	55.86	-3.15	327.9	663.1	2.5	0.9	ROSEWELL,LOTHIAN		6	8	159	0.09	1.0	1.0	C	B*C	COALFIELD TYPE

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121187	193828.5	55.86	-3.15	328.1	663.4	2.2	0.0	ROSEWELL,LOTHIAN		5	8	163	0.06	0.8	1.1	C	A*D	COALFIELD TYPE
171187	201822.0	55.86	-3.15	328.1	663.1	2.4	0.2	ROSEWELL,LOTHIAN		6	8	162	0.09	0.6	0.9	B	A*C	COALFIELD TYPE
200187	164943.7	55.86	-3.14	328.6	663.4	1.2	0.3	ROSEWELL,LOTHIAN		7	8	169	0.11	1.5	1.5	C	B*C	COALFIELD TYPE
140887	031624.5	55.86	-3.14	328.9	663.6	1.0	-0.1	ROSEWELL,LOTHIAN		4	8	187	0.22	0.0	0.0	C	B*D	COALFIELD TYPE
070987	170809.7	55.86	-3.14	328.9	663.1	0.4	1.2	ROSEWELL,LOTHIAN		10	8	119	0.21	0.9	1.0	B	B*B	COALFIELD TYPE
230987	201131.8	55.86	-3.14	328.5	663.1	1.4	1.2	ROSEWELL,LOTHIAN	3+	12	1	120	0.14	0.6	0.3	B	A*B	COALFIELD TYPE,FELT ROSLIN
260987	020823.8	55.86	-3.14	328.7	663.5	2.1	0.2	ROSEWELL,LOTHIAN		5	8	170	0.07	1.0	1.2	C	B*D	COALFIELD TYPE
300987	194925.7	55.86	-3.14	328.6	663.1	1.5	1.2	ROSEWELL,LOTHIAN	3+	12	1	120	0.08	0.3	0.2	B	A*B	COALFIELD TYPE,FELT ROSLIN
071187	030746.4	55.86	-3.14	328.8	663.2	1.4	-0.2	ROSEWELL,LOTHIAN		5	8	170	0.00	0.0	0.0	C	A*D	COALFIELD TYPE
071187	043403.3	55.86	-3.14	329.0	663.3	1.8	-0.1	ROSEWELL,LOTHIAN		6	8	173	0.04	0.3	0.4	B	A*C	COALFIELD TYPE
051287	074437.0	55.86	-3.14	328.7	663.2	2.9	1.3	ROSEWELL,LOTHIAN	3+	8	8	119	0.06	0.3	1.3	B	A*B	COALFIELD TYPE,FELT ROSLIN
070287	043840.8	55.86	-3.13	329.3	663.1	3.6	0.7	ROSEWELL,LOTHIAN		8	8	117	0.13	0.2	0.8	B	A*B	COALFIELD TYPE
120287	104612.7	55.86	-3.13	329.4	663.5	3.1	0.0	ROSEWELL,LOTHIAN		6	8	178	0.08	0.7	8.6	C	C*C	COALFIELD TYPE
140287	075222.4	55.86	-3.13	329.0	663.5	2.4	0.3	ROSEWELL,LOTHIAN		5	8	174	0.07	0.5	1.1	C	A*D	COALFIELD TYPE
080387	193011.3	55.86	-3.13	329.1	664.1	2.8	-0.3	ROSEWELL,LOTHIAN		6	7	177	0.07	0.8	13.5	C	C*C	COALFIELD TYPE
300987	013744.4	55.86	-3.13	329.2	663.1	4.7	0.2	ROSEWELL,LOTHIAN		5	8	174	0.01	0.3	0.9	C	A*D	COALFIELD TYPE
131087	181841.0	55.86	-3.13	329.3	663.2	1.0	1.0	ROSEWELL,LOTHIAN		6	8	176	0.02	0.3	0.3	B	A*C	COALFIELD TYPE
071187	044006.4	55.86	-3.13	329.3	663.3	1.4	0.0	ROSEWELL,LOTHIAN		5	8	176	0.03	0.5	0.6	C	A*D	COALFIELD TYPE
091187	203008.5	55.86	-3.13	329.3	663.6	1.5	0.0	ROSEWELL,LOTHIAN		5	8	178	0.04	0.7	0.8	C	A*D	COALFIELD TYPE
101187	085628.5	55.86	-3.13	329.2	663.6	1.8	-0.1	ROSEWELL,LOTHIAN		5	8	176	0.02	0.3	0.3	C	A*D	COALFIELD TYPE
211187	155626.9	55.86	-3.13	329.1	663.4	0.2	-0.4	ROSEWELL,LOTHIAN		4	8	174	0.04	0.0	0.0	C	A*D	COALFIELD TYPE
231187	201133.4	55.86	-3.13	329.5	663.3	0.5	-0.1	ROSEWELL,LOTHIAN		5	8	179	0.03	0.7	0.9	C	A*D	COALFIELD TYPE
241187	022104.2	55.86	-3.13	329.5	663.7	2.1	0.1	ROSEWELL,LOTHIAN		6	8	181	0.05	0.5	0.5	C	A*D	COALFIELD TYPE
110287	064239.3	55.86	-3.12	329.9	663.4	4.0	0.3	ROSEWELL,LOTHIAN		6	8	183	0.14	1.6	7.6	D	C*D	COALFIELD TYPE
050687	063253.5	55.86	-3.12	330.0	663.4	0.5	0.4	ROSEWELL,LOTHIAN		6	8	184	0.07	1.5	1.4	C	B*D	COALFIELD TYPE
120787	052847.7	55.86	-3.12	329.8	663.2	3.0	0.7	ROSEWELL,LOTHIAN		3	8	181	0.01	0.0	0.0	C	A*D	COALFIELD TYPE
091187	112811.1	55.86	-3.12	329.8	663.9	0.4	-0.2	ROSEWELL,LOTHIAN		5	8	185	0.14	1.6	1.4	C	B*D	COALFIELD TYPE
290587	205245.3	55.86	-3.11	330.3	663.3	0.5	0.4	ROSEWELL,LOTHIAN		6	9	187	0.03	0.7	0.6	C	A*D	COALFIELD TYPE
300787	034313.0	55.86	-3.11	330.6	663.6	1.9	0.0	ROSEWELL,LOTHIAN		6	8	192	0.12	1.2	1.3	C	B*D	COALFIELD TYPE
111187	093915.3	55.86	-3.11	330.4	663.2	1.0	-0.1	ROSEWELL,LOTHIAN		6	9	187	0.04	1.0	0.9	C	B*D	COALFIELD TYPE
241187	080242.9	55.86	-3.11	330.4	663.5	0.5	-0.1	ROSEWELL,LOTHIAN		6	8	189	0.09	2.0	1.8	C	B*D	COALFIELD TYPE
251187	165045.9	55.86	-3.11	330.7	663.9	2.2	0.2	ROSEWELL,LOTHIAN		6	8	195	0.06	0.7	0.7	C	A*D	COALFIELD TYPE,LOW FREQ.
030187	165819.9	55.86	-3.10	330.9	664.0	7.2	-0.1	ROSEWELL,LOTHIAN		6	8	197	0.09	1.8	1.4	C	B*D	COALFIELD TYPE
071187	040830.3	55.86	-3.10	330.9	663.7	4.7	-0.3	ROSEWELL,LOTHIAN		5	9	195	0.06	1.7	3.4	C	B*D	COALFIELD TYPE
010487	194745.9	55.86	-3.09	332.0	664.0	8.4	0.2	DALHOUSIE,LOTHIAN		6	9	208	0.00	0.0	0.1	C	A*D	COALFIELD TYPE
150887	005019.1	55.85	-3.17	326.9	662.8	3.7	-0.1	ROSEWELL,LOTHIAN		4	8	147	0.06	0.0	0.0	C	A*D	COALFIELD TYPE
270687	032835.1	55.85	-3.16	327.6	662.1	0.0	1.1	ROSEWELL,LOTHIAN		5	9	130	0.06	0.4	0.4	C	A*D	COALFIELD TYPE
301087	034948.8	55.85	-3.16	327.4	662.8	2.2	0.1	ROSEWELL,LOTHIAN		6	8	153	0.09	0.7	1.0	B	A*C	COALFIELD TYPE
081187	152856.0	55.85	-3.16	327.6	662.8	0.7	0.1	ROSEWELL,LOTHIAN		6	8	154	0.07	0.9	1.1	B	A*C	COALFIELD TYPE
081187	161328.7	55.85	-3.16	327.3	663.0	2.4	-0.4	ROSEWELL,LOTHIAN		5	8	153	0.03	0.4	0.4	C	A*D	COALFIELD TYPE
141187	014207.8	55.85	-3.16	327.1	662.9	1.5	-0.3	ROSEWELL,LOTHIAN		5	8	149	0.04	0.6	0.9	C	A*D	COALFIELD TYPE
150187	232712.4	55.85	-3.15	327.7	662.7	0.6	0.0	ROSEWELL,LOTHIAN		6	8	156	0.10	0.6	0.8	B	A*C	COALFIELD TYPE
070287	042719.6	55.85	-3.15	328.1	662.4	3.4	0.7	ROSEWELL,LOTHIAN		10	9	126	0.18	0.8	2.3	B	B*B	COALFIELD TYPE
140687	110211.2	55.85	-3.15	327.8	662.3	0.4	1.2	ROSEWELL,LOTHIAN		8	9	128	0.28	1.5	1.9	B	B*B	COALFIELD TYPE
150687	010345.3	55.85	-3.15	327.9	662.1	0.6	1.2	ROSEWELL,LOTHIAN	2+	9	9	129	0.14	0.9	1.1	B	A*B	COALFIELD TYPE,FELT ROSLIN
240687	150510.1	55.85	-3.15	327.7	662.3	0.1	1.2	ROSEWELL,LOTHIAN		5	9	134	0.04	0.0	0.0	C	A*D	COALFIELD TYPE

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250687	192609.2	55.85	-3.15	327.7	661.9	0.0	1.3	ROSEWELL,LOTHIAN		5	9	131	0.10	0.4	0.5	C	A*D	COALFIELD TYPE
070887	183927.4	55.85	-3.15	328.2	662.7	0.9	0.2	ROSEWELL,LOTHIAN		6	8	161	0.09	1.4	1.5	C	B*C	COALFIELD TYPE
070887	215511.8	55.85	-3.15	328.3	662.3	0.7	1.5	ROSEWELL,LOTHIAN	4+	10	9	94	0.19	0.8	1.0	B	B*B	COALFIELD TYPE,FELT ROSLIN
280887	092256.5	55.85	-3.15	328.3	662.5	0.1	1.3	ROSEWELL,LOTHIAN	2+	10	9	125	0.18	0.6	0.6	B	B*B	COALFIELD TYPE,FELT ROSLIN
021087	130525.8	55.85	-3.15	328.1	662.1	4.9	0.5	ROSEWELL,LOTHIAN		6	9	157	0.03	0.3	1.1	B	A*C	COALFIELD TYPE
031087	022043.2	55.85	-3.15	327.7	662.6	1.1	-0.2	ROSEWELL,LOTHIAN		4	8	282	0.02	0.0	0.0	C	A*D	COALFIELD TYPE
261087	205148.9	55.85	-3.15	328.0	662.9	4.4	0.0	ROSEWELL,LOTHIAN		6	8	159	0.07	1.3	4.0	C	B*C	COALFIELD TYPE
261087	224703.6	55.85	-3.15	328.3	662.2	2.2	0.0	ROSEWELL,LOTHIAN		6	9	160	0.07	0.6	0.7	B	A*C	COALFIELD TYPE
301087	233417.8	55.85	-3.15	328.3	662.4	2.1	0.2	ROSEWELL,LOTHIAN		6	9	161	0.06	0.5	0.6	B	A*C	COALFIELD TYPE
061187	230239.1	55.85	-3.15	327.8	662.1	0.1	1.1	ROSEWELL,LOTHIAN	3+	9	9	129	0.09	0.3	0.4	B	A*B	COALFIELD TYPE,FELT ROSLIN
070187	232537.6	55.85	-3.14	328.7	662.0	0.0	0.0	ROSEWELL,LOTHIAN		6	9	162	0.04	2.3	2.3	C	B*C	COALFIELD TYPE
090187	174332.3	55.85	-3.14	329.0	662.9	1.1	0.5	ROSEWELL,LOTHIAN		8	8	120	0.14	1.0	1.3	B	B*B	COALFIELD TYPE
140187	033750.9	55.85	-3.14	328.8	662.4	2.2	1.2	ROSEWELL,LOTHIAN		9	9	123	0.11	0.5	0.9	B	A*B	COALFIELD TYPE
160187	044100.2	55.85	-3.14	329.0	662.6	2.1	1.3	ROSEWELL,LOTHIAN		9	9	121	0.08	0.3	0.7	B	A*B	COALFIELD TYPE
190187	063658.2	55.85	-3.14	329.0	662.9	1.9	0.3	ROSEWELL,LOTHIAN		7	8	170	0.08	0.6	0.7	B	A*C	COALFIELD TYPE
200187	145957.3	55.85	-3.14	328.6	662.4	1.6	0.7	ROSEWELL,LOTHIAN		8	9	124	0.11	0.6	0.9	B	A*B	COALFIELD TYPE
110287	063806.7	55.85	-3.14	328.6	662.8	2.7	0.0	ROSEWELL,LOTHIAN		6	8	166	0.13	0.9	31.1	C	C*C	COALFIELD TYPE
150287	211849.1	55.85	-3.14	328.6	662.7	0.6	-0.2	ROSEWELL,LOTHIAN		4	8	165	0.08			C	A*D	COALFIELD TYPE
270287	010243.3	55.85	-3.14	328.7	662.6	0.0	1.3	ROSEWELL,LOTHIAN		10	9	122	0.10	0.4	0.4	B	A*B	COALFIELD TYPE
030487	051759.8	55.85	-3.14	328.5	661.9	2.4	0.0	ROSEWELL,LOTHIAN		5	9	160	0.14	0.1	0.2	C	A*D	COALFIELD TYPE
190587	035111.3	55.85	-3.14	328.9	662.8	1.1	1.0	ROSEWELL,LOTHIAN		10	8	120	0.06	0.3	0.3	B	A*B	COALFIELD TYPE
290587	084118.3	55.85	-3.14	328.6	662.6	0.5	0.6	ROSEWELL,LOTHIAN		6	9	165	0.06	1.0	1.1	B	A*C	COALFIELD TYPE
020687	122431.5	55.85	-3.14	328.7	662.9	0.5	0.4	ROSEWELL,LOTHIAN		6	8	168	0.07	1.1	1.3	C	B*C	COALFIELD TYPE
050687	074031.4	55.85	-3.14	328.7	662.8	1.0	1.3	ROSEWELL,LOTHIAN		9	8	121	0.06	0.3	0.4	B	A*B	COALFIELD TYPE
050687	175959.2	55.85	-3.14	328.7	662.5	0.5	0.9	ROSEWELL,LOTHIAN		8	9	123	0.06	0.5	0.6	B	A*B	COALFIELD TYPE
090687	114835.6	55.85	-3.14	328.9	662.9	1.8	0.9	ROSEWELL,LOTHIAN		7	8	119	0.04	0.2	0.4	B	A*B	COALFIELD TYPE
220687	184509.5	55.85	-3.14	328.9	662.6	0.2	1.4	ROSEWELL,LOTHIAN	2+	9	9	121	0.04	0.2	0.2	B	A*B	COALFIELD TYPE,FELT ROSLIN
300687	054851.6	55.85	-3.14	328.8	662.9	1.5	0.8	ROSEWELL,LOTHIAN		4	8	120	0.01	0.0	0.0	C	A*D	COALFIELD TYPE
310787	002413.0	55.85	-3.14	328.9	662.6	0.2	1.6	ROSEWELL,LOTHIAN	3+	10	9	99	0.05	0.2	0.2	B	A*B	COALFIELD TYPE, FELT LOANHEAD
040887	113045.1	55.85	-3.14	328.9	662.7	0.3	1.5	ROSEWELL,LOTHIAN	4+	9	9	121	0.06	0.2	0.2	B	A*B	COALFIELD TYPE,FELT ROSLIN
170887	193011.1	55.85	-3.14	328.5	662.4	0.2	1.4	ROSEWELL,LOTHIAN	2+	10	9	124	0.10	0.3	0.3	B	A*B	COALFIELD TYPE,FELT ROSLIN
200887	095608.5	55.85	-3.14	328.7	663.0	1.2	0.7	ROSEWELL,LOTHIAN		6	8	168	0.01	0.2	0.2	B	A*C	COALFIELD TYPE
260887	173115.6	55.85	-3.14	328.7	662.6	0.2	1.4	ROSEWELL,LOTHIAN	4+	10	9	122	0.06	0.2	0.2	B	A*B	COALFIELD TYPE,FELT ROSLIN
310887	034650.8	55.85	-3.14	328.4	662.6	0.1	1.1	ROSEWELL,LOTHIAN	2+	10	9	124	0.11	0.4	0.4	B	A*B	COALFIELD TYPE,FELT ROSLIN
020987	072957.6	55.85	-3.14	328.6	662.7	0.0	1.1	ROSEWELL,LOTHIAN	3+	10	8	122	0.10	0.3	0.3	B	A*B	COALFIELD TYPE,FELT ROSLIN
200987	095002.6	55.85	-3.14	328.5	662.2	1.8	1.0	ROSEWELL,LOTHIAN		11	1	125	0.09	0.4	0.2	B	A*B	COALFIELD TYPE
071087	183040.9	55.85	-3.14	328.4	662.7	0.7	1.1	ROSEWELL,LOTHIAN	2+	12	1	123	0.12	0.5	0.4	B	A*B	COALFIELD TYPE,FELT ROSLIN
291087	021807.8	55.85	-3.14	328.4	662.5	0.2	1.2	ROSEWELL,LOTHIAN	3+	12	8	124	0.04	0.1	0.2	B	A*B	COALFIELD TYPE,FELT ROSLIN

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Listed in order of decreasing latitude

Date	HrMnSecs	Lat	Lon	KmE	KmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	Q	SQD	Comments...
061187	175536.4	55.85	-3.14	328.4	662.7	2.4	0.2	ROSEWELL,LOTHIAN		6	8	163	0.08	0.5	0.7	B	A*C	COALFIELD TYPE
141187	224840.7	55.85	-3.14	328.8	662.6	0.7	1.6	ROSEWELL,LOTHIAN	2+	9	9	122	0.08	0.5	0.6	B	A B	COALFIELD TYPE,FELT ROSLIN
261187	004418.0	55.85	-3.14	328.7	662.8	0.5	0.5	ROSEWELL,LOTHIAN		6	8	167	0.06	0.7	0.8	B	A*C	COALFIELD TYPE
261187	195816.6	55.85	-3.14	328.7	662.8	0.2	1.1	ROSEWELL,LOTHIAN		9	8	121	0.06	0.3	0.3	B	A*B	COALFIELD TYPE
071287	200229.4	55.85	-3.14	328.6	662.8	1.6	0.1	ROSEWELL,LOTHIAN		6	8	165	0.14	0.9	1.2	B	A*C	COALFIELD TYPE
171287	231602.4	55.85	-3.14	328.6	661.9	0.1	0.6	ROSEWELL,LOTHIAN		8	9	127	0.06	0.3	0.4	B	A*B	COALFIELD TYPE
221287	214220.1	55.85	-3.14	328.7	662.9	0.7	1.2	ROSEWELL,LOTHIAN	2+	9	8	121	0.09	0.5	0.7	B	A B	COALFIELD TYPE,FELT ROSLIN
231287	015150.4	55.85	-3.14	328.7	662.3	0.3	1.1	ROSEWELL,LOTHIAN		8	9	124	0.05	0.2	0.2	B	A*B	COALFIELD TYPE
030187	003417.5	55.85	-3.13	329.1	662.2	0.0	0.1	ROSEWELL,LOTHIAN		6	9	167	0.07	2.8	2.7	C	C*C	COALFIELD TYPE
080187	172232.4	55.85	-3.13	329.3	662.5	0.7	1.2	ROSEWELL,LOTHIAN		9	9	120	0.11	0.6	0.8	B	A*B	COALFIELD TYPE
140187	123601.6	55.85	-3.13	329.1	662.9	1.1	1.0	ROSEWELL,LOTHIAN	2+	9	8	118	0.13	0.8	0.9	B	A*B	COALFIELD TYPE,FELT ROSEWELL:UNDERGROUND
220187	155725.7	55.85	-3.13	329.0	662.9	1.5	1.1	ROSEWELL,LOTHIAN		10	8	119	0.05	0.2	0.3	B	A*B	COALFIELD TYPE
240287	175127.4	55.85	-3.13	329.5	662.7	6.0	0.5	ROSEWELL,LOTHIAN		7	9	118	0.10	0.7	1.0	B	A*B	COALFIELD TYPE
110387	025215.5	55.85	-3.13	329.0	662.5	3.8	0.4	ROSEWELL,LOTHIAN		6	9	169	0.11	1.2	7.4	C	C*C	COALFIELD TYPE
150687	053159.7	55.85	-3.13	329.0	662.3	0.0	0.5	ROSEWELL,LOTHIAN		7	9	123	0.04	0.3	0.3	B	A*B	COALFIELD TYPE
300987	133714.6	55.85	-3.13	329.0	662.2	0.5	0.4	ROSEWELL,LOTHIAN		6	9	167	0.05	5.7	5.2	D	D*C	COALFIELD TYPE
031087	012933.6	55.85	-3.13	329.4	662.9	2.0	0.1	ROSEWELL,LOTHIAN		3	9	293	0.00	0.0	0.0	C	A*D	COALFIELD TYPE
061087	180227.9	55.85	-3.13	329.2	662.5	0.4	1.6	ROSEWELL,LOTHIAN	3+	12	2	120	0.04	0.1	0.1	B	A*B	COALFIELD TYPE,FELT ROSLIN
201087	124443.3	55.85	-3.13	329.2	662.6	0.4	0.9	ROSEWELL,LOTHIAN		8	9	120	0.08	0.5	0.4	B	A*B	COALFIELD TYPE
310187	171608.2	55.85	-3.12	329.6	662.4	0.4	1.8	ROSEWELL,LOTHIAN		7	9	102	0.04	0.2	0.2	B	A*B	COALFIELD TYPE
070287	170823.6	55.85	-3.12	330.1	662.9	0.5	0.7	ROSEWELL,LOTHIAN		9	9	114	0.09	0.4	0.4	B	A*B	COALFIELD TYPE
210587	094755.9	55.85	-3.12	330.0	663.0	0.5	0.2	ROSEWELL,LOTHIAN		6	9	182	0.08	9.8	7.5	D	D*D	COALFIELD TYPE
310587	180054.0	55.85	-3.12	330.1	663.0	0.5	0.4	ROSEWELL,LOTHIAN		6	9	183	0.04	5.4	4.1	D	D*D	COALFIELD TYPE
230687	041839.1	55.85	-3.12	330.0	662.7	0.5	-0.2	ROSEWELL,LOTHIAN		6	9	180	0.03	6.1	4.7	D	D*C	COALFIELD TYPE
240787	180429.7	55.85	-3.12	329.6	662.7	1.9	0.2	ROSEWELL,LOTHIAN		6	9	176	0.03	0.3	0.4	B	A*C	COALFIELD TYPE
311087	031125.1	55.85	-3.12	329.6	662.8	0.9	0.6	ROSEWELL,LOTHIAN		8	9	117	0.08	0.5	0.5	B	A*B	COALFIELD TYPE
130887	160154.8	55.85	-3.11	330.2	663.0	5.1	0.9	ROSEWELL,LOTHIAN		6	9	184	0.05	0.7	1.6	C	A*D	COALFIELD TYPE
200887	032926.6	55.85	-3.11	330.6	662.6	2.0	-0.2	ROSEWELL,LOTHIAN		4	9	299	0.03	0.0	0.0	C	A*D	COALFIELD TYPE
271187	134137.4	55.85	-3.11	330.3	663.0	1.2	1.0	ROSEWELL,LOTHIAN		8	9	113	0.09	0.6	1.0	B	A*B	COALFIELD TYPE,LOW FREQ.
300187	224016.6	55.85	-3.10	331.1	662.4	0.5	0.7	ROSEWELL,LOTHIAN		4	31	250	0.22			C	B*D	COALFIELD TYPE
150287	210222.3	55.85	-3.09	331.8	661.9	4.1	-0.2	CARRINGTON,LOTHIAN		4	9	196	0.06			C	A*D	COALFIELD TYPE
100887	193300.6	55.84	-3.20	324.9	661.0	2.2	0.5	ROSEWELL,LOTHIAN		6	10	147	0.27	1.9	2.7	C	B*C	COALFIELD TYPE
170687	005736.4	55.84	-3.16	327.4	661.6	0.1	1.3	ROSEWELL,LOTHIAN	2+	8	9	134	0.14	0.3	0.3	B	A*B	COALFIELD TYPE,FELT ROSLIN
300687	033358.3	55.84	-3.16	327.6	661.8	0.4	1.4	ROSEWELL,LOTHIAN		6	9	132	0.16	0.7	0.8	B	B*B	COALFIELD TYPE
201087	191929.7	55.84	-3.16	327.6	661.7	0.3	1.1	ROSEWELL,LOTHIAN	2+	8	9	132	0.13	0.2	0.2	B	A*B	COALFIELD TYPE,FELT ROSLIN
290587	082620.7	55.84	-3.15	328.1	661.8	0.3	1.1	ROSEWELL,LOTHIAN		9	9	130	0.14	0.3	0.4	B	A*B	COALFIELD TYPE
290587	144533.1	55.84	-3.15	328.0	661.6	0.2	1.1	ROSEWELL,LOTHIAN		9	9	132	0.16	0.4	0.4	B	B*B	COALFIELD TYPE
030987	121319.0	55.84	-3.15	327.7	661.7	0.4	1.0	ROSEWELL,LOTHIAN		10	9	132	0.27	0.3	0.3	B	B*B	COALFIELD TYPE
011187	045222.9	55.73	-5.43	184.6	653.2	0.9	1.4	KINTYRE,STRATHCLYDE		8	45	339	0.07	1.5	1.1	C	B*D	
220287	072045.7	55.46	-2.45	371.7	618.1	0.5	0.5	JEDBURGH,BORDERS		6	13	163	0.45	3.3	2.5	C	C*C	
090887	161049.7	55.40	-3.29	318.4	612.2	4.7	0.8	MOFFAT WATER,DUM & GAL		16	10	166	0.40	3.5	8.3	C	C*C	
080987	225711.4	55.39	-1.03	461.6	610.8	10.4	2.1	NORTHUMBRIAN COAST		18	78	276	0.18	1.3	1.4	C	B*D	OFFSHORE EPICENTRE
080987	225654.4	55.27	-1.09	457.8	597.2	8.2	0.8	NORTHUMBRIAN COAST		6	78	309	0.05	0.8	1.0	C	A*D	OFFSHORE EPICENTRE
110887	214328.6	55.25	-3.37	313.2	595.7	1.0	-0.3	JOHNSTONEBRIDGE,D & G		4	13	297	0.08	0.0	0.0	C	A*D	

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Date	HrMnSecs	Lat	Lon	KmE	KmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	Q	SQD	Comments...
190487	053454.8	55.22	-3.36	313.6	592.7	2.7	0.6	BORELAND,DUM & GALL		8	14	248	0.07	0.8	2.0	C	B*D	
230187	030238.5	55.21	-2.99	336.7	591.4	0.5	0.4	LANGHOLM,DUM & GALL		6	9	230	0.17	2.3	1.9	C	B*D	
080887	173152.1	55.21	-2.96	338.7	590.8	5.6	0.2	LANGHOLM,DUM & GALL		5	11	199	0.08	2.1	5.2	D	C*D	
140387	133921.9	55.20	-4.12	265.2	591.9	20.0	0.5	MONIAIVE,DUM & GALL		4	59	345	0.15	0.0	0.0	C	B*D	
060187	063957.4	54.76	-3.41	309.1	541.6	1.0	1.4	MARYPORT,CUMBRIA		10	50	337	0.26	17.5	12.7	D	D*D	
300787	002032.5	54.56	-3.59	296.9	519.1	1.1	2.1	WHITEHAVEN,CUMBRIA		15	9	216	0.16	3.7	1.8	D	C*D	COALFIELD TYPE EVENT
091187	013314.9	54.22	-4.83	215.3	484.4	17.7	2.3	W.PEEL,ISLE OF MAN	4	39	13	146	0.27	0.6	0.5	C	B*C	FELT THROUGHOUT I.O.M
110287	102439.1	53.96	-1.55	429.6	451.3	13.3	1.0	LEEDS,YORKSHIRE		4	5	334	0.07			C	A*D	COALFIELD TYPE
180587	132825.4	53.66	-2.03	397.9	417.9	11.4	1.8	HUDDERSFIELD,W.YORKS		21	43	140	0.20	1.4	2.6	C	B*C	
161187	025449.9	53.62	-2.41	372.7	414.2	16.8	2.3	BOLTON,LANCASHIRE		21	48	130	0.19	1.0	1.7	C	B*C	
291187	202042.7	53.56	-1.90	406.6	406.6	7.1	1.1	MOSSLEY,LANCASHIRE		5	20	288	0.09	2.3	3.8	C	B*D	
051287	164722.3	53.50	-1.95	403.2	400.7	7.7	2.1	MANCHESTER		28	25	127	0.31	0.9	1.9	C	C*C	POSSIBLE A/S OF EVENT @ 10:23 GMT ON 05-12-87
051287	102258.5	53.49	-1.98	401.6	399.2	8.8	2.6	MANCHESTER	4+	31	27	108	0.20	0.7	1.9	C	B*C	FELT OVER WIDE AREA OF GREATER MANCHESTER
150587	202218.7	53.48	-1.28	447.7	398.4	0.6	2.0	SWINTON,S.YORKSHIRE		11	58	222	0.23	2.3	1.3	C	B*D	
100687	162317.7	53.41	-4.44	238.1	392.7	11.6	0.0	NORTH ANGLESEY,GWYNEDD		7	8	210	0.03	0.3	0.3	C	A*D	
050887	231533.1	53.38	-1.00	466.4	387.9	0.4	2.0	NE WORKSOP,NOTTS	3+	11	75	229	0.72	6.8	9.3	D	D*D	FELT THORPE SALVIN
180487	112930.3	53.28	-1.81	412.8	375.7	2.2	1.9	BUXTON,DERBYSHIRE		11	66	169	0.23	2.0	1.3	C	B*D	
291187	223420.2	53.27	-4.98	201.1	379.2	10.0	1.1	W.OF HOLYHEAD,GWYNEDD		19	27	196	0.10	0.4	0.6	C	A*D	
030287	231032.1	53.27	-1.51	432.4	374.8	3.0	1.8	CHESTERF'LD,DERBYSHIRE	3+	3	70	349	0.01	0.0	0.0	C	A*D	FELT BOLSOVER VILLAGE NEAR CHESTERFIELD
050887	231547.9	53.27	-1.12	458.8	375.7	0.2	2.3	NE WORKSOP,NOTTS	3+	11	61	298	0.81	5.5	4.2	D	D*D	FELT THORPE SALVIN
200887	195256.1	53.26	-2.73	351.3	374.4	6.8	1.1	RUNCORN,CHESHIRE		18	76	310	0.29	2.6	2.7	D	C*D	
260887	172042.9	53.14	-1.09	460.8	360.2	0.1	1.9	NW OLLERTON,NOTTS.	4+	10	47	298	0.56	4.2	3.5	D	D*D	FELT OLLERTON,NOTTS.
221287	063346.9	53.05	-1.69	420.9	351.0	12.3	2.2	ASHBOURNE,DERBYSHIRE		21	44	138	0.17	0.7	1.6	C	B*C	
070987	104240.8	53.00	-4.52	231.0	348.0	11.3	1.3	LLEYN,GWYNEDD		23	7	151	0.14	0.4	1.0	B	A*C	
290487	094218.9	53.00	-4.33	243.9	347.8	17.1	0.1	LLEYN AFTERSHOCK		6	7	214	0.23	3.5	3.5	D	C*D	
100987	161703.6	52.99	-4.43	237.1	345.9	20.0	0.8	LLEYN AFTERSHOCK		22	0	123	0.22	0.7	1.6	B	B*B	
150587	054201.3	52.98	-4.41	238.3	344.7	21.6	0.5	LLEYN AFTERSHOCK		13	1	81	0.17	0.8	1.2	B	B*A	
060987	093204.2	52.98	-4.41	238.2	345.0	20.0	1.8	LLEYN AFTERSHOCK		23	1	146	0.28	1.1	1.9	C	B*C	
280487	211035.9	52.98	-4.40	239.2	344.9	24.9	1.1	LLEYN AFTERSHOCK		21	2	81	0.10	0.3	0.7	A	A*A	
220187	185209.2	52.97	-4.43	237.0	344.3	21.6	0.9	LLEYN AFTERSHOCK		18	1	209	0.13	0.7	1.0	C	A*D	
040887	223556.3	52.97	-4.41	238.1	343.9	21.9	0.2	LLEYN AFTERSHOCK		6	2	120	0.24	2.3	1.3	B	B*B	
130187	170534.7	52.97	-4.40	239.2	344.3	23.0	0.5	LLEYN AFTERSHOCK		18	2	155	0.09	0.4	0.7	B	A*C	
110787	221353.2	52.97	-4.40	238.7	344.0	23.5	0.7	LLEYN AFTERSHOCK		22	2	86	0.10	0.3	0.6	A	A*A	
140287	055641.5	52.97	-4.39	239.4	344.4	23.9	0.6	LLEYN AFTERSHOCK		18	2	150	0.13	0.7	1.0	B	A*C	
020987	063033.1	52.97	-4.38	240.3	343.9	24.5	0.8	LLEYN AFTERSHOCK		24	3	84	0.22	0.6	1.3	B	B*A	
220887	183113.3	52.96	-4.43	237.1	343.3	21.9	-0.2	LLEYN AFTERSHOCK		9	2	302	0.08	0.8	0.7	C	A*D	
031287	090824.6	52.96	-4.41	238.4	342.7	23.9	0.9	LLEYN AFTERSHOCK		21	3	106	0.11	0.4	0.6	B	A*B	
180687	064539.3	52.96	-4.40	238.8	343.4	23.1	0.7	LLEYN AFTERSHOCK		18	3	93	0.08	0.3	0.5	B	A*B	
231087	131046.7	52.96	-4.40	239.1	343.4	23.8	0.6	LLEYN AFTERSHOCK		17	3	88	0.08	0.3	0.7	A	A*A	
160187	090653.7	52.96	-4.39	239.7	342.8	23.4	0.2	LLEYN AFTERSHOCK		10	21	215	0.06	0.6	0.7	C	A*D	
010687	131008.4	52.96	-4.39	239.5	343.5	20.0	0.8	LLEYN AFTERSHOCK		16	3	85	0.15	0.6	1.0	B	B*A	
051087	121908.6	52.96	-4.39	239.7	342.4	23.1	0.7	LLEYN AFTERSHOCK		20	4	88	0.08	0.3	0.7	A	A*A	
161187	011908.1	52.96	-4.39	239.4	343.1	23.4	0.6	LLEYN AFTERSHOCK		19	3	86	0.10	0.3	0.6	A	A*A	
181287	235254.2	52.96	-4.39	239.4	343.4	23.8	1.0	LLEYN AFTERSHOCK		25	3	85	0.09	0.3	0.5	A	A*A	
210287	172112.1	52.96	-4.38	240.0	342.5	21.9	0.6	LLEYN AFTERSHOCK		23	4	171	0.10	0.4	0.4	B	A*C	
191087	194438.6	52.96	-4.33	243.4	342.7	12.9	0.6	LLEYN,GWYNEDD		20	7	88	0.08	0.2	0.3	A	A*A	
050687	001920.1	52.95	-4.39	239.3	342.2	24.0	1.6	LLEYN AFTERSHOCK		22	4	95	0.15	0.6	1.3	B	B*B	

CATALOGUE OF EVENTS : 1987

Listed in order of decreasing latitude

Date	HrMnSecs	Lat	Lon	KmE	KmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	Q	SQD	Comments...
230287	020837.7	52.94	-2.43	371.2	338.1	10.5	2.6	MARKET DRAYTON,SALOP		18	47	115	0.08	0.3	0.8	B	A*C	
230287	085101.0	52.93	-3.94	269.6	339.2	15.5	-0.2	L.TRAWSFYNYDD,GWYNEDD		17	6	86	0.16	0.7	0.9	B	B*A	
270987	072502.8	52.90	-2.52	365.0	334.0	11.2	1.0	MARKET DRAYTON,SALOP		9	50	271	0.35	2.2	3.3	D	C*D	
240187	125305.2	52.76	-3.03	330.3	318.0	7.2	0.5	N.WELSHPOOL,SALOP		10	23	202	0.08	0.6	2.4	C	B*D	
010587	060952.1	52.74	-0.82	479.4	316.7	10.5	2.7	MELTON MOWBRAY,LEICS	4+	22	24	129	0.34	1.4	2.0	C	C C	FELT OAKHAM
010587	052151.8	52.71	-0.82	479.9	313.6	7.6	2.1	MELTON MOWBRAY,LEICS	2+	18	23	135	0.13	0.6	1.1	B	A C	FELT OAKHAM
210187	163934.9	52.70	-2.96	335.4	311.7	2.5	0.7	HALFWAY HOUSE,SALOP		6	21	209	0.17	3.5	6.4	D	C*D	
090387	230857.5	52.70	-2.55	362.8	311.7	3.4	1.3	TELFORD,SHROPSHIRE		10	28	166	0.19	1.1	2.5	C	B*C	
120487	110456.0	52.68	-3.07	327.6	309.6	10.8	2.4	WELSHPOOL,POWYS		25	22	61	0.15	0.4	0.6	B	A*C	
140487	110340.1	52.68	-3.05	329.0	309.7	14.7	1.0	WELSHPOOL,POWYS		7	21	178	0.06	1.0	2.8	C	B*C	
241287	185041.8	52.55	-2.35	376.5	294.7	13.5	0.5	BRIDGNORTH,SALOP		11	8	176	0.20	1.8	1.6	C	B*C	
160987	074324.8	52.54	-1.85	410.3	294.0	1.5	1.6	BIRMINGHAM,W.MIDLANDS		22	71	280	0.35	3.3	5.2	D	C*D	
010787	225148.3	52.53	-1.88	408.0	292.3	13.8	1.2	BIRMINGHAM,W.MIDLANDS		8	11	181	0.07	2.4	1.8	C	B*D	
120387	092859.0	52.48	-2.44	370.1	287.2	14.0	2.5	BRIDGNORTH,SALOP		16	15	86	0.14	0.6	0.9	B	A*B	
160487	234419.4	52.33	-1.55	430.6	270.0	0.3	1.8	COVENTRY,WEST MIDLANDS		22	33	230	0.31	1.6	1.3	D	C*D	
121287	233438.8	52.28	-3.25	314.5	265.0	8.5	1.7	L'DRINDOD WELLS,POWYS		23	22	98	0.14	0.5	1.8	B	A*C	
131287	031506.7	52.27	-3.24	315.3	264.9	7.4	0.0	L'DRINDOD WELLS,POWYS		8	22	121	0.07	0.4	1.5	B	A*C	POSSIBLE A/S OF EVENT @ 23:34 GMT ON 12-12-87
130187	143430.1	52.21	-3.39	305.0	258.4	32.6	-0.2	LLANDRINDOD,POWYS		5	17	152	0.19	16.0	10.3	D	D*D	
080687	011403.5	52.18	-3.55	294.4	254.6	16.6	1.7	BUILTH,POWYS		8	18	195	0.06	0.9	0.8	C	A*D	
070587	020837.0	52.17	-2.67	354.2	252.4	19.5	0.9	LEOMINSTER,HEREFORD		10	17	92	0.09	0.8	1.4	B	A*B	
050687	160331.7	52.12	-2.56	361.5	247.5	13.6	1.2	GREAT MALVERN,WORCS		5	10	201	0.01	0.5	0.9	C	A*D	
161287	231556.3	52.03	-3.52	296.0	238.2	12.6	1.4	NW OF BRECON,POWYS		23	18	238	0.18	1.0	1.0	C	B*D	
130887	122844.1	52.00	-3.39	304.4	234.8	14.5	0.6	BRECON,POWYS.		7	12	198	0.08	1.8	2.0	C	B*D	
300587	130226.1	51.98	-3.84	273.4	233.4	13.0	1.5	S.LLANDOVERY,POWYS		29	40	212	0.16	0.7	1.7	C	B*D	
160187	111345.6	51.82	-3.60	290.1	215.3	35.3	1.0	YSTRADFELLTE,POWYS		5	36	288	0.03	1.5	2.9	C	B*D	
060287	110303.4	51.31	-3.41	301.4	157.8	0.3	2.1	BRISTOL CHANNEL		7	56	196	0.17	3.3	36.4	D	C*D	
061287	002058.3	51.07	-2.88	338.5	130.6	2.0	1.5	SE BRIDGWATER,SOMERSET		10	63	327	0.15	12.8	9.8	D	D*D	
031287	203339.6	51.06	-2.78	345.0	129.4	6.3	2.1	SE BRIDGWATER,SOMERSET		10	64	328	0.08	2.2	4.3	C	B*D	
070887	131515.2	50.49	-5.04	184.4	70.0	5.5	1.4	TREVOSE HEAD,CORNWALL		16	18	279	0.07	1.4	4.6	C	B*D	
080987	120201.5	50.43	-4.43	227.2	61.4	9.1	0.9	SE LISKEARD, CORNWALL		7	36	149	0.10	0.3	9.7	C	C*C	
040487	224300.5	50.32	-5.18	173.4	51.1	3.4	0.3	PERRANPORTH,CORNWALL		10	13	246	0.06	0.8	2.9	C	B*D	
130987	221530.4	50.26	-5.18	173.2	44.7	5.6	-0.3	N ST DAY, CORNWALL		10	7	334	0.01	0.3	0.2	C	A*D	
090687	145505.5	50.23	-5.26	167.8	41.4	0.6	-0.3	CAMBORNE,CORNWALL		6	5	322	0.02	0.4	4.8	C	B*D	
120787	030743.1	50.17	-5.18	173.2	35.1	3.8	2.0	STITHIANS,CORNWALL	3+	6	1	102	0.01	0.2	0.5	B	A*B	FELT STITHIANS AREA
190787	032912.5	50.17	-5.18	173.2	35.1	3.1	0.7	STITHIANS,CORNWALL	2+	8	1	104	0.02	0.2	0.2	B	A*B	FELT ROSEMANOWES AREA
131187	161811.1	50.14	-5.26	167.2	31.6	3.3	0.5	NW WENDRON,CORNWALL		9	4	289	0.03	0.4	0.7	C	A*D	
131187	170015.5	50.14	-5.25	167.5	31.3	3.6	-0.5	NW WENDRON,CORNWALL		8	4	314	0.01	0.2	0.2	C	A*D	
250787	074532.0	50.14	-5.23	169.5	31.5	3.6	0.4	NE WENDRON,CORNWALL		13	2	262	0.04	0.3	0.3	C	A*D	
250787	074818.2	50.14	-5.23	169.4	31.3	3.1	0.5	NE WENDRON,CORNWALL		15	2	269	0.04	0.3	0.3	C	A*D	
250787	074929.5	50.14	-5.22	169.6	31.5	3.7	0.4	NE WENDRON,CORNWALL		15	2	259	0.07	0.5	0.4	C	A*D	
230487	185210.8	50.13	-5.06	181.7	30.6	0.6	-0.7	FALMOUTH BAY,CORNWALL		6	5	269	0.02	0.6	4.2	C	B*D	
160587	000159.8	50.11	-5.17	173.3	27.7	5.2	0.5	CONSTANTINE,CORNWALL		12	4	171	0.03	0.4	0.3	B	A C	
021287	101724.9	50.05	-7.62	-2.1	31.5	6.0	2.6	WEST OF SCILLY ISLES		51	46	358	0.24	9.8	0.9	D	D*D	
140887	233603.6	50.01	-5.53	146.8	17.7	12.7	1.0	S.PENZANCE,CORNWALL		7	27	328	0.08	3.0	6.1	D	C*D	
071087	045545.5	49.98	-5.49	150.0	14.6	10.1	0.5	S PENZANCE,CORNWALL		6	24	328	0.06	3.2	8.6	D	C*D	
190287	171527.5	49.26	-2.14			5.6	0.0	ST.JOHN'S BAY,JERSEY		7	4	266	0.21	2.3	4.2	C	B*D	
251087	032353.6	49.24	-2.28			7.4	0.2	SW GRONEZ POINT,JERSEY		7	6	322	0.01	0.3	0.2	C	A*D	
010787	062852.9	48.55	-5.18			5.0	2.1	BREST AREA FRANCE		51	67	348	0.21	86.5	14.8	D	D*D	

CATALOGUE OF EVENTS : 1987

Poorly located events

Date	HrMnSecs	Lat	Lon	KmE	KmN	Dep	Mag	Locality	Int	No	DM	Gap	RMS	ERH	ERZ	Q	SQD	Comments...
010287	151352.8	55.59	-4.92	216.0	636.2	8.3	2.3	FIRTH OF CLYDE		8	76	246	0.58	8.3	9.1	D	D*D	EXPLOSION
230287	125034.1	53.87	-2.08	394.6	441.8	7.9	0.5	BURNLEY,LANCASHIRE		4	17	342	0.48			D	C*D	POSSIBLE QUARRY
200787	200008.1	52.25	-0.83	479.5	262.1	3.4	1.4	NORTHAMPTON		4	120	344	0.01	0.0	0.0	C	A*D	POSSIBLE QUARRY
150887	1418							GWYNEDD-SONIC										FELT GWYNEDD
031087	1034							LANCASHIRE-SONIC										FELT LEIGH,LANCASHIRE
041087	1647							POWYS-SONIC										FELT NORTH POWYS
071087	1629							ISLE OF MAN-SONIC										FELT ISLE OF MAN
091087	020213.1	54.76	-5.48	176.1	546.6	3.0	1.3	N.CHANNEL,IRISH SEA		5	132	324	0.05	36.8	56.9	D	D*D	POSSIBLE EXPLOSION
091087	043221.5	54.76	-5.47	176.7	546.1	3.6	1.3	N.CHANNEL,IRISH SEA		5	131	324	0.06	30.1	46.9	D	D*D	POSSIBLE EXPLOSION
081187	1528					-0.2		ROSEWELL,LOTHIAN										COALFIELD TYPE
171187	1150							MERSEYSIDE-SONIC										FELT WIRRAL
181187	0010							CLYDE AREA-SONIC?										FELT/HEARD CLYDE AREA
																		POSSIBLE METEORITE
271187	0335							SUSSEX-SONIC										FELT SUSSEX
301187	0743					-0.4		ROSEWELL,LOTHIAN										COALFIELD TYPE
011287	1920	53.70	-0.30					HULL-SONIC										POSS SONIC/METEOR,REPORTS
																		19.20-19.40,NO SIGNAL
011287	003737.8	50.27	-5.28	165.9	45.9	1.2	0.9	OFFSHORE CORNWALL		6	10	332	0.04	0.8	4.8	C	B*D	POSS.UNDERWATER EXPLOSION
021287	1429	53.50	0.00					CLEETHORPES-SONIC										FELT CLEETHORPES
041287	0621					0.0		ROSEWELL,LOTHIAN										COALFIELD TYPE
081287	0050	57.20	-2.20					ABERDEEN-SONIC										FELT ABERDEEN-BANCHORY
081287	0104	57.20	-2.20					ABERDEEN-SONIC										FELT ABERDEEN-BANCHORY
241287	1818					-0.5		ROSEWELL,LOTHIAN										COALFIELD TYPE

Table 4 : Geographical coordinates of seismograph stations operated by BGS, DIAS and Leeds University during 1987.

Code	Name	Lat	Lon	KmE (km)	KmN (km)	Ht (m)	Yrs open	Comp	Agency
ABA	BACONSTHORPE	52.8875	1.1471	611.7	336.9	13	82-	1	BGS
AEA	E.ANGLIA UNIV.	52.6208	1.2403	619.3	307.5	45	84-	m	BGS
AHE	HEMPNAL	52.4730	1.3074	624.60	291.30	50	80-	1	BGS
APA	PACKWAY	52.2999	1.4779	637.1	272.6	35	84-	1	BGS
AWH	WHINBURGH	52.6299	0.9512	599.70	307.70	60	80-	1R	BGS
AWI	WITTON	52.8324	1.4460	632.1	331.7	35	83-	1	BGS
BBR	BROCKHURST	52.6071	-1.7785	415.0	301.0	125	84-	1	BGS
BFR	FRANKLEY	52.4230	-2.0074	399.5	280.6	210	84-	1	BGS
BSE	SEISDON	52.5316	-2.2374	383.9	292.7	100	84-	1	BGS
BUR	BURN	53.7424	-1.0668	461.54	427.76	13	85-	1	BGS
BZO	ZOO (DUDLEY)	52.5138	-2.0811	394.5	290.7	155	84-	1	BGS
CBW	BUDOCK WATER	50.1482	-5.1144	177.525	32.29	98	81-	1	BGS
CCA	CARNMENELLIS	50.1864	-5.2277	169.62	36.87	213	81-	1	BGS
CCO	CONSTANTINE	50.1357	-5.1960	171.64	31.145	183	81-	1	BGS
CGH	GOONHILLY	50.0508	-5.1649	173.465	21.610	91	81-	1	BGS
CME	MENERDUE FARM	50.1760	-5.1903	172.238	35.608	178	82-	3	BGS
CPZ	PENZANCE	50.1560	-5.5835	144.065	34.655	198	81-	1	BGS
CR2	ROSEMANOWES 2	50.1669	-5.1687	173.7	34.5	152	81-	3	BGS
CRA	RAME	50.1648	-5.1921	172.060	34.363	198	82-	3	BGS
CRQ	ROSEMANOWES	50.1672	-5.1728	173.445	34.570	165	81-	4R	BGS
CSA	ST AUSTELL	50.3528	-4.8936	194.18	54.39	113	81-	1	BGS
CST	STITHIANS	50.1952	-5.1635	174.24	37.66	139	81-	1	BGS
CTR	TROLVIS QUARRY	50.1665	-5.1624	174.183	34.468	191	82-	3	BGS
CWF	CHARNWOOD FST	52.7382	-1.3071	446.78	315.88	152	75-	3R	BGS
DCO	COMBE FARM	50.3200	-3.8724	266.72	48.42	410	82-	1	BGS
DYA	YADSWORTHY	50.4352	-3.9309	262.89	61.33	280	82-	3	BGS
EAB	ABERFOYLE	56.1881	-4.3400	254.80	701.95	250	69-	1R	BGS
EAU	AUCHINOON	55.8444	-3.4547	308.92	662.20	350	69-	1R	BGS
EBH	BLACK HILL	56.2481	-3.5081	306.56	707.19	375	69-	1R	BGS
EBL	BROAD LAW	55.7733	-3.0436	334.54	653.82	365	69-	1R	BGS
ECK	CAULDKAINE HILL	55.1812	-3.1271	328.237	588.022	337	81-	1R	BGS
EDI	EDINBURGH	55.9233	-3.1861	325.89	670.66	125	69-	3R	BGS
EDU	DUNDEE	56.5475	-3.0142	337.65	739.95	275	69-	1R	BGS
ELO	LOGIEALMOND	56.4706	-3.7119	294.55	732.24	495	69-	1R	BGS
ESK	ESKDALEMUIR	55.3167	-3.2050	323.536	603.179	263	65-	4Rm	BGS
ESY	STONEYPATH	55.9177	-2.6144	361.603	669.569	328	81-	1R	BGS
FOO	FLORO (NORWAY)	61.5983	5.0439			50	85-	3R	BGS
FRO	FROYA (NORWAY)	61.7572	4.8819			50	84-	1R	BGS
HAE	ALDERS END	52.0376	-2.5475	362.45	237.88	224	82-	1	BGS
HCG	CRAIG GOCH	52.3224	-3.6567	287.1	270.7	511	80-	1R	BGS
HGH	GRAY HILL	51.6380	-2.8064	344.2	193.6	210	80-	1	BGS
HLM	LONG MYND	52.5169	-2.8878	339.8	291.4	259	84-	1	BGS
HPK	HAVERAH PARK	53.9554	-1.6240	424.67	451.12	227	78-	4R	BGS
HSA	SWANSEA	51.7478	-4.1543	251.3	207.7	274	87-	1	BGS
HTL	HARTLAND	50.9944	-4.4850	225.636	124.667	91	81-	3Rm	BGS
HTR	TREWERN HILL	52.0790	-3.2697	313.0	243.1	329	82-	1	BGS
JLP	LES PLATONS	49.2428	-2.1039			131	81-	1	BGS
JRS	MAISON ST LOUIS	49.1924	-2.0917			53	81-	3R	BGS
JSA	ST AUBINS	49.1879	-2.1709			21	81-	1	BGS
JVM	VALLE D.L.MARE	49.2169	-2.2068			64	81	1	BGS

Table 4 : continued

Code	Name	Lat	Lon	KmE (km)	KmN (km)	Ht (m)	Yrs open	Comp	Agency
KAC	ACHNASHELLACH	57.4999	-5.2982	202.4	850.3	330	83-	1	BGS
KAR	ARISAIG	56.9175	-5.8302	166.9	787.2	225	83-	1	BGS
KSB	SHIEL BRIDGE	57.2098	-5.4230	193.3	818.4	70	83-	1	BGS
KPL	PLOCKTON	57.3391	-5.6527	180.212	833.498	36	86-	4R	BGS
LDU	LEEDS UNIV.	53.8025	-1.5553	429.350	434.450	230	83-	m	BGS
LEU	LEICS. UNIV.	52.6238	-1.1223	459.41	303.30	76	81-	1	BGS
LRW	LERWICK	60.1360	-1.1779	445.66	1139.27	100	78-	4R	BGS
MCD	COLEBURN DISTIL	57.5827	-3.2541	325.02	855.41	280	81-	4Rm	BGS
MCH	MICHAELCHURCH	51.9977	-2.9983	331.47	233.77	229	78-	4	BGS
MDO	DOCHFOUR	57.441	-4.363	258.17	841.43	366	81-	1	BGS
MLA	LATHERON	58.305	-3.364	320.1	935.9	190	81-	1	BGS
MME	MEIKLE CAIRN	57.315	-2.965	341.9	825.3	455	81-	1	BGS
MVH	ACHVAICH	57.9232	-4.1816	270.8	894.7	198	84-	1	BGS
PCA	CARROT	55.700	-4.255	258.3	647.5	305	83-	1	BGS
PCO	CORRIE	55.988	-4.097	269.2	679.2	274	83-	1	BGS
PGB	GLENIFFERBRAES	55.810	-4.478	244.5	660.5	200	84-	3	BGS
PMS	MUIRSHIEL	55.846	-4.744	228.2	664.8	351	83-	1	BGS
RCA	ROSSYLN CASTLE	55.8531	-3.1581	327.506	662.812	122	87-	3	BGS
RCH	ROSSYLN CHAPEL	55.8554	-3.1581	327.511	663.069	150	87-	3	BGS
RGH	GORTON HOUSE	55.8562	-3.1496	328.046	663.151	129	87-	1	BGS
RHC	HAWTHORNDEN	55.8599	-3.1429	328.473	663.551	125	87-	1	BGS
RMM	MOUNTMARLE	55.8685	-3.1488	328.120	664.520	138	87-	1	BGS
ROB	ROSSLYN CHAP(B)	55.8552	-3.1588	327.467	663.054	153	87-	1	BGS
RRD	ROSEDALE	55.8441	-3.1390	328.688	661.798	157	87-	1	BGS
SAN	SANDWICK	60.0176	-1.2386	442.44	1126.05	155	85-	1	BGS
SBD	BRYN DU	52.9055	-3.2588	315.35	335.01	497	80-	1	BGS
SFJ	STATFJORD	61.2550	1.8167			-150	85-	3	BGS
WAL	WALLS	60.2576	-1.6133	421.40	1152.60	170	80-	1	BGS
WBR	BRONABER	52.8560	-3.8941	272.480	330.434	340	85-	1	BGS
WCB	CHURCH BAY	53.3782	-4.5465	230.630	389.864	135	85-	3	BGS
WFB	FAIRBOURNE	52.6830	-4.0378	262.266	311.465	325	85-	1	BGS
WFF	FFESTINIOG	52.9788	-3.9877	266.559	344.262	500	86-	L	BGS
WIM	ISLE OF MAN	54.1472	-4.6735	225.410	475.700	365	85-	1	BGS
WLC	LLYN CONWY *	52.9956	-3.7788	280.630	345.765	440	85-	1	BGS
WLF	LLYNFAES	53.2893	-4.3966	240.266	379.636	65	85-	1	BGS
WME	MYNDD EILIAN	53.3966	-4.3034	246.862	391.367	130	85-	1	BGS
WPM	PENMAENMAWR	53.2583	-3.9049	272.942	375.197	350	85-	1	BGS
WST	STWLAN *	52.975	-3.989	266.45	343.85	850	86-	3	BGS
WVR	VYRNWY	52.7974	-3.6051	291.795	323.448	580	85-	1m	BGS
XAL	ALLENDALE	54.8617	-2.2147	386.22	551.91	462	83-	1R	BGS
XDE	DENT	54.5058	-3.4897	303.55	513.31	291	83-	1R	BGS
XSO	SOURHOPE	55.4925	-2.2511	384.14	622.11	495	83-	1R	BGS
YEL	YELL	60.5509	-1.0830	450.29	1185.55	200	79-	1	BGS
YLL	LLANBERIS	53.1402	-4.1704	254.842	362.568	162	84-	1	BGS
YRC	RHOSCOLYN	53.2506	-4.5741	228.289	375.745	24	84-	1	BGS
YRE	YR EIFL	52.9810	-4.4254	237.186	345.418	197	84-	1	BGS
YRH	RHIW	52.8335	-4.6289	222.930	329.500	300	84-	1R	BGS
DCN	CROGHAN	53.3439	-7.2767			150	76-	1R	DIAS
DDK	DUNSINK OBS	53.3869	-6.3392			85		1R	DIAS
DLE	LYONS ESTATE	53.2872	-6.5436			140	80-	3R	DIAS
DKM	KILMASHOGUE	53.2553	-6.2644			280	76-	1R	DIAS

Table 4 : continued

Code	Name	Lat	Lon	KmE (km)	KmN (km)	Ht (m)	Yrs open	Comp	Agency
DMU	KINGSCOURT	53.8989	-6.9106			280	76-	1R	DIAS
ECB	CARRICKBYRNE	52.3661	-6.7811			125	81-	1R	DIAS
ECP	CARNSORE PT	52.1800	-6.3689			5		3R	DIAS
ETA	TARA HILL	52.6958	-6.2100			140		1R	DIAS
BMY	BINGLEY MOOR	53.8708	-1.8193	411.88	441.66	240	83-	1	LDS
HOY	HIGH HOYLAND	53.5867	-1.5973	426.65	410.11	205	83-	1	LDS
OXE	OXENHOPE MOOR	53.7908	-1.9798	401.33	432.74	438	83-	1	LDS

* WLC became a 3-component station on 12 May 1987
  WST became a 1-component station on 12 May 1987

Agency codes:

BGS	British Geological Survey
DIAS	Dublin Institute of Advanced Studies
LDS	University of Leeds

Component codes:

1	Single vertical seismometer
3	Orthogonal set of 3 seismometers
4	As in 3, above, plus one low-gain vertical
L	Single low-gain vertical seismometer
R	Station coordinates registered with the International Seismological Centre, England and the National Earthquake Information Centre, USA.
m	Low-frequency microphone

KEY TO CATALOGUE ABBREVIATIONS

Date :Day, month and year of event.
HrMnSecs:Time of occurrence of event in hours, mins and secs, GMT always.
Lat Lon :Latitude and Longitude of the event, negative longitude indicates west.
KmE KmN :UK National grid reference in kilometres east and north of grid origin.
Dep :Depth of the hypocentre in kilometres.
(Only meaningful for A and possibly B quality solutions)
Mag :Richter local magnitude of the earthquake.
Int :Maximum MSK intensity, using the convention of Io described in the key to phase-data encoding.

The following abbreviations are extracted from the output of the location program HYP071 (Lee and Lahr,1975)

No :Total number of P and S readings used in the event location.
DM :Epicentral distance in kilometres to the closest station.
Gap :Largest azimuthal separation in degrees between stations.
RMS :Root Mean Square of the travel-time residuals in seconds.
ERH :Standard error of the epicentre in kilometres.
ERZ :Standard error of the focal depth in kilometres.
Q :Solution quality of the hypocentre averaged from QS and QD (below).
A, excellent; B, good; C, fair; D, poor
SQD :S is quality factor ascribed to RMS, D is quality ascribed to number and distribution of stations.

KEY TO PHASE DATA ENCODING FORMAT

General description:

The format of the seismic data presented here was originally designed to allow direct entry onto a computer coding form. The system is described by Browitt (1985). Each line is coded according to the flag in column 80. Lines with 1, 2 or 3 in column 80 give epicentral details; those with a blank in column 80 contain phase information.

Epicentral details (1,2 or 3 in column 80):

```
.         1         2         3         4         5         6         7         8
12345678901234567890123456789012345678901234567890123456789012345678901234567890
DyMoYrNetwork....Tape..SLoc...EventSec.. Ccor DekReader.TLocality.............1
      HrMnSe:c. Grid:e./Grid:n. Dep:h M:l B:* M:b M:s Io. Lat:...N Lon:...E   2
No.DM. GapRm:s.Erh:.Erz:. Q SQD Comments.....................................3
CodeCoHrMnSec1..Amp1.CP1QIUSec2..Amp2.CP2QIUAmp.CPer.MtAmp.CPer.MtJetpAmodPDist
12345678901234567890123456789012345678901234567890123456789012345678901234567890
```

Line 1:

DyMoYr :Event date....Day, Month, Year.
Network :Name of network, eg LOWNET.
Tape :Analogue tape number on which event is recorded eg LN123.
S :Tape side when two sided recording selected eg 1 or 2.
Loc :Tape footage of event eg 1200.
Event :Event number on that tape eg 20.
Sec :Second length of jet-pen playout in mm, eg 12.
Ccor :Seconds error of internal clock (absolute minus clock time) eg -0.23.
Dek :Gain of replay deck eg 5.0.
Reader :Name of analyst.
T :Event type. Earthquake.. L=Local, R=Regional, T=Teleseism, E=unknown
Explosion... Q=Quarry, D=up to 10deg, A=further than 10deg
U=Unknown, S=Sonic
Locality :Closest generally known place or area, followed by region.

Line 2: (: in field indicates decimal point)
HrMnSe:c :Hours, minutes and seconds of the origin time.
Grid:e./ :Kilometres east and north of the National grid origin.

Grid:n
Dep:h :Depth of event in kilometres.
(valid for A and possibly B quality events).
M:l :Richter local magnitude obtained from the method described in the Manual of Seismological Observatory Practice (MSOP).
B:* :MB* ,An approximation to MB as determined using stations at closer ranges (paragraph 3.3.2 in MSOP).
M:b :Body wave magnitude determined using the method described in MSOP.
M:s :Surface wave magnitude determined using the method descibed in MSOP.
Io :Maximum MSK intensity. 2+ indicates felt, no macroseismic details. 3+, 4+ etc indicates felt at MSK 3 or 4, but no survey carried out. 3,4,5 etc describes the maximum MSK intensity produced by the event
Lat:... :Latitude of event in degrees and decimal degrees, positive is north
N :(N) North or (S) South. Only inserted if no Lat sign convention +/- is in use.
Lon:... :Longitude of event in degrees and decimal degrees, negative is west
E :(E) East or (W) West. Only inserted if no Lon sign convention +/- is in use.

Line 3:
No.DM. GapRm:s.Erh:.Erz:.Q SQD : HYPO71 output, see catalogue abbreviations
Comments :Descriptive remarks about felt area and other items of interest.

Phase data (column 80 blank):
Code :Station code eg EAB.
Co :Component, Z=Vertical, NS=North-South, EW= East-West.
HrMn :Time datum, Hours and Minutes for phase arrivals. -1 in Hr column indicates the end of the event.
Sec1 :Seconds to the first arrival. For local events this is either PN or PG. Subsequent P arrivals are not usually read as the location program HYPO71 does not require them.
Amp1 :Trace amplitude (mm) of first motion of this arrival, for 3-component set.
C :Amp1 is H: half peak-peak, C: centre-peak, F or blank: peak-peak A:log(ground amplitude in millimicrons)
P1 :Phase, normally P (= PN or PG) but any MSOB code possible.
Q :HYPO weighting factor to arrival. 0 or blank= full weighting to 4= zero weighting (ignore). 9= use P-S interval only for this line.
I :I=Impulsive (onset read better than 0.1s) or E=emergent (worse than 0.1s)
U :U=First motion up/compression or D=down/dilation.
Sec2..Amp2.CP2QIU: As for first arrival, but usually referring to S phase(SN,SG)
Amp :Trace amplitude in millimetres at the relevant part of the phase train for the magnitude type indicated in Mt.
ML:largest amplitude in trace, MB*: Maximum in P-phase.
MB:Maximum in first 25 seconds,MS: Rayleigh phase (Z,long period)
M :Equivalent to ML, but not used in the magnitude calculation.
C :As previous
Per :Period (secs) of Amp.
Mt :Magnitude type... ML ,B*, MB, MS.
Amp.CPer.Mt: As previous
Jetp :Jet pen sensitivity in volts/cm used on playout eg 0.25,1.0,2.5,10.0
Amod :Amplifier-modulator gain. Normally 100, 200, 400. Low-gain devices usually have a gain of 4.
P :If there is a polarity reversal in the system, this column=1.
Dist :Distance in kilometres to event from station.

```
010187 LOWNET    LN 519    343      12.5      5.0DWR    LGARGUNNOCK,CENTRAL    1
        953 3.88  271.54/ 695.84   0.0-0.2                 56.138   -4.067    2
  6 18 218 0.23  3.3  2.7 D C*D                                               3
EAB Z 095307.61       P  EU10.92       S 2E  2.8H0.10ML          0.25 200   18
EBH Z 095311.02       P  E 16.62       S 2E  2.8H0.10ML          0.25 200   37
ELO Z 095312.41       P 1E 17.82       S 2E  0.9H0.10ML          0.25 200   43
      -1
030187 LOWNET    LN 519    877      12.5      5.0DWR    LROSEWELL,LOTHIAN      1
       03417.59  329.05/ 662.19   0.0 0.1                 55.848   -3.133    2
  6  9 167 0.07  2.8  2.7 C C*C COALFIELD TYPE                                3
EDI Z 003419.90       P  EU21.40       S 2E 11.0H0.23M          0.25 200    9
EDI NS0034               EU               EU 9.9H0.21ML          0.25 200    9
EDI EW0034               E                E  6.8H0.21ML          0.25 200    9
EBL Z 003420.08       P  E 21.89       S 2ED                                  10
EAU Z 003422.01       P  EU24.99       S 2E                                   20
      -1
030187 LOWNET    LN 519   1103      12.5      5.0DWR    LROSEWELL,LOTHIAN      1
       165819.91  330.87/ 664.01   7.2-0.1                 55.864   -3.105    2
  6  8 197 0.09  1.8  1.4 C B*D COALFIELD TYPE                                3
EDI Z 165822.19       P  EU23.38       S 2EU11.1H0.30M          0.25 200    8
EDI NS1658               EU               E  6.5H0.20ML          0.25 200    8
EDI EW1658               E                E  6.9H0.21ML          0.25 200    8
EBL Z 165822.40       P  E 24.22       S 2ED                                  11
EAU Z 165824.19       P  E 27.31       S 2E                                   22
      -1
060187 LOWNET    LN 519   1954      12.5      5.0DWR    LMARYPORT,CUMBRIA      1
       63957.45  309.13/ 541.60   1.0 1.4                 54.761   -3.412    2
 10 50 337 0.26 17.5 12.7 D D*D                                               3
ECK Z 064006.55       P  E 13.53       S 2E                      1.0 200   50
ESK Z 064008.60       P  EU16.90       S 2EU 2.6H0.09M           1.0 200   63
ESK NS0640               EU               E  3.8H0.10ML          1.0 200   63
ESK EW0640               EU               ED 3.0H0.10ML          1.0 200   63
EBL Z 064017.20       P 1ED31.00       S 2E                                  115
EAU Z 064017.85       P 2E 31.80       S 2ED                                 121
EDI Z 064019.8        P 3E 35.40       S 2E  2.5H0.19M          0.25 200   130
EDI NS0640               E                EU 3.8H0.19ML          0.25 200   130
EDI EW0640               E                E  4.2H0.20ML          0.25 200   130
EAB Z 064020.52       P 2E 37.7        S 3E                                  169
      -1
070187 LOWNET    LN 520    270      12.5      5.0DWR    LROSEWELL,LOTHIAN      1
       232537.66  328.67/ 662.04   0.0 0.0                 55.846   -3.139    2
  6  9 162 0.04  2.3  2.3 C B*C COALFIELD TYPE                                3
EDI Z 232539.92       P  EU41.60       S 2ED10.3H0.27M          0.25 200    9
EDI NS2325               ED               ED 7.1H0.19ML          0.25 200    9
EDI EW2325               E                E  5.5H0.28ML          0.25 200    9
EBL Z 232540.15       P  ED42.09       S 2E                                   10
EAU Z 232542.00       P 1E 45.01       S 2E                                   20
      -1
080187 LOWNET    LN 520    517      25.0      5.0DWR    LROSEWELL,LOTHIAN      1
       172232.45  329.26/ 662.54   0.7 1.2                 55.851   -3.130    2
  9  9 120 0.11  0.6  0.8 B A*B COALFIELD TYPE                                3
EDI Z 172234.64       P  ID35.93       S 2ED 3.1H0.29M          10.0 200    9
EDI NS1722               ID               EU 2.7H0.13ML          10.0 200    9
EDI EW1722               IU               EU 4.4H0.19ML          10.0 200    9
EBL Z 172234.96       P  ED36.51       S 2EU                                  10
EAU Z 172236.71       P  ID39.70       S 3EU                                  20
ESY Z 172238.93       P  IU                                                   33
EBH Z 172241.86       P  ED48.52       S 3E                                   50
EDU Z 172248.48       P 1ED                                                   78
ELO Z 172246.69       P 2E                                                    78
EAB Z 172246.82       P 2E                                                    84
      -1
090187 LOWNET    LN 520    851      12.5      5.0DWR    LROSEWELL,LOTHIAN      1
       174332.36  328.97/ 662.86   1.1 0.5                 55.854   -3.135    2
  8  8 120 0.14  1.0  1.3 B B*B COALFIELD TYPE                                3
EDI Z 174334.45       P  ID35.69       S 2E  5.0H0.21M           1.0 200    8
EDI NS1743               ID               EU 4.0H0.22ML          1.0 200    8
EDI EW1743               IU               E  6.5H0.30ML          1.0 200    8
EBL Z 174334.91       P  EU36.41       S 2EU                                  11
EAU Z 174336.59       P  ED39.38       S 3E                                   20
ESY Z 174338.82       P 2E                                                    33
EBH Z 174341.70       P 2E                                                    50
      -1
130187                                           5.0       LLLANDRINDOD,POWYS     1
       143430.13  305.03/ 258.40  32.6-0.2                 52.215   -3.390    2
  5 17 152 0.19 16.0 10.3 D D*D                                                3
HTR Z 143435.67       P  IU                                                   17
HCG Z 143436.39       P  EU                  6.0 H0.2 ML          1.0  200   22
MCHEW 143438.02       P  EU43.48       S     5.0 H0.2 ML          1.0  200
MCH Z 143438.10       P  IU43.50       S                                      36
MCHNS 143438.22       P  IU43.49       S     4.5 H0.1 ML          1.0  200
SBD Z 143443.20       P  EU                                                   77
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PHASE DATA : 1987

```
     -1
130187 N WALES                                    5.0KPR    LLLEYN AFTERSHOCK      1
       17 534.71  239.17/ 344.29  23.0 0.5                    52.971   -4.395    2
 18  2 155 0.09  0.4  0.7 B A*C                                                    3
WCB Z 1705                49.27       S 2E                                      46
WCB NS1705                                 3.5 H0.06ML           0.25 200       46
WCB EW1705                                 3.5 H0.07ML           0.25 200       46
YRC Z 1705                45.87       S 2                                       33
YRE Z 170538.44       P  ID                                                      2
WPM Z 170543.01       P 1ID                                                      46
WLF Z 170541.46       P 1E 46.25      S  IU                                      35
WME Z 170543.24       P  IU49.24      S 2E                                       48
YLL Z 170540.05       P  IU43.65      S  IU                                      24
WST Z 170540.45       P  E 44.45      S  IU                                      27
WST NS1705                              11.5H0.06ML           1.0  200          27
WST EW1705                              13.9H0.08ML           1.0  200          27
WVR Z 1705                51.09       S 1E                                      57
WBR Z 170541.70       P  E 46.30      S  ID                                      36
WLC Z 170542.39       P  EU47.60      S 2E                                       42
WFB Z 170542.13       P 1E 47.62      S 2E                                       40
     -1
140187 LOWNET    LN 520   2306      12.5      5.0DWR    LROSEWELL,LOTHIAN      1
        33750.97  328.83/ 662.44   2.2 1.2                  55.850   -3.137    2
  9  9 123 0.11  0.5  0.9 B A*B COALFIELD TYPE                                    3
EDI Z 033752.86       P  ID54.26      S 2E 10.5H0.20M            2.5 200        9
EDI NS0337               ID             EU 9.3H0.25ML           2.5 200        9
EDI EW0337               IU             E 13.7H0.20ML           2.5 200        9
EBL Z 033753.23       P  ID54.69      S 3E                                       10
EAU Z 033754.95       P  ID57.06      S 3E                                       20
ESY Z 033757.27       P 2ED                                                      34
EBH Z 033800.10       P 2ED06.76      S 3EU                                      50
     -1
140187 LOWNET    LN 521     58      25.0      5.0DWR    LROSEWELL,LOTHIAN      1
       1236 1.69  329.15/ 662.94   1.1 1.0            2+   55.854   -3.132    2
  9  8 118 0.13  0.8  0.9 B A*B COALFIELD TYPE,FELT     ROSEWELL:UNDERGROUND   3
EDI Z 123603.79       P  ID05.03      S 2E  7.9H0.18M            2.5 200        8
EDI NS1236               ED             ED 6.6H0.20ML           2.5 200        8
EDI EW1236               IU             EU10.4H0.20ML           2.5 200        8
EBL Z 123604.21       P  EU05.73      S 2EU                                      11
EAU Z 123605.88       P  ID08.84      S 3E                                       20
ESY Z 123608.10       P 1EU                                                      33
EBH Z 123611.10       P 1EU17.1       S 3E                                       50
EDU Z 123614.78       P 2EU                                                      78
ELO Z 123615.4        P 2E                                                       78
     -1
150187 LOWNET/KYL         233      12.5      5.0DWR    LARDNAMURCHAN,HIGHLAND 1
        11910.72  133.40/ 746.44   5.0 0.8                  56.534   -6.337    2
  4 99 278 0.08           C A*D                                                  3
EAB Z 011931.9        P  E 47.0       S 2E  1.6H0.10ML          0.25 200  129
ELO Z 011937.1        P  E 55.6       S 2E  1.5H0.09ML          0.25 200  162
KPL Z 011927.00       P  E 39.0       S                                          99
KPL NS0119                                 2.0H0.10ML           0.25 200       99
KPL EW0119                                 3.0H0.15ML           0.25 200       99
     -1
150187 LOWNET    LN 521    463      12.5      5.0DWR    LKIRKCALDY,FIFE        1
       18 015.23  331.35/ 688.68   0.2 0.2                  56.086   -3.103    2
  9 19 115 0.18  1.0  1.8 C B*C OFFSHORE,COALFIELD TYPE                          3
EDI Z 180019.34       P  ID22.40      S 2EU15.7H0.20M           0.25 200       19
EDI NS1800               IU             EU12.3H0.18ML           0.25 200       19
EDI EW1800               EU             E  5.9H0.22ML           0.25 200       19
EBH Z 180021.19       P  ID25.85      S 2IU                                      31
EAU Z 180021.91       P  ED                                                      35
ESY Z 180022.09       P  ID                                                      36
EBL Z 180022.21       P  ID27.28      S 2EU                                      35
EDU Z 180025.38       P 2E                                                       52
     -1
150187 LOWNET    LN 521    537      12.5      5.0DWR    LROSEWELL,LOTHIAN      1
       232712.48  327.73/ 662.73   0.6 0.0                  55.852   -3.154    2
  6  8 156 0.10  0.6  0.8 B A*C COALFIELD TYPE                                    3
EDI Z 232714.52       P  E 15.91      S 2E  5.7H0.30M           0.25 200       8
EDI NS2327               E              ED 5.4H0.21ML           0.25 200       8
EDI EW2327               E              EU 6.5H0.29ML           0.25 200       8
EBL Z 232715.20       P 1E 16.9       S 3EU                                      11
EAU Z 232716.63       P  ID19.3       S 3E                                       19
     -1
160187 LOWNET    LN 521    558      12.5      5.0DWR    LROSEWELL,LOTHIAN      1
        05641.20  328.58/ 664.21   1.4 0.7                  55.866   -3.141    2
  8  7 114 0.28  1.8  2.0 B B*B COALFIELD TYPE                                   3
EDI Z 005643.03       P  ID44.29      S 2E  9.6H0.19M            1.0 200        7
EDI NS0056               ID             E  8.4H0.20ML           1.0 200        7
EDI EW0056               IU             EU12.6H0.20ML           1.0 200        7
EBL Z 005644.47       P 1EU44.91      S 3E                                       12
EAU Z 005645.11       P  ID47.90      S 3EU                                      20
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ESY Z 005647.38        P 1E                                                  34
EBH Z 005650.33        P 1IU                                                 48
      -1
160187 LOWNET    LN 521    609       25.0       5.0DWR    LROSEWELL,LOTHIAN     1
        441 0.28  328.96/ 662.59   2.1 1.3                  55.851   -3.135    2
  9  9 121 0.08  0.3  0.7 B A*B COALFIELD TYPE                                  3
EDI Z 044102.18        P  ID03.60        S 2EU 9.8H0.20M          2.5 200     9
EDI NS0441                ID                EU10.4H0.28ML         2.5 200     9
EDI EW0441                IU                E 13.7H0.20ML         2.5 200     9
EBL Z 044102.59        P  ID04.10        S 3EU                                 10
EAU Z 044104.28        P  ID07.08        S 3E                                  20
ESY Z 044106.53        P 1EU                                                   33
EBH Z 044109.44        P 1ED16.10        S 2E                                  50
EDU Z 044113.83        P 2E                                                    78
EAB Z 044114.70        P 2E                                                    84
      -1
160187 N WALES                                    5.0KPR    LLLEYN AFTERSHOCK     1
         9 653.72  239.73/ 342.81  23.4 0.2                  52.958   -4.386    2
 10 21 215 0.06  0.6  0.7 C A*D                                                 3
WST Z 090659.85        P  E 63.33        S 1                                   27
WST NS0906                                   14.0H0.09ML          0.25 200    27
WST EW0906                                   11.0H0.05ML          0.25 200    27
YRH Z 090658.84        P 1E 62.36        S 1E                                  21
WBR Z 090660.56        P 1E 65.19        S 3E                                  35
WLC Z 090661.30        P  ID66.54        S 3E                                  41
WFB Z 090660.89        P 3E 65.95        S 1E                                  39
      -1
160187                                            5.0       LYSTRADFELLTE,POWYS   1
       111345.65  290.05/ 215.32  35.3 1.0                  51.825   -3.596    2
  5 36 288 0.03  1.5  2.9 C B*D                                                 3
HTR Z 111353.47        P  ID59.30        S    8.0 H0.2 ML          0.25 200   36
MCH Z 111354.60        P  ID61.10        S                                     58
MCHNS 111354.60        P  ID61.10        S
MCHEW 111354.60        P  ID61.10        S
HGH Z 111356.20        P  ID                  6.25H0.1 ML          0.25 200   97
      -1
160187 LOWNET    LN 521    855       12.5       5.0DWR    LKIRKCALDY,FIFE       1
       2233 2.43  331.85/ 689.73   0.1-0.4                  56.096   -3.096    2
  7 20 180 0.09  0.6  1.1 B A*C                                                 3
EDI Z 223306.72        P  ED09.92        S 2E  4.3H0.12M          0.25 200    20
EDI NS2233                EU                EU 4.1H0.15ML         0.25 200    20
EDI EW2233                E                 E  1.0H0.19ML         0.25 200    20
EBH Z 223308.50        P  EU13.26        S 2IU                                 31
EAU Z 223309.32        P 1ED                                                   36
ESY Z 223309.40        P 1E                                                    36
EBL Z 223309.60        P  ID                                                   36
      -1
190187 LOWNET    LN 521   1629       12.5       5.0DWR    LROSEWELL,LOTHIAN     1
        63658.25  328.96/ 662.85   1.9 0.3                  55.854   -3.135    2
  7  8 170 0.08  0.6  0.7 B A*C COALFIELD TYPE                                  3
EDI Z 063700.19        P  ID01.67        S 2ED15.9H0.21M          0.25 200    8
EDI NS0637                ID                E 13.6H0.26ML         0.25 200    8
EDI EW0637                IU                IU16.7H0.20ML         0.25 200    8
EBL Z 063700.59        P  E 02.38        S 2ED                                 11
EAU Z 063702.22        P  ID05.21        S 3E                                  20
EBH Z 063707.50        P 1EU                                                   50
      -1
200187 LOWNET    LN 521   2075       12.5       5.0DWR    LROSEWELL,LOTHIAN     1
       145957.33  328.65/ 662.40   1.6 0.7                  55.850   -3.140    2
  8  9 124 0.11  0.6  0.9 B A*B COALFIELD TYPE                                  3
EDI Z 145959.38        P  EU60.87        S 2EU 5.7H0.30M          1.0 200     9
EDI NS1459                IU                E  6.3H0.28ML         1.0 200     9
EDI EW1459                ED                IU 8.1H0.29ML         1.0 200     9
EBL Z 145959.61        P  E 61.51        S 2ED                                 10
EAU Z 145961.40        P  ID64.20        S 2EU                                 20
ESY Z 145963.9         P 3E                                                    34
EBH Z 145966.6         P 3E                                                    50
      -1
200187 LOWNET    LN 521   2100       12.5       5.0DWR    LROSEWELL,LOTHIAN     1
       164943.78  328.62/ 663.39   1.2 0.3                  55.858   -3.141    2
  7  8 169 0.11  1.5  1.5 C B*C COALFIELD TYPE                                  3
EDI Z 164945.71        P  ID47.21        S 2ED17.3H0.20M          0.25 200    8
EDI NS1649                ED                E 14.7H0.23ML         0.25 200    8
EDI EW1649                EU                IU17.2H0.20ML         0.25 200    8
EBL Z 164946.49        P  ED48.00        S 2EU                                 11
EAU Z 164947.81        P  ID50.80        S 3E                                  20
EBH Z 164953.05        P 2E                                                    49
      -1
210187                                            5.0       LHALFWAY HOUSE,SALOP  1
       163934.90  335.40/ 311.73   2.5 0.7                  52.699   -2.956    2
  6 21 209 0.17  3.5  6.4 D C*D                                                 3
HLM Z 163939.1         P  ID41.62        S    21.5H0.21ML          0.25 200   21
SBD Z 163940.5         P  ID                                                   31
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HCG Z 163946.78        P  ID53.9        S                                    63
WVR Z 163943.05        P  E                                                  45
      -1
220187 LOWNET     LN 522    359      12.5       5.0DWR    LPOLTON,LOTHIAN       1
       1013 8.95  329.35/ 665.52   2.4 0.5                 55.878   -3.129    2
  8  6 112 0.08  0.5  0.8 B A*B COALFIELD TYPE                                 3
EDI Z 101310.41        PG ID11.57       SG2EU13.1H0.22M          1.0  200    6
EDI NS101310.41        PG ID11.57       SG E  7.9H0.19ML         1.0  200    6
EDI EW101310.41        PG EU11.57       SG EU 7.0H0.18ML         1.0  200    6
EBL Z 101311.59        PG EU13.42       SG3E                                 13
EAU Z 101312.93        PG EU16.09       SG3E                                 21
ESY Z 101315.08        PG3E                                                  33
EBH Z 101317.63        PG3E                                                  48
      -1
220187 LOWNET   LN 522   438       12.5       5.0DWR    LROSEWELL,LOTHIAN     1
       155725.76  329.01/ 662.88   1.5 1.1                 55.854   -3.134    2
 10  8 119 0.05  0.2  0.3 B A*B COALFIELD TYPE                                 3
EDI Z 155727.76        PG ID29.25       SG2E  9.2H0.20ML          2.5  200    8
EDI NS155727.76        PG ID29.25       SG ED 9.3H0.22ML          2.5  200    8
EDI EW155727.76        PG EU29.25       SG IU13.9H0.21ML          2.5  200    8
EBL Z 155728.16        PG EU30.00       SG2ED                                11
EAU Z 155729.85        PG ID32.79       SG3E                                 20
ESY Z 155732.10        PG EU36.60       SG3E                                 33
EBH Z 155734.99        PG ED41.55       SG3E                                 50
      -1
220187 N WALES                                    5.0KPR    LLLEYN AFTERSHOCK     1
       1852 9.26  237.04/ 344.26  21.6 0.9                 52.971   -4.427    2
 18  1 209 0.13  0.7  1.0 C A*D                                               3
WCB Z 185217.78        P 2E 23.62       S 2E                                 46
WCB NS1852                                   5.9 H0.08ML          0.25 200   46
WCB EW1852                                   6.2 H0.18ML          0.25 200   46
YRC Z 185216.59        P 3E                                                  33
YRE Z 185212.75        P  ID                                                  1
WPM Z 185217.55        P 1E                                                  47
WLF Z 185215.81        P 1E 20.52       S 2E                                 36
WME Z 185217.79        P 1E 23.57       S 3E                                 48
YLL Z 185214.67        P  IU18.26       S 1I                                 26
WST Z 185215.20        P  IU19.38       S  ID                                29
WST NS1852                                  14.4H0.08ML          1.0  200   29
WST EW1852                                  16.6H0.06ML          1.0  200   29
WBR Z 185216.31        P  ID21.00       S 1E                                 38
WLC Z 185217.11        P  EU22.61       S 1E                                 44
WFB Z 185216.87        P 1E 21.81       S 3E                                 41
      -1
230187                                            5.0       LOBAN,STRATHCLYDE     1
        0 338.81  192.18/ 728.04   1.2 0.9                 56.399   -5.368    2
  4 68 322 0.04           C A*D                                               3
PMS Z 000351.03        P  EU60.82       S 2E 5.0 H0.10ML          0.25 200   73
PCO Z 000354.48        P 1E 66.72       S 3E                                 91
EAB Z 000350.72        P 2E                                                  68
      -1
230187                                            5.0       LLANGHOLM,DUM & GALL  1
        3 238.51  336.68/ 591.45   0.5 0.4                 55.213   -2.995    2
  6  9 230 0.17  2.3  1.9 C B*D                                               3
ESY Z 030253.15        P 2E 63.85       S 3                                  82
ECK Z 030240.66        P 2E 42.61       S 2                                   9
ESK Z 030242.19        P  ID45.19       S 2                                  18
ESK NS0302                                  11.5H0.05ML           1.0 200   18
ESK EW0302                                  11.5H0.07ML           1.0 200   18
      -1
240187 HEREFORD                                   5.0MJA    LN.WELSHPOOL,SALOP    1
       1253 5.21  330.32/ 317.98   7.2 0.5                 52.755   -3.033    2
 10 23 202 0.08  0.6  2.4 C B*D                                               3
SBD Z 125309.18        P 1IU12.02       S 2  14.4H0.06ML          0.25 200   23
HLM Z 125310.14        P 1ID13.46       S 2  9.4 H0.13ML          0.25 200   28
HCG Z 125316.0         P 3E 23.36       S 3                                  64
WST Z 1253                24.50         S 3E                                 69
WST NS1253                                   5.0 H0.11ML          0.25 200   69
WVR Z 125312.12        P 3E                                                  39
WBR Z 125315.14        P 3E 22.14       S 3E                                 59
WST EW1253                                   2.9 H0.07ML          0.25 200   69
      -1
260187KYL                                         5.0MJA    LLOCH CARRON,HIGHLAND 1
        01233.71  171.65/ 824.32   7.1 0.0                 57.253   -5.786    2
  4 13 216 0.02           C A*D                                               3
KPL Z 001236.5         P    38.45       S                                    13
KPL NS0012                                  08.5H0.09ML           0.25 200   13
KPL EW0012                                  20.0H0.10ML           0.25 200   13
KSB Z 0012                41.25         S                                    23
KAR Z 0012                45.25         S                                    37
      -1
290187                                            5.0       LGLENDARUEL,STRATHCLYDE1
        91845.93  207.03/ 686.05   0.5 0.9                 56.028   -5.097    2
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  7 30 297 0.13 12.8 10.4 D D*D                                                3
EAB Z 091855.29        P 1E 62.10        S 3E 15.9H0.08ML          0.25 200   50
PGB Z 091854.42        P 2EU61.59        S 3E                                 46
PGB NS0918                                    11.0H0.08ML          0.25 200   46
PGB EW0918                                     8.5H0.08ML          0.25 200   46
PCA Z 091857.06        P 2EU                                                  64
PMS Z 091851.89        P  IU                                                  30
PCO Z 091857.35        P  IU                                                  63
     -1
300187                                          5.0       LCOMRIE,TAYSIDE      1
       105457.35  278.76/ 722.76   2.3 1.0                 56.382   -3.964    2
 11 18 190 0.48  1.3  1.5 D C*D                                               3
ELO Z 105501.15        P  ID3.1          S                      0.25 200   18
EAB Z 105503.3         P  ID7.0          S    12.2H0.1 ML       0.25 200   32
EBH Z 105503.75        P  IU6.6          S    13.2H0.1 ML       0.25 200   32
EDU Z 105508.3         P  E                   9.3H0.1 ML       0.25 200   61
EAU Z 105509.4         P  E                                                   68
ESY Z 105514.0         P  E                                                   99
EBL Z 105515.8         P  E                                                   89
ESK Z 105519.13        P 2E 33.51                                            128
ESK NS1055                                     5.3H0.13ML       0.25 200  128
ESK EW1055                                     6.6H0.12ML       0.25 200  128
PCO Z 105505.78        P 1E                                                   45
     -1
300187                                          5.0       LROSEWELL,LOTHIAN    1
       224016.65  331.14/ 662.40   0.5 0.7                 55.850   -3.100    2
  4 31 250 0.22          C B*D COALFIELD TYPE                                  3
ESY Z 224022.59         P ED27.41        S  E                                 31
ESK Z 224028.08         P3E 35.30        S 3E                                 60
ESK NS2240                                     1.5H0.18ML       0.25 200   60
ESK EW2240                                     2.0H0.20ML       0.25 200   60
     -1
310187                                          5.0KPR    LLOCH AWE,STRATHCLYDE 1
        64032.94  193.98/ 718.51   9.8 0.8                 56.314   -5.331    2
  4 63 318 0.09          C A*D                                                 3
EAB Z 064043.52        P 3E 51.14        S 3E 3.6 H0.11ML          0.25 200   63
PMS Z 064043.62        P 2E                   5.5 H0.07ML       0.25 200   64
PCO Z 064047.07        P 1EU                  4.4 H0.12ML       0.25 200   85
     -1
310187                                          5.0       LROSEWELL,LOTHIAN    1
       1716 8.24  329.57/ 662.45   0.4 1.8                 55.850   -3.125    2
  7  9 102 0.04  0.2  0.2 B A*B COALFIELD TYPE                                 3
EDI Z 171610.49        P  ID                  4.5H0.2 M         0.25   4     9
EBL Z 171610.72        P  ID                                                  10
EAU Z 171612.60        P   E                                                  21
ESY Z 171614.70        P   E19.29        S 2E                                 33
EDU Z 171622.38        P   E32.62        S                                    78
EAB Z 171623.03        P 3E 33.40        S 2E                                 85
ESK Z 171619.16        P 1ED26.06        S 2E                                 60
ESK NS1716                                     9.0H1.10ML       0.25 200   60
ESK EW1716                                    11.6H0.29ML       0.25 200   60
ECK Z 171621.83        P 3E 30.21        S 2E                                 75
PGB Z 171623.65        P 3E 33.62        S 2E                                 85
PCA Z 171621.04        P 2EU                                                  73
PMS Z 171626.05        P 1E                                                  102
PCO Z 171619.60        P 1ED                                                  63
     -1
030287                                          5.0MJA    LOBAN,STRATHCLYDE    1
        83233.46  194.86/ 717.86   5.0 1.7                 56.309   -5.317    2
  5101 349 0.10 12.0 10.7 D D*D                                               3
KPL Z 083252.60        P 2  66.50        S 3                                 117
KPL NS0832                                     6.5H0.17ML       0.25 200  117
KPL EW0832                                    11.5H0.21ML       0.25 200  117
KSB Z 083250.00        P 1                                                   101
KAC Z 083255.70        P 1  70.70        S 2                                 133
     -1
030287                                          5.0MJA    LCHESTERF'LD,DERBYSHIRE1
       231032.14  432.43/ 374.83   3.0 1.8             3+  53.269   -1.514    2
  3 70 349 0.01  0.0  0.0 C A*D FELT BOLSOVER VILLAGE     NEAR CHESTERFIELD    3
HPK Z 231045.20        P    54.70        S                                    77
BMY Z 2310                  52.90        S                                    70
HPK NS2310                                     5.5H0.20ML       1.0  200   77
HPK EW2310                                     5.2H0.15ML       1.0  200   77
     -1
050287                                          5.0MJA    LKYLE,HIGHLAND       1
        726 7.11  183.86/ 822.66   3.2-0.2                 57.244   -5.583    2
  6 10 227 0.07  0.8  8.3 D C*D                                               3
KPL Z 072609.50        P 1 D11.20        S 2                                 11
KPL NS0726                                     3.0H0.14ML       0.25 200   11
KPL EW0726                                     9.0H0.16ML       0.25 200   11
KSB Z 072609.30        P 1 U11.00        S 1                                 10
KAC Z 072613.50        P 3  17.65        S 1                                 33
     -1
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060287 HEREFORD                                    5.0MJA    LBRISTOL CHANNEL      1
       11 3 3.46  301.45/ 157.77   0.3 2.1                    51.310   -3.414    2
  7 56 196 0.17  3.3 36.4 D C*D                                                   3
MCH Z 110317.45       P 1IU                                                     82
MCH NS1103                                  3.5 H0.24ML          2.5  200     82
MCH EW1103                                  4.0 H0.12ML          2.5  200     82
SBD Z 110332.80       P 1  54.00      S 2                                     178
HAE Z 110321.06       P 1ID                                                   101
HGH Z 110313.63       P 1IU                                                    56
HTR Z 110318.20       P 2                                                      86
HLM Z 110326.90       P 1ID                                                   139
HTL Z 110317.9        P 1E                                                     83
HTL NS1103                                 10.0H0.15ML           1.0 200     83
HTL EW1103                                 14.0H0.20ML           1.0 200     83
      -1
070287 LOWNET    LN525    174      12.5       5.0DWR    LROSEWELL,LOTHIAN      1
       42719.62  328.11/ 662.43   3.4 0.7                  55.850   -3.148    2
 10  9 126 0.18  0.8  2.3 B B*B COALFIELD TYPE                                   3
EDI Z 042721.48       PG EU22.72      SG2E 11.3H0.19M          1.0  200      9
EDI NS042721.48       PG ED22.72      SG EU11.7H0.12ML         1.0  200      9
EDI EW0427            PG EU           SG E 16.2H0.19ML         1.0  200      9
EBL Z 042721.81       PG E 23.38      SG2EU                                   11
EAU Z 042723.52       PG ID26.13      SG3E                                    19
ESY Z 042726.19       PG1E 31.48      SG3E                                    34
EBH Z 042728.29       PG IU34.90      SG3E                                    50
      -1
070287 LOWNET    LN 525    176      12.5       5.0DWR    LROSEWELL,LOTHIAN      1
       43840.82  329.26/ 663.12   3.6 0.7                  55.856   -3.130    2
  8  8 117 0.13  0.2  0.8 B A*B COALFIELD TYPE                                   3
EDI Z 043842.60       PG ID43.89      SG2E  9.4H0.21M          1.0  200      8
EDI NS043842.60       PG ID43.89      SG E  9.0H0.19ML         1.0  200      8
EDI EW043842.60       PG IU43.89      SG EU10.5H0.21ML         1.0  200      8
EBL Z 043843.14       PG1EU44.6       SG3E                                    11
ESY Z 043846.99       PG2E                                                    33
EAU Z 043844.70       PG ID47.63      SG3E                                    20
EBH Z 043849.93       PG1EU                                                   50
      -1
070287 LOWNET   LN 525     350      12.5       5.0DWR    LROSEWELL,LOTHIAN      1
       17 823.65  330.12/ 662.85   0.5 0.7                  55.854   -3.116    2
  9  9 114 0.09  0.4  0.4 B A*B COALFIELD TYPE                                   3
EDI Z 170825.93       PG IU27.32      SG2E 11.5H0.31M          1.0  200      9
EDI NS1708            PG IU           SG E  7.0H0.32ML         1.0  200      9
EDI EW1708            PG ID           SG EU 5.9H0.30ML         1.0  200      9
EBL Z 170826.22       PG1ED27.89      SG3ED                                   10
EAU Z 170828.09       PG1E 30.80      SG3ED                                   21
ESY Z 170829.90       PG2E                                                    32
EBH Z 170833.20       PG1EU39.82      SG2E                                    50
      -1
090287 LOWNET    LN 525   1116       25.0       5.0DWR    LCOMRIE,TAYSIDE        1
       221315.39  277.64/ 724.85   3.2 1.0            2+   56.400   -3.983    2
 11 18 202 0.29  1.8  3.3 C B*D FELT COMRIE                                     3
ELO Z 221319.10       P  IU21.20      S 1EU                    0.25 200     19
EAB Z 221321.40       P  ED25.32      S 2EU                                   32
EBH Z 221321.84       P  IU25.79      S 2E                                    34
EDU Z 221326.61       P 2ED33.49      S 3E                                    62
EAU Z 221327.70       P 1EU                                                   70
EDI Z 221328.46       P 3E 36.11      S 3E  4.6H0.09M          0.25 200     73
EDI NS2213               E               E  5.8H0.10ML         0.25 200     73
EDI EW2213               E               E  5.6H0.11ML         0.25 200     73
      -1
100287                                          5.0        OFFSHORE SHETLAND      1
       01345.52  402.29/1119.36   5.0 0.6                  59.960   -1.959    2
  3 41 345 0.00  0.0  0.0 C A*D                                                 3
LRW Z 0013                60.1      S 1                                       48
LRW NS0013                                  7.5H0.1ML            0.25 200     48
LRW EW0013                                  5.5H0.1 ML           0.25 200     48
SAN Z 001352.85       P 0ID58.2       S 1                                     41
      -1
110287 LOWNET    LN 525   1512      12.5       5.0DWR    LKIRKCALDY,FIFE        1
       345 4.06  330.02/ 689.17   0.5-0.4                  56.090   -3.125    2
  6 19 225 0.08  0.6  0.4 C A*D                                                 3
EDI Z 034508.11       PG E 11.30      SG2E  4.5H0.12M          0.25 200     19
EDI NS0345            PG E            SG E  4.5H0.12ML         0.25 200     19
EDI EW0345            PG E            SG E  2.1H0.11ML         0.25 200     19
EBH Z 034509.88       PG E 14.31      SG2E                                    30
EAU Z 034510.62       PG E                                                    34
EBL Z 034510.91       PG E                                                    36
      -1
110287 LOWNET    LN 525   1544      12.5       5.0KPR    LROSEWELL,LOTHIAN      1
       638 6.76  328.65/ 662.79   2.7 0.0                  55.853   -3.140    2
  6  8 166 0.13  0.9 31.1 C C*C COALFIELD TYPE                                  3
EDI Z 063808.72       P  EU09.84      S  E 14.0H0.26M          0.25 200      8
EDI NS0638            P  E            S  EU8.75H0.11ML         0.25 200      8
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EDI EW0638            P  E             S  EU11.7H0.20ML          0.25 200    8
EAU Z 063810.80       P  ED13.25       S  E                                  20
EBL Z 063809.06       P  ED10.68       S  E                                  11
     -1
110287 LOWNET    LN 525   1546     12.5       5.0KPR    LROSEWELL,LOTHIAN     1
       64239.37  329.91/ 663.44   4.0 0.3                 55.859   -3.120    2
  6  8 183 0.14  1.6  7.6 D C*D COALFIELD TYPE                                3
EDI Z 064241.51       P  EU42.55       S  E 21.9H0.26M          0.25 200    8
EDI NS0642            P  E             S  E 16.5H0.20ML         0.25 200    8
EDI EW0642            P  E             S  E 12.0H0.21ML         0.25 200    8
EAU Z 064243.54       P  ED46.30       S  E                                  21
EBL Z 064241.50       P  E 43.42       S  E                                  11
     -1
110287LEEDS                                     5.0MJA    LLEEDS,YORKSHIRE      1
      102439.14  429.59/ 451.33  13.3 1.0                 53.957   -1.549    2
  4  5 334 0.07          C A*D COALFIELD TYPE                                 3
HPK Z 102441.6        P 1  43.55       S 1                                    5
HPK NS1024                                 16.0H0.20ML          1.0  200    5
HPK EW1024                                 26.0H0.20ML          1.0  200    5
BMY Z 102443.4        P 1  46.2        S 3                                   20
     -1
120287 LOWNET    LN 526    216       12.5     5.0KPR    LBUCKHAVEN,FIFE       1
       22223.84  338.01/ 697.79   6.9 0.0                 56.169   -2.998    2
  9 30 141 0.59  3.9 24.1 D D*C                                              3
EDI Z 022228.98       P  ID31.95       S 2E                                  30
EDI NS0222                                  7.2H0.08ML          0.25 200   30
EDI EW0222                                  3.0H0.08ML          0.25 200   30
EAU Z 022231.49       P  E                                                   46
EBL Z 022230.83       P  IU                                                  44
ESY Z 022230.83       P  EU31.71       S 4                                   37
EBH Z 022230.75       P  ID34.72       S 3                                   33
EDU Z 022230.85       P 1E                                                   42
ELO Z 022230.86       P  E                                                   56
     -1
120287 LOWNET    LN 526    333       12.5     5.0KPR    LROSEWELL,LOTHIAN     1
      104612.76  329.38/ 663.51   3.1 0.0                 55.860   -3.128    2
  6  8 178 0.08  0.7  8.6 C C*C COALFIELD TYPE                               3
EDI Z 104614.69       P  EU15.81       S  2E11.9H0.28M          0.25 200    8
EDI NS1046                                  9.4H0.12ML          0.25 200    8
EDI EW1046                                 12.1H0.19ML          0.25 200    8
EAU Z 104616.80       P  ID19.55       S  3                                  21
EBL Z 104615.02       P  E 16.80       S  3                                  11
     -1
130287 LOWNET    LN 526    535       12.5     5.0KPR    LKIRKCALDY,FIFE       1
        121 0.63  329.48/ 689.24   0.0-0.5                 56.091   -3.134    2
  5 19 224 0.05  0.9  0.9 C A*D                                              3
EDI Z 012104.69       P  E 7.91        S 2E                                  19
EDI NS0121            P  IU                    4.2H0.13ML          0.25 200   19
EDI EW0121            P  E                     1.9H0.08ML          0.25 200   19
EAU Z 012107.29       P  E                                                   34
EBL Z 012107.66       P  E                                                   36
EBH Z 012106.49       P  E                                                   29
     -1
130287 LOWNET    LN 526    562       12.5     5.0KPR    LKIRKCALDY,FIFE       1
       31522.46  330.73/ 689.04   2.4-0.5                 56.089   -3.113    2
  6 19 176 0.16  0.5  1.7 C B*C                                              3
EDI Z 031526.29       P  E 28.08       S 3E                                  19
EDI NS0315            P  E                    6.1 H0.13ML          0.25 200   19
EDI EW0315                                  2.0 H0.06ML          0.25 200   19
EAU Z 031528.83       P  E 31.08       S 3E                                  35
EBL Z 031529.14       P  E                                                   35
ESY Z 031529.08       P  E                                                   37
EBH Z 031528.05       P 1E                                                   30
     -1
130287                                          5.0MJA    LLOCH MAREE,HIGHLAND  1
      201156.50  192.46/ 876.94   5.0 1.9                 57.734   -5.487    2
  8 28 242 0.11  1.5  1.2 C B*D                                              3
MCD Z 201218.50       P 1  34.50       S 3                                  134
MCD NS2012                                 20.0H0.10ML          0.25 200  134
MCD EW                                     25.0H0.20ML          0.25 200  134
MDO Z 201209.20       P 1                                                    75
MVH Z 201209.80       P 1IU                                                  80
MLA Z 201218.40       P 3                                                   141
KPL Z 201204.5        P 1                                                    45
KPL NS2012                                 10.0H0.2 ML          1.0  200   45
KPL EW2012                                 10.0H0.15ML          1.0  200   45
KSB Z 201206.7        P 1 U13.80       S 2                                   59
KAC Z 201201.8        P 1 U                                                  29
EDI Z 201234.11       P 4E                                                  246
EDI NS2012                                  3.6H0.15ML          0.25 200  246
EDI EW2012                                  5.0H0.12ML          0.25 200  246
EAU Z 201233.39       P 4E                                                  244
EAB Z 201226.05       P 4E 46.40       S 4                                  186
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EBH Z 201228.78       P 4E 48.32       S 4                                  205
EDU Z 201228.86       P 4E                                                  200
ELO Z 201224.91       P 4E 44.56       S 4                                  177
     -1
130287 LOWNET    LN 526    832        12.5    5.0KPR    LKIRKCALDY,FIFE        1
       224811.98  331.21/ 689.72   5.5-0.4                 56.095   -3.106    2
  6 20 179 0.08  0.9  1.6 B A*C                                               3
EDI Z 224815.83       P  ID            S 2  7.9 H0.18M          0.25 200   20
EDI NS2248               IU                 6.5 H0.14ML         0.25 200   20
EDI EW2248                                  2.1 H0.07ML         0.25 200   20
EAU Z 224818.40       P  E                                                  35
EBL Z 224818.72       P  E                                                  36
ESY Z 224818.57       P  E                                                  37
EBH Z 224817.65       P  E 21.64       S 3                                  30
     -1
140287 N WALES   WA 073              25.0    5.0KPR    LLLEYN AFTERSHOCK      1
        55641.55  239.40/ 344.35  23.9 0.6                52.972   -4.392    2
 18  2 150 0.13  0.7  1.0 B A*C                                               3
WCB Z 0556                55.87       S 3E                                  46
WCB NS0556                                 7.0H0.06ML          0.25 200   46
WCB EW0556                                 7.5H0.09ML          0.25 200   46
YRC Z 055648.19       P 2IU52.74       S 2E                                 33
YRE Z 055645.30       P 3E                                                   2
WPM Z 055649.80       P 3E                                                  46
WLF Z 055648.33       P 3E 53.04       S 3E                                 35
WME Z 055649.98       P 3E 56.16       S 3E                                 48
YLL Z 055646.88       P 2IU50.75       S 2E                                 24
WST Z 0556                51.33       S 2E                                 27
WST NS0556                              12.5H0.04ML         1.0  200   27
WST EW0556                               8.1H0.04ML         1.0  200   27
WBR Z 055648.31       P 3E 53.00       S 3E                                 36
WLC Z 055649.28       P 2IU54.67       S 3E                                 41
WFB Z 055649.16       P 2E 54.50       S 3E                                 40
     -1
140287 LOWNET    LN 526    959        12.5    5.0KPR    LROSEWELL,LOTHIAN      1
        75222.46  329.00/ 663.49   2.4 0.3                 55.859   -3.134    2
  5  8 174 0.07  0.5  1.1 C A*D COALFIELD TYPE                                 3
EDI Z 075224.30       P  IU25.43       S 3E                                  8
EDI NS0752                                 6.5H0.10ML          1.0 200    8
EDI EW0752                                 8.4H0.10ML          1.0 200    8
EAU Z 075226.35       P 1ID                                                 20
EBL Z 075224.84       P 2E 25.82       S 3E                                 11
     -1
140287 LOWNET    LN 526             25.0      5.0DWR    LCOMRIE,TAYSIDE        1
       23 355.87  277.57/ 725.48   2.9 2.2              3+   56.406   -3.984    2
 14 18 204 0.25  1.6  2.6 C B*D FELT COMRIE & CRIEFF                          3
ELO Z 230359.52       P  IU61.52       S 1IU                 1.0 200    18
EAB Z 230402.04       P  ED06.01       S 1IU                               33
EBH Z 230402.50       P  IU06.51       S 2ED                               34
EDU Z 230406.60       P 1EU14.07       S 2EU                               62
EAU Z 230408.11       P  EU                                                71
EDI Z 230408.34       P 1EU16.93       S 1E  6.1H0.20M          1.0 200    73
EDI NS2304               E                EU13.3H0.28ML       1.0 200    73
EDI EW2304               EU               E  8.0H0.30ML       1.0 200    73
EBL Z 230411.90       P 1EU23.70       S 2E                                92
ESY Z 230412.83       P  IU24.90       S 2E                               101
     -1
140287 LOWNET    LN 526   1168        12.5    5.0KPR    LCOMRIE,TAYSIDE        1
       23 738.87  277.56/ 725.84   4.0 0.4                 56.409   -3.985    2
  6 18 206 0.21  0.5  7.3 D C*D                                               3
EAB Z 230745.20       P 3E 49.00       S 3E                                33
EBH Z 230745.40       P  E 49.71       S 1E 8.5 H0.06ML          0.25 200   35
ELO Z 230742.49       P 2E 44.72       S 2E                                18
     -1
150287 LOWNET    LN 526   1472        12.5    5.0KPR    LCARRINGTON,LOTHIAN    1
       21 222.39  331.82/ 661.93   4.1-0.2                 55.846   -3.089    2
  4  9 196 0.06           C A*D COALFIELD TYPE                                3
EDI Z 210224.70       P 1E 26.08       S 3E 7.4 H0.22M          0.25 200   11
EDI NS2102                                 6.4 H0.20ML         0.25 200   11
EDI EW2102                                 3.6 H0.17ML         0.25 200   11
EAU Z 210226.78       P  E                                                  23
EBL Z 210224.34       P  E                                                   9
     -1
150287 LOWNET    LN 526   1476        12.5    5.0KPR    LROSEWELL,LOTHIAN      1
       211849.11  328.55/ 662.70   0.6-0.2                 55.852   -3.141    2
  4  8 165 0.08           C A*D COALFIELD TYPE                                3
EDI Z 211851.30       P  E 52.51       S 3E                                  8
EDI NS2118                                 5.05H0.18ML         0.25 200    8
EDI EW2118                                 7.0 H0.13ML         0.25 200    8
EAU Z 211853.27       P  E                                                  20
EBL Z 211851.70       P 2E                                                  11
     -1
190287 LOWNET    LN 527             12.5    5.0KPR    LSTRAITON,LOTHIAN      1
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        83018.27  327.38/ 666.44   0.9 0.3                55.886   -3.161    2
  6  4 170 0.65  5.5  6.2 D D*C COALFIELD TYPE                                 3
EDI Z 083018.89        P  ID20.19       S  E                                  5
EDI NS0830             P  EU               IU11.0H0.16ML          1.0 200    5
EDI EW0830             P  IU               ED4.3 H0.10ML          1.0 200    5
EAU Z 083022.30        P  E 26.19       S 2E                                19
EBL Z 083021.00        P  E 25.70       S 2E                                15
      -1
190287 LOWNET    LN 527              12.5    5.0KPR    LSALINE,FIFE          1
       161657.55  297.38/ 692.64   0.6 1.4                56.115   -3.651    2
  5 17 233 0.14  0.6  0.7 C A*D                                               3
EDI Z 161704.33        P  E 09.70       S  E                               36
EDI NS1617                                12.5H0.50ML          0.25 200    36
EDI EW1617                                15.1H0.44ML          0.25 200    36
EAU Z 161703.71        P  ED08.80       S 1E                                33
EBH Z 161701.29        P 1E                                                 17
      -1
190287 JERSEY                               5.0KPR    LST.JOHN'S BAY,JERSEY 1
       171527.51                 5.6 0.0                49.263   -2.144    2
  7  4 266 0.21  2.3  4.2 C B*D                                               3
JLP Z 171529.00        P 3                4.25H0.10ML          1.0  200     4
JSA Z 171529.40        P 3  31.50       S 3                                 9
JVM Z 171529.20        P 3  30.50       S 3                                 7
JRS Z 171529.70        P 3  30.80       S 3                                 9
      -1
210287 LOWNET    LN 527              12.5    5.0KPR    LKIRKCALDY,FIFE       1
        44528.68  331.56/ 689.59   0.4-0.3                56.094   -3.100    2
  8 20 179 0.19  0.6  0.7 C B*C                                               3
EDI Z 044532.82        P  E 36.09       S  E                               20
EDI NS0445             P  IU               4.1 H0.16ML          0.25 200    20
EDI EW0445                                3.1 H0.08ML          0.25 200    20
EAU Z 044535.32        P 2E                                                 36
EBL Z 044535.72        P 1E 41.08       S 1E                                36
ESY Z 044535.59        P 2E                                                 36
EBH Z 044534.52        P 1E 39.32       S  E                               31
      -1
210287 N WALES   WA 074              25.0    5.0KPR    LLLEYN AFTERSHOCK     1
       172112.11  240.02/ 342.52  21.9 0.6                52.956   -4.382    2
 23  4 171 0.10  0.4  0.4 B A*C                                               3
WCB Z 1721                26.65       S 2E                                48
WCB NS1721                                 7.6H0.07ML          0.25 200    48
WCB EW1721                                 9.0H0.06ML          0.25 200    48
YRC Z 172118.86        P 2ID23.50       S 3E                                35
YRE Z 172115.86        P 3EU18.10       S 3E                                 4
WPM Z 172120.30        P 2EU26.20       S 3E                                46
WLF Z 172119.11        P 3E 23.70       S 2E                                37
WME Z 172120.70        P 3E 26.72       S 2E                                49
YLL Z 172117.45        P 2IU21.17       S 2E                                25
WST Z 172117.77        P 2ID21.65       S 2E                                27
WST NS1721                                10.6H0.05ML          1.0 200    27
WST EW1721                                10.0H0.05ML          1.0 200    27
WVR Z 172121.71        P 3E 28.20       S 2E                                55
WBR Z 172118.66        P 3E 23.24       S 3E                                35
WLC Z 172119.62        P 2IU24.32       S 3E                                41
WFB Z 172119.20        P 2EU24.09       S 3E                                38
      -1
220287 LOWNET    LN 527              12.5    5.0KPR    LJEDBURGH,BORDERS     1
        72045.70  371.69/ 618.15   0.5 0.5                55.456   -2.448    2
  6 13 163 0.45  3.3  2.5 C C*C                                               3
EDI Z 072062.49        P 3E                                                 70
ESY Z 072055.60        P 3E                                                 52
ESK Z 0720                62.00       S 2E                                50
ESK NS0720                                 4.0 H0.12ML          0.25 200    50
ESK EW0720                                 2.6 H0.10ML          0.25 200    50
XSO Z 072048.12        P  ID51.32       S  I                                13
ECK Z 072055.20        P  E 63.42       S 1E                                53
      -1
230287                                      5.0MJA    LMARKET DRAYTON,SALOP 1
         2 837.76  371.20/ 338.12  10.5 2.6                52.939   -2.429    2
 18 47 115 0.08  0.3  0.8 B A*C                                               3
HPK Z 020857.9         P 1IU72.2        S 3E                              125
HPK NS0208                                15.0H0.14ML          2.5  200   125
HPK EW0208                                15.0H0.21ML          2.5  200   125
BUR Z 020858.4         P 2  73.00       S 3E                              127
BMY Z 020855.75        P 1ID68.80       S 3E                              111
MCH Z 020855.9         P 1E 69.10       S 1                               112
MCH NS0208                                 4.5H0.18ML          2.5  200   112
MCH EW0208                                16.0H0.13ML          1.0  200   112
SBD Z 020847.30        P 1IU                                                56
HAE Z 020854.37        P 2E                                                101
HCG Z 020855.30        P 2E                                                108
HTR Z 020856.00        P 1E                                                112
HLM Z 020847.05        P 1IU                                                56
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BSE Z 020846.09        P 1E                                                  47
BZO Z 020846.58        P 1E 53.30        S 2E                                53
BBR Z 020847.52        P 1E                                                  57
BFR Z 020848.42        P 3E                                                  64
      -1
230287N WALES                                    5.0       LL.TRAWSFYNYDD,GWYNEDD 1
        851 1.02  269.58/ 339.23  15.5-0.2                    52.934   -3.941    2
 17  6  86 0.16  0.7  0.9 B B*A                                                  3
WST Z 08514.02         P 1ID                                                    6
WST NS0851                 5.71        S 3  4.5 H0.05ML          1.0  200     6
WST EW0851                              4.8 H0.06ML           1.0  200     6
WVR Z 08516.38         P 1IU9.29         S 3                                  27
WBR Z 08514.15         P 1ID6.00         S 2                                   9
WLC Z 08514.42         P 2EU6.28         S 3                                  13
WFB Z 08516.36         P 2EU9.90         S 2                                  29
YRE Z 08517.11         P 1IU11.35        S 3                                  33
YLL Z 08516.10         P 1ID9.60         S 2                                  28
YRC Z 0851                16.82         S 3                                  55
WLF Z 0851                15.00         S 3                                  50
WME Z 0851                17.24         S 3                                  57
      -1
240287 LOWNET    LN 527                12.5    5.0KPR    LROSEWELL,LOTHIAN       1
       175127.40  329.47/ 662.67   6.0 0.5                 55.852   -3.127    2
  7  9 118 0.10  0.7  1.0 B A*B COALFIELD TYPE                                   3
EDI Z 175129.42        P  IU31.06        S  I 10.3H0.30M           1.0  200     9
EDI NS1751                ID                   7.0H0.20ML          1.0  200     9
EDI EW1751                EU                   5.9H0.18ML          1.0  200     9
EAU Z 175131.57        P  ID34.20        S 1E                                 21
EBL Z 175129.60        P  ID31.50        S 1E                                 10
ESY Z 175133.46        P 2E                                                  33
EBH Z 175136.70        P 2E                                                  50
      -1
250287 LOWNET    LN 527                12.5    5.0KPR    LPOLTON,LOTHIAN         1
        2 355.91  329.93/ 664.24   6.8-0.5                 55.866   -3.120    2
  5  8 188 0.01  0.2  0.2 C A*D COALFIELD TYPE                                   3
EDI Z 020357.90        P 1E 59.36        S 1E 6.9 H0.20M           0.25 200     8
EDI NS0203                                    5.1 H0.18ML           0.25 200     8
EDI EW0203                                    4.0 H0.07ML           0.25 200     8
EAU Z 020360.03        P 2E                                                  21
EBL Z 020358.48        P 3E 60.32        S 2E                                11
      -1
250287 LOWNET    LN  528               12.5    5.0KPR    LCOMRIE,TAYSIDE         1
       142544.01  276.76/ 726.02   2.3 0.9                 56.410   -3.998    2
  7 19 209 0.24  0.6  0.6 C B*D                                                 3
EAB Z 142550.20        P  E 54.18        S 2E                                33
EBH Z 142550.70        P  IU55.02        S 2E                                35
EDU Z 142555.10        P  E                                                  63
ELO Z 142547.72        P  IU49.73        S 2E                                19
EDI Z 142554.49        P 2E 64.63        S 3E                                74
EDI NS1425                                    6.5 H0.08ML           0.25 200    74
EDI EW1425                                    4.5 H0.10ML           0.25 200    74
      -1
270287 LOWNET    LN 528                12.5    5.0KPR    LROSEWELL,LOTHIAN       1
        1 243.39  328.73/ 662.59   0.0 1.3                 55.851   -3.139    2
 10  9 122 0.10  0.4  0.4 B A*B COALFIELD TYPE                                   3
EDI Z 010245.60        P  IU46.72        S 2E                                 9
EDI NS0102                                   10.3H0.21ML           2.5 200     9
EDI EW0102                                   15.5H0.22ML           2.5 200     9
EAU Z 010247.70        P  ID50.80        S 3E                                20
EBL Z 010245.95        P  ID47.40        S 3E                                11
ESY Z 010250.08        P 2E                                                  34
EBH Z 010252.87        P 1E 59.56        S 2E                                50
EDU Z 010257.45        P 2E                                                  78
      -1
070387 LOWNET    LN 529                12.5    5.0KPR    LDANDERHALL,LOTHIAN     1
        34737.70  333.13/ 670.44   0.4 0.0                 55.922   -3.070    2
  6  7 180 0.16  2.0  1.9 C B*D COALFIELD TYPE                                   3
EDI Z 034739.60        P  ID40.63        S 1E                                 7
EDI NS0347                                   16.0H0.12ML           0.25 200     7
EDI EW0347             P  IU                 10.8H0.12ML           0.25 200     7
EAU Z 034743.38        P 1E 46.60        S 3E                                26
EBL Z 034741.40        P 1E                                                  17
ESY Z 034743.31        P 1E                                                  29
      -1
070387                                           5.0MJA    LBRAEMORE,HIGHLAND      1
       234218.14  217.42/ 873.18  11.1 0.7                 57.711   -5.065    2
  6 27 341 0.10  3.3  4.8 D C*D                                                 3
KPL Z 234227.50        P 1ID34.2         S 3E                                54
KPL NS2342                                    8.0H0.10ML           0.25 200    54
KPL EW2342                                    4.0H0.08ML           0.25 200    54
KSB Z 234229.65        P 3E 35.5           3E                                60
KAC Z 234223.20        P 1ID27.15        S 2                                 27
      -1
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080387 LOWNET    LN 529              12.5    5.0KPR    LROSEWELL,LOTHIAN      1
       193011.31  329.05/ 664.05   2.8-0.3                55.864   -3.134    2
  6  7 177 0.07  0.8 13.5 C C*C COALFIELD TYPE                               3
EDI Z 193013.05       P 1E 14.24       S 2E                                  7
EDI NS1930                                7.1 H0.08ML          0.25 200     7
EDI EW1930                                7.5 H0.13ML          0.25 200     7
EAU Z 193015.31       P 1E 17.92       S 2E                                 20
EBL Z 193013.72       P 1E 15.50       S 2E                                 12
      -1
090387HEREFORD                                 5.0MJA    LTELFORD,SHROPSHIRE    1
       23 857.50  362.76/ 311.69   3.4 1.3                52.701   -2.551    2
 10 28 166 0.19  1.1  2.5 C B*C                                              3
MCH Z 230911.60       P 1E 21.7        S 1                                  84
MCH NS2309                                9.0H0.10ML          0.25 200     84
MCH EW2309                               10.0H0.14ML          0.25 200     84
SBD Z 230907.0        P 0IU13.3        S 1                                  53
HAE Z 230910.27       P 0ID                                                 74
HCG Z 230912.22       P 0ID                                                 86
HTR Z 230911.90       P 1E                                                  85
HLM Z 230903.14       P 0IU                                                 31
BSE Z 230902.5        P 1E                                                  28
BBR Z 230906.9        P 0ID                                                 53
      -1
110387 LOWNET    LN 529              12.5    5.0KPR    LROSEWELL,LOTHIAN      1
       25215.54  329.00/ 662.52   3.8 0.4                55.851   -3.134    2
  6  9 169 0.11  1.2  7.4 C C*C COALFIELD TYPE                               3
EDI Z 025217.45       P 1E 19.00       S 2E                                  9
EDI NS0252                               15.1H0.20ML          0.25 200     9
EDI EW0252                               23.0H0.21ML          0.25 200     9
EAU Z 025219.55       P  ID22.00       S 2E                                 20
EBL Z 025217.73       P 2E 19.41       S 2E                                 10
      -1
120387                                         5.0MJA    LBRIDGNORTH,SALOP      1
       92859.00  370.05/ 287.25  14.0 2.5                52.482   -2.441    2
 16 15  86 0.14  0.6  0.9 B A*B                                              3
BSE Z 092902.67       P 0IU                                                 15
BZO Z 092903.81       P 0IU07.03       S 3                                  25
BFR Z 092904.77       P 0ID                                                 30
BBR Z 092907.17       P 0IU                                                 47
MCH Z 092909.97       P 0IU18.2        S 3                                  66
SBD Z 092911.25       P 0IU                                                 73
HAE Z 092907.93       P 0IU                                                 50
HCG Z 092913.10       P 1IU23.20       S 3                                  85
HTR Z 092910.97       P 0IU                                                 72
HLM Z 092904.68       P 0ID                                                 31
MCH NS0929                                7.5H0.12ML          2.5  200     66
MCH EW0929                               13.0H0.08ML          2.5  200     66
CWF Z 092912.20       P 3  21.1        S 3                                  82
HPK Z 092925.3        P 0  46.0        S 3                                 173
HPK NS0929                                7.5H0.14ML          2.5  200    173
HPK EW0929                                9.0H0.14ML          2.5  200    173
BMY Z 092924.00       P 3                                                  160
      -1
130387 LOWNET    LN 530              12.5    5.0KPR    LLOANHEAD,LOTHIAN      1
       74350.27  328.63/ 666.50   6.1 0.1             2+    55.886   -3.141    2
  6  5 189 0.12  1.5  2.5 C B*D COALFIELD TYPE,FELT      LOANHEAD              3
EDI Z 074351.93       P  IU52.89       S 2E                                  5
EDI NS0743            P  IU                6.4 H0.11ML          1.0  200     5
EDI EW0743            P  ED                5.0 H0.11ML          1.0  200     5
EAU Z 074354.30       P 1E 57.05       S 2E                                 20
EBL Z 074353.08       P  ID55.52       S 2E                                 14
      -1
140387 LOWNET    LN 530              12.5    5.0KPR    LMONIAIVE,DUM & GALL   1
       133921.96  265.21/ 591.87  20.0 0.5                55.203   -4.118    2
  4 59 345 0.15  0.0  0.0 C B*D                                              3
EDI Z 133939.57       P 2E 52.90       S 2E                                100
EDI NS1339                                1.4 H0.13ML          0.25 200    100
EDI EW1339                                2.9 H0.07ML          0.25 200    100
EAU Z 133936.90       P 2E 48.80       S 2E                                 83
EBL Z 133938.30       P 2E 51.70       S 2E                                 93
ESY Z 133943.13       P 2E 59.78       S 3E                                124
EAB Z 133940.34       P 3E 56.08       S 3E                                111
ESK Z 133932.00       P 1E 39.73       S 3E                                 59
ESK NS1339                                1.4 H0.13ML          0.25 200     59
ESK EW1339                                2.9 H0.07ML          0.25 200     59
XDE Z 133936.51       P 3E 48.97       S 3E                                 87
XSO Z 133943.10       P 2E 58.60       S 3E                                123
ECK Z 133932.78       P 1E 40.20       S 3E                                 63
      -1
170387 LOWNET    LN 530              12.5    5.0KPR    LBONNYRIGG,LOTHIAN     1
       223750.23  331.07/ 664.37   6.2 0.1                55.868   -3.102    2
  6  8 201 0.06  1.0  1.6 C A*D COALFIELD TYPE                               3
EDI Z 223752.22       P  E 53.76       S 2E                                  8
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EDI NS2237                                    13.2H0.16ML          0.25 200    8
EDI EW2237                                    19.6H0.10ML          0.25 200    8
EAU Z 223754.59       P  IU57.34       S 2E                                   22
EBL Z 223752.69       P 1E 54.49       S 3E                                   11
     -1
180387 LOWNET    LN 530              12.5    5.0KPR    LKIRKCALDY,FIFE         1
       12657.02  331.07/ 690.00   5.8 0.0                 56.098   -3.108     2
  9 20 179 0.08  0.5  0.9 B A*C OFFSHORE,COALFIELD TYPE                        3
EDI Z 012700.84       P  ID03.79       S 2E                                   20
EDI NS0127                                    9.4 H0.15ML          0.25 200   20
EDI EW0127                                    6.1 H0.10ML          0.25 200   20
EAU Z 012703.49       P 1E 09.00       S 3E                                   36
EBL Z 012703.75       P  ID08.43       S 2E                                   36
ESY Z 012703.62       P  ID08.65       S 2E                                   37
EBH Z 012702.52       P  ID06.80       S 2E                                   30
     -1
230387 LOWNET    LN 531              12.5    5.0KPR    LROSEWELL,LOTHIAN       1
       19 246.09  327.09/ 663.70   0.5-0.4                 55.861   -3.165     2
  4  7 153 0.04           C A*D COALFIELD TYPE                                 3
EDI Z 190247.90       P 1E 49.04       S 3E 4.7 H0.11M      0.25 200    7
EDI NS1902                                    4.4 H0.17ML          0.25 200    7
EDI EW1902                                    6.0 H0.09ML          0.25 200    7
EAU Z 190250.02       P 2E                                                   18
EBL Z 190249.01       P 2E                                                   12
     -1
240387 LOWNET    LN 531              12.5    5.0KPR    LESKBANK, LOTHIAN       1
       34239.77  332.18/ 667.03   4.4-0.2                 55.892   -3.085     2
  5  7 230 0.15  4.7  7.0 D C*D COALFIELD TYPE                                 3
EDI Z 034241.68       P 1E 42.65       S 2E                                    7
EDI NS0342                                    10.5H0.15ML          0.25 200    7
EDI EW0342                                    10.5H0.08ML          0.25 200    7
EAU Z 034244.30       P 1E                                                   24
EBL Z 034242.35       P 2E 44.75       S 3E                                   13
     -1
240387 LOWNET    LN 531              12.5    5.0KPR    LDANDERHALL,LOTHIAN     1
         423 2.52  331.54/ 668.69   7.8 0.1                 55.907   -3.095     2
  6  6 240 0.17  3.0  2.7 D C*D COALFIELD TYPE                                 3
EDI Z 042304.43       P 1E 05.79       S 2E                                    6
EDI NS0423                                    9.3 H0.20ML          0.25 200    6
EDI EW0423                                    10.3H0.20ML          0.25 200    6
EAU Z 042307.20       P 2E 10.13       S 3E                                   24
EBL Z 042305.39       P 3E 08.22       S 3E                                   15
     -1
300387 LOWNET    LN 532              12.5    5.0KPR    LCRIANLARICH,CENTRAL    1
       35250.86  243.25/ 732.37   8.3 1.1                 56.457   -4.544     2
  5 33 291 0.07  4.9115.4 D C*D                                               3
EDI Z 0353              22.13       S 3E                                     103
EDI NS0353                                  6.3H0.08ML          0.25 200   103
EDI EW0353                                  5.0H0.10ML          0.25 200   103
EAU Z 035307.95       P 3E                                                   96
EAB Z 035256.77       P 2E 61.00       S 3E                                   33
EBH Z 035302.82       P 2E                                                   68
EDU Z 035307.25       P 3E 18.55       S 4E                                   95
ELO Z 035259.60       P 2E 66.06       S 3E                                   51
     -1
010487 LOWNET    LN 533              12.5    5.0KPR    LDALHOUSIE,LOTHIAN      1
       194745.96  331.96/ 663.97   8.4 0.2                 55.864   -3.087     2
  6  9 208 0.00  0.0  0.1 C A*D COALFIELD TYPE                                 3
EDI Z 194748.29       P 1E 50.00       S 2E                                    9
EDI NS1947                                    5.0 H0.13ML           1.0 200    9
EDI EW1947                                    16.5H0.14ML          0.25 200    9
EAU Z 194750.39       P 2E 53.62       S 2E                                   23
EBL Z 194748.49       P 2E 50.33       S 2E                                   11
     -1
020487 LOWNET    LN 533              12.5    5.0KPR    LSHERIFFHALL,LOTHIAN    1
       175538.40  332.15/ 668.01   7.2-0.1                 55.900   -3.085     2
  5  7 238 0.03  1.4  0.7 C B*D COALFIELD TYPE                                 3
EDI Z 175540.36       P 1E 41.72       S 2E                                    7
EDI NS1755                                    8.8 H0.09ML          0.25 200    7
EDI EW1755                                    12.5H0.21ML          0.25 200    7
EAU Z 175542.91       P 2E 46.39       S 3E                                   24
EBL Z 175541.45       P 2E                                                   14
     -1
030487 LOWNET    LN 533              12.5    5.0KPR    LKIRKCALDY,FIFE         1
       45619.33  333.47/ 689.02  15.0-0.3                 56.089   -3.069     2
  7 20 181 0.13  2.6  4.2 D C*D                                               3
EDI Z 045623.52       P 1E 26.80       S 2E                                   20
EDI NS0456                                  7.5H0.10ML          0.25 200   20
EDI EW0456                                  3.3H0.09ML          0.25 200   20
EAU Z 045626.18       P 2E                                                   36
EBL Z 045626.45       P 1E                                                   35
ESY Z 045625.88       P 3E                                                   34
EBH Z 045625.32       P 1E 29.96       S 2E                                   33
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      -1
030487 LOWNET     LN 533                12.5     5.0KPR     LROSEWELL,LOTHIAN      1
        51759.81  328.50/ 661.89    2.4 0.0                    55.845   -3.142     2
  5  9 160 0.14  0.1  0.2 C A*D COALFIELD TYPE                                      3
EDI Z 051801.80        P 1E 02.98        S 2E                                     9
EDI NS0518                                    11.5H0.10ML           0.25 200     9
EDI EW0518                                    16.5H0.11ML           0.25 200     9
EAU Z 051803.78        P 1E 06.36        S 2E                                    20
EBL Z 051802.04        P 2E                                                      10
      -1
040487 CORNWALL                                    5.0        LPERRANPORTH,CORNWALL  1
        2243 0.52  173.45/  51.07    3.4 0.3                    50.315   -5.183     2
 10 13 246 0.06  0.8  2.9 C B*D                                                    3
CST Z 224302.95        P 0ID04.89        S 1  10.2H0.05ML           1.0 200    13
CCA Z 224303.14        P 0IU05.05        S 2                                    15
CR2 Z 224303.50        P 0ID05.73        S 1                                    17
CCO Z 224304.10        P 0ID06.70        S 1  12.6H0.05ML           1.0 200    20
CSA Z 224304.15        P 2E                                                      21
CBW Z 2243                  06.50        S 2                                    19
      -1
120487                                             5.0        LWELSHPOOL,POWYS       1
       11 456.09  327.62/ 309.60   10.8 2.4                    52.679   -3.071     2
 25 22  61 0.15  0.4  0.6 B A*C                                                    3
WFB Z 110507.14        P 2E 14.57        S 3                                    65
BZO Z 110507.71        P 0ED16.12        S 2E                                   70
BFR Z 110508.89        P 1E                                                     78
BBR Z 110510.56        P 0E                                                     88
HPK Z 110522.80        P 1ID                                                   172
HPK NS1105                                     8.5H0.15ML           1.0  200   172
HPK EW1105                                     9.5H0.11ML           1.0  200   172
YRC Z 110515.57        P 3E 28.97        S 3                                   119
MCH Z 110508.39        P 2E 17.51        S 2E                                   76
MCH NS1105                                     2.8 H0.11ML          1.0  200    76
MCH EW1105                                     2.9 H0.11ML          1.0  200    76
SBD Z 110501.30        P 1ID                                                    28
YRE Z 110512.15        P 1ID                                                    97
HCG Z 110505.59        P 1IU12.27        S 2                                    56
HGH Z 110515.66        P 1ID                                                   117
HTR Z 110507.43        P 1ID                                                    68
HLM Z 110500.24        P 1ID                                                    22
WVR Z 110503.04        P 1IU                                                    39
WBR Z 110506.07        P 1IU12.8         S 3                                    59
WLC Z 110506.17        P 1ID                                                    59
WLF Z 110514.07        P 3E 26.75        S 3                                   112
YRH Z 110513.66        P 2ED                                                  107
      -1
130487 LOWNET     LN 534                12.5     5.0KPR     LCRAINLARICH,CENTRAL   1
         4 640.46  243.86/ 734.26    9.0 1.6                    56.475   -4.535     2
  5 34 291 0.14  5.1 68.4 D D*D                                                    3
EDI Z 040658.28        P 3E 72.00        S 2E                                   104
EDI NS0406                                    16.5H0.11ML           0.25 200   104
EDI EW0406                                    10.0H0.14ML           0.25 200   104
EAU Z 040656.78        P 3E                                                     97
EAB Z 040646.57        P 2E 51.10        S 3E                                   34
EBH Z 040652.60        P 3E 61.90        S 3E                                   68
ELO Z 040649.20        P 2E 55.30        S 3E                                   51
      -1
140487N WALES                                      5.0        LWELSHPOOL,POWYS       1
       11 340.17  329.04/ 309.75   14.7 1.0                    52.680   -3.050     2
  7 21 178 0.06  1.0  2.8 C B*C                                                    3
WVR Z 110347.27        P 2IU                                                    40
WBR Z 110350.29        P 3E                                                     60
SBD Z 110345.50        P 2ID                                                    29
HCG Z 110349.71        P 3E 56.49        S 2  3.3 H0.11ML           1.0  200   57
HLM Z 110344.51        P 1ID47.37        S 2  11.2H0.09ML           1.0  200   21
      -1
160487                                             5.0        LCOVENTRY,WEST MIDLANDS1
       234419.41  430.57/ 269.97    0.3 1.8                    52.327   -1.551     2
 22 33 230 0.31  1.6  1.3 D C*D                                                    3
BBR Z 234426.06        P 1ID30.81        S 2                                    35
BFR Z 234426.13        P 0ID31.06        S 2                                    33
BZO Z 234427.25        P 1ID32.74        S 2   1.8H0.37ML           1.0  200   42
BSE Z 234429.00        P 2E                                                     52
MCH Z 234437.36        P 1ID50.20        S 1ID                                  106
MCH NS2344                                     3.8 H0.10ML           1.0 200   106
MCH EW2344                                     4.0 H0.09ML           1.0 200   106
SBD Z 234442.11        P 3E 58.69        S 2E                                   132
HAE Z 234432.62        P 1E 42.40        S 2E                                    75
HCG Z 234443.70        P 3E 60.89        S 2E                                   144
HGH Z 234438.79        P 3E                                                   115
HTR Z 234439.62        P 2E 54.07        S 2E                                   121
HLM Z 234435.46        P 1E 47.08        S 3E                                    93
HPK Z 234448.3         P 2E 70.2         S 2E                                   181
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HPK NS2344                                        6.7 H0.19ML          1.0  200  181
HPK EW2344                                        5.0 H0.19ML          1.0  200  181
     -1
180487                                             5.0       LBUXTON,DERBYSHIRE      1
       112930.39  412.81/ 375.66   2.2 1.9                    53.277   -1.808     2
 11 66 169 0.23  2.0  1.3 C B*D                                                     3
BBR Z 112943.16       P 1ED52.80       S 2                                       75
BZO Z 112944.08       P 2E                                                       87
BSE Z 112945.02       P 1ID                                                      88
MCH Z 1129                 75.50       S 3E                                     164
MCH NS1129                                        7.5 H0.13ML          0.25 200  164
MCH EW1129                                        9.4 H0.09ML          0.25 200  164
SBD Z 112948.20       P 1E 61.10       S 3E                                     106
HTR Z 112949.22       P 3E 62.50       S 3E                                     166
HPK Z 112943.63       P  E 52.88       S  E                                      76
BMY Z 112941.92       P 1E 50.36       S 3                                       66
HPK NS1129                                        6.0 H0.12ML          2.5  200   76
HPK EW1129                                        7.6 H0.10ML          2.5  200   76
     -1
180487                                             5.0MJA    LSHIEL BRIDGE,HIGHLAND 1
       1628 2.80  190.51/ 820.03   1.9 0.3                    57.223   -5.470     2
  4  3 202 0.05  0.0  0.0 C A*D                                                     3
KPL Z 162806.33       P 0IU08.70       S 1                                       17
KPL NS1628                                         9.0H0.17ML          0.25 200   17
KPL EW1628                                        16.0H0.17ML          0.25 200   17
KSB Z 162803.73       P 0IU                                                       3
KAC Z 162808.87       P 1E                                                       33
     -1
190487 LOWNET    LN 535              12.5    5.0KPR    LBORELAND,DUM & GALL    1
        53454.88  313.58/ 592.75   2.7 0.6                    55.221   -3.359     2
  8 14 248 0.07  0.8  2.0 C B*D                                                     3
EAU Z 053507.16       P 2E 15.99       S 3E                                      70
EBL Z 0535                 14.58       S 3E                                      65
ESY Z 053510.45       P 2E                                                       91
ESK Z 053457.74       P  IU59.96       S 3E                                      14
ESK NS0534                                        5.5H0.10ML          2.5  200   14
ESK EW0534                                        7.7H0.06ML          2.5  200   14
ECK Z 053457.99       P  IU60.11       S 3E                                      15
XAL Z 053510.40       P 2E 21.35       S 3E                                      84
XSO Z 053507.79       P 2E                                                       76
     -1
200487                                             5.0        NORTH SEA            1
        51852.08                  10.6 2.5                    59.573    1.784     2
 18177 185 0.65  5.0  6.1 D D*D                                                     3
SUE Z 051926.0        P 1  50.4        S 3                                      233
HYA Z 051934.6        P 1  65.9        S 3                                      301
BER Z 051924.2        P 1  47.4        S 3                                      218
ODD Z 051932.0        P 1  61.0        S 3                                      277
KMY Z 051922.6        P 1  45.0        S 3                                      201
ASK Z 051923.8        P 1  46.4        S 3                                      216
LRW Z 051920.2        P 3  39.1        S 1                                      177
LRW NS0519                                        9.0H0.13ML          1.0  200  177
LRW EW0519                                       14.0H0.12ML          1.0  200  177
SAN Z 051918.2        P 3  38.7        S 1                                      177
YEL Z 051921.0        P 3  44.8        S 2                                      193
     -1
210487 LOWNET    LN 535              12.5    5.0KPR    LCOMRIE,TAYSIDE         1
       113310.90  276.96/ 726.88   2.4 1.5              2+   56.418   -3.995     2
 11 18 212 0.15  0.6  0.7 C A*D FELT COMRIE                                        3
EDI Z 113323.60       P 3E 32.56       S 2E                                      75
EDI NS1133                                        7.0H0.10ML          1.0 200   75
EDI EW1133                                        4.0H0.09ML          1.0 200   75
EAU Z 113323.49       P 2E                                                       72
ESY Z 113327.97       P 3E 40.15       S 3E                                     102
EAB Z 113317.13       P 1ID21.29       S 3E                                      33
EBH Z 113317.59       P 1IU22.12       S 1I                                      36
EDU Z 113321.85       P 1E 29.47       S 3E                                      62
ELO Z 113314.37       P  IU16.45       S 3E                                      18
     -1
230487 CORNWALL                                    5.0       LFALMOUTH BAY,CORNWALL 1
       185210.81  181.73/  30.65   0.6-0.7                    50.135   -5.055     2
  6  5 269 0.02  0.6  4.2 C B*D                                                     3
CBW Z 185211.59       P 1I                                                        5
CR2 Z 185212.37       P 2                                                         9
CCO Z 185212.58       P 0ID                                                      10
CST Z 185212.59       P 0IU                                                      10
CGH Z 185212.96       P 1E                                                       12
CCA Z 185213.24       P 1ID                                                      14
CME Z 185212.40       P 4                                                        11
CME NS1852                                        4.0 H0.05ML          0.25 200  11
CME EW1852                                        6.6 H0.05ML          0.25 200  11
     -1
260487 LOWNET    LN 536              12.5    5.0KPR    LCHARTERSHALL,CENTRAL   1
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       852 6.17  276.64/ 688.47   2.7 1.1                  56.073   -3.982    2
 11 26 172 0.07  0.3  1.3 B A*C                                                 3
EDI Z 085215.48       P 3E 21.80       S 3E                                   52
EDI NS0852                                        3.1 H0.12ML          1.0 200   52
EDI EW0852                                        3.7 H0.09ML          1.0 200   52
EAU Z 085213.66       P 2E 19.16       S 2E                                   42
EAB Z 085211.06       P  IU14.39       S 2E                                   26
EBH Z 085212.52       P 3E 17.45       S 3E                                   35
EDU Z 085219.95       P 3E 29.70       S 3E                                   80
ELO Z 085214.60       P 2E 20.84       S 3E                                   47
     -1
280487N WALES                                  5.0       LLLEYN AFTERSHOCK      1
       211035.95  239.24/ 344.90  24.9 1.1                  52.977   -4.395    2
 21  2  81 0.10  0.3  0.7 A A*A                                                 3
WCB Z 211043.93       P 3E                                                    46
WCB NS2110                                        5.1 H0.06ML          1.0  200  46
WCB EW2110                49.99       S 3     6.6 H0.06ML          1.0  200  46
YRC Z 211042.54       P 2ED47.18       S 2                                    33
YRE Z 211039.85       P 1IU                                                    2
WPM Z 211044.23       P 1IU                                                   45
WLF Z 211042.78       P 2E 47.45       S 3                                    35
WME Z 211044.48       P 2E 50.59       S 3                                    47
YLL Z 211041.43       P 1IU45.24       S 2                                    24
WST Z 211042.0        P 2E                                                    27
WST NS2110                46.07       S 3    10.0H0.06ML          2.5  200  27
WST EW2110                                        8.2 H0.07ML          2.5  200  27
YRH Z 211041.33       P 1IU45.06       S 2                                    22
WBR Z 211042.97       P 1ID47.76       S 3                                    36
WLC Z 211043.9        P 2E                                                    41
WFB Z 211043.85       P 2E 48.58       S 3                                    41
     -1
290487N WALES                                  5.0       LLLEYN AFTERSHOCK      1
        94218.98  243.87/ 347.81  17.1 0.1                  53.004   -4.327    2
  6  7 214 0.23  3.5  3.5 D C*D                                                 3
YRC Z 094225.18       P 2E                                                    32
YRE Z 094222.23       P 1I 23.93       S 2                                     7
WLF Z 0942                28.89       S 2                                    32
YLL Z 094222.69       P 1IU26.07       S 1   13.1H0.09ML          0.25 200  18
     -1
010587 HEREFORD  HF 413              12.5     5.0KPR     LMELTON MOWBRAY,LEICS  1
        52151.87  479.91/ 313.62   7.6 2.1             2+   52.714   -0.817    2
 18 23 135 0.13  0.6  1.1 B A C FELT OAKHAM                                     3
MCH Z 052218.17       P 1E 37.43       S 2E                                  169
MCH NS0522                                        16.0H0.10ML          0.25 200  169
MCH EW0522                                        14.5H0.10ML          0.25 200  169
BBR Z 052202.97       P 1ID10.64       S 3     8.6H0.07M            2.5  200   66
BFR Z 052206.16       P 1ID15.61       S 3                                    87
BSE Z 052207.92       P 1ID19.61       S 3     4.5H0.16M            2.5  200   98
UNIVZ 052156.47       P  IU59.67       S 1     8.7H0.09ML           0.25   4   23
CWF Z 052157.71       P  ID                                                   33
AWH Z 052211.34       P 2E                                                   120
ABA Z 052213.35       P 2E                                                   134
AWI Z 052216.16       P 3E                                                   153
APA Z 052217.25       P 3E                                                   163
HPK Z 052215.46       P 2E 32.44       S 2                                   148
HPK NS0522                                        12.5H0.13ML          1.0 200  148
HPK EW0522                                        16.6H0.12ML          1.0 200  148
BMY Z 052215.21       P 3E 32.38       S 2                                   145
     -1
010587 HEREFORD  HF413               12.5     5.0KPR     LMELTON MOWBRAY,LEICS  1
           6 952.12  479.38/ 316.73  10.5 2.7             4+   52.742   -0.824    2
 22 24 129 0.34  1.4  2.0 C C C FELT OAKHAM                                     3
MCH Z 061018.41       P  IU37.75       S 2E                                  170
MCH NS0610                                        8.1 H0.09ML          2.5 200  170
MCH EW0610                                        7.4 H0.11ML          2.5 200  170
BBR Z 061003.30       P  IU11.1        S 3     4.6H0.11ML           10.0 200   66
BZO Z 061007.50       P 4  18.69       S 3                                    89
BSE Z 061008.14       P 2EU19.12       S 3     5.0H0.15ML           10.0 200   99
UNIVZ 060956.85       P  IU60.24       S 2    13.0H0.08ML           1.0   4   24
CWF Z 060958.05       P  IU                                                   33
APA Z 061017.70       P  ID34.99       S 3                                   164
AWH Z 061011.41       P 2E 24.85       S 2                                   121
ABA Z 061013.75       P  ID28.81       S 2                                   134
AWI Z 061016.54       P  ID34.07       S 3                                   154
BUR Z 061010.79       P 3E                                                   113
BMY Z 061014.00       P 2E                                                   142
HPK Z 061014.64       P 2E 32.74       S 3                                   145
HPK NS0610                                        4.9H0.20ML           10.0 200  145
     -1
020587 LOWNET    LN 537              12.5     5.0KPR     LINVERGARRY,HIGHLAND   1
       133623.10  241.09/ 794.40   5.9 1.5                  57.013   -4.617    2
 18 54 155 0.27  1.2  3.5 C B*D                                                 3
EAU Z 133648.10       P 3E                                                   149
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EAB Z 133638.49        P 1E 48.70        S 3E 12.6H0.04M            0.25 200   94
EDU Z 133641.33        P 2E                                                    111
EBH Z 133641.22        P 2E 53.98        S 3E                     0.25 200   109
ELO Z 133636.25        P 1E 45.79        S 2E 13.0H0.10M          0.25 200   82
PCO Z 133642.72        P 1E                                                    119
PMS Z 133644.50        P 2E 59.40        S 3E                                  130
PGB Z 1336                  60.29        S 3E                                  134
PGB NS1336                                     5.5 H0.15ML      0.25 200   134
PGB EW1336                                     6.8 H0.11ML      0.25 200   134
KPL Z 133635.60        P 0IU44.5         S 3                                   72
KPL NS1336                                      7.0H0.10ML      1.0  200   72
KPL EW1336                                      5.5H0.13ML      1.0  200   72
KAR Z 1336                  44.5         S 2                                   75
KSB Z 133632.40        P 0IU38.5         S 3                                   54
KAC Z 133634.25        P 2E 43.0         S 3                                   68
     -1
030587 LOWNET     LN 537                12.5     5.0KPR     LBLACKFORD,TAYSIDE     1
       14 829.83  292.01/ 708.28   3.6 0.6                  56.255   -3.743     2
 11 15 106 0.11  0.4  1.1 B A*C                                                  3
EDI Z 140838.90        P 1E 45.11        S 2E                                  51
EDI NS1408                                     5.2H0.10ML      0.25 200   51
EDI EW1408                                     3.6H0.08ML      0.25 200   51
EAU Z 140838.56        P 1E                                                    49
EBL Z 140844.51        P 2E                                                    69
EAB Z 140836.73        P  IU41.48        S 3E                                  38
EBH Z 140832.80        P  IU34.90        S 1IU                                 15
EDU Z 140839.83        P 3E 46.59        S 2E                                  56
ELO Z 140834.49        P 1ED37.56        S 2E                                  24
     -1
030587                                          5.0        LMULL,HIGHLAND         1
       224820.84  140.16/ 761.91  11.3 2.5                  56.677   -6.243     2
 16 37 255 0.25  1.6  1.6 C B*D                                                  3
EDI Z 224851.35        P 3E                                                   207
EDI NS2248                                     8.0H0.17ML      1.0  200   207
EDI EW2248                                     6.6H0.12ML      1.0  200   207
EAU Z 224851.67        P 2E                                                   196
KPL Z 224834.55        P 1ID44.7         S 3                                   82
KPL NS2248                                     5.0H0.30M       10.0 200   82
KPL EW2248                                     5.0H0.20M       10.0 200   82
KAR Z 224827.27        P 0ID32.15        S 1                                   37
KSB Z 224833.6         P 0ID42.90        S 3                                   78
KAC Z 224838.55        P 0ID51.50        S 3                                  108
EAB Z 224841.21        P 2E 56.09        S 3E                                 130
EBH Z 224848.80        P 1E 68.86        S 3E                                 175
EDU Z 224851.65        P 2E 76.35        S 2E                                 199
ELO Z 224845.96        P 1E 63.89        S 3E                                 157
MCD Z 224851.8         P 1E                                                   207
MCD NS2248                                     4.0H0.22ML      1.0  200   207
MCD EW2248                                     6.5H0.13ML      1.0  200   207
MME Z 224852.0         P 2E                                                   212
MVH Z 224850.65        P 1EU                                                  186
PGB Z 224843.65        P 1ID60.2         S 2E                                 146
PGB NS2248                                     4.5H0.17ML      2.5  200   146
PGB EW2248                                     8.0H0.11ML      2.5  200   146
     -1
040587                                          5.0        LMULL AFTERSHOCK       1
        02218.58  142.16/ 760.11   4.1 1.8                  56.662   -6.208     2
 12 37 249 0.14  1.2  1.2 C B*D                                                  3
KPL Z 002232.46        P 0E 42.9         S 3                                   83
KPL NS0022                                     5.0H0.10ML      1.0  200   83
KPL EW0022                                    10.0H0.20ML      1.0  200   83
KAR Z 002225.25        P 0ID30.20        S 1ID                                 37
KSB Z 002231.60        P 0ID40.90        S 2                                   78
KAC Z 002236.50        P 1E 49.85        S 3                                  108
EAB Z 002239.50        P 2E 54.29        S 3E                                 127
EBH Z 0022                  67.40        S 3E                                 173
ELO Z 0022                  61.73        S 3E                                 155
PMS Z 002239.5         P 1E                                                   128
     -1
040587                                          5.0MJA     LLOCH HOURN,HIGHLAND   1
       1652 9.87  192.86/ 804.83   4.8 0.1                  57.088   -5.419     2
  6 14 224 0.10  2.2  2.7 C B*D                                                  3
KPL Z 165216.0         P 1E 19.8         S 3E                                  31
KPL NS1652                                     4.0H0.14ML      0.25 200   31
KPL EW1652                                     4.0H0.07ML      0.25 200   31
KAR Z 1652                  19.9         S 2E                                  31
KSB Z 165212.68        P 0ID14.6         S 1                                   14
KAC Z 165218.05        P 2                                                    46
     -1
050587                                          5.0MJA     LMULL AFTERSHOCK       1
        32915.74  140.60/ 759.91   7.3 2.0                  56.659   -6.233     2
 10 38 251 0.09  2.9  5.1 D C*D                                                  3
KPL Z 032929.5         P 1E                                                   84
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KPL NS0329                                    3.5H0.32ML          1.0  200   84
KPL EW0329                                   10.0H0.21ML          1.0  200   84
KAR Z 032922.4        P 0ID27.35       S 1ID                                 38
KSB Z 032928.85       P 1EU                                                  79
KAC Z 032933.7        P 1E                                                  110
EAB Z 032936.40       P 3E 51.30       S 3E                                 128
ELO Z 032940.81       P 3E 58.69       S 3E                                 156
EBH Z 0329                64.07       S 3E                                 174
EDU Z 0329                71.95       S 3E                                 198
PMS Z 032936.55       P 1E                                                  129
     -1
070587 HEREFORD  HF 413              12.5    5.0KPR    LLEOMINSTER,HEREFORD    1
       2 837.07  354.25/ 252.40  19.5 0.9                 52.168   -2.669     2
 10 17  92 0.09  0.8  1.4 B A*B                                               3
MCH Z 020842.99       P  IU            S 2E                                  29
MCH NS0208                                   10.6H0.10ML          1.0  200   29
MCH EW0208                                    7.5 H0.08ML          1.0 200   29
HAE Z 020841.48       P  ID44.53       S 2E                                  17
HCG Z 0208                57.55       S 3E                                  70
HTR Z 020844.60       P 3E 50.00       S 3E                                  42
HLM Z 020844.82       P 2E 50.05       S 3E                                  42
BSE Z 020845.90       P 2E 50.99       S 4   6.0H0.09M           1.0 200   50
BFR Z 020846.30       P 1IU                                                  53
     -1
080587                                        5.0MJA    LMULL AFTERSHOCK        1
       04154.21  146.63/ 754.19   7.1 1.7                 56.611   -6.130     2
 10 39 267 0.11  4.4  6.9 D C*D                                               3
KPL Z 004208.3        P 1E                                                   86
KPL NS0042                                    4.0H0.11ML          1.0  200   86
KPL EW0042                                    9.0H0.20ML          1.0  200   86
KAR Z 004201.05       P 0ID06.10       S 1ID                                 39
KSB Z 004207.43       P 1ED                                                  79
KAC Z 004212.45       P 1E                                                  111
EAB Z 004213.73       P 1ED27.81       S 2E  9.9H0.12ML          0.25 200  120
ELO Z 004217.03       P 3E 35.44       S 2E 10.0H0.10ML          0.25 200  150
EBH Z 004221.03       P 3E 41.27       S 3E  6.9H0.10ML          0.25 200  167
     -1
080587                                        5.0       LMULL AFTERSHOCK        1
       1 4 6.23  142.24/ 758.84   3.9 1.9                 56.650   -6.206     2
 11 38 270 0.20  1.9  2.1 C B*D                                               3
EAB Z 010427.05       P 1ED41.60       S 2E                                 126
ELO Z 010430.93       P 3E 49.31       S 2E                                 155
EBH Z 010435.66       P 3E 54.48       S 2E                                 173
EDI Z 0104                61.40       S 2E                                 204
EDI NS0104                                    3.0H0.18ML          0.25 200  204
EDI EW0104                                    3.0H0.19ML          0.25 200  204
KPL Z 010420.2        P 0ID                                                  84
KPL NS0104                                    4.5H0.30ML          1.0  200   84
KPL EW0104                                   14.0H0.20ML          1.0  200   84
KAR Z 010413.08       P 0ID18.1        S 1ID                                 38
KSB Z 010419.35       P 0ED                                                  79
KAC Z 010424.30       P 0IU                                                 109
     -1
080587                                        5.0MJA    LMULL AFTERSHOCK        1
       2 4 6.22  132.19/ 768.21  12.9 2.0                 56.729   -6.379     2
  5 40 335 0.41  4.5  2.9 D C*D                                               3
KPL Z 020419.35       P 1E                                                   81
KPL NS0204                                    4.5H0.20ML          1.0  200   81
KPL EW0204                                   13.0H0.20ML          1.0  200   81
KAR Z 020413.10       P 0ID18.1        S 1ID                                 40
KSB Z 020419.46       P 1ID                                                  79
KAC Z 020424.44       P 1IU                                                 108
     -1
140587 LOWNET    LN 539    614      12.5      5.0DWR    LKIRKCALDY,FIFE         1
      234213.79  332.06/ 691.15   1.2-0.3                 56.108   -3.093     2
  7 21 234 0.09  2.2  1.3 C B*D OFFSHORE,COALFIELD TYPE                        3
EDI Z 234218.02       P  ED21.40       S 2E  4.5H0.19M          0.25 200   21
EDI NS2342               EU               E  2.7H0.16ML          0.25 200   21
EDI EW2342               EU              EU 2.4H0.19ML          0.25 200   21
EBH Z 234219.64       P 1E 23.82       S 2E                                  30
EBL Z 234220.82       P 1E 25.92       S 3E                                  37
EAU Z 234221.31       P 2E                                                   37
     -1
150587N WALES                                 5.0       LLLEYN AFTERSHOCK       1
       542 1.30  238.31/ 344.75  21.6 0.5                 52.975   -4.408     2
 13  1  81 0.17  0.8  1.2 B B*A                                               3
YRC Z 05427.71        P 2E                                                   33
YRE Z 05424.88        P 2E 7.16        S 2                                   1
YLL Z 05426.60        P 2E 9.81        S 2                                  24
WLC Z 05428.96        P 2E                                                   42
WLC NS0542                14.39       S 2  7.0 H0.08ML          0.25 200   42
WLC EW0542                                    5.6 H0.09ML          0.25 200   42
YRH Z 05426.27        P 1IU9.71        S 1                                   22
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WBR Z 0542                12.75       S 2                                  37
WST Z 05427.06        P 2E 11.29       S 1                                  28
WFB Z 0542                13.58       S 2                                  41
      -1
150587 LOWNET     LN 539     838      12.5      5.0DWR    LBLAIRHALL,FIFE      1
       155217.42  298.39/ 692.65   0.0 1.4                56.116   -3.634    2
 10 17 121 0.20  0.9  1.2 C B*C COALFIELD TYPE                                 3
EBH Z 155221.20       P  EU23.00       S 2EU                 0.25 200    17
EAU Z 155223.60       P 1E 28.73       S 2EU                               32
EDI Z 155224.26       P 1EU29.38       S 2E  9.0H0.41M       0.25 200    35
EDI NS1552               E                EU13.3H0.43ML      0.25 200    35
EDI EW                   E                E 13.7 0.39ML      0.25 200    35
ELO Z 155225.41       P 2ED31.10       S 3ED                               40
EAB Z 155225.95       P 3E 31.86       S 3E                                45
      -1
150587 HEREFORD  HF 415              12.5    5.0KPR    LSWINTON,S.YORKSHIRE   1
       202218.78  447.72/ 398.40   0.6 2.0                53.480   -1.281    2
 11 58 222 0.23  2.3  1.3 C B*D                                               3
MCH Z 2022                74.40       S 2E                               202
SBD Z 202243.06       P 2E 60.55       S 2E                               147
HAE Z 202247.58       P 2E 69.21       S 2E                               182
HLM Z 202243.46       P 2E 61.95       S 2E                               152
HPK Z 202229.2        P 2E 37.0        S 2E                                58
HPK NS2022                                  10.7H0.17ML       1.0  200    58
HPK EW2022                                  11.0H0.16ML       1.0  200    58
BBR Z 202235.57       P 3E 49.79       S 3E                               103
      -1
150587 LOWNET     LN 539     936      12.5      5.0DWR    LKIRKCALDY,FIFE      1
       225821.32  332.00/ 689.99   0.0-0.4                56.098   -3.093    2
  6 20 181 0.11  1.4  1.5 C B*D OFFSHORE,COALFIELD TYPE                        3
EDI Z 225825.52       P  E 28.90       S 2E  4.0H0.16M       0.25 200    20
EDI NS2258               E                E  3.0H0.12ML      0.25 200    20
EDI EW2258               E                E  1.6H0.24ML      0.25 200    20
EBH Z 225827.40       P 1E 32.02       S 2E                                31
ESY Z 225828.30       P 2E                                                 36
EBL Z 225828.60       P 1E                                                 36
      -1
160587 CORNWALL                             5.0       LCONSTANTINE,CORNWALL  1
        0 159.81  173.32/  27.73   5.2 0.5                50.106   -5.171    2
 12  4 171 0.03  0.4  0.3 B A C                                              3
CCO Z 000200.97       P 0ID                                                 4
CGH Z 000201.20       P 0ID                                                 6
CR2 Z 000201.30       P 0IU02.47       S 1                                  7
CR2 NS0002                                  1.2 H0.05ML       10.0 200     7
CR2 EW0002                                  3.2 H0.05ML       10.0 200     7
CCA Z 000201.71       P 0IU                                                10
CST Z 000201.79       P 0IU03.20       S 1                                 10
CRA Z 000201.31       P 0IU                                                 7
CRA NS0002                                  4.1 H0.04ML       10.0 200     7
CRA EW0002                                  4.5 H0.04ML       10.0 200     7
CTR Z 000201.32       P 0IU02.45       S 1                                  7
CTR NS0002                                  2.7 H0.05ML       10.0 200     7
CTR EW0002                                  2.5 H0.06ML       10.0 200     7
CME Z 000201.50       P 0IU02.73       S 1                                  8
      -1
160587                                      5.0MJA    LMULL AFTERSHOCK       1
       14 638.06  141.08/ 759.98  10.2 2.1                56.660   -6.226    2
  9 38 270 0.14  1.8  2.3 C B*D                                               3
KPL Z 140651.8        P 1E                                                 83
KPL NS1406                                  4.0H0.33ML        1.0  200     83
KPL EW1406                                 10.0H0.22ML        1.0  200     83
KAR Z 140644.65       P 1ID49.7        S 1ID                               38
KSB Z 140651.00       P 1IU                                                78
KAC Z 140655.95       P 1E                                                109
EAB Z 140658.50       P 2E 73.48       S 2E                               128
ELO Z 140703.00       P 3E 19.89       S 2E                               156
EBH Z 140708.18       P 3E 26.33       S 3E                               174
      -1
170587 LOWNET     LN 539    1340      12.5      5.0DWR    LLASSWADE,LOTHIAN      1
        4 852.51  329.36/ 664.47   1.2 0.4                55.868   -3.129    2
  6  7 183 0.02  0.4  0.3 C A*D COALFIELD TYPE                                 3
EDI Z 040854.32       P  EU55.61       S 2E  4.8H0.21M         1.0 200     7
EDI NS0408               E                EU 5.2H0.18ML      1.0 200     7
EDI EW0408               E                EU 6.0H0.20ML      1.0 200     7
EBL Z 040855.21       P  ID57.20       S 2ED                               12
EAU Z 040856.72       P  ID59.72       S 2E                                21
      -1
180587 LOWNET     LN 539    1718      12.5      5.0DWR    LDALKEITH,LOTHIAN      1
        74657.08  333.53/ 668.31   2.7 0.3                55.903   -3.063    2
  5  8 249 0.03  0.2  4.9 C B*D COALFIELD TYPE                                 3
EDI Z 074658.88       P  EU60.19       S 2E  7.0H0.26M         1.0 200     8
EDI NS0746               EU               EU 6.0H0.19ML      1.0 200     8
EDI EW0746               E                E  5.6H0.12ML      1.0 200     8
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EBL Z 074700.01        P 1E 02.10        S 3E                                  15
EAU Z 074701.90        P 1E 04.50        S 3E                                  25
     -1
180587N WALES                                    5.0       LHUDDERSFIELD,W.YORKS  1
       132825.43  397.93/ 417.88  11.4 1.8                  53.657   -2.031    2
 21 43 140 0.20  1.4  2.6 C B*C                                                  3
YRC Z 132851.46        P 2E 71.55        S 3                                   175
YRE Z 132852.41        P 2E 72.6         S 3                                   177
WPM Z 132846.6         P 2E 61.8         S 3  17.0H0.12ML          0.25 200    132
WLF Z 1328                 69.3          S 2                                   162
WME Z 132849.59        P 3E 66.4         S 3                                   154
YLL Z 132849.11        P 3E 67.13        S 2                                   154
WLC Z 132849.65        P 2E                                                    138
WLC NS1328                 63.19         S 2  10.2H0.07ML          0.25 200    138
WLC EW1328                              13.5H0.08ML          0.25 200          138
WVR Z 132848.19        P 2E 63.73        S 3                                   142
WBR Z 1328                 66.5          S 3                                   153
WST Z 1328                 66.6          S 3                                   151
WFB Z 1328                 71.62         S 3                                   172
HPK Z 132832.92        P  IU38.40        S                                      43
HPK NS1328                                   12.0H0.14ML          2.5  200     43
HPK EW1328                                   9.25H0.18ML          2.5  200     43
CWF Z 1328                 56.9          S 3E                                  113
     -1
180587 LOWNET    LN 539   1938      12.5      5.0DWR    LCOUSLAND,LOTHIAN       1
       235130.28  336.61/ 668.32   3.7 0.0                  55.904   -3.014    2
  5 11 165 0.09  0.0  0.2 C A*D COALFIELD TYPE                                  3
EDI Z 235132.72        P  E 34.20        S 2E  8.9H0.20M           0.25 200    11
EDI NS2351                E                 E  7.2H0.19ML          0.25 200    11
EDI EW2351                E                 E  7.9H0.20ML          0.25 200    11
EBL Z 235133.30        P  E 35.20        S 2E                                  15
ESY Z 235135.00        P  E                                                    25
     -1
190587 LOWNET    LN 539   1992      12.5      5.0DWR    LROSEWELL,LOTHIAN       1
        35111.31  328.92/ 662.84   1.1 1.0                  55.854   -3.135    2
 10  8 120 0.06  0.3  0.3 B A*B COALFIELD TYPE                                  3
EDI Z 035113.40        P  ID14.90        S 2E 11.4H0.22M            1.0 200     8
EDI NS0351                ID                ID17.8H0.21ML          1.0 200     8
EDI EW0351                IU                IU21.0H0.20ML          1.0 200     8
EBL Z 035113.82        P  ED15.69        S 3ED                                 11
EAU Z 035115.49        P  ED18.29        S 3E                                  20
ESY Z 035117.72        P 1E 22.30        S 3E                                  33
EBH Z 035120.61        P 1E 27.30        S 3E                                  50
     -1
210587 LOWNET    LN 539    374      12.5      5.0DWR    LROSEWELL,LOTHIAN       1
        94755.98  330.04/ 662.96   0.5 0.2                  55.855   -3.118    2
  6  9 182 0.08  9.8  7.5 D D*D COALFIELD TYPE                                  3
EDI Z 094758.32        P 1EU59.62        S 2EU15.8H0.28M           0.25 200     9
EDI NS0947                EU                EU14.7H0.20ML          0.25 200     9
EDI EW0947                E                 E 10.5H0.22ML          0.25 200     9
EBL Z 094758.49        P 2E 60.40        S 2ED                                 10
EAU Z 094760.40        P 1E 63.60        S 2ED                                 21
     -1
260587                                           5.0MJA    LMULL AFTERSHOCK        1
       13 7 2.70  149.12/ 759.58   6.7 1.8                  56.661   -6.094    2
  8120 338 0.69 28.6 21.7 D D*D                                                 3
EAB Z 130721.71        P 1ED36.39        S 2EU                                 120
ELO Z 130726.41        P 2EU43.68        S 2EU                                 148
EBH Z 130729.60        P 2E 48.91        S 2E                                  166
EDU Z 130734.38        P 3E 52.20        S                                     190
EDI Z 130735.00        P 4E 54.4         S 4E                                  198
EDI NS1307                                    7.5H0.12ML          0.25 200    198
EDI EW1307                                    5.0H0.18ML          0.25 200    198
     -1
290587 LOWNET    LN 541    704      12.5      5.0DWR    LROSEWELL,LOTHIAN       1
        82620.71  328.11/ 661.84   0.3 1.1                  55.844   -3.148    2
  9  9 130 0.14  0.3  0.4 B A*B COALFIELD TYPE                                  3
EDI Z 082622.82        P 1ED24.20        S 1EU13.9H0.29M           1.0 200     9
EDI NS0826                ED                IU14.5H0.22ML          1.0 200     9
EDI EW0826                E                 IU22.3H0.28ML          1.0 200     9
EBL Z 082623.24        P  ID25.02        S 2ED                                 10
EAU Z 082624.84        P  ID28.00        S 2EU                                 19
ESY Z 082627.53        P 1EU                                                   34
EBH Z 082629.96        P 2E 36.59        S 3EU                                 50
     -1
290587 LOWNET    LN 541    707      12.5      5.0DWR    LROSEWELL,LOTHIAN       1
        84118.36  328.65/ 662.59   0.5 0.6                  55.851   -3.140    2
  6  9 165 0.06  1.0  1.1 B A*C COALFIELD TYPE                                  3
EDI Z 084120.56        P  ID21.97        S 2E 13.5H0.8 M           0.25 200     9
EDI NS0841                ID                EU13.5H0.8 ML          0.25 200     9
EDI EW0841                EU                E 10.3H0.4 ML          0.25 200     9
EBL Z 084121.00        P  EU22.82        S 3E                                  11
EAU Z 084122.49        P 1E 25.72        S 3E                                  20
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      -1
290587                                          5.0MJA    LLOCH LINNHE,HIGHLAND  1
       12 320.63  174.95/ 750.90  11.4 1.5                    56.596   -5.666    2
  9 70 242 0.25  3.0  2.1 D C*D                                                   3
KPL Z 120334.35       P 2E                                                      83
KPL NS1203                                  8.0H0.15ML          0.25 200      83
KPL EW1203                                 15.0H0.17ML          0.25 200      83
KSB Z 120331.97       P 1E                                                      70
KAC Z 120337.6        P 2E                                                     103
EAB Z 120335.91       P 1E 47.34       S 3E                                     94
EBH Z 120342.88       P 1E                                                     139
EDU Z 120346.70       P 2E                                                     163
ELO Z 120340.00       P 1E 54.30       S 2E                                    121
      -1
290587 LOWNET    LN 541    792      12.5       5.0DWR    LROSEWELL,LOTHIAN      1
       144533.15  328.02/ 661.60   0.2 1.1                  55.842   -3.150    2
  9  9 132 0.16  0.4  0.4 B B*B COALFIELD TYPE                                   3
EDI Z 144535.35       P  IU36.90       S 1E 21.2H0.28M          1.0 200      9
EDI NS1445               IU              ED10.0H0.5 ML          1.0 200      9
EDI EW1445               ED              IU21.4H0.21ML          1.0 200      9
EBL Z 144535.61       P  ID37.28       S 3E                                    10
EAU Z 144537.39       P  ID40.32       S 3E                                    19
ESY Z 144540.09       P 2E                                                     35
EBH Z 144542.66       P 3E 49.20       S 3E                                    50
      -1
290587 LOWNET    LN 541    878      12.5       5.0DWR    LROSEWELL,LOTHIAN      1
       205245.33  330.33/ 663.32   0.5 0.4                  55.858   -3.113    2
  6  9 187 0.03  0.7  0.6 C A*D COALFIELD TYPE                                   3
EDI Z 205247.50       P  IU49.03       S 2E  8.3H0.30M          1.0 200      9
EDI NS2052               IU              EU 3.6H0.28ML          1.0 200      9
EDI EW2052               E               EU 2.9H0.28ML          1.0 200      9
EBL Z 205247.90       P  ID49.87       S 2EU                                   10
EAU Z 205249.80       P 1ED53.02       S 3ED                                   21
      -1
300587 HEREFORD  HF 417              12.5     5.0KPR    LS.LLANDOVERY,POWYS    1
       13 226.16  273.35/ 233.39  13.0 1.5                  51.984   -3.844    2
 29 40 212 0.16  0.7  1.7 C B*D                                                 3
MCH Z 130235.76       P  IU42.61       S 1ID                                   58
SBD Z 130243.97       P  ID                                                   110
HAE Z 130240.82       P  ID50.69       S 2E                                    89
HCG Z 130233.25       P  ID37.99       S 1E 14.9H0.10ML         1.0  200      40
HGH Z 130239.79       P 1E                                                     81
HTR Z 130233.25       P  IU38.32       S 2E                                    41
HLM Z 130240.39       P 1ID50.52       S 2E                                    88
YRE Z 130245.55       P 1I                  13.4H0.13ML         0.25 200     118
WPM Z 130248.6        P 2E 64.94       S 3                                    142
WLF Z 130249.78       P 2E 66.16       S 3                                    150
YLL Z 130246.65       P 2E 61.31       S 3                                    131
WFB Z 130239.2        P 1ID48.19       S 3                                     79
WVR Z 130241.16       P 2E 51.39       S 2                                     92
WBR Z 130242.9        P 2E 51.85       S 3                                     97
YRH Z 130243.77       P 1I                                                    109
WST Z 130243.98       P 2E                                                    111
WLC NS1302                                 10.5H0.09ML         0.25 200     113
WLC EW1302                56.76       S 3  6.0 H0.11ML         0.25 200     113
WLC Z 130244.2        P 2E                                                    113
      -1
310587 LOWNET    LN 541   1508      12.5       5.0DWR    LROSEWELL,LOTHIAN      1
       18 054.06  330.12/ 663.03   0.5 0.4                  55.855   -3.116    2
  6  9 183 0.04  5.4  4.1 D D*D COALFIELD TYPE                                   3
EDI Z 180056.31       P 1E 57.71       S 3E 24.4H0.31M          0.25 200     9
EDI NS1800               E               3E  9.4H0.30ML         0.25 200     9
EDI EW1800               E                E 12.4H0.40ML         0.25 200     9
EBL Z 180056.60       P  ID58.50       S 3ED                                   10
EAU Z 180058.50       P 1E 61.70       S 3E                                    21
      -1
010687N WALES                                   5.0       LLLEYN AFTERSHOCK      1
       1310 8.40  239.53/ 343.47  20.0 0.8                  52.964   -4.390    2
 16  3  85 0.15  0.6  1.0 B B*A                                                 3
WCB Z 131016.88       P 4                                                      47
WCB NS1310                                  5.9 H0.07ML         0.25 200     47
WCB EW1310                22.65       S 2  4.5 H0.09ML         0.25 200     47
YRC  Z131014.76       P 2ED19.30       S 3                                     34
YRC Z 131014.76       P 2ED19.30       S 3                                     34
YRE Z 131011.81       P 1ID13.84       S 2                                      3
YLL Z 131013.42       P 1IU16.69       S 2                                     25
WLC Z 131015.82       P 1IU                                                    41
WLC NS1310                21.19       S 2  6.4 H0.15ML         1.0  200     41
WLC EW1310                                  3.5 H0.11ML         1.0  200     41
YRH Z 131013.14       P 1IU16.6        S 2                                     22
WBR Z 131014.7        P 3E 19.46       S 3                                     35
WST Z 131013.91       P 1IU17.98       S 2                                     27
WFB Z 1310                20.4        S 2                                     39
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     -1
020687 LOWNET    LN 541   2099      12.5      5.0DWR    LROSEWELL,LOTHIAN      1
       122431.53  328.73/ 662.90   0.5 0.4                55.854   -3.139    2
  6  8 168 0.07  1.1  1.3 C B*C COALFIELD TYPE                                 3
EDI Z 122433.62       P  E 35.09       S 2EU13.9H0.30M          0.25 200    8
EDI NS1224               E                E 12.5H0.28ML        0.25 200    8
EDI EW1224               E                IU18.1H0.25ML        0.25 200    8
EBL Z 122434.11       P 1E 36.28       S 3E                                  11
EAU Z 122435.78       P  ED38.69       S 3E                                  20
     -1
050687N WALES                                  5.0       LLLEYN AFTERSHOCK      1
        01920.17  239.27/ 342.25  24.0 1.6                52.953   -4.393    2
 22  4  95 0.15  0.6  1.3 B B*B                                               3
WCB Z 001929.0        P 2E                                                   48
WCB NS0019                                 6.9 H0.06ML          1.0  200   48
WCB EW0019                34.5       S 3  14.5H0.06ML          1.0  200   48
YRC Z 001927.1        P 1ID31.69       S 2                                   35
YRE Z 001924.2        P 1ID                                                   4
WPM Z 001928.69       P 1IU34.7        S 3                                   47
WLF Z 001927.25       P 1IU                                                  37
WME Z 001929.00       P 1ID35.04       S 3                                   50
YLL Z 001925.8        P 1IU                                                  26
WLC Z 001928.07       P 1IU                                                  42
WLC NS0019                33.2        S 2  15.3H0.12ML          2.5  200   42
WLC EW0019                             8.4 H0.11ML          2.5  200   42
YRH Z 001925.31       P 1IU                                                  21
WVR Z 001930.0        P 2E 35.59       S 3                                   56
WBR Z 001927.0        P 1ID31.55       S 3                                   35
WST Z 001926.1        P 2E 29.2        S 3                                   27
WFB Z 001926.81       P 2E 32.63       S 3                                   38
     -1
050687 LOWNET    LN 542    673      12.5      5.0DWR    LROSEWELL,LOTHIAN      1
        63253.59  329.96/ 663.35   0.5 0.4                55.858   -3.119    2
  6  8 184 0.07  1.5  1.4 C B*D COALFIELD TYPE                                 3
EDI Z 063255.78       P  EU57.10       S 2E 21.2H0.28M          0.25 200    8
EDI NS0632               E                E  7.5H0.71ML        0.25 200    8
EDI EW0632               E                E  9.9H0.48ML        0.25 200    8
EBL Z 063256.24       P  EU58.11       S 2E                                  11
EAU Z 063257.91       P 1EU61.34       S 3E                                  21
     -1
050687 LOWNET    LN 542    690      12.5      5.0DWR    LROSEWELL,LOTHIAN      1
        74031.46  328.74/ 662.81   1.0 1.3                55.853   -3.138    2
  9  8 121 0.06  0.3  0.4 B A*B COALFIELD TYPE                                 3
EDI Z 074033.57       P  ID35.03       S 1E  8.0H0.21M           2.5 200    8
EDI NS0740               ID               ID13.1H0.20ML        2.5 200    8
EDI EW0740               IU               IU15.8H0.20ML        2.5 200    8
EBL Z 074034.00       P  ID35.85       S 2EU                                 11
EAU Z 074035.61       P  ID38.43       S 3E                                  20
ESY Z 074037.92       P 2E                                                   34
EBH Z 074040.80       P 1ID47.34       S 3E                                  50
ELO Z 074045.29       P 3E                                                   77
EAB Z 074046.02       P 3E                                                   84
     -1
050687HEREFORD   HF418             12.5      5.0CMCW   LGREAT MALVERN,WORCS   1
        16 331.79  361.47/ 247.49  13.6 1.2                52.124   -2.563    2
  5 10 201 0.01  0.5  0.9 C A*D                                               3
HAE Z 160334.73       P 0ID                                    1.0  200   10
MCH Z 160337.88       P 0ID                                                  33
MCH EW1603                                13.6H0.1 ML          1.0  200   33
MCH NS1603                                08.5H0.1 ML          1.0  200   33
HTR Z 160340.22       P 2IU                                                  49
HLM Z 160340.31       P 2ID                                                  49
HGH Z 160341.47       P 1IU                                                  57
     -1
050687 LOWNET    LN 542    835      12.5      5.0DWR    LROSEWELL,LOTHIAN      1
       175959.23  328.69/ 662.47   0.5 0.9                55.850   -3.139    2
  8  9 123 0.06  0.5  0.6 B A*B COALFIELD TYPE                                 3
EDI Z 180001.43       P  IU02.88       S 1EU11.8H0.29M          1.0 200     9
EDI NS1800               IU               E 12.5H0.21ML        1.0 200     9
EDI EW1800               ED               IU17.5H0.22ML        1.0 200     9
EBL Z 180001.80       P 1EU03.69       S 2E                                  10
EAU Z 180003.46       P  ID06.38       S 3E                                  20
ESY Z 180005.79       P 2E                                                   34
EBH Z 180008.69       P 1EU                                                  50
     -1
060687                                         5.0MJA    LMULL AFTERSHOCK       1
       1126 2.19  142.51/ 760.16  13.0 1.6                56.662   -6.203    2
  7 77 269 0.34  7.0  6.0 D D*D                                               3
KPL Z 112615.6        P 1E 27.0        S 2E                                  83
KPL NS1126                              2.0H0.1 ML           1.0  200   83
KPL EW1126                              9.5H0.18ML           1.0  200   83
KSB Z 112614.7        P 1E                                                   77
KAC Z 112619.65       P 1E 32.5        S 2E                                 108
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EAB Z 112622.6        P 1E 36.7        S 2E                                  127
     -1
060687                                        5.0MJA    LMULL AFTERSHOCK       1
      161633.68  141.10/ 760.16  14.6 1.6                56.662   -6.225     2
  8 78 270 0.41  7.2  5.1 D D*D                                               3
KPL Z 161647.2        P 1E 58.2        S 2E                                  83
KPL NS1616                                2.0H0.09ML          1.0  200      83
KPL EW1616                                8.0H0.18ML          1.0  200      83
KSB Z 161646.37       P 0IU                                                 78
KAC Z 161651.3        P 1E 63.7        S 2E                                 109
EAB Z 161654.3        P 2E 68.1        S 3E                                 128
ELO Z 1616                77.3        S 3E                                 156
     -1
080687HEREFORD   HF418             12.5       5.0CMCW   LBUILTH,POWYS          1
       114 3.58  294.35/ 254.65  16.6 1.7                52.180   -3.545     2
  8 18 195 0.06  0.9  0.8 C A*D                                              3
HCG Z 011407.73       P 0ID                                                 18
HTR Z 011408.32       P 0IU                                                 22
MCH Z 011411.10       P 0IU16.84       S 1IU                                43
MCH NS0114                            5.5 H0.1 ML         2.5  200      43
MCH EW0114                            10.0H0.1 ML         2.5  200      43
HLM Z 011413.63       P 1ID                                                 59
HAE Z 011415.46       P 1IU                                                 70
HGH Z 011416.80       P 2IU                                                 79
SBD Z 011417.30       P 2IU                                                 83
     -1
090687 LOWNET    LN 542   2105      12.5       5.0DWR    LROSEWELL,LOTHIAN      1
      114835.65  328.89/ 662.95   1.8 0.9                55.855   -3.136     2
  7  8 119 0.04  0.2  0.4 B A*B COALFIELD TYPE                                3
EDI Z 114837.67       P  ED39.09       S 1E  9.8H0.30M          1.0 200     8
EDI NS1148               E                E 11.2H0.21ML          1.0 200     8
EDI EW1148               E                IU16.6H0.21ML          1.0 200     8
EBL Z 114837.99       P 1E 39.89       S 2ED                                 11
EAU Z 114839.66       P  ID42.51       S 2E                                  20
ESY Z 114841.92       P 3E                                                  33
     -1
090687 CORNWALL                               5.0       LCAMBORNE,CORNWALL     1
      1455 5.57  167.78/  41.38   0.6-0.3                50.226   -5.256     2
  6  5 322 0.02  0.4  4.8 C B*D                                              3
CCA Z 145506.40       P 2E07.11        S 2                                   5
CST Z 145506.89       P 1 D07.87       S 2                                   8
CR2 Z 145507.20       P 2  08.40       S 2                                   9
CR2 NS1455                            4.1 H0.04ML         1.0  200      9
CR2 EW1455                            4.9 H0.05ML         1.0  200      9
     -1
100687 LOWNET    LN 542   2370      12.5       5.0DWR    LROSEWELL,LOTHIAN      1
       638 8.80  327.95/ 663.67   1.0 0.7                55.861   -3.151     2
  8  7 119 0.08  0.5  0.7 B A*B COALFIELD TYPE                                3
EDI Z 063810.68       P  IU11.88       S 2E 16.3H0.28M          1.0 200     7
EDI NS0638               IU                EU 9.5H0.22ML          1.0 200     7
EDI EW0638               E                 E 11.4H0.19ML          1.0 200     7
EBL Z 063811.60       P 1E 13.23       S 3E                                  12
EAU Z 063812.70       P 2E 15.72       S 3E                                  19
ESY Z 063815.33       P 2E                                                  34
EBH Z 063818.00       P 2E                                                  49
     -1
100687N WALES                                 5.0       LNORTH ANGLESEY,GWYNEDD1
      162317.77  238.13/ 392.74  11.6 0.0                53.406   -4.435     2
  7  8 210 0.03  0.3  0.3 C A*D                                              3
WCB Z 162320.12       P 2E                                                   8
WCB NS1623                21.8        S 2  6.3 H0.09ML          1.0  200      8
WCB EW1623                            4.3 H0.07ML         1.0  200      8
YRC Z 162321.6        P 1IU                                                 20
WLF Z 162320.80       P 1ID22.74       S 2
WME Z 162320.22       P 2E 21.91       S 2
     -1
110687                                        5.0MJA    LFIRTH OF LORN,HIGHLAND1
      12 350.93  176.47/ 724.32   8.4 1.2                56.358   -5.619     2
  5 64 339 0.11  4.2  3.0 D C*D                                              3
KPL Z 120408.85       P 3E                                                  109
KPL NS1204                            4.0H0.10ML          0.25 200     109
KPL EW1204                            7.0H0.12ML          0.25 200     109
KAR Z 120401.60       P 1E                                                   64
KSB Z 120406.5        P 1ID                                                  96
KAC Z 120411.9        P 2E 26.95       S 3E                                 129
     -1
140687 LOWNET    LN 543   1410      12.5       5.0DWR    LROSEWELL,LOTHIAN      1
       11 211.22  327.81/ 662.28   0.4 1.2                55.848   -3.153     2
  8  9 128 0.28  1.5  1.9 B B*B COALFIELD TYPE                                3
EDI Z 110213.11       P  ID14.70       S 2E 14.6H0.7 M          1.0 200     9
EDI NS1102               ID                EU13.8H0.7 ML          1.0 200     9
EDI EW1102               IU                IU 7.3H0.7 ML          1.0 200     9
EBL Z 110213.65       P  EU15.66       S 2EU                                 11
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EAU Z 110215.30        P  EU18.49        S 2ED                                  19
ESY Z 110218.42        P 2E                                                     35
EBH Z 110220.40        P 2E                                                     50
      -1
150687 LOWNET     LN 543   1608       12.5       5.0DWR     LROSEWELL,LOTHIAN      1
        1 345.34  327.95/ 662.07    0.6 1.2              2+   55.846   -3.151     2
  9  9 129 0.14  0.9  1.1 B A*B COALFIELD TYPE,FELT       ROSLIN                   3
EDI Z 010347.48        P  ID48.99        S 1EU 8.2H0.28M            2.5 200     9
EDI NS0103               ID                ED10.5H0.20ML           2.5 200     9
EDI EW0103               EU                IU16.4H0.21ML           2.5 200     9
EBL Z 010347.88        P  ED49.60        S 2ED                                  11
EAU Z 010349.50        P  ID52.31        S 2E                                   19
ESY Z 010352.19        P 2EU                                                    35
EBH Z 010354.57        P 2E 61.10        S 3E                                   50
      -1
150687 LOWNET     LN 543   1670       12.5       5.0DWR     LROSEWELL,LOTHIAN      1
        53159.71  328.99/ 662.29    0.0 0.5                  55.849   -3.134     2
  7  9 123 0.04  0.3  0.3 B A*B COALFIELD TYPE                                    3
EDI Z 053201.99        P  IU03.51        S 1E  7.5H0.22M            1.0 200     9
EDI NS0532               IU                E  5.1H0.19ML           1.0 200     9
EDI EW0532               ED                IU 7.3H0.20ML           1.0 200     9
EBL Z 053202.29        P 1ED04.01        S 2ED                                  10
EAU Z 053204.02        P  ID07.22        S 2EU                                  20
ESY Z 053206.30        P 2E                                                     33
      -1
160687                                          5.0MJA     LMALLAIG,HIGHLAND      1
        85232.62  168.51/ 797.62    3.9 1.6                  57.012   -5.813     2
 14 11 189 0.28  2.4  2.2 C B*D                                                  3
KPL Z 085239.56        P 0ID44.45        S 1                                    38
KPL NS0852                                   30.0H0.10ML          1.0  200     38
KPL EW0852                                   12.0H0.15ML          1.0  200     38
KAR Z 085234.6         P 0ID                                                    11
KSB Z 085238.67        P 0ID                                                    32
KAC Z 085243.54        P 0ID51.1         S 1E                                   63
EAB Z 085253.98        P 1EU68.80        S 2E                                  129
ELO Z 085255.12        P 1E 72.12        S 2                                   142
EBH Z 085259.82        P 1E 78.45        S 2E                                  165
EDU Z 085302.20        P 1E 22.90        S 3E                                  179
EAU Z 085302.23        P 1E                                                    195
EDI Z 0853                                    2.6H0.14ML          0.25 200    202
EDI NS0853                                    4.5H0.16ML          0.25 200    202
EDI EW0853                                    5.5H0.09ML          0.25 200    202
      -1
170687 LOWNET     LN 543   2283       12.5       5.0DWR     LROSEWELL,LOTHIAN      1
        05736.43  327.40/ 661.65    0.1 1.3              2+   55.843   -3.159     2
  8  9 134 0.14  0.3  0.3 B A*B COALFIELD TYPE,FELT       ROSLIN                   3
EDI Z 005738.61        P  ID40.10        S 1EU 8.6H0.28M            2.5 200     9
EDI NS0057               ID                E 12.1H0.21ML           2.5 200     9
EDI EW0057               IU                IU17.0H0.21ML           2.5 200     9
EBL Z 005739.00        P  ID40.80        S 2ED                                  11
EAU Z 005740.60        P  ED43.55        S 3ED                                  19
ESY Z 005743.40        P 1EU                                                    35
EBH Z 005745.82        P 1ED53.32        S 3E                                   50
      -1
180687N WALES                                   5.0        LLLEYN AFTERSHOCK      1
        64539.39  238.80/ 343.38   23.1 0.7                  52.963   -4.400     2
 18  3  93 0.08  0.3  0.5 B A*B                                                  3
WCB Z 064548.0         P 4                                                      47
WCB NS0645                                    3.5 H0.07ML         0.25 200    47
WCB EW0645                53.71       S 3   6.4 H0.08ML         0.25 200    47
YRC Z 064546.0         P 3E 50.68        S 3                                    34
YRE Z 064543.28        P 2ID45.71        S 3                                     3
WLF Z 0645                50.99        S 3                                    36
YLL Z 064544.81        P 1IU48.64        S 2                                    25
WLC Z 064547.11        P 2IU                                                    42
WLC NS0645                52.35        S 3   15.0H0.13ML         0.25 200    42
WLC EW0645                                    9.0 H0.09ML         0.25 200    42
YRH Z 064544.4         P 1IU47.9         S 2                                    21
WBR Z 064546.51        P 3E 50.83        S 3                                    36
WST Z 064545.2         P 2E 49.21        S 2                                    28
WFB Z 064546.9         P 3E 51.85        S 3                                    40
      -1
220687 LOWNET     LN 544   1849       25.0       5.0DWR     LROSEWELL,LOTHIAN      1
        1845 9.52  328.89/ 662.62    0.2 1.4              2+   55.852   -3.136     2
  9  9 121 0.04  0.2  0.2 B A*B COALFIELD TYPE,FELT       ROSLIN                   3
EDI Z 184511.73        P  ID13.19        S 1E  7.6H0.28M            2.5 200     9
EDI NS1845               ID                EU17.9H0.20ML           2.5 200     9
EDI EW1845               IU                IU19.5H0.21ML           2.5 200     9
EBL Z 184512.12        P  ID14.06        S 2EU                                  11
EAU Z 184513.76        P  ID16.99        S 3E                                   20
ESY Z 184516.11        P 3E                                                     34
EBH Z 184518.91        P 1ED25.50        S 3E                                   50
EDU Z 184523.65        P 3E                                                     78
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EAB Z 184524.28       P 3E                                                  84
     -1
230687 LOWNET    LN 544   1983      12.5      5.0DWR    LROSEWELL,LOTHIAN      1
       41839.14  329.96/ 662.66   0.5-0.2                55.852   -3.119    2
  6  9 180 0.03  6.1  4.7 D D*C COALFIELD TYPE                                3
EDI Z 041841.42       P  ED43.02       S 2E  9.8H0.29M          0.25 200    9
EDI NS0418               ED               ED 6.4H0.19ML          0.25 200    9
EDI EW0418               EU               E  5.0H0.18ML          0.25 200    9
EBL Z 041841.60       P  ED43.50       S 2EU                                 10
EAU Z 041843.53       P  ED46.80       S 3EU                                 21
     -1
240687LOWNET     LN545            12.5       5.0CMCW   LROSEWELL,LOTHIAN      1
       15 510.17  327.72/ 662.28   0.1 1.2                55.848   -3.154    2
  5  9 134 0.04  0.0  0.0 C A*D COALFIELD TYPE                               3
EDI Z 150512.29       P 0IU                                                  9
EDI NS1505                                    10.0H0.2 ML          2.5  200    9
EDI EW1505                                    15.0H0.2 ML          2.5  200    9
EBL Z 150512.88       P 0IU                                                 11
EAU Z 150514.29       P 0ID                                                 19
EBH Z 150519.60       P 1IU                                                 50
EDU Z 150524.11       P 3EU                                                 78
     -1
250687LOWNET     LN545            12.5       5.0CMCW   LROSEWELL,LOTHIAN      1
       1926 9.26  327.66/ 661.90   0.0 1.3                55.845   -3.155    2
  5  9 131 0.10  0.4  0.5 C A*D COALFIELD TYPE                               3
EDI Z 192611.44       P 1ID                                                  9
EDI NS1926                                    12.6H0.2 ML          2.5  200    9
EDI EW1926                                    17.5H0.2 ML          2.5  200    9
EBL Z 192611.78       P 2ED                                                 11
EAU Z 192613.41       P 1ID                                                 19
ESY Z 192616.21       P 2ID                                                 35
EBH Z 192618.52       P 3ED                                                 50
     -1
270687LOWNET     LN545            12.5       5.0CMCW   LROSEWELL,LOTHIAN      1
       32835.19  327.55/ 662.10   0.0 1.1                55.847   -3.157    2
  5  9 130 0.06  0.4  0.4 C A*D COALFIELD TYPE                               3
EDI Z 032837.31       P 0ID                                                  9
EDI NS0328                                    7.5 H0.2 ML          2.5  200    9
EDI EW0328                                    11.0H0.2 ML          2.5  200    9
EBL Z 032837.84       P 2EU                                                 11
EAU Z 032839.33       P 2EU                                                 19
ESY Z 032842.11       P 2ED                                                 35
EBH Z 032844.47       P 2ED                                                 50
     -1
300687                                          5.0       LROSEWELL,LOTHIAN      1
       33358.31  327.58/ 661.79   0.4 1.4                55.844   -3.157    2
  6  9 132 0.16  0.7  0.8 B B*B COALFIELD TYPE                               3
EDI NS033400.39       P                       14.0H0.3 ML           2.5 200    9
EDI EW0334                                    20.3H0.2 ML           2.5 200    9
EBL Z 033400.71       P 2ED                                                 11
EAU Z 033402.41       P 0ID                                                 19
ESY Z 033405.25       P 1ID                                                 35
EBH Z 033407.59       P 3ED14.37       S 2IU                                50
EDI Z 033400.39       P 0ID                                                  9
     -1
300687LOWNET     LN545            12.5       5.0CMCW   LROSEWELL,LOTHIAN      1
       54851.66  328.80/ 662.85   1.5 0.8                55.854   -3.137    2
  4  8 120 0.01  0.0  0.0 C A*D COALFIELD TYPE                               3
EDI Z 054853.71       P 0ID                                                  8
EDI NS0548                                    12.0H0.2 ML          1.0  200    8
EDI EW0548                                    16.0H0.2 ML          1.0  200    8
EBL Z 054854.11       P 2EU                                                 11
EAU Z 054855.69       P 0ID                                                 20
ESY Z 054858.01       P 3EU                                                 34
     -1
010787CORNWALL   CR535                          5.0BS      BREST AREA FRANCE      1
       62852.94                  5.0 2.1                48.550   -5.177    2
  5167 348 0.21 86.5 14.8 D D*D                                              3
CR2 Z 062920.95       P 2ED                                                180
CGH Z 062918.97       P 2E                                                 167
CCA Z 062921.50       P 2E                                                 182
CST Z 062921.67       P 3ED            S 4E                                183
HTL Z 0630                 02.45       S 3E                                202
HTL NS0630                                    06.5H0.25ML          0.25 200  202
HTL EW0630                                    07.0H0.30ML          0.25 200  202
     -1
010787HEREFORD   HF421            12.5       5.0CMCW   LBIRMINGHAM,W.MIDLANDS 1
       225148.30  408.01/ 292.28  13.8 1.2                52.528   -1.882    2
  8 11 181 0.07  2.4  1.8 C B*D                                             3
HLM Z 225159.50       P 2EU67.25       S 3EU                                68
HAE Z 225200.11       P 2EU                                                 71
MCH Z 225203.99       P 1ED15.11       S 1EU                                96
MCH NS2252                                    3.50H0.10ML          1.0  200   96
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MCH EW2252                                    4.00H0.10ML          1.0  200   96
HGH Z 225207.61       P 3ED                                                   118
HCG Z 225208.34       P 2EU                                                   123
BBR Z 225151.43       P 0ID                                                    11
BZO Z 225151.83       P 1  53.92       S 3  1.5 H0.1 ML          10.0 200    14
BSE Z 225153.21       P 0IU56.21       S 4                                     24
      -1
070787LOWNET     LN546             12.5       5.0CMCW   LKIRKNEWTON,LOTHIAN    1
       1454 9.92  311.24/ 667.48   5.3 0.3                 55.892   -3.419     2
  4  6 234 0.00  0.0  0.0 C A*D                                                 3
EAU Z 145411.51       P 0IU                                                    6
EDI Z 145412.97       P 0IU15.20       S 2EU                                  15
EDI NS1454                                   11.0H0.2 ML          0.25 200    15
EDI EW1454                                   09.5H0.2 ML          0.25 200    15
EBL Z 145414.99       P 2EU                                                   27
      -1
090787LOWNET     LN547             12.5       5.0CMCW   LLOCHGILPHEAD,HIGHLAND 1
       145241.38  186.72/ 688.37   5.0 1.2                 56.041   -5.424     2
 11 48 309 0.24 11.7 24.7 D D*D                                               3
EAB Z 145252.85       P 1ID61.60       S 2ED                                  70
ELO Z 145300.71       P 2EU14.70       S 2E                                  116
EBH Z 145301.21       P 2ED                                                  122
EAU Z 145302.09       P 2EU                                                  125
EDI Z 145305.60       P 2IU22.51       S 2E                                  140
EDI NS1453                                   2.5 H0.2 ML          0.25 200   140
EDI EW1453                                   3.5 H0.1 ML          0.25 200   140
PMS Z 145249.71       P 0IU
PGB Z 145252.61       P 1ID60.40       S 2E
PCO Z 145255.39       P 3EU
      -1
110787N WALES                                 5.0        LLLEYN AFTERSHOCK      1
       221353.27  238.66/ 344.02  23.5 0.7                 52.969   -4.403     2
 22  2  86 0.10  0.3  0.6 A A*A                                                3
WCB Z 221361.89       P 4                                                     47
WCB NS2213                                   4.9 H0.05ML          0.25 200   47
WCB EW2213                67.49      S 3  4.5 H0.07ML          0.25 200    47
YRC Z 221359.85       P 2E 64.39       S 2                                    33
YRE Z 221357.02       P 1ID59.67       S 3                                     2
WPM Z 221361.61       P 2E 67.58       S 3                                    46
WLF Z 221360.12       P 2IU64.8        S 2                                    36
WME Z 221361.89       P 2E 67.82       S 2                                    48
YLL Z 221358.5        P 2E 62.49       S 3                                    25
WLC Z 221361.1        P 1IU                                                   42
WLC NS2213                66.49      S 2  7.8 H0.07ML          1.0  200    42
WLC EW2213                                   6.5 H0.07ML          1.0  200    42
YRH Z 221358.46       P 1IU62.02       S 2                                    21
WVR Z 221363.2        P 2E 69.26       S 3                                    57
WBR Z 221360.2        P 1IU64.83       S 3                                    37
WFB Z 221360.75       P 2E 65.87       S 3                                    40
      -1
120787CORNWALL                                5.0        LSTITHIANS,CORNWALL    1
       030743.1   173.2 /  35.1    3.8 2.0            3+   50.17    -5.18      2
  6  1 102 0.01  0.2  0.5 B A*B FELT STITHIANS AREA                            3
CR2 Z 030743.82       P 0ID                                                    1
GH4 Z 030743.82       P 4                                                      1
GH5 Z 030743.82       P 4                                                      2
DYA Z 030759.44       P 4                                                     94
DYA NS0307                                   13.8H0.11ML          1.0  200   94
CCO Z 030744.17       P 1                                                      4
CCA Z 030744.12       P 0ID                                                    4
CST Z 030743.98       P 0IU                                                    3
DYA EW0307                                   11.7H0.13ML          1.0  200   94
CTR Z 030743.88       P 0ID                                                    1
GH6 Z 030743.82       P 4                                                      2
HY1 Z 030743.82       P 4                                                      0
CME Z 030743.87       P 0ID                                                    1
DCO Z 030759.44       P 4                                                     95
CRQ SM030743.88       P 0                          2.0 H0.12ML          2.5    4   1
HTL Z 030761.15       P 4              S 4                                   104
HTL NS0307                                    6.8H0.10ML          1.0  200  104
HTL EW0307                                   11.0H0.15ML          1.0  200  104
GH2 Z 030743.82       P 4                                                      1
GH3 Z 030743.82       P 4                                                      1
      -1
120787LOWNET     LN547             12.5       5.0CMCW   LROSEWELL,LOTHIAN      1
        52847.71  329.82/ 663.18   3.0 0.7                 55.857   -3.121     2
  3  8 181 0.01  0.0  0.0 C A*D COALFIELD TYPE                                  3
EDI Z 052849.63       P 0IU                                                    9
EBL Z 052849.95       P 0ID                                                   11
EAU Z 052851.71       P 0ID                                                   21
EDI NS052849.63       P                            7.2 H0.2 ML          1.0  200   9
EDI EW0528                                   10.2H0.2 ML          1.0  200    9
      -1
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190787CORNWALL   CN541                          5.0       LSTITHIANS,CORNWALL    1
      032912.5   173.2 / 35.1     3.1 0.7              2+   50.17    -5.18      2
  8   1 104 0.02  0.2   0.2 B A*B FELT ROSEMANOWES AREA                          3
CR2 Z 032913.05       P 0ID                                                     1
CR2 NS0329                                  3.0 H0.04ML          10.0 200     1
CR2 EW0329                                  3.2 H0.05ML          10.0 200     1
CSA Z 032917.40       P 4IU                                                    28
CGH Z 032914.98       P 4IU                                                    14
CCO Z 032913.42       P 0ID                                                     4
CCA Z 032913.38       P 0ID                                                     4
CST Z 032913.21       P 0ID                                                     3
CPZ Z 032917.56       P 4IU                                                    29
CTR Z 032913.05       P 0ID13.44       S                                        1
CTR NS0329                             S 1                                      1
CTR EW0329                             S 1                                      1
CRQ SM032913.02       P 1ID13.50       S 2  4.0 H0.03ML          1.0    4      1
CME Z 032912.96       P 1ID13.48       S 1                                      1
CME NS0329                             S 1                                      1
CME EW0329                             S 1                                      1
     -1
200787                                          5.0       LKINLOCHEWE,HIGHLAND   1
      19 942.50  206.28/ 869.43   6.1 1.8              57.673   -5.249      2
  7  20 213 0.13  2.0   1.9 C B*D                                                3
ELO Z 191010.08       P 3E 28.4        S 3E                    0.25 200   163
EAB Z 191011.02       P 3E 31.4        S 3E                               174
EDU Z 191013.48       P 3E 35.1        S 3E                               185
EBH Z 191014.00       P 2E 36.7        S 3E                               191
EDI Z 191021.00       P 3E 47.0        S 2E  2.0H0.28M           0.25 200   232
EDI NS1910               E                E  3.1H0.21ML          0.25 200   232
EDI EW1910               E                E  3.3H0.31ML          0.25 200   232
KPL Z 190950.5        P 2E 56.00       S 3                                     44
KPL NS1909                                  4.0H0.16ML          1.0  200     44
KPL EW1909                                  6.0H0.15ML          1.0  200     44
KAR Z 190959.2        P 3E                                                     91
KSB Z 190951.4        P 3E                                                     53
KAC Z 190946.33       P 0IU                                                    20
MDO Z 190952.52       P 0IU                                                    59
MCD NS1909                                  5.0H0.18ML          1.0  200    120
MCD EW1909                                  5.0H0.21ML          1.0  200    120
MCD Z 190962.35       P 1E                                                    120
MVH Z 190954.1        P 1E                                                     69
     -1
240787 LOWNET    LN 549    837      12.5       5.0DWR    LROSEWELL,LOTHIAN      1
      18 429.78  329.58/ 662.72   1.9 0.2              55.853   -3.125      2
  6   9 176 0.03  0.3   0.4 B A*C COALFIELD TYPE                                 3
EDI Z 180431.80       P  EU33.37       S 2E  3.5H0.21M            1.0 200     9
EDI NS1804               E                E  2.5H0.19ML           1.0 200     9
EDI EW1804               E                EU 3.2H0.20ML           1.0 200     9
EBL Z 180432.10       P  ED33.74       S 3EU                                   10
EAU Z 180433.89       P  ED36.78       S 3E                                    21
EBH Z 180439.00       P 2E                                                     50
     -1
250787CORNWALL   CN543            25.0       5.0WALKER LNE WENDRON,CORNWALL   1
       74532.04  169.54/  31.48   3.6 0.4              50.138   -5.226      2
 13   2 262 0.04  0.3   0.3 C A*D                                                3
CCO Z 074532.75       P 0ID                                                     2
CR2 Z 074533.14       P 0IU33.96       S 1                                      5
CR2 NS0745                             S 1  12.1H0.03ML          2.5  200     5
CR2 EW0745                             S 1  11.5H0.04ML          2.5  200     5
CCA Z 074533.14       P 0IU33.98       S 1                                      5
CST Z 074533.54       P 0IU34.64       S 1                                      8
CBW Z 074533.54       P 0ID                                                     8
CRA Z 074533.00       P 0IU33.67       S 1                                      4
CME Z 074533.16       P 0IU33.98       S 1                                      5
CTR Z 0745                34.06       S 1                                      6
     -1
250787CORNWALL   CN543            25.0       5.0WALKER LNE WENDRON,CORNWALL   1
       74818.21  169.38/  31.27   3.1 0.5              50.136   -5.228      2
 15   2 269 0.04  0.3   0.3 C A*D                                                3
CCO Z 074818.89       P 0ID19.36       S 1                                      2
CR2 Z 074819.30       P 0IU20.12       S 1                                      5
CCA Z 074819.29       P 0IU20.15       S 1                                      6
CST Z 074819.70       P 0IU20.80       S 1                                      8
CBW Z 074819.70       P 0ID                                                     8
CR2 NS0748                                  4.5 H0.03ML          10.0 200     5
CR2 EW0748                                  4.1 H0.04ML          10.0 200     5
CRA Z 074819.16       P 0IU19.85       S 1                                      4
CME Z 074819.32       P 0IU20.14       S 1                                      5
CTR Z 074819.41       P 0E 20.25       S 1                                      6
     -1
250787CORNWALL   CN543            25.0       5.0WALKER LNE WENDRON,CORNWALL   1
       74929.52  169.65/  31.51   3.7 0.4              50.138   -5.224      2
 15   2 259 0.07  0.5   0.4 C A*D                                                3
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CCO Z 074930.23        P 0I 30.80        S 1                                    2
CR2 Z 074930.60        P 0IU                                                    5
CR2 Z 074930.60        P 0IU31.44        S                                      5
CR2 NS0749                               S 1  12.0H0.04ML          2.5  200     5
CR2 EW0749                               S 1  10.5H0.04ML          2.5  200     5
CCA Z 074930.60        P 0IU31.45        S 1                                    5
CST Z 074931.00        P 0IU32.11        S 1                                    8
CBW Z 074931.00        P 0ID                                                    8
CRA Z 074930.65        P 0IU31.18        S 1                                    4
CME Z 074930.65        P 0IU31.46        S 1                                    5
CTR Z 0749                  31.55        S 1                                    5
     -1
300787 LOWNET     LN 550    252      12.5      5.0DWR    LWHITEHAVEN,CUMBRIA     1
       02032.57  296.91/ 519.06   1.1 2.1                 54.556   -3.594     2
 15  9 216 0.16  3.7  1.8 D C*D COALFIELD TYPE EVENT                            3
XDE Z 002034.77        P  ID36.39        S 2E                    1.0 200     9
ECK Z 002045.55        P 1E 55.48        S 3E                                  76
ESK Z 002047.47        P 1ED58.97        S 3E  8.6H0.20M         1.0 200    88
ESK NS0020                ED               E  9.5H0.20ML        1.0 200    88
ESK EW0020                ED               ED13.4H0.25ML        1.0 200    88
XAL Z 002049.97        P 4E 62.58        S 4E                                  95
XSO Z 002055.28        P 2E 72.05        S 3E                                 135
EBL Z 002056.06        P 2EU72.18        S 3E                                 140
EAU Z 002056.69        P 2EU72.99        S 3E                                 144
EDI Z 002058.39        P 1EU76.06        S 2E  8.3H0.40M         0.25 200   154
EDI NS0020                EU               EU 7.0H0.30ML        0.25 200   154
EDI EW0020                E                E  8.2H0.26ML        0.25 200   154
EAB Z 002102.40        P 3E                                                   188
EBH Z 002103.08        P 4E                                                   189
     -1
300787 LOWNET     LN 550    298      12.5      5.0DWR    LROSEWELL,LOTHIAN       1
       34313.02  330.58/ 663.59   1.9 0.0                 55.861   -3.109     2
  6  8 192 0.12  1.2  1.3 C B*D COALFIELD TYPE                                  3
EDI Z 034315.18        P  EU16.40        S 2E  7.5H0.20M         0.25 200    9
EDI NS0343                EU               E  7.0H0.20ML        0.25 200    9
EDI EW0343                E                E  6.4H0.31ML        0.25 200    9
EBL Z 034315.30        P 1E 17.30        S 3E                                  11
EAU Z 034317.18        P 1E 20.36        S 3E                                  22
     -1
310787 LOWNET     LN 550            12.5      5.0DWR    LROSEWELL,LOTHIAN       1
       02413.04  328.89/ 662.59   0.2 1.6              3+  55.851   -3.136     2
 10  9  99 0.05  0.2  0.2 B A*B COALFIELD TYPE, FELT      LOANHEAD               3
EDI Z 002415.26        P  ID16.73        S 1IU 5.3H0.28M         10.0 200    9
EBL Z 002415.65        P  ID17.53        S 2EU                                 10
EAU Z 002417.28        P  ID20.50        S 2EU                                 20
ESY Z 002419.62        P 1EU                                                   34
EBH Z 002422.40        P 1ED29.04        S 2E                                  50
ELO Z 002426.70        P 2E 36.48        S 2ED                                 78
EDU Z 002426.90        P 1E 36.78        S 2E                                  78
EAB Z 002427.42        P 3E                                                    84
ESK Z 002423.79        P 2E 31.49        S 3E  8.4H0.41M         0.25 200    60
ESK NS0024                E                E  6.3H0.8 ML        0.25 200    60
ESK EW0024                E                E  5.6H0.4 ML        0.25 200    60
XSO Z 002425.83        P 2E                                                    69
ECK Z 002426.71        P 2E                                                    75
EDI NS0024                ID               E  5.4H0.20M         10.0 200    9
EDI EW0024                IU               IU 5.1H0.20M         10.0 200    9
     -1
040887 LOWNET                                  5.0       LROSEWELL,LOTHIAN      1
       113045.15  328.88/ 662.71   0.3 1.5              4+  55.852   -3.136     2
  9  9 121 0.06  0.2  0.2 B A*B COALFIELD TYPE,FELT      ROSLIN                 3
EDI Z 113047.35        P  ID48.81        S 1EU 4.6H0.28M         10.0 200    9
EDI NS1130                ID               ED 5.0H0.20M         10.0 200    9
EDI EW1130                IU               IU 5.1H0.20M         10.0 200    9
EBL Z 113047.74        P 1ED49.73        S 2E                                  11
EAU Z 113049.38        P  ID52.59        S 2E                                  20
ESY Z 113051.72        P 2E                                                    33
EBH Z 113054.50        P 1EU61.02        S 2EU                                 50
ELO Z 113058.78        P 2E 68.52        S 3E                                  78
EDU Z 113058.82        P 2E 69.00        S 3E                                  78
EAB Z 113059.76        P 3E                                                    84
ESK Z 113056.09        P 3E 63.11        S 3E  5.1H0.8 M         0.25 200    60
ESK NS1130                E                ED 5.5H0.8 ML        0.25 200    60
ESK EW1130                E                E  5.1H0.4 ML        0.25 200    60
XSO Z 113057.89        P 2EU                                                   69
ECK Z 113058.78        P 3E                                                    75
     -1
040887N WALES                                  5.0       LLLEYN AFTERSHOCK      1
       223556.31  238.12/ 343.92  21.9 0.2                52.968   -4.411     2
  6  2 120 0.24  2.3  1.3 B B*B                                                3
YRE Z 22360.60         P 3  2.19         S 2                                    2
WLC Z 22365.0          P 3  9.23         S 2                                   43
WLC NS2236                                   4.5 H0.05ML           0.25 200   43
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WLC EW2236                                    4.0 H0.06ML          0.25 200   43
YRH Z 22361.2          P 1IU                                                    21
WBR Z 22363.1          P 2E                                                     37
      -1
050887HEREFORD   HF426                          5.0MORRIS LNE WORKSOP,NOTTS      1
       231533.17  466.38/ 387.91   0.4 2.0            3+   53.384   -1.002     2
 11 75 229 0.72  6.8  9.3 D D*D FELT THORPE SALVIN                               3
MCH Z 231606.27        P 2EU28.90        S                                     205
MCH NS2316                               S 3  11.4H0.35ML          0.25 200   205
MCH EW2316                               S 3   7.5H0.35ML          0.25 200   205
SBD Z 231600.11        P 1ED18.05        S 1  15.2H0.29ML          0.25 200   160
HAE Z 231603.68        P 1IU26.72        S 1   8.5H0.39ML          0.25 200   183
HTR Z 231612.60        P 3EU30.72        S 2   7.3H0.40ML          0.25 200   211
HLM Z 231559.82        P 1EU77.26        S 1   9.5H0.39ML          0.25 200   159
HPK Z 231545.85        P 2ED                                                    76
CWF Z 2315                  53.61        S                                      75
CWF NS2315                               S 3   5.5H0.20ML          0.25 200    75
CWF EW2315                               S 2   7.5H0.09ML          0.25 200    75
      -1
050887HEREFORD   HF426                          5.0MORRIS LNE WORKSOP,NOTTS      1
       231547.95  458.84/ 375.68   0.2 2.3            3+   53.275   -1.118     2
 11 61 298 0.81  5.5  4.2 D D*D FELT THORPE SALVIN                               3
MCH Z 231618.71        P 3ED40.28        S                                     191
MCH NS2316                               S 2  19.0H0.30ML          0.25 200   191
MCH EW2316                               S 2  24.5H0.27ML          0.25 200   191
SBD Z 231611.69        P 1EU29.59        S 3  25.5H0.18ML          0.25 200   149
HAE Z 231615.43        P 1EU36.41        S 2  17.6H0.32ML          0.25 200   168
HTR Z 231621.21        P 2EU42.32        S 2  21.5H0.26ML          0.25 200   197
HLM Z 231611.54        P 2EU28.96        S 3  17.5H0.20ML          0.25 200   146
CWF Z 2316                  05.20        S                                      61
CWF NS2316                               S 2   5.1H0.25ML           1.0 200    61
CWF EW2316                               S 1   7.7H0.21ML           1.0 200    61
      -1
070887 CORNWALL                                5.0       LTREVOSE HEAD,CORNWALL 1
       131515.27  184.38/  70.04   5.5 1.4                50.490   -5.040     2
 16 18 279 0.07  1.4  4.6 C B*D                                                  3
CSA Z 131518.56        P 0ID21.25        S 1                                   19
CST Z 131521.34        P 0IU                                                    34
CCA Z 131521.76        P 0IU                                                    36
CR2 Z 131521.85        P 0IU26.68        S 1                                   37
CR2 NS1315                                   4.1 H0.05ML          10.0 200   37
CR2 EW1315                                                                     37
CBW Z 131522.00        P 0IU                                                    38
CCO Z 131522.52        P 0IU                                                    41
CGH Z 131524.00        P 0IU                                                    50
CPZ Z 131524.55        P 0IU                                                    54
CTR Z 131521.86        P 0IU26.67        S 1                                   37
CME Z 131521.80        P 0IU26.60        S 1                                   37
CRA Z 131522.01        P 0IU26.96        S 1                                   38
CR2 SM1315                                   1.6 H0.05ML           0.25   4   37
      -1
070887 LOWNET    LN 551            12.5       5.0DWR    LBONNYRIGG,LOTHIAN      1
       145547.69  331.69/ 664.82   5.7 0.4                55.872   -3.092     2
  6  8 210 0.05  0.7  1.4 C A*D COALFIELD TYPE                                   3
EDI Z 145549.70        P  ED51.15        S 2EU 5.0H0.11M           1.0 200     8
EDI NS1455                ED                EU 6.5H0.12ML          1.0 200     8
EDI EW1455                EU                EU 5.0H0.22ML          1.0 200     8
EBL Z 145550.12        P 1EU52.04        S 2E                                  11
EAU Z 145552.16        P 1ED55.21        S 2E                                  23
      -1
070887 LOWNET    LN 551            12.5       5.0DDG    LBONNYRIGG,LOTHIAN      1
       175258.45  331.71/ 665.09   1.3 0.1                55.874   -3.092     2
  4  8 212 0.01  0.0  0.0 C A*D COALFIELD TYPE                                   3
EDI Z 175300.50        P  ID01.95        S 2EU17.2H0.22M           0.25 200     8
EDI NS1753                ID                EU14.1H0.11ML          0.25 200     8
EDI EW1753                IU                EU 8.2H0.25ML          0.25 200     8
EBL Z 175301.10        P 2EU                                                    12
EAU Z 175303.05        P 2E                                                     23
      -1
070887 LOWNET    LN 551            12.5       5.0DDG    LROSEWELL,LOTHIAN       1
       183927.48  328.20/ 662.72   0.9 0.2                55.852   -3.147     2
  6  8 161 0.09  1.4  1.5 C B*C COALFIELD TYPE                                   3
EDI Z 183929.51        P  IU31.08        S 1IU13.8H0.35M           0.25 200     8
EDI NS1839                ID                1IU 8.2H0.25ML          0.25 200     8
EDI EW1839                E                 1IU14.7H0.19ML          0.25 200     8
EBL Z 183930.27        P 2E 31.80        S 3E                                  11
EAU Z 183931.52        P 2E 34.50        S 3E                                  19
      -1
070887 LOWNET    LN551             12.5       5.0DDG    LROSEWELL,LOTHIAN       1
       215511.81  328.27/ 662.34   0.7 1.5            4+   55.849   -3.146     2
 10  9  94 0.19  0.8  1.0 B B*B COALFIELD TYPE,FELT      ROSLIN                   3
EDI Z 215513.82        P  ID15.29        S 1EU                                  9
EBL Z 215514.15        P 1ED16.18        S 2EU                                 11
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EAU Z 215515.90       P  ID19.05       S 1EU                                  20
ESY Z 215518.55       P 1EU                                                   34
EBH Z 215521.00       P  ID27.51       S 3E                                   50
ELO Z 215525.30       P 3E 35.00       S 2ED                                  78
EDU Z 215525.55       P 2EU                                                   78
EAB Z 215526.30       P 3E                                                    84
ESK Z 215520.57       P 3E 27.80       S 4E  8.4H0.30M          0.25 200      60
ESK NS2155              3E               4E  4.5H0.80ML         0.25 200      60
ESK EW2155              3E               4ED 4.5H0.40ML         0.25 200      60
XSO Z 215522.16       P 4ED                                                   69
ECK Z 215522.71       P 3E                                                    75
     -1
080887 LOWNET    LN 551           12.5       5.0DDG    LARROCHAR,STRATHCLYDE  1
       93731.84  230.71/ 707.80   5.6 1.2                56.233   -4.731     2
  7 25 309 0.14  2.5  1.8 D C*D                                               3
EAB Z 093736.40       P 1EU40.10       S 2ED                                  25
ELO Z 093743.65       P 3E 51.70       S 3E                                   68
EBH Z 093744.68       P 1ED53.70       S 3E                                   76
EAU Z 093746.90       P 1EU                                                   91
EDI Z 093747.82       P 4E 69.91       S 3E  4.0H0.20M          0.25 200     102
EDI NS0937              3E               2E  5.5H0.18ML         0.25 200     102
EDI EW0937              3E               2E  4.2H0.14ML         0.25 200     102
     -1
080887 LOWNET    LN 551           12.5       5.0DDG    LLANGHOLM,DUM & GALL   1
       173152.13  338.66/ 590.80   5.6 0.2                55.208   -2.964     2
  5 11 199 0.08  2.1  5.2 D C*D                                               3
EBL Z 173205.05       P 2E 11.93       S 3E                                   63
EAU Z 173207.61       P 2E                                                    77
EDI Z 173208.46       P 2EU16.48       S 3E                                   81
ESY Z 173208.65       P 2E 18.20       S 3E                                   82
ECK Z 173154.61       P 3IU56.16       S 3ID                                  11
ESK Z 173156.10       P 3ID58.67       S 3ID 4.0H0.11M          1.0  200      20
ESK NS1731              3ID              3ID 4.0H0.10ML         1.0  200      20
ESK EW1731              3IU              3ID 4.0H0.08ML         1.0  200      20
XSO Z 173161.62       P 3IU63.44       S 4E                                   55
     -1
090887 LOWNET    LN 551           12.5       5.0DDG    LMOFFAT WATER,DUM & GAL1
       161049.70  318.43/ 612.24   4.7 0.8                55.397   -3.288     2
 16 10 166 0.40  3.5  8.3 C C*C                                               3
EBL Z 161058.10       P  ID63.25       S 1IU                                  45
EAU Z 161058.60       P  ID63.57       S 2EU                                  51
EDI Z 161060.12       P  ID66.90       S 2E                                   59
ESY Z 161062.80       P 2E 71.28       S 3E                                   72
EBH Z 161065.90       P 1EU76.48       S 3E                                   97
EAB Z 161068.04       P 2E                                                   111
ELO Z 161069.78       P 1EU                                                  123
ESK Z 161051.75       P 3IU54.15       S 3E 10.0H0.10M          2.5  200      9
ESK NS1610              3ID              3E  9.0H0.10ML         2.5  200      9
ESK EW1610              3IU              3IU10.2H0.09ML         2.5  200      9
ECK Z 161054.09       P 3E 58.12       S 3ID                                  25
XSO Z 161060.59       P 3IU                                                   66
     -1
100887 LOWNET    LN 551           12.5       5.0DDG    LROSEWELL,LOTHIAN      1
       1933 0.61  324.85/ 661.02   2.2 0.5                55.837   -3.200     2
  6 10 147 0.27  1.9  2.7 C B*C COALFIELD TYPE                                 3
EDI Z 193302.74       P  ID04.31       S 1IU 8.2H0.19M          1.0  200     10
EDI NS1933              ID               1IU 7.0H0.19ML         1.0  200     10
EDI EW1933              IU               1IU 4.1H0.20ML         1.0  200     10
EBL Z 193303.16       P  ID05.01       S 2E                                   12
EAU Z 193304.78       P 3E 05.76       S 3E                                   16
     -1
110887 LOWNET    LN 551           12.5       5.0DDG    LJOHNSTONEBRIDGE,D & G 1
       214328.64  313.19/ 595.75   1.0-0.3                55.248   -3.366     2
  4 13 297 0.08  0.0  0.0 C A*D                                               3
ESK Z 214331.49       P  IU33.70       S 2ED 6.5H0.15M          0.25 200     13
ESK NS2143              IU               2EU 4.0H0.20ML         0.25 200     13
ESK EW2143              IU               2EU 5.0H0.12ML         0.25 200     13
ECK Z 214332.38       P 2E 34.79       S 3EU                                  17
XSO Z 214342.23       P 2E 51.48       S 3E                                   76
EBL Z 214342.60       P 4E 46.90       S 4E
ESY Z 214342.85       P 4E
EAU Z 214345.40       P 4E
     -1
130887HEREFORD                                  5.0ADS    LBRECON,POWYS.         1
       122844.15  304.41/ 234.81  14.5 0.6                52.003   -3.393     2
  7 12 198 0.08  1.8  2.0 C B*D                                               3
MCH Z 122849.29       P 0IU53.30       S 1ID                                  27
MCH NS1228                                  12.3H0.03ML          1.00 200     27
MCH EW1228                                  14.6H0.04ML          1.00 200     27
HAE Z 122854.27       P 1ID62.35       S 2                                    58
HCG Z 122851.42       P 2E 56.45       S 2                                    40
HGH Z 122854.01       P 0E                                                    57
HTR Z 122847.44       P 1IU                                                   12
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     -1
130887 LOWNET    LN 552            12.5       5.0DDG    LROSEWELL,LOTHIAN      1
       16 154.81  330.20/ 663.01   5.1 0.9                 55.855   -3.115    2
  6  9 184 0.05  0.7  1.6 C A*D COALFIELD TYPE                                  3
EDI Z 160156.79       P  IU58.35       S  EU 6.7H0.25M          2.5  200     9
EDI NS1601               IU              1EU 5.5H0.25ML         2.5  200     9
EDI EW1601               IU              1IU 6.0H0.21ML         2.5  200     9
EBL Z 160157.13       P  ID58.68       S 1EU                                  10
EAU Z 160158.89       P  ID62.00       S 3E                                   21
     -1
140887 LOWNET    LN 552            12.5       5.0DDG    LROSEWELL,LOTHIAN      1
        31624.54  328.89/ 663.65   1.0-0.1                 55.861   -3.136    2
  4  8 187 0.22  0.0  0.0 C B*D COALFIELD TYPE                                  3
EDI Z 031626.41       P  ID27.88       S 1ED 6.0H0.24M         0.25 200     8
EDI NS0316               ID              1ED 5.0H0.19ML         0.25 200     8
EDI EW0316             2E                1ED 6.0H0.26ML         0.25 200     8
EBL Z 031627.80       P 3E 28.92       S 2E                                   11
     -1
140887 CORNWALL                                  5.0ABW    LS.PENZANCE,CORNWALL   1
       2336 3.60  146.81/  17.69  12.7 1.0                 50.005   -5.534    2
  7 27 328 0.08  3.0  6.1 D C*D                                                3
CGH Z 233608.86       P 1                                                    27
CCO Z 233608.94       P 0IU                                                  28
CCA Z 233609.30       P 1IU                                                  30
CR2 Z 233609.51       P 1IU14.23       S 1                                   32
CR2 NS2336                          12.0H0.05ML          1.0  200    32
CR2 EW2336                          12.0H0.05ML          1.0  200    32
CBW Z 233609.76       P 0IU                                                  34
CST Z 233609.93       P 0IU                                                  34
     -1
150887 LOWNET    LN 552            12.5       5.0DDG    LROSEWELL,LOTHIAN      1
        05019.14  326.93/ 662.77   3.7-0.1                 55.853   -3.167    2
  4  8 147 0.06  0.0  0.0 C A*D COALFIELD TYPE                                  3
EDI Z 005021.09       P 1EU22.25       S 1EU 6.1H0.18M         0.25 200     8
EDI NS0050                             6.1H0.20ML         0.25 200     8
EDI EW0050                             5.5H0.22ML         0.25 200     8
EAU Z 005022.61       P 3E                                                   18
EBL Z 005021.61       P 1E                                                   12
     -1
170887 LOWNET    LN 552            12.5       5.0DDG    LROSEWELL,LOTHIAN      1
       193011.17  328.54/ 662.37   0.2 1.4            2+   55.849   -3.141    2
 10  9 124 0.10  0.3  0.3 B A*B COALFIELD TYPE,FELT      ROSLIN                 3
EDI Z 193013.322      P  ID14.82       S 1EU 3.1H0.25M         10.0 200     9
EDI NS1930               ID              1EU 4.2H0.20ML         10.0 200     9
EDI EW1930               IU               IU 4.7H0.21ML         10.0 200     9
EBL Z 193013.74       P  ID15.62       S 2E                                   10
EAU Z 193015.366      P  ID18.58       S 2E                                   20
ESY Z 193018.033      P 2E 22.60       S 3E                                   34
EBH Z 193020.577      P  ID27.25       S 2E                                   50
EDU Z 193025.055      P 3E                                                   78
EAB Z 193025.844      P 3E                                                   84
     -1
200887 LOWNET    LN 553            12.5       5.0DDG    LROSEWELL,LOTHIAN      1
        32926.66  330.55/ 662.64   2.0-0.2                 55.852   -3.110    2
  4  9 299 0.03  0.0  0.0 C A*D COALFIELD TYPE                                  3
EDI Z 032928.83       P 1ID30.34       S 2E  7.0H0.2 M         0.25 200     9
EDI Z 0329               ID              2E  3.2H0.40ML         0.25 200     9
EDI Z 0329             2E                1E  3.0H0.30ML         0.25 200     9
EAU Z 032930.86       P 2EU34.04       S 3E                                   22
     -1
200887 LOWNET    LN 553            12.5       5.0DDG    LROSEWELL,LOTHIAN      1
         956 8.59  328.67/ 663.03   1.2 0.7                 55.855   -3.140    2
  6  8 168 0.01  0.2  0.2 B A*C COALFIELD TYPE                                  3
EDI Z 095610.62       P  ID12.14       S 1IU 5.5 0.21M         1.0  200     8
EDI NS0956                          10.2H0.15ML          1.0  200     8
EDI EW0956                          13.5H0.16ML          1.0  200     8
EAU Z 095612.67       P 2EU15.60       S 3ID                                  20
EBL Z 095611.16       P 1IU13.01       S 1EU                                  11
     -1
200887N WALES                                    5.0       LRUNCORN,CHESHIRE      1
       195256.14  351.26/ 374.40   6.8 1.1                 53.264   -2.731    2
 18 76 310 0.29  2.6  2.7 D C*D                                                3
WCB Z 195315.35       P 3E                                                  122
WCB NS1953                             5.4 H0.06ML          0.25 200    122
WCB EW1953                30.0       S 3  5.0 H0.09ML          0.25 200    122
YRC Z 1953                29.8       S 3                                   123
YRH Z 195318.4        P 2E                                                  136
WLF Z 195313.72       P 3E 26.06       S 3                                   111
WME Z 195313.6        P 3E 25.97       S 2                                   106
YLL Z 195312.25       P 2I 23.4        S 2                                    97
WLC Z 19539.0         P 2E                                                   76
WLC NS1953                17.45       S 2  8.9 H0.06ML          0.25 200     76
WLC EW1953                             5.7 H0.09ML          0.25 200     76
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WVR Z 19539.29        P 2E 18.11       S 2                                    78
WBR Z 195310.93       P 2E 21.71       S 2                                    90
WST Z 195311.69       P 1IU                                                   90
WFB Z 195314.2        P 2ED                                                  109
      -1
220887N WALES                                    5.0       LLLEYN AFTERSHOCK     1
       183113.39  237.13/ 343.32  21.9-0.2                  52.962   -4.425    2
  9  2 302 0.08  0.8  0.7 C A*D                                                3
WCB Z 1831              27.79       S 3                                      47
YRC Z 183120.10       P 3E 24.31       S 2                                    34
YRE Z 183116.82       P 2E 19.47       S 2  17.5H0.06ML          0.25 200     2
WLF Z 183120.3        P 3E 24.82       S 2                                    37
YLL Z 183118.94       P 1IU22.7        S 3                                    26
      -1
220887 LOWNET    LN 553           12.5       5.0DDG    LKIRKCALDY,FIFE        1
       2236 3.35  331.42/ 689.78   0.6 0.2                 56.096   -3.102    2
  8 20 179 0.11  0.7  1.2 B A*C COALFIELD TYPE                                 3
EDI Z 223607.53       P 1ED10.31       S 2E 9.0H0.35M            0.25 200    20
EDI NS2236                                  7.5H0.30ML          0.25 200    20
EDI EW2236                                  4.6H0.25ML          0.25 200    20
EBH Z 223609.30       P 1ED13.68       S 2E                                   30
EAU Z 223610.17       P 2EU                                                   36
ESY Z 223610.29       P  ED                                                   36
EBL Z 223610.44       P  ED15.78       S 3E                                   36
      -1
230887 LOWNET    LN 553           12.5       5.0DDG    LROSEWELL,LOTHIAN      1
        84510.11  328.27/ 663.12   4.5-0.1                 55.856   -3.146    2
  6  8 164 0.05  0.6  2.5 C B*C COALFIELD TYPE                                 3
EDI Z 084511.92       P  ED13.36       S  IU 4.6H0.20M           0.25 200     8
EDI NS0845                                  6.1H0.19ML          0.25 200     8
EDI EW0845                                  7.5H0.16ML          0.25 200     8
EBL Z 084512.60       P 2EU14.17       S 3E                                   11
EAU Z 084513.87       P 2ED16.65       S 2E                                   19
      -1
230887                                           5.0MJA    LMALLAIG,HIGHLAND      1
       18 520.98  169.72/ 800.35   2.6 0.5                 57.037   -5.796    2
  5 13 186 0.06  1.8  3.6 C B*D                                                3
KPL Z 180527.4        P 1E 31.8        S 2E                                   35
KPL NS1805                                  7.5H0.1 ML          0.25 200    35
KPL EW1805                                  8.5H0.1 ML          0.25 200    35
KAR Z 180523.72       P 0IU                                                   13
KSB Z 180526.55       P 1E                                                    30
KAC Z 180531.4        P 2E                                                    60
      -1
260887HEREFORD   HF238                        MORRIS LNW OLLERTON,NOTTS.      1
       172042.99  460.84/ 360.24   0.1 1.9          4+   53.136   -1.090    2
 10 47 298 0.56  4.2  3.5 D D*D FELT OLLERTON,NOTTS.                           3
MCH Z 172112.62       P 3EU33.34       S                                     181
MCH NS1721                               S 2  11.1H0.18ML          0.25 200  181
MCH EW1721                               S 2  14.7H0.25ML          0.25 200  181
SBD Z 172106.56       P 2ED24.97         S 2   8.7H0.27ML          0.25 200  148
HCG Z 1721              37.41           S 2  10.5H0.31ML          0.25 200  196
HTR Z 1721              36.05           S 3   6.5H0.20ML          0.25 200  189
HLM Z 172105.35       P 2EU22.52         S 2   7.4H0.30ML          0.25 200  139
CWF Z 172050.98       P 2EU56.49         S                                    47
CWF NS1720                               S 2  11.2H0.10ML          0.25 200   47
CWF EW1720                               S 2  26.1H0.13ML          0.25 200   47
      -1
260887 LOWNET    LN 554           12.5       5.0DDG    LROSEWELL,LOTHIAN      1
       173115.60  328.67/ 662.63   0.2 1.4          4+   55.852   -3.139    2
 10  9 122 0.06  0.2  0.2 B A*B COALFIELD TYPE,FELT      ROSLIN                3
EDI Z 173117.77       P  ID19.27       S 1IU15.2H0.30M           2.5  200     9
EDI NS1731                                 19.0H0.20ML           2.5  200     9
EDI EW1731                                 19.5H0.21ML           2.5  200     9
EBL Z 173118.17       P 2ED20.22       S 2EU                                  11
EAU Z 173119.81       P  ID23.01       S 2EU                                  20
ESY Z 173122.24       P 3E 27.02       S 3E                                   34
EBH Z 173124.97       P 1ID31.56       S 2ED                                  50
      -1
280887 LOWNET    LN 554           12.5       5.0DDG    LROSEWELL,LOTHIAN      1
        92256.55  328.33/ 662.48   0.1 1.3          2+   55.850   -3.145    2
 10  9 125 0.18  0.6  0.6 B B*B COALFIELD TYPE,FELT      ROSLIN                3
EDI Z 092258.69       P  ID60.14       S 1IU12.0H0.31M           2.5  200     9
EDI NS0922                                 15.5H0.15ML           2.5  200     9
EDI EW0922                                 19.0H0.20ML           2.5  200     9
EBL Z 092259.09       P 1ED61.13       S 1EU                                  11
EAU Z 092260.70       P  ID63.89       S 1EU                                  19
ESY Z 092263.62       P 1ID67.90       S 2EU                                  34
EBH Z 092265.84       P 2ED72.47       S 2EU                                  50
EDU Z 092270.37       P 3ED80.36       S 3E                                   78
      -1
310887 LOWNET    LN 554           12.5       5.0DDG    LROSEWELL,LOTHIAN      1
        34650.82  328.45/ 662.56   0.1 1.1          2+   55.851   -3.143    2
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 10  9 124 0.11  0.4  0.4 B A*B COALFIELD TYPE,FELT      ROSLIN                3
EDI Z 034652.95        P  ID54.46        S 1IU 6.5H0.21M            2.5  200    9
EDI NS0346                                     7.0H0.21ML           2.5  200    9
EDI EW0346                                    12.7H0.20ML           2.5  200    9
EBL Z 034653.49        P 1IU55.40        S 1IU                                  11
EAU Z 034654.96        P  ID58.20        S 1IU                                  20
ESY Z 034657.78        P 2ED62.24        S 2EU                                  34
EBH Z 034660.18        P 2ED66.76        S 3E                                   50
      -1
020987N WALES                                    5.0       LLLEYN AFTERSHOCK     1
        63033.17  240.30/ 343.86  24.5 0.8                  52.968   -4.378     2
 24  3  84 0.22  0.6  1.3 B B*A                                                  3
WCB Z 063041.27        P 3                                                    47
WCB NS0630                                     6.6 H0.05ML           0.25 200   47
WCB EW0630                                     7.1 H0.05ML           0.25 200   47
YRC Z 063040.0         P 1ID44.56        S 2                                    34
YRE Z 063036.62        P 3E                                                     4
WPM Z 063041.52        P 2I 47.2         S 2                                    45
WLF Z 063040.2         P 2I 44.9         S 2                                    36
WME Z 063041.92        P 2E 47.93        S 2                                    48
YLL Z 063038.31        P 3E 42.18        S 2                                    24
WLC Z 063040.9         P 2IU                                                    40
WLC NS0630                                     9.2 H0.12ML           1.0  200   40
WLC EW0630                 45.27        S 1  5.0 H0.10ML           1.0  200   40
YRH Z 063038.6         P 1IU42.2         S 1                                    23
WVR Z 063043.02        P 2E 49.1         S 3                                    55
WST Z 063039.12        P 2E 43.22        S 1                                    26
WFB Z 063040.65        P 1IU45.7         S 2                                    39
WBR Z 063039.33        P 3E 44.75        S 2                                    35
      -1
020987 LOWNET    LN 554            12.5       5.0DDG    LROSEWELL,LOTHIAN      1
        72957.66  328.62/ 662.70   0.0 1.1              3+   55.852   -3.140     2
 10  8 122 0.10  0.3  0.3 B A*B COALFIELD TYPE,FELT      ROSLIN                3
EDI Z 072959.78        P  ID61.27        S 1E  8.5H0.30M            2.5  200    8
EDI NS0729                                     7.4H0.21ML           2.5  200    8
EDI EW0729                                    14.1H0.19ML           2.5  200    8
EBL Z 072960.30        P 1EU62.24        S 1IU                                  11
EAU Z 072961.87        P  ID65.07        S 1EU                                  20
ESY Z 072964.55        P 2E 69.02        S 2E                                   34
EBH Z 072967.07        P 2EU73.72        S 3E                                   50
      -1
030987 LOWNET    LN 555            12.5       5.0DDG    LROSEWELL,LOTHIAN      1
       121319.09  327.67/ 661.75   0.4 1.0                  55.844   -3.155     2
 10  9 132 0.27  0.3  0.3 B B*B COALFIELD TYPE                                   3
EDI Z 121321.14        P 0ID22.61        S 1IU 6.7H0.25M            2.5 200    9
EDI NS1213                                     9.2H0.2 ML           2.5 200    9
EDI EW1213                                     6.2H0.21ML           2.5 200    9
EBL Z 121321.57        P 1ED23.56        S 1EU                                  11
EAU Z 121323.19        P 0ID26.36        S 2EU                                  19
ESY Z 121325.99        P 3E 31.58        S 3E                                   35
EBH Z 121328.42        P 2EU35.16        S 3E                                   50
      -1
050987                                           5.0MJA    LLOCH NEVIS,HIGHLAND   1
       161433.07  176.24/ 800.50   6.5 2.0                  57.041   -5.689     2
  8 16 152 0.15  2.3  3.0 C B*C                                                  3
KPL Z 161439.3         P 0IU43.4         S 1E                                   33
KPL NS1614                                     14.0H0.23ML           2.5  200   33
KPL EW1614                                     11.0H0.27ML           2.5  200   33
KAR Z 161436.34        P 0ID                                                    16
KSB Z 161437.75        P 0ID                                                    25
KAC Z 161442.88        P 0ID49.4         S 1E                                   56
MDO Z 161448.5         P 2E 58.6         S 3E                                   92
MME Z 161458.8         P 2E                                                    168
MCD NS1614                                     3.0H0.15ML            1.0  200  159
MCD EW1614                                     3.5H0.14ML            1.0  200  159
MCD Z 161459.0         P 4                                                     159
      -1
050987                                           5.0MJA    LLOCH HOURN,HIGHLAND   1
       161321.81  187.05/ 808.22   1.0 0.4                  57.116   -5.518     2
  5 12 192 0.02  0.4  0.5 C A*D                                                  3
KPL Z 161326.97        P 0ID30.8         S 0ID14.0H0.18ML           0.25 200   26
KPL NS1613                                     5.0H0.17ML            0.25 200   26
KPL EW1613                                     8.0H0.17ML            0.25 200   26
KAR Z 161327.5         P 3E                                                     29
KSB Z 161324.6         P 0ID                                                    12
KAC Z 161330.1         P 2E                                                     45
      -1
060987N WALES                                    5.0       LLLEYN AFTERSHOCK     1
        932 4.28  238.19/ 345.04  20.0 1.8                  52.978   -4.410     2
 23  1 146 0.28  1.1  1.9 C B*C                                                  3
WCB Z 093172.4         P 3E                                                    46
WCB NS0931                78.31        S 3  8.5 H0.07ML           2.5  200   46
WCB EW0931                                     5.5 H0.08ML           2.5  200   46
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YRC Z 093170.45       P 1IU74.92       S 2                                    32
YRE Z 093167.45       P 1ID                                                    1
WPM Z 093172.25       P 1IU77.62       S 3                                    46
WLF Z 093170.65       P 1IU75.37       S 2                                    35
WME Z 093172.36       P 2IU78.37       S 2                                    47
YLL Z 093169.34       P 1IU72.3        S 1                                    24
WLC Z 093212.21       P 1ID                                                   42
WLC NS0932                17.42       S 2  5.1 H0.12ML          10.0 200    42
WLC EW0932                             4.4 H0.06ML          10.0 200    42
WVR Z 093214.12       P 2ID20.41       S 2                                    57
WBR Z 093211.27       P 1ID16.0        S 2                                    37
WST Z 093210.29       P 1ID14.11       S 2                                    28
WFB Z 093211.76       P 2I 16.17       S 2                                    41
     -1
070987N WALES                                    5.0       LLLEYN,GWYNEDD      1
       104240.87  231.04/ 347.97  11.3 1.3                 53.002   -4.518    2
 23  7 151 0.14  0.4  1.0 B A*C                                                3
WCB Z 104248.10       P 2E                                                    42
WCB NS1042                                  7.2 H0.05ML          1.0  200    42
WCB EW1042                53.13       S 3  7.9 H0.08ML          1.0  200    42
YRC Z 104245.90       P 2I 49.73       S 2                                    28
YRE Z 104242.72       P 2I                                                     7
WPM Z 104249.25       P 3E 55.12       S 3                                    50
WLF Z 104246.60       P 2E 50.69       S 2                                    33
WME Z 104248.48       P 2E 53.90       S 3                                    46
YLL Z 104245.75       P 1IU49.36       S 1                                    28
WLC Z 104249.56       P 2E                                                    50
WLC NS1042                55.3        S 2  13.0H0.08ML          1.0  200    50
WLC EW1042                             7.0 H0.09ML          1.0  200    50
YRH Z 104244.76       P 1ID                                                   20
WVR Z 104251.89       P 2E                                                    66
WBR Z 104248.75       P 2E 53.81       S 3                                    45
WST Z 104247.37       P 1IU51.84       S 2                                    36
WFB Z 104249.22       P 1ID54.8        S 3                                    48
     -1
070987 LOWNET    LN 555           12.5       5.0DDG    LROSEWELL,LOTHIAN      1
       17 8 9.73  328.87/ 663.08   0.4 1.2                 55.856   -3.136    2
 10  8 119 0.21  0.9  1.0 B B*B COALFIELD TYPE                                 3
EDI Z 170811.86       P  IU13.40       S 1IU11.5H0.28M           2.5  200     8
EDI NS1708                                10.0H0.30ML          2.5  200     8
EDI EW1708                                14.0H0.17ML          2.5  200     8
EBL Z 170812.18       P  ID14.92       S 2E                                   11
EAU Z 170813.88       P  ID17.08       S 1IU                                  20
ESY Z 170816.15       P 2E 20.90       S 3E                                   33
EBH Z 170819.20       P 2ED25.81       S 1EU                                  50
EDU Z 170823.66       P 3E                                                    77
     -1
080987 CORNWALL                                  5.0       LSE LISKEARD, CORNWALL 1
       12 2 1.57  227.16/  61.42   9.1 0.9                 50.427   -4.434    2
  7 36 149 0.10  0.3  9.7 C C*C                                                3
DYA Z 120208.15       P 1IU12.50       S 1                                    36
CBW Z 120211.27       P 1                                                     58
CR2 Z 120211.65       P 1EU                                                   60
CR2 NS1202                                3.0 H0.06ML           1.0 200    60
CR2 EW1202                                3.7 H0.05ML           1.0 200    60
CCA Z 120212.17       P 1                                                     63
CCO Z 120212.22       P 1                                                     63
DYA NS1202                                6.5 H0.07ML          1.0  200    36
DYA EW1202                                3.5 H0.10ML          1.0  200    36
HTL Z 1202                20.00       S 2                                    63
     -1
080987 ESKDALE   ES 329           12.5       5.0DDG    LNORTHUMBRIAN COAST    1
       225654.48  457.84/ 597.25   8.2 0.8                 55.266   -1.090    2
  6 78 309 0.05  0.8  1.0 C A*D OFFSHORE EPICENTRE                             3
XSO Z 225707.43       P 1IU16.71       S 2E                                   78
XAL Z 225708.41       P 2E 18.71       S 2E                                   85
ESK Z 225716.02       P 2E 31.71       S 2E                                  135
ESK NS2257                              2.0H0.07ML          0.25 200   135
ESK EW2257                              2.6H0.07ML          0.25 200   135
     -1
080987 LOWNET    LN 555           12.5       5.0DDG    LNORTHUMBRIAN COAST    1
       225711.46  461.62/ 610.77  10.4 2.1                 55.387   -1.027    2
 18 78 276 0.18  1.3  1.4 C B*D OFFSHORE EPICENTRE                             3
ESY Z 225729.43       P 3E 44.22       S 3E                                  116
EBL Z 225732.81       P 3E 48.88       S 3E                                  134
EDI Z 225735.50       P 3E 51.80       S 3E                                  148
EDI NS2257                              13.5H0.28ML          0.25 200   148
EDI EW2257                              11.5H0.31ML          0.25 200   148
EAU Z 225736.85       P 1E                                                    161
EDU Z 225738.55       P 2E                                                    179
EBH Z 225739.61       P 2E                                                    183
EAB Z 225744.72       P 1E                                                    226
XSO Z 225724.44       P 1IU33.81       S 3E                                   78
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XAL Z 225727.21       P 3E 38.76       S 3E                                     96
ECK Z 225732.86       P 2E 48.61       S 3E                                    135
ESK Z 225733.38       P 2ID49.21       S 2E                                    138
ESK NS2257                                   8.0H0.10ML          1.0  200  138
ESK EW2257                                   6.8H0.11ML          1.0  200  138
     -1
100987N WALES                                 5.0       LLLEYN AFTERSHOCK       1
       1617 3.67  237.10/ 345.85  20.0 0.8                  52.985    -4.427     2
 22  0 123 0.22  0.7  1.6 B B*B                                                  3
WCB Z 161671.7        P 3E                                                      45
WCB NS1616                77.28        S 3  6.5 H0.06ML          0.25 200   45
WCB EW1616                                  5.4 H0.09ML          0.25 200   45
YRC Z 161669.7        P 1ID73.75       S 2                                      31
YRE Z 161666.65       P 2I                                                       0
WPM Z 1616                77.15        S 3                                      46
WLF Z 161669.78       P 3E 74.6        S 2                                      34
WME Z 161671.78       P 2E 77.5        S 3                                      47
YLL Z 161668.55       P 1IU72.2        S 2                                      24
WLC Z 161711.58       P 2E                                                      44
WLC NS1617                                  5.0 H0.15ML          1.0  200   44
WLC EW1617                17.05        S 1  4.5 H0.08ML          1.0  200   44
YRH Z 16178.76        P 1IU                                                     22
WVR Z 161713.9        P 2E                                                      59
WBR Z 161710.8        P 2E 15.44       S 1                                      39
WST Z 16179.15        P 3E 13.8        S 2                                      29
WFB Z 161711.1        P 2E 16.1        S 3                                      43
     -1
160987N WALES                                 5.0       LBIRMINGHAM,W.MIDLANDS 1
        74324.85  410.29/ 294.00   1.5 1.6                  52.543    -1.848     2
 22 71 280 0.35  3.3  5.2 D C*D                                                  3
WFB Z 074349.17       P 3E 66.02       S 3                                     149
WVR Z 074345.55       P 3E 59.9        S 3                                     122
WLC Z 074348.05       P 2E                                                     140
WLC NS0743                63.54        S 3  8.7 H0.11ML          0.25 200  140
WLC EW0743                                  5.5 H0.12ML          0.25 200  140
WBR Z 074348.55       P 2E 64.7        S 2                                     143
MCH Z 074341.52       P 2E                                                      99
MCH NS0743                52.82        S 2  9.0 H0.06ML          1.0  200   99
MCH EW0743                                  5.0 H0.1 ML          1.0  200   99
SBD Z 074343.05       P 2E 53.55       S 2                                     104
HAE Z 074336.76       P 1IU45.3        S 2                                      74
HCG Z 074345.82       P 2E 59.49       S 2                                     126
HGH Z 074345.15       P 1IU59.19       S 2                                     120
HTR Z 074343.16       P 1IU55.8        S 2                                     110
HLM Z 074336.15       P 1IU45.1        S 2                                      71
     -1
180987 LOWNET    LN557         12.5       5.0DDG      LLOCH TUMMEL,TAYSIDE    1
        93348.19  288.57/ 760.00   2.4 1.4                  56.719    -3.821     2
 10 28 263 0.12  1.2  1.3 C B*D                                                  3
ELO Z 093352.99       P  IU56.15       S 2E                                     28
EDU Z 093357.06       P 1E                                                      53
EBH Z 093357.50       P  IU64.80       S 3E                                     56
EAB Z 093359.49       P  IU67.20       S 3E                                     67
EDI Z 093364.05       P 3E 75.94       S 2E  5.6H0.20M           0.25 200   97
EDI NS0933                                   4.0H0.25ML          0.25 200   97
EDI EW0933                                   6.5H0.25ML          0.25 200   97
EAU Z 093364.75       P 1E                                                     100
EBL Z 093366.91       P 3E                                                     116
     -1
200987 LOWNET                                 5.0DDG/JARLROSEWELL,LOTHIAN       1
       950 2.61  328.47/ 662.25   1.8 1.0                  55.848    -3.143     2
 11  1 125 0.09  0.4  0.2 B A*B COALFIELD TYPE                                   3
ROA Z 095003.10       P  ID03.54       S 1                       0.25   4     1
ROA NS0950                                ID 3.0H0.15M           0.250.04     1
ROB Z 095003.11       P  ID                                                      1
EDI Z 095004.67       P  IU06.21       S 1IU10.0H0.24M             2.5 200    9
EDI NS0950                 IU                6.1H0.20ML            2.5 200    9
EDI EW0950                 ID                9.5H0.20ML            2.5 200    9
EBL Z 095004.94       P  ID06.65       S 2E                                     10
EAU Z 095006.70       P  ID09.20       S 2E                                     20
ESY Z 095008.99       P 2E                                                      34
EBH Z 095011.61       P 2E                                                      50
     -1
210987 SH,FL,BER                              5.0SIMPSON NORTH SEA              1
       8 718.72                    5.0 2.3                  59.819     1.563     2
 18157 170 0.81  5.3  6.6 D D*D                                                  3
FOO Z 0807 59.50      P 1E  85.80      S 3E                                    275
FOO NS0807                                  05.2H0.08ML         01.0 200  275
FOO EW0807                                  03.2H0.11ML         01.0 200  275
FRO Z 0807                 87.40       S 3E                                    282
ASK Z 0807 50.60      P 1I  73.10      S 3E                                    215
ODD Z 0808 00.00      P 1I  28.40      S 3E                                    286
KMY Z 0807 52.50      P 1I  74.50      S 3E                                    219
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HYA Z 0808                    30.40       S 3E                                  295
LRW Z 0807 42.61       P 2E   62.05       S 3ID                                 157
LRW NS0807                                     08.6H0.10ML           01.0 200   157
LRW EW0807                                     06.7H0.12ML           01.0 200   157
SAN Z 0807 43.41       P 1E   62.80       S 3ID                                 158
WAL Z 0807 47.01       P 2E   65.32       S 3EU                                 184
YEL Z 0807 46.10       P 1E   65.80       S 3ID                                 168
     -1
210987                                          5.0SIMPSON NORTH SEA              1
       8 952.27                      17.2 2.3                  59.808    1.547    2
 19156 171 0.36  3.1   3.3 D C*D                                                  3
FOO Z 0810 30.80       P 1E   59.50       S 3E                                  276
FRO Z 0810 32.60       P 1E   60.01       S 3E                                  283
HYA Z 0810 33.10       P 1E   63.20       S 3E                                  297
ODD Z 0810 32.20       P 1E   61.20       S 3E                                  287
KMY Z 0810                    47.00       S 3E                                  220
ASK Z 0810 23.10       P 1E   45.50       S 3E                                  217
LRW Z 0810 16.70       P 1E   32.70       S 3E                                  156
LRW NS0810                                     08.0H0.11ML           01.0 200   156
LRW EW0810                                     07.2H0.07ML           01.0 200   156
SAN Z 0810 16.31       P 1ED  33.50       S 3E                                  158
WAL Z 0810 19.39       P 1EU  36.30       S 3E                                  183
YEL Z 0810 18.05       P 1E   37.70       S 3E                                  168
FOO NS0810                                     06.0H0.08ML           01.0 200   276
FOO EW0810                                     04.5H0.09ML           01.0 200   276
     -1
220987 LOWNET    LN 557              12.5        5.0DDG    LRENFREW,STRATHCLYDE    1
       72154.94  247.64/ 667.89     2.3 1.8                  55.880   -4.436    2
 18  8 111 0.12  0.3   0.5 B A*B                                                  3
EAB Z 072201.34        P  ID05.78       S 1E                                    35
EAU Z 072205.90        P 1E                                                     62
EBH Z 072207.15        P  ID16.35       S 1E                                    71
ELO Z 072208.35        P 2E                                                     80
EDI Z 072208.52        P 2E 18.50       S 2E  4.5H0.12M           1.0  200     78
EDI NS0722                                     5.8H0.20ML           1.0  200     78
EDI EW0722                                     4.5H0.14ML           1.0  200     78
EDU Z 072213.97        P 2EU28.20       S 3E                                    115
ESY Z 072214.07        P 4E                                                     114
PGB Z 072156.89        P  IU58.09       S 1ID 4.7H0.11M           10.0 200      8
PGB EW0721                                     7.0H0.19M           10.0 200      8
PMS Z 072158.79        P  IU61.67       S 1ID                                   20
PCA Z 072159.30        P  IU62.40       S 1ID                                   23
PCO Z 072159.70        P  IU63.10       S 2E                                    24
     -1
230987 LOWNET    LN 558 031          12.5        5.0DDG    LRENFREW,STRATHCLYDE    1
       94014.58  247.83/ 667.75     3.1 1.2                  55.879   -4.433    2
 18  8 110 0.08  0.2   0.7 B A*B                                                  3
EAB Z 094021.05        P 1E 25.45       S 2E                                    35
EAU Z 094025.29        P 1E                                                     61
EBH Z 094026.70        P 1ED35.43       S 2E                                    71
EDI Z 094027.91        P 2E 37.72       S 2E  4.4H0.12M           0.25 200      78
EDI NS0940                                     6.8H0.17ML           0.25 200      78
EDI EW0940                                     4.4H0.19ML           0.25 200      78
ELO Z 094028.20        P 3E                                                     80
EBL Z 094029.36        P 3E 40.40       S 3E                                    88
PGB Z 094016.48        P  IU17.69       S 1IU 8.5H0.10M           2.5  200      8
PGB EW0940                                    18.5H0.12ML           2.5  200      8
PMS Z 094018.41        P  IU21.20       S 1IU                                   20
PCA Z 094018.90        P 1IU22.00       S 1ID                                   23
PCO Z 094019.25        P 1IU22.52       S 3E                                    24
     -1
230987 LOWNET                                   5.0DWR/JARLROSEWELL,LOTHIAN       1
       201131.83  328.49/ 663.10     1.4 1.2             3+   55.856   -3.142    2
 12  1 120 0.14  0.6   0.3 B A*B COALFIELD TYPE,FELT      ROSLIN                   3
ROA Z 201132.21        P  IU32.63       S 1E                        0.25   4     1
ROA EW2011                                     7.6H0.12M             0.250.04     1
ROB Z 201132.22        P  IU                                                     1
EDI Z 201133.75        P  ID35.22       S 1EU10.0H0.29M            2.5 200      8
EDI NS2011                ID               IU11.4H0.20ML           2.5 200      8
EDI EW2011                EU               IU16.6H0.20ML           2.5 200      8
EBL Z 201134.25        P 2E 36.19       S 2EU                                   11
EAU Z 201135.78        P 1ID38.98       S 3EU                                   20
ESY Z 201138.56        P 2E                                                     34
EBH Z 201140.98        P 2ED47.69       S 2E                                    49
     -1
260987 LOWNET    LN 558 944          12.5        5.0DDG    LROSEWELL,LOTHIAN       1
       2 823.83  328.67/ 663.46     2.1 0.2                  55.859   -3.140    2
  5  8 170 0.07  1.0   1.2 C B*D COALFIELD TYPE                                   3
EDI Z 020825.60        P 1E 27.08       S 1IU 6.5H0.28M           0.25 200      8
EDI NS0208                                     8.5H0.19ML           0.25 200      8
EDI EW0208                                    13.6H0.25ML           0.25 200      8
EBL Z 020826.40        P 2E 28.02       S 2E                                    11
EAU Z 020827.70        P 2E                                                     20
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PHASE DATA : 1987

```
     -1
270987                                          5.0IMI    LMARKET DRAYTON,SALOP  1
       725 2.86  365.01/ 333.98  11.2 1.0                    52.902   -2.520    2
  9 50 271 0.35  2.2  3.3 D C*D                                                  3
HLM Z 072510.57       P 3E 17.22       S 3                                    50
SBD Z 072511.55       P 2E 17.53       S 3                                    50
HAE Z 072517.26       P 3E                                                    96
MCH Z 072520.60       P 2E 33.02       S 1                                   106
MCH NS0725                                   4.5H0.09ML          0.25 200   106
MCH EW0725                                   3.8H0.11ML          0.25 200   106
HTR Z 072520.72       P 2E 33.22       S 2                                   105
     -1
280987 PAISLEY   176              12.5       5.0DDG    LRENFREW,STRATHCLYDE   1
       345 4.79  247.91/ 666.73   4.8 0.6                    55.870   -4.431    2
  4  7 302 0.01  0.0  0.0 C A*D                                                 3
PGB Z 034506.60       P 2E 07.86       S 1E                                    7
PGB EW0345                                  10.5H0.15ML          1.0  200     7
PMS Z 034508.62       P  IU11.44       S 1E                                   20
     -1
280987 LOWNET    LN 558           12.5       5.0DDG    LRENFREW,STRATHCLYDE   1
       7 649.02  247.74/ 667.79   2.4 1.1                    55.879   -4.434    2
 17  8 110 0.08  0.2  0.3 B A*B                                                 3
EAB Z 070655.30       P 2E 60.14       S 2E                                   35
EAU Z 070659.94       P 2E                                                    61
EDI Z 070702.35       P 3E 11.76       S 4E                                   78
EDI NS0707                                   6.5H0.10ML          0.25 200    78
EDI EW0707                                   4.0H0.16ML          0.25 200    78
EBH Z 070701.23       P 1ED09.49       S 2ED                                  71
ESK Z 070706.11       P 3E 17.97       S 2EU                                 100
ESK NS0707                                   6.0H0.12ML          0.25 200   100
ESK EW0707                                   7.0H0.09ML          0.25 200   100
ECK Z 070708.28       P 2E 21.90       S 2EU                                 113
PGB Z 070650.95       P  IU52.18       S 1IU 5.0H0.11M          2.5  200     8
PGB EW0706                                  14.5H0.15ML          2.5  200     8
PMS Z 070652.84       P  IU55.65       S 1IU                                  20
PCA Z 070653.40       P 1EU56.44       S 2ED                                  23
PCO Z 070653.80       P 2E 57.42       S 3E                                   24
     -1
300987 LOWNET    LN 558 2291      12.5       5.0DDG    LROSEWELL,LOTHIAN      1
       13744.46  329.21/ 663.07   4.7 0.2                    55.856   -3.131    2
  5  8 174 0.01  0.3  0.9 C A*D COALFIELD TYPE                                  3
EDI Z 013746.28       P  ED47.81       S 1IU 7.5H0.20M          0.25 200    8
EDI NS0137                                   9.5H0.20ML          0.25 200    8
EDI EW0137                                  13.5H0.22ML          0.25 200    8
EBL Z 013746.80       P 1E 48.45       S 2E                                   11
EAU Z 013748.39       P 2E                                                    20
     -1
300987 LOWNET    LN 559           12.5       5.0DDG    LROSEWELL,LOTHIAN      1
       133714.62  329.00/ 662.21   0.5 0.4                    55.848   -3.134    2
  6  9 167 0.05  5.7  5.2 D D*C COALFIELD TYPE                                  3
EDI Z 133716.85       P 1EU18.55       S 2E  6.6H0.29M          1.00 200    9
EDI NS1337                                   4.5H0.24ML          1.00 200    9
EDI EW1337                                   3.5H0.26ML          1.00 200    9
EBL Z 133717.11       P 2E 18.99       S 2E                                   10
EAU Z 133718.94       P 2E 21.86       S 3E                                   20
     -1
300987 LOWNET                                    5.0DWR/JARLROSEWELL,LOTHIAN    1
       194925.78  328.61/ 663.08   1.5 1.2              3+   55.856   -3.140    2
 12  1 120 0.08  0.3  0.2 B A*B COALFIELD TYPE,FELT      ROSLIN                  3
ROA Z 194926.26       P  IU26.63       S 2ED                                   1
ROB Z 194926.28       P  IU                                                    1
EDI Z 194927.74       P  IU29.20       S 1EU 7.6H0.29M          2.5 200     8
EDI NS1949               ID               IU11.2H0.20ML        2.5 200     8
EDI EW1949               IU               IU16.6H0.20ML        2.5 200     8
EBL Z 194928.10       P 2E 30.19       S 2E                                   11
EAU Z 194929.79       P  ID32.70       S 3E                                   20
ESY Z 194932.19       P 2E                                                    34
EBH Z 194934.92       P 2ED41.40       S 2E                                   49
     -1
011087 LOWNET    LN 559           12.5       5.0DDG    LCOMRIE,TAYSIDE        1
       84945.70  277.22/ 726.35   3.7 0.7                    56.414   -3.990    2
  7 18 209 0.13  1.1  3.0 C B*D                                                 3
ELO Z 084949.20       P 1EU51.90       S 2EU 3.6H0.11M          1.0  200    18
EAB Z 084951.95       P 2ED56.10       S 2EU                                  33
EBH Z 084952.30       P  IU56.65       S 1IU 9.0H0.07M          1.0  200    35
EDI Z 084958.25       P 2E                                                    74
EDI NS0849                                   2.5H0.10ML          0.25 200    74
EDI EW0849                                   2.5H0.15ML          0.25 200    74
     -1
011087 LOWNET    LN 559           12.5       5.0DDG    LBLAIRHALL,FIFE        1
       113645.42  298.22/ 691.58   0.5 0.9                    56.106   -3.637    2
  8 18 195 0.05  0.1  0.1 C A*D COALFIELD TYPE                                  3
EBH Z 113649.19       P 1ED52.12         3ED                                  18
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EAU Z 113651.50       P 1EU56.10         2ED                                  31
EDI Z 113652.11       P 1E 57.10       S 2ED 5.0H0.30M          0.25 200    35
EDI NS1136                                   7.5H0.30ML          0.25 200    35
EDI EW1136                                   6.5H0.23ML          0.25 200    35
ELO Z 113653.15       P 2E 58.90         2EU                                  41
     -1
021087 LOWNET    LN 559            12.5       5.0DDG    LROSEWELL,LOTHIAN      1
       13 525.89  328.15/ 662.07   4.9 0.5                55.846   -3.148     2
  6  9 157 0.03  0.3  1.1 B A*C COALFIELD TYPE                                  3
EDI Z 130527.90       P  IU29.43       S 1IU 7.0H0.21M          1.0  200     9
EDI NS1305                                   5.0H0.18ML          1.0  200     9
EDI EW1305                                   7.0H0.19ML          1.0  200     9
EBL Z 130528.15       P  ID29.89       S 1E                                 10
EAU Z 130529.70       P 1IU32.40       S 2E                                 19
     -1
031087 LOWNET    LN 559            12.5       5.0DDG    LROSEWELL,LOTHIAN      1
       12933.61  329.44/ 662.91   2.0 0.1                55.854   -3.127     2
  3  9 293 0.00  0.0  0.0 C A*D COALFIELD TYPE                                  3
EDI Z 012935.61       P  ID37.08       S 1IU                                 9
EDI NS0129                                   9.2H0.16ML          0.25 200     9
EDI EW0129                                  12.5H0.21ML          0.25 200     9
EAU Z 012937.65       P  ID                                                   21
     -1
031087 LOWNET    LN 559            12.5       5.0DDG    LROSEWELL,LOTHIAN      1
       22043.29  327.73/ 662.55   1.1-0.2                55.851   -3.154     2
  4  8 282 0.02  0.0  0.0 C A*D COALFIELD TYPE                                  3
EDI Z 022045.38       P 1E 46.92       S 1IU                                  8
EDI NS0220                                   6.0H0.10ML          0.25 200     8
EDI EW0220                                   7.5H0.21ML          0.25 200     8
EAU Z 022047.22       P 1ED50.02       S 3E                                 19
     -1
031087 PAISLEY   PA 177            12.5       5.0DDG    LRENFREW,STRATHCLYDE   1
       24054.36  247.57/ 667.34   2.4 0.5                55.875   -4.437     2
  4  8 299 0.01  0.0  0.0 C A*D                                                3
PGB Z 024056.18       P 0ID57.47       S 1ID 2.3H0.10M          1.0  200     8
PGB EW0240                                  10.0H0.13ML          1.0  200     8
PMS Z 024058.15       P 0IU60.94       S 1ID                                 20
PCA Z 024058.65       P 4E 61.80       S 4E                                  23
     -1
031087 PAISLEY   PA 177            12.5       5.0DDG    LRENFREW,STRATHCLYDE   1
         254 0.70  247.57/ 666.83   4.8 0.7                55.870   -4.436     2
  7  7 156 0.01  0.1  0.3 B A*C F/S DOUBLE EVT,2ND(0.5ML) 3.42 SECS LATER      3
PGB Z 025402.48       P 0IU03.75       S 1ID 4.5H0.10M          1.0  200     7
PGB EW0254                                  19.1H0.12ML          1.0  200     7
PMS Z 025404.48       P 0IU07.24       S 1I                                  19
PCA Z 025404.95       P 3EU08.01       S 3E                                  22
PCO Z 025405.40       P 3ED                                                  25
     -1
031087 PAISLEY   PA 177            12.5       5.0DDG    LRENFREW,STRATHCLYDE   1
       25427.77  247.18/ 666.85   2.2 0.4                55.871   -4.443     2
  4  7 296 0.01  0.0  0.0 C A*D                                                3
PGB Z 025429.51       P 0ID30.74       S 1ID                                  7
PGB EW0254                                   7.6H0.15ML          1.0  200     7
PMS Z 025431.51       P 0IU34.27       S 1ID                                 19
PCA Z 025431.87       P 4E 35.03       S 4E                                  22
     -1
041087                                        5.0        NORTH SEA             1
         225 4.01                    2.4 2.9                58.375    1.490     2
 26236 179 0.53  2.4  1.7 D D*D                                                3
MLA Z 0225 46.60      P 1E  74.00      S 2E                                 285
LRW Z 0225 41.80      P 2ED 66.90      S 3ED                                248
LRW NS0225                                  04.0H0.12ML          02.5 200   248
LRW EW0225                                  05.0H0.10ML          02.5 200   248
SAN Z 0225 40.10      P 1ED 65.10      S 3ED                                240
WAL Z 0225 45.10      P 2ED                                                 274
FOO Z 022600.80       P 2ED40.00       S 3ID                                410
FOO NS0226                                  03.0H0.10ML          01.0 200   410
FOO EW0226                                  03.5H0.10ML          01.0 200   410
FRO Z 022601.51       P 2E 42.00       S 3ID                                422
SUE Z 022551.80       P 1E 84.50       S 3E                                 351
HYA Z 022600.00       P 1E 37.50       S 3E                                 408
ODD Z 022553.10       P 1E 87.10       S 3E                                 344
KMY Z 022539.50       P 1E 64.50       S 3E                                 236
ASK Z 022548.40       P 1E 77.80       S 3E                                 315
MCD Z 022546.70       P 1E 76.80       S 3E                                 294
MCD NS0225                                  03.5H0.10ML          02.5 200   294
MCD EW0225                                  04.0H0.09ML          02.5 200   294
MME Z 022546.10       P 1ED75.01       S 2ED                                290
MVH Z 022552.40       P 2ED83.30       S 3ED                                338
     -1
041087                                        5.0        LULLAPOOL,HIGHLAND     1
       125828.32  210.49/ 902.97   0.4 3.0             4+   57.976   -5.205     2
 12 53 231 0.13  1.4  1.1 C B*D FELT ULLAPOOL,ARDMAIR AND RHIROY                3
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ELO Z 125857.50        P 1E 80.2         S 3E                        0.25 200  190
EAB Z 125859.4         P 2E 83.6         S 3E                                  206
EDU Z 125900.3         P 2E 26.7         S 3E                                  207
EBH Z 125901.3         P 2E 28.6         S 3E                                  218
MCD Z 125848.75        P 0IU63.2         S 2E                                  124
MDO Z 125841.2         P 0IU                                                    78
MME Z 125852.5         P 1IU                                                   153
MVH Z 125838.55        P 0IU                                                    61
MLA Z 125847.44        P 0ID60.3         S 1E                                  115
KPL Z 125840.9         P 0ID                                                    76
KPL NS1258                                   11.5H0.30ML           2.5  200    76
KPL EW1258                                   12.5H0.40ML           2.5  200    76
KAR Z 125848.55        P 1ID                                                   124
KSB Z 125842.6         P 0ID                                                    86
KAC Z 125837.3         P 0ID                                                    53
EDI Z 125906.6         P 3E 37.00        S 4E                                  258
EDI NS1259                                    7.6H0.38ML           1.0  200   258
EDI EW1259                                   11.2H0.34ML           1.0  200   258
     -1
041087                                        5.0MJA    LULLAPOOL,HIGHLAND      1
      13 127.46  212.00/ 901.30   0.7 1.6              2+   57.961   -5.178     2
 10 52 228 0.19  2.2  2.3 C B*D FELT ARDMAIR                                    3
MCD Z 130147.7         P 1EU62.2         S 3E                                  122
MCD NS1301                                    3.0H0.14ML           1.0  200   122
MCD EW1301                                    5.5H0.14ML           1.0  200   122
MDO Z 130140.1         P 1E                                                     76
MME Z 130152.2         P 1E                                                    151
MVH Z 130137.5         P 1IU44.0         S 2E                                   59
MLA Z 130146.35        P 1ED59.3         S 2E                                  114
KPL NS1258                                    8.0H0.16ML           0.25 200   75
KPL EW1258                                    7.5H0.24ML           0.25 200   75
KPL Z 130139.6         P 3E                                                     75
KAC Z 130136.14        P 0ED                                                    52
     -1
041087                                        5.0MJA    LULLAPOOL,HIGHLAND      1
      131628.24  211.91/ 903.09   0.2 1.4                  57.977   -5.181     2
  8 54 244 0.18  3.5  3.4 D C*D                                                 3
MCD Z 131648.7         P 1E 63.8         S 3E                                  123
MCD NS1316                                    4.5H0.20ML           0.25 200   123
MCD EW1316                                    7.0H0.14ML           0.25 200   123
MDO Z 131641.15        P 1E                                                     77
MME Z 131653.3         P 3E 71.2         S 3E                                  152
MVH Z 131638.35        P 1E 44.8         S 2E                                   59
MLA Z 1316                 60.2          S 2E                                  113
KAC Z 131637.1         P 1E                                                     54
     -1
041087                                        5.0MJA    LULLAPOOL,HIGHLAND      1
      145022.20  211.71/ 902.72   0.2 2.0              2+   57.974   -5.184     2
  9 53 229 0.17  2.5  2.7 C B*D FELT ARDMAIR                                    3
MCD Z 145042.55        P 1E                                                    123
MCD NS1450                                    2.0H0.20ML           2.5  200   123
MCD EW1450                                    3.5H0.20ML           2.5  200   123
MDO Z 145035.04        P 1IU                                                    77
MME Z 145046.8         P 3E                                                    152
MVH Z 145032.4         P 0ID38.8         S 1E                                   60
MLA Z 145041.0         P 2ED54.3         S 3E                                  114
KPL Z 145034.72        P 1E                                                     76
KPL NS1450                                    4.0H0.25ML           1.0  200   76
KPL EW1450                                    6.0H0.23ML           1.0  200   76
KAC Z 145031.1         P 0EU                                                    53
EDI Z 145104.6         P 4E 31.4         S 4E                                  259
EDI NS1451                                    2.7H0.19ML           0.25 200   259
EDI EW1451                                    3.4H0.21ML           0.25 200   259
     -1
041087                                        5.0       LULLAPOOL,HIGHLAND      1
      172816.46  211.53/ 902.31   0.5 3.0              4+   57.970   -5.187     2
 13 53 229 0.17  1.6  1.2 C B*D FELT ULLAPOOL,ARDMAIR AND RHIROY                3
ELO Z 172845.60        P 1EU71.5         S 2E                        0.25 200  189
EAB Z 172847.47        P 2E 73.1         S 2E                                  205
EDU Z 172847.71        P 2E 77.6         S 3E                                  206
EBH Z 172848.92        P 2E                                                    217
EAU Z 172854.90        P 2E                                                    259
EDI Z 172854.8         P 4E                                                    259
EDI NS1728                                    8.3H0.22ML           1.0  200   259
MCD Z 172836.8         P 0IU51.3         S 2E                                  123
MCD NS1728                                    4.0H0.20ML          10.0 200   123
MCD EW1728                                    5.0H0.18ML          10.0 200   123
MDO Z 172829.31        P 0IU                                                    77
MME Z 172840.4         P 0IU                                                   152
MVH Z 172826.62        P 0IU33.2         S 1E                                   60
MLA Z 172835.45        P 0IU48.5         S 1E                                  114
KPL Z 172828.95        P 0ID                                                    76
KPL NS1728                                   15.0H0.23ML           2.5  200   76
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KPL EW1728                                    12.0H0.34ML          2.5  200   76
KAR Z 172836.64       P 0ID                                                  124
KSB Z 172830.67       P 0ID                                                   86
KAC Z 172825.34       P 0ID                                                   53
EDI EW1728                                     9.3H0.38ML          1.0  200  259
     -1
041087                                          5.0MJA    LULLAPOOL,HIGHLAND     1
       173416.16  218.99/ 898.94   0.1 1.3                  57.943   -5.058    2
  8 51 232 0.19  2.5  3.1 C B*D                                                 3
MCD Z 173435.24       P 1EU49.7       S 2E                                    115
MCD NS1734                                     4.5H0.15ML          0.25 200  115
MCD EW1734                                     9.0H0.10ML          0.25 200  115
MDO Z 173427.6        P 1EU                                                    70
MME Z 173439.7        P 1EU                                                   143
MVH Z 173425.0        P 0EU                                                    52
MLA Z 173433.9        P 1E 47.0       S 1E                                    108
KAC Z 173424.7        P 1E                                                     51
     -1
051087N WALES                                   5.0       LLLEYN AFTERSHOCK      1
       1219 8.62  239.70/ 342.44  23.1 0.7                 52.955   -4.386    2
 20  4  88 0.08  0.3  0.7 A A*A                                                 3
WCB Z 121917.22       P 3E 23.05      S 2                                      48
WCB NS1219                                     3.5 H0.05ML          0.25 200   48
WCB EW1219                                     7.1 H0.12ML          0.25 200   48
YRC Z 121915.45       P 1ID20.21      S 2                                      35
YRE Z 121912.32       P 1IU                                                     4
WLF Z 121915.64       P 2E 20.48      S 3                                      37
WME Z 121917.40       P 2E 23.38      S 2                                      50
YLL Z 121913.72       P 2E 17.95      S 2                                      25
WLC Z 121916.24       P 2E 21.60      S 1                                      41
WLC NS1219                                     3.8 H0.12ML          1.0  200   41
WLC EW1219                                     4.0 H0.08ML          1.0  200   41
YRH Z 121913.72       P 1IU                                                    21
WVR Z 121918.32       P 2E                                                     55
WBR Z 121915.37       P 2E 19.84      S 2                                      35
WST Z 121915.04       P 2E 18.30      S 2                                      27
WFB Z 121915.89       P 2E 20.67      S 3                                      38
     -1
061087NORTH SEA                                 5.0SIMPSON NORTH SEA           1
        25542.51                 0.2 2.4                 59.216    1.618      2
  9207 302 0.77 25.2 12.7 D D*D                                                3
FOO Z 0256 30.60      P 2E  63.40     S 3E                                    326
FOO NS0256                                    08.5H0.10ML          0.25 200  326
FOO EW0256                                    06.0H0.10ML          0.25 200  326
FRO Z 0256 28.20      P 4E  64.90     S 3E                                    335
SUE Z 0256                  51.10     S 3E                                    270
ODD Z 0256 26.10      P 1E  54.70     S 3E                                    297
KMY Z 0256 16.80      P 4E  38.00     S 3E                                    207
ASK Z 0256 18.80      P 1E  44.60     S 3E                                    246
     -1
061087                                          5.0MJA    LULLAPOOL,HIGHLAND     1
        44056.97  212.75/ 900.86   0.6 1.7                 57.958   -5.165    2
 10 52 227 0.15  1.8  2.1 C B*D                                                 3
MCD Z 044117.1        P 1EU31.5       S 3E                                    121
MCD NS0441                                     4.0H0.14ML          1.0  200  121
MCD EW0441                                     8.0H0.18ML          1.0  200  121
MDO Z 044109.5        P 1EU                                                    75
MME Z 044121.5        P 2EU                                                   150
MVH Z 044106.86       P 0IU13.4       S 1E                                     59
MLA Z 044115.75       P 0IU28.8       S 2E                                    113
KAC Z 044105.57       P 0ID                                                    52
KPL Z 044109.1        P 3E                                                     75
KPL NS0441                                     8.5H0.20ML          0.25 200   75
KPL EW0441                                     9.5H0.20ML          0.25 200   75
     -1
061087                                          5.0       LULLAPOOL,HIGHLAND     1
        74130.66  218.03/ 895.89   0.7 1.5                 57.915   -5.072    2
  8 48 230 0.34  4.3  6.7 D C*D                                                 3
MCD Z 074150.2        P 2E 64.5       S 3E                                    115
MCD NS0741                                     5.0H0.25ML          0.25 200  115
MCD EW0741                                     7.0H0.15ML          0.25 200  115
MDO Z 074141.4        P 3E                                                     68
MME Z 074154.6        P 4E                                                    143
MVH Z 074139.7        P 3E                                                     53
MLA Z 074148.75       P 1E 61.85      S 2E                                    110
KAC Z 074138.7        P 1E                                                     48
     -1
061087                                          5.0MJA    LULLAPOOL,HIGHLAND     1
        75214.51  209.50/ 902.71   0.9 2.2                 57.973   -5.222    2
  6 53 246 0.07  2.1  1.8 C B*D                                                 3
MCD Z 075235.7        P 1IU                                                   125
MCD NS0752                                     4.5H0.31ML          1.0  200  125
MCD EW0752                                     9.0H0.18ML          1.0  200  125
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MDO Z 075228.2        P 1IU                                                  78
MVH Z 075225.54       P 0IU                                                  62
MLA Z 075234.44       P 0IU47.4       S 1E                                  116
KAC Z 075224.2        P 2E                                                   53
EDI Z 075253.40       P 4E                                                  260
EDI NS0752                                4.5H0.20ML          0.25 200      260
EDI EW0752                                4.5H0.20ML          0.25 200      260
ELO Z 075244.75       P 4E                                                  191
EDU Z 075246.80       P 4E                                                  207
EBH Z 075248.20       P 4E                                                  218
     -1
061087 LOWNET                                5.0DWR/JARLROSEWELL,LOTHIAN      1
       18 227.97  329.20/ 662.54   0.4 1.6            3+   55.851   -3.131    2
 12  2 120 0.04  0.1  0.1 B A*B COALFIELD TYPE,FELT      ROSLIN                3
ROA Z 180228.43       P  ID28.82      S 1E                                    2
ROB Z 180228.45       P  ID                                                   2
EDI Z 180230.15       P  IU31.69      S 1E  5.5H0.25M          10.0 200      9
EDI NS1802               IU             E  3.1H0.50ML         10.0 200      9
EDI EW1802               ID            IU  3.6H0.45ML         10.0 200      9
EBL Z 180230.50       P  ID32.40      S 2E                                   10
EAU Z 180232.20       P  ID35.39      S 2E                                   20
ESY Z 180234.47       P 1ED                                                  33
EBH Z 180237.44       P 1IU44.11      S 2E                                   50
EDU Z 180241.91       P 2EU                                                  78
     -1
071087 CORNWALL                              5.0       LS PENZANCE,CORNWALL   1
       045545.51  150.01/  14.59  10.1 0.5                49.978   -5.487    2
  6 24 328 0.06  3.2  8.6 D C*D                                              3
CGH Z 0455                53.70       S 2                                   25
CCO Z 045550.47       P 1IU                                                  27
CCA Z 045551.05       P 1E                                                   30
CR2 Z 0455                55.56       S 2                                   31
CR2 NS0455                               6.2 H0.04ML          1.0 200      31
CR2 EW0455                               5.2 H0.05ML          1.0 200      31
CST Z 0455                56.24       S 2                                   33
CBW Z 0455                56.04       S 2                                   33
     -1
071087                                       5.0MJA    LULLAPOOL,HIGHLAND     1
        45850.47  214.27/ 900.73   0.5 1.6                57.957   -5.139    2
  5 57 289 0.11  6.1  3.0 D D*D                                              3
MCD Z 045910.35       P 1E                                                  120
MCD NS0459                               7.0H0.16ML          0.25 200      120
MCD EW0459                              10.0H0.18ML          0.25 200      120
MDO Z 045902.7        P 1E                                                   74
MVH Z 045900.05       P 1E                                                   57
MLA Z 045908.9        P 0IU22.0       S 3E                                  112
     -1
071087                                       5.0MJA    LULLAPOOL,HIGHLAND     1
       06 435.81  212.20/ 900.78   8.1 2.1                57.957   -5.174    2
  7 51 242 0.30  3.0  5.1 D C*D                                              3
MCD Z 060455.8        P 2E                                                  122
MCD NS0604                               4.5H0.20ML          1.0  200      122
MCD EW0604                               8.0H0.20ML          1.0  200      122
MDO Z 060448.25       P 1IU                                                  75
MVH Z 060445.74       P 0ID52.2       S 1E                                   59
MLA Z 060454.45       P 1IU67.5       S 1E                                  114
KAC Z 060444.3        P 1E                                                   51
     -1
071087 LOWNET                                5.0DWR/JARLROSEWELL,LOTHIAN      1
       183040.91  328.45/ 662.71   0.7 1.1            2+   55.852   -3.143    2
 12  1 123 0.12  0.5  0.4 B A*B COALFIELD TYPE,FELT      ROSLIN                3
ROA Z 183041.21       P 4IU41.64      S 4E                                    1
ROB Z 183041.23       P 4IU                                                   1
EDI Z 183042.95       P  ID44.41      S 1EU 6.3H0.29M          2.5 200       8
EDI NS1830               ID             IU 7.9H0.20ML         2.5 200       8
EDI EW1830               IU             IU12.6H0.20ML         2.5 200       8
EBL Z 183043.44       P 1ED45.37      S 2EU                                  11
EAU Z 183044.99       P  ID48.22      S 3E                                   20
ESY Z 183047.72       P 3E                                                   34
EBH Z 183050.11       P 2ED56.82      S 2E                                   50
     -1
081087 PAISLEY   PA 178            12.5       5.0DDG    LAIRDRIE,STRATHCLYDE   1
        14440.12  275.53/ 669.48   1.3 0.8                55.902   -3.991    2
  7 12 136 0.02  0.1  0.2 B A*C                                              3
PCO Z 014442.80       P  IU45.28      S 1EU                                  12
PCA Z 014445.61       P  IU50.49      S 1IU                                  28
PGB Z 014446.33       P 1IU                                                  32
PGB EW0144                               5.4H0.12ML          1.0  200      32
PMS Z 014448.93       P 1ID                                                  48
EAU Z 014446.65       P  IU51.15      S 4E                                   34
EBH Z 014448.90       P 4E 55.20      S 4E                                   49
EDI Z 014449.20       P 4E 55.70      S 4E                                   50
EDI NS0144                               4.5H0.14ML          0.25 200      50
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EDI EW0144                                    4.1H0.12ML          0.25 200   50
     -1
081087                                         5.0       LULLAPOOL,HIGHLAND     1
       165411.42  221.13/ 899.39   0.2 1.6                 57.948   -5.023    2
  7 50 283 0.31  2.5  5.4 D C*D                                               3
MCD Z 165430.80       P 1E                                                   113
MCD NS1654                                   6.0H0.20ML          0.25 200   113
MCD EW1654                                  15.0H0.1 ML          0.25 200   113
MDO Z 165422.70       P 1E 31.00       S 1E                                   69
MVH Z 165419.80       P 1E 25.30       S 3E                                   50
MLA Z 165428.70       P 1E 42.10       S 3E                                  106
     -1
101087 PA/LN/ES  PA 178            25.0      5.0DWR    LRENFREW,STRATHCLYDE    1
       123548.37  247.85/ 666.86   4.8 2.3           4+   55.871   -4.432    2
 15  7 107 0.25  0.8  2.2 B B*B FELT IN RENFREW,ERSKINE & INCHINNAN            3
PGB Z 123550.28       P  ID51.39       S 1IU                                   7
PMS Z 123552.25       P  IU54.67       S 2EU                                  20
PCA Z 123552.68       P  ID55.39       S 1IU                                  22
PCO Z 123553.11       P  IU56.45       S 2EU                                  25
EAB Z 123555.82       P  ID59.11       S 2EU                                  36
EAU Z 123558.97       P  IU                                                   61
EBH Z 123600.43       P 1EU09.29       S 2ID                                  71
EDI Z 123601.71       P 1ED12.00       S 3E  4.6H0.10M          2.5  200    78
EDI NS1236               E                E  5.4H0.20ML         2.5  200    78
EDI EW1236               E                E  3.6H0.19ML         2.5  200    78
ELO Z 123601.74       P 1ED11.03       S 3E                                   80
EBL Z 123603.06       P 1IU                                                   88
ESY Z 123607.17       P 3E                                                   114
EDU Z 123607.24       P 2ED20.90       S 3E                                  116
ESK Z 123604.95       P 2E 16.60       S 3E                2.5  200    99
ESK NS1236                                   7.5H0.18ML          2.5  200    99
ESK EW1236                                   7.5H0.10ML          2.5  200    99
ECK Z 123606.80       P 3E                                                   113
XSO Z 123612.35       P 3E                                                   144
     -1
101087 PA/LN     PA 178            12.5      5.0DWR    LRENFREW,STRATHCLYDE    1
       192833.20  247.36/ 666.20   7.4 0.7                 55.865   -4.439    2
  9  7 106 0.15  0.8  0.8 B B*B                                               3
PGB Z 192835.21       P  ID36.47       S 1ED 5.0H0.09M          2.5  200     7
PGB EW1928               IU                ID 9.1H0.10ML         2.5  200     7
PMS Z 192837.17       P  IU39.57       S 2EU                                  19
PCA Z 192837.55       P 1E 40.27       S 2EU                                  22
PCO Z 192838.08       P 1E 41.27       S 2ED                                  25
EAB Z 192839.71       P 2ED41.30       S 3E                                   37
EAU Z 192841.30       P 2EU                                                   62
EBH Z 192845.60       P 2E 54.10       S 3E                                   72
EDI Z 192847.00       P 4E 57.65       S 3E  2.1H0.11M          0.25 200    79
EDI NS1928               E                E  2.4H0.12ML         0.25 200    79
EDI EW1928               E                E  3.2H0.08ML         0.25 200    79
     -1
131087 LOWNET    LN 560            12.5       5.0DDG    LROSEWELL,LOTHIAN       1
       181841.07  329.32/ 663.25   1.0 1.0                 55.857   -3.129    2
  6  8 176 0.02  0.3  0.3 B A*C COALFIELD TYPE                                 3
EDI Z 181843.14       P  ID44.62       S 1EU                                   8
EDI NS1818                                   6.6H0.20ML          2.5  200     8
EDI EW1818                                  10.6H0.20ML          2.5  200     8
EBL Z 181843.62       P 2E 45.54       S 2EU                                  11
EAU Z 181845.24       P  ID48.35       S 2E                                   20
ESY Z 181846.80       P 4E                                                    33
     -1
131087 PAISLEY   PA 178            12.5       5.0DDG    LRENFREW,STRATHCLYDE    1
       192841.00  247.76/ 666.92   4.9 0.7                 55.871   -4.433    2
  8  7 157 0.04  0.2  0.7 B A*C                                               3
PGB Z 192842.86       P 0ID44.08       S 1ID                                   7
PGB EW1928                                  16.5H0.12ML          1.0  200     7
PMS Z 192844.82       P 0IU47.58       S 1IU                                  20
PCA Z 192845.25       P 2EU48.29       S 2ED                                  22
PCO Z 192845.70       P 3ED49.04       S 3E                                   25
     -1
151087 LOWNET                                 5.0DWR/JARLROSEWELL,LOTHIAN       1
        326 4.28  327.91/ 663.24   1.6 1.0                 55.857   -3.152    2
 11  0 101 0.12  0.6  0.2 B A*B COALFIELD TYPE                                 3
ROA Z 032604.63       P  IU04.99        2E                    0.25           0
EDI Z 032606.15       P  ID07.61       S 1EU 4.4H0.30M          2.5  200     8
EDI NS0326               ID                IU 6.7H0.20ML         2.5  200     8
EDI EW0326               IU                IU 9.9H0.20ML         2.5  200     8
EBL Z 032606.97       P 1ED08.52       S 2EU                                  12
EAU Z 032608.20       P 1ID11.10       S 3E                                   19
ESY Z 032610.92       P 2E                                                    34
EBH Z 032613.38       P 2E 19.48       S 2E                                   49
     -1
161087                                         5.0       LULLAPOOL,HIGHLAND     1
       14 534.64  207.08/ 900.56   1.0 1.1                 57.953   -5.261    2
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 10 64 294 0.73  6.4  5.3 D D*D                                          3
MCD Z 140556.15       P 2E 70.20       S 3E                            126
MCD NS1405                                3.0 H0.1 ML          0.25 200 126
MCD EW1405                                5.0 H0.1 ML          0.25 200 126
MDO Z 140546.70       P 0E 57.25       S 1E                             78
MME Z 140561.30       P 3E 78.35       S 3E                            155
MVH Z 140546.00       P 3E 52.00       S 3E                             64
MLA Z 140554.75       P 2E 68.00       S 1E                            119
     -1
161087 LOWNET    LN 561            12.5       5.0DDG    LROSEWELL,LOTHIAN    1
       163526.40  327.85/ 663.11   2.5 0.9                55.856   -3.153   2
  6  8 159 0.09  1.0  1.0 C B*C COALFIELD TYPE                            3
EDI Z 163528.10       P 0ID29.55       S 1IU 3.6H0.28M          2.5 200   8
EDI NS1635                                5.3H0.20ML           2.5 200   8
EDI EW1635                                8.0H0.20ML           2.5 200   8
EBL Z 163528.92       P 1ID30.52       S 1IU                           12
EAU Z 163530.15       P 2ED31.70       S 3E                            19
     -1
171087                                     5.0       LULLAPOOL,HIGHLAND    1
       74438.86  214.03/ 897.80   2.0 2.9          3+   57.931   -5.141   2
 10 49 223 0.10  1.3  0.8 C B*D FELT ULLAPOOL                            3
KPL Z 074451.33       P 1ID                                           73
KPL NS0744                                5.5H0.28ML           2.5 200  73
KSB Z 074452.87       P 1ED62.6        S 1ID                           82
MCD Z 074459.05       P 1IU73.35       S 4ED                           119
MCD NS0744                               12.0H0.29ML           2.5 200 119
MCD EW0744                               16.5H0.21ML           2.5 200 119
MDO Z 074451.20       P 1EU61.50       S 3E                            72
MME Z 074462.70       P 1EU81.70       S 4E                            147
MVH Z 074448.95       P 2IU55.88       S 1ED                           57
MLA Z 074457.69       P 1ID70.65       S 1ED                           113
KAC Z 074447.71       P 0ID                                            49
EDI Z 074516.55       P 3E                                            253
EDI NS0745                                5.0H0.37ML           1.0 200 253
EDI EW0745                                7.0H0.35ML           1.0 200 253
EDU Z 074510.10       P 3E                                            201
EBH Z 074511.55       P 3E 33.90       S 3E                            212
ELO Z 074507.95       P 3E 28.10       S 3E                            184
     -1
171087                                     5.0       LULLAPOOL,HIGHLAND    1
       74715.61  213.96/ 898.36   5.6 2.1          57.936   -5.143   2
 12 49 224 0.27  2.2  1.6 C B*D                                         3
KPL Z 074727.5        P 2E                                            73
KPL NS0747                                2.0H0.28ML           2.5 200  73
KPL EW0747                                2.5H0.20ML           2.5 200  73
KSB Z 074729.1        P 3E 38.8        S 3E                            83
KAC Z 074723.83       P 1E 29.7        S 3E                            49
MCD Z 074735.20       P 2EU49.80       S 2E                            119
MCD NS0747                                8.0H0.27ML           1.0 200 119
MCD EW0747                               10.0H0.22ML           1.0 200 119
MDO Z 074727.85       P 1E                                            72
MME Z 074738.95       P 4E 57.90       S 4ED                           147
MVH Z 074725.15       P 1E 31.60       S 1ED                           57
MLA Z 074734.10       P 1E 46.85       S 1E                            113
     -1
171087                                     5.0       LULLAPOOL,HIGHLAND    1
        954 7.66  211.33/ 900.82   4.8 2.5          3+   57.957   -5.189   2
 10 51 228 0.08  0.9  2.2 C B*D FELT ULLAPOOL                           3
KPL Z 095420.17       P 1ED                                           74
KPL NS0954                                2.5H0.30ML           2.5 200  74
KPL EW0954                                4.5H0.22ML           2.5 200  74
KSB Z 095421.9        P 4E 31.6        S 2E                            84
KAC Z 095416.6        P 0ID                                            51
MCD Z 095427.90       P 1E 42.90       S 4E                            122
MCD NS0954                                9.0H0.2 ML           2.5 200 122
MCD EW0954                               20.0H0.2 ML           2.5 200 122
MDO Z 095420.45       P 0E 29.20       S 2E                            76
MME Z 095431.70       P 1E 49.05       S 1E                            151
MVH Z 095417.90       P 1E 25.05       S 1E                            60
MLA Z 095426.65       P 1E 39.70       S 3E                            114
EDI Z 095445.27       P 3E                                            257
EDI NS0954                                9.0H0.30ML           0.25 200 257
EDI EW0954                                9.6H0.27ML           0.25 200 257
ELO Z 095436.57       P 3E 57.48       S 3E                            188
EDU Z 095438.64       P 3E 61.06       S 3E                            205
EBH Z 095440.010      P 3E                                            216
     -1
171087                                     5.0       LULLAPOOL,HIGHLAND    1
       2045 2.47  219.62/ 896.21   3.6 1.2          57.919   -5.046   2
  7 51 284 0.04  1.3  2.7 C B*D                                         3
MCD Z 204521.20       P 1E 33.15       S 2ED                           113
MCD NS2045                                2.0H0.20ML           0.25 200 113
MCD EW2045                                8.0H0.09ML           0.25 200 113
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MDO Z 204513.95       P 1ED21.92       S 3E                                  67
MME Z 204525.75       P 3ED43.75       S 4ED                                141
MVH Z 204511.57       P 2ED17.76       S 2E                                  51
MLA Z 204520.27       P 1EU32.65       S 2ED                                108
     -1
181087                                          5.0       LULLAPOOL,HIGHLAND     1
       130 9.90  210.48/ 899.48   7.0 2.3                  57.945   -5.202     2
 11 50 228 0.09  1.3  2.6 C B*D                                                 3
KPL Z 013022.00       P 1E                                                    73
KPL NS0130                                  5.0H0.18ML          1.0  200     73
MCD Z 013029.90       P 2E 44.20       S 2                                   123
KSB Z 013023.80       P 2E 33.3        S 3E                                   83
KAC Z 013018.45       P 1ED24.35       S 3E                                   50
MCD NS0130                                 18.0H0.15ML          1.0  200    123
MCD EW0130                                 17.5H0.20ML          1.0  200    123
MDO Z 013022.40       P 2E                                                    75
MME Z 013033.40       P 2E 51.08       S 3                                   151
MVH Z 013020.30       P 3E 27.20       S 3                                    61
MLA Z 013028.65       P 2E 41.60       S 3                                   116
EDI Z 013047.45       P 3E                                 0.25 200         256
EDI NS0130                                  5.5H0.24ML          0.25 200    256
EDI EW0130                                  7.0H0.30ML          0.25 200    256
ELO Z 013038.85       P 3E 58.70       S 3E                                  187
EAB Z 013040.70       P 3E 62.00       S 3E                                  203
     -1
191087 PAISLEY   PA 179            12.5       5.0DDG    LRENFREW,STRATHCLYDE    1
       25913.11  247.85/ 667.25   3.5 1.0                  55.874   -4.432     2
 12  8 109 0.06  0.3  0.7 B A*B                                                 3
PGB Z 025914.96       P 0IU16.15       S 1E  2.0H0.10M          10.0 200      8
PGB EW0259                                  5.5H0.10ML          10.0 200      8
PMS Z 025916.90       P 1IU20.15       S 3EU                                  20
PCA Z 025917.38       P 0ID20.40       S 2E                                   22
PCO Z 025917.75       P 0IU21.07       S 2E                                   25
EAB Z 025919.57       P 2EU                                                   35
EAU Z 025923.95       P 2E                                                    61
EBH Z 025925.25       P 1ID33.95       S 2E                                   71
EDI Z 025926.45       P 4E                4.0H0.12M          0.25 200       78
EDI NS0259                                  5.6H0.12ML          0.25 200      78
EDI EW0259                                  4.0H0.10ML          0.25 200      78
     -1
191087N WALES                                   5.0       LLLEYN,GWYNEDD         1
       194438.68  243.35/ 342.73  12.9 0.6                 52.959   -4.332     2
 20  7  88 0.08  0.2  0.3 A A*A                                                 3
WCB EW1944                52.66       S 3
YRC Z 1944                49.75       S 3                                    36
YRE Z 194441.10       P 1ID                                                    7
WPM Z 194446.39       P 1IU51.39       S 3                                    44
WLF Z 194445.25       P 2E 49.70       S 1                                    37
WME Z 194447.14       P 2E 52.64       S 3                                    49
YLL Z 194443.08       P 1IU46.09       S 1                                    23
WLC Z 194445.4        P 1I 49.82       S 1                                    37
WLC NS1944                                  3.1 H0.06ML          1.0  200     37
WLC EW1944                                  5.2 H0.05ML          1.0  200     37
YRH Z 194443.26       P 1IU46.42       S 3                                    24
WVR Z 194447.72       P 2EU53.42       S 2                                    52
WBR Z 194444.46       P 1IU48.22       S 2                                    32
WFB Z 194445.28       P 2EU49.62       S 1                                    37
     -1
201087 LOWNET    LN 561            12.5       5.0DDG    LROSEWELL,LOTHIAN       1
       124443.39  329.16/ 662.59   0.4 0.9                  55.851   -3.132     2
  8  9 120 0.08  0.5  0.4 B A*B COALFIELD TYPE                                  3
EDI Z 124445.58       P 0IU47.19       S 1ID 9.1H0.35M          2.5  200      9
EDI NS1244                                  4.6H0.19ML          2.5  200      9
EDI EW1244                                  5.7H0.25ML          2.5  200      9
EBL Z 124445.81       P 2E 47.98       S 2E                                   10
EAU Z 124447.65       P 0ID50.80       S 1IU                                  20
ESY Z 124449.80       P 3E                                                    33
EBH Z 124452.90       P 2E                                                    50
EDU Z 124457.55       P 3E                                                    78
     -1
201087 LOWNET    LN 561            12.5       5.0DDG    LROSEWELL,LOTHIAN       1
       191929.71  327.64/ 661.72   0.3 1.1             2+   55.843   -3.156     2
  8  9 132 0.13  0.2  0.2 B A*B COALFIELD TYPE,FELT      ROSLIN                  3
EDI Z 191931.79       P 1ID33.21       S 3EU 7.0H0.29M          2.5  200      9
EDI NS1919                                  7.5H0.20ML          2.5  200      9
EDI EW1919                                 12.0H0.21ML          2.5  200      9
EBL Z 191932.22       P 1ED34.20       S 1IU                                  11
EAU Z 191933.80       P 0ID36.95       S 2EU                                  19
ESY Z 191936.62       P 2E                                                    35
EBH Z 191939.00       P 2E                                                    50
     -1
231087N WALES                                   5.0       LLLEYN AFTERSHOCK      1
       131046.74  239.05/ 343.42  23.8 0.6                 52.964   -4.397     2
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 17  3  88 0.08  0.3  0.7 A A*A                                                3
WCB Z 131056.0        P 4  61.13        S                                     47
WCB NS1310                                   4.1 H0.07ML          0.25 200    47
WCB EW1310                                   3.5 H0.10ML          0.25 200    47
YRC Z 131053.41       P 2E 57.65        S 3                                   34
YRE Z 131050.56       P 1ID                                                    3
WLF Z 1310                 58.45        S 2                                   36
YLL Z 131052.22       P 1IU56.01        S 1                                   25
WLC Z 131054.5        P 1IU59.89        S 1                                   42
WLC NS1310                                  15.8H0.16ML          0.25 200    42
WLC EW1310                                   7.1 H0.09ML          0.25 200    42
YRH Z 131051.9        P 1IU55.44        S 1                                   21
WBR Z 131053.61       P 2E 58.30        S 2                                   36
WST Z 131052.62       P 2E 56.74        S 2                                   27
WFB Z 131054.69       P 2E 59.2         S 2                                   40
     -1
251087 JERSEY                                 5.0       LSW GRONEZ POINT,JERSEY1
       32353.69                    7.4 0.2                49.239   -2.279     2
  7  6 322 0.01  0.3  0.2 C A*D                                                3
JLP Z 032356.48       P 0  58.55        S 1                                   13
JRS NS0323                                   9.2 H0.04ML           1.0 200    15
JSA Z 032356.04       P 0                                                     10
JVM Z 032355.54       P 0  56.84        S 1                                    6
JRS Z 032356.79       P 0  59.02        S 1                                   15
JRS EW0323                                   9.0 H0.05ML           1.0 200    15
     -1
261087 LOWNET    LN 562            12.5       5.0DDG    LROSEWELL,LOTHIAN      1
       205148.93  327.97/ 662.94   4.4 0.0                55.854   -3.151     2
  6  8 159 0.07  1.3  4.0 C B*C COALFIELD TYPE                                  3
EDI Z 205150.72       P 1EU52.20        S 1EU 8.1H0.20M       0.25 200     8
EDI NS2051                                   8.0H0.20ML           0.25 200     8
EDI EW2051                                   8.7H0.20ML           0.25 200     8
EBL Z 205151.40       P 1EU53.05        S 1E                                  11
EAU Z 205152.69       P 2ED54.41        S 3E                                  19
     -1
261087 LOWNET    LN 562            12.5       5.0DDG    LROSEWELL,LOTHIAN      1
       2247 3.65  328.34/ 662.22   2.2 0.0                55.848   -3.145     2
  6  9 160 0.07  0.6  0.7 B A*C COALFIELD TYPE                                  3
EDI Z 224705.60       P 0IU07.16        S 1IU 7.0H0.20M       0.25 200     9
EDI NS2247                                   6.8H0.18ML           0.25 200     9
EDI EW2247                                   8.0H0.19ML           0.25 200     9
EBL Z 224705.90       P 2EU07.65        S 3ED                                 10
EAU Z 224707.55       P 1ED09.50        S 3ED                                 19
     -1
261087                                        5.0       LCLACKMANNAN,CENTRAL   1
       23 639.84  291.59/ 691.59   2.8 1.4             2+   56.105   -3.743     2
  6 22 136 0.02  0.1 26.6 C C*C COALFIELD TYPE,FELT ALLOA                       3
EDI Z 230647.1        P 1ED52.4           2E                                  40
EDI NS2306                                  13.5H0.35ML           0.25 200    40
EDI EW2306                                  13.0H0.35ML           0.25 200    40
EAU Z 230646.1        P 1ED                                                   34
EAB Z 230646.8        P 1ED                                                   38
EBH Z 230644.0        P 1ED                                                   22
ELO Z 230647.2        P 3E                                                    41
     -1
271087                                        5.0       LULLAPOOL,HIGHLAND     1
       114247.20  214.87/ 897.10   5.0 1.5                57.925   -5.126     2
  8 48 222 0.21  2.7  2.4 D C*D                                                3
KPL Z 1142                 67.7        S 2E                                  72
KPL NS1142                                   8.0H0.26ML           0.25 200    72
KPL EW1142                                   7.5H0.22ML           0.25 200    72
KSB Z 1142                 70.3        S 2E                                  82
KAC Z 114255.4        P 2E                                                    49
MCD Z 114266.9        P 2E                                                   118
MCD NS1142                                   2.0H0.14ML           1.0  200   118
MCD EW1142                                   4.0H0.10ML           1.0  200   118
MDO Z 114259.3        P 1EU                                                   71
MVH Z 114256.6        P 1E 63.0         S 1E                                  56
MLA Z 114265.4        P 1EU                                                  112
     -1
281087                                        5.0       LSPEAN BRIDGE,HIGHLAND 1
        7 149.61  244.71/ 785.32   0.2 1.9                56.933   -4.552     2
  9 61 234 0.20  1.7  3.1 C B*D                                                3
KPL Z 070163.3        P 2E 72.6         S 2E                                  81
KPL NS0701                                   6.5H0.10ML           1.0  200    81
KPL EW0701                                   8.5H0.14ML           1.0  200    81
KSB Z 070159.7        P 2E 66.9         S 2E                                  61
KAC Z 070162.5        P 2E 71.3         S 3E                                  78
MCD Z 070167.3        P 2E                                                   107
MCD NS0701                                   5.0H0.24ML           1.0  200   107
MCD EW0701                                   6.0H0.18ML           1.0  200   107
MME Z 070167.0        P 2E                                                   105
MVH Z 070168.7        P 2E                                                   113
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     -1
291087 LOWNET    LN563             12.5       5.0DDG    LROSEWELL,LOTHIAN      1
       218 7.86  328.36/ 662.54   0.2 1.2             3+   55.851   -3.144    2
 12  8 124 0.04  0.1  0.2 B A*B COALFIELD TYPE,FELT      ROSLIN                 3
EDI Z 021810.01       P 0ID11.50       S 1IU 7.5H0.22M           2.5  200    9
EDI NS0218                                   8.5H0.21ML          2.5  200    9
EDI EW0218                                  13.5H0.21ML          2.5  200    9
EBL Z 021810.49       P 1ID12.55       S 2EU                                 11
EAU Z 021812.05       P 0ID15.11       S 3E                                  20
ESY Z 021814.50       P 1ED                                                  34
EBH Z 021817.33       P 2EU23.95       S 3EU                                 50
ELO Z 021821.60       P 3E                                                   78
EDU Z 021821.78       P 3E                                                   78
EAB Z 021822.43       P 3E                                                   84
     -1
301087                                       5.0       LROSEWELL,LOTHIAN      1
       34948.83  327.43/ 662.81   2.2 0.1                55.853   -3.159    2
  6  8 153 0.09  0.7  1.0 B A*C COALFIELD TYPE                               3
EDI Z 034950.60       P 0IU52.15       S 1ID 9.5H0.30M           0.25 200    8
EDI NS0349                                  10.5H0.18ML          0.25 200    8
EDI EW0349                                  10.0H0.18ML          0.25 200    8
EBL Z 034951.40       P 0IU53.00       S 1ID                                 12
EAU Z 034952.55       P 2ED55.10       S 3E                                  19
     -1
301087                                       5.0       LULLAPOOL,HIGHLAND     1
       21 840.38  215.22/ 898.04   5.8 1.6                57.934   -5.121    2
  5 56 288 0.03  0.9  0.7 C A*D                                              3
MCD Z 210860.5        P 4E                                                  118
MCD NS2108                                   8.5H0.14ML          0.25 200  118
MCD EW2108                                  17.5H0.12ML          0.25 200  118
MDO Z 210852.3        P 2E 60.7        S 2E                                  71
MVH Z 210849.7        P 2E                                                   56
MLA Z 210858.45       P 1E 71.4        S 2E                                  112
     -1
301087 LOWNET    LN563             12.5       5.0DDG    LROSEWELL,LOTHIAN      1
       233417.87  328.34/ 662.45   2.1 0.2                55.850   -3.145    2
  6  9 161 0.06  0.5  0.6 B A*C COALFIELD TYPE                               3
EDI Z 233419.81       P 1IU21.40       S 1IU11.5H0.22M           0.25 200    9
EDI NS2334                                   9.5H0.19ML          0.25 200    9
EDI EW2334                                  13.5H0.21ML          0.25 200    9
EBL Z 233420.20       P 1E 21.93       S 2E                                  11
EAU Z 233421.78       P 2ED24.38       S 3E                                  19
     -1
311087 LOWNET    LN563             12.5       5.0DDG    LROSEWELL,LOTHIAN      1
       31125.15  329.55/ 662.82   0.9 0.6                55.853   -3.125    2
  8  9 117 0.08  0.5  0.5 B A*B COALFIELD TYPE                               3
EDI Z 031127.31       P 0IU28.90       S 1IU13.0H0.25M           1.0  200    9
EDI NS0311                                   6.6H0.19ML          1.0  200    9
EDI EW0311                                  10.5H0.21ML          1.0  200    9
EBL Z 031127.61       P 0ID29.42       S 2E                                  10
EAU Z 031129.37       P 0ID32.60       S 1IU                                 21
ESY Z 031131.75       P 3E                                                   33
EBH Z 031134.65       P 3E                                                   50
     -1
311087                                       5.0       LULLAPOOL,HIGHLAND     1
       32934.94  215.19/ 899.11   0.6 2.5                57.943   -5.123    2
 11 56 262 0.11  2.2  1.1 C B*D                                              3
MCD Z 032955.2        P 3E                                                  118
MCD NS0329                                   6.0H0.20ML          2.5  200  118
MCD EW0329                                  10.5H0.12ML          2.5  200  118
MDO Z 032947.65       P 1IU                                                  72
MVH Z 032945.05       P 1ID                                                  56
MLA Z 032953.75       P 1ED66.8        S 2E                                  111
ELO Z 033004.50       P 3E 25.05       S 3E                                  185
EDU Z 033006.25       P 3E 28.30       S 3E                                  201
EAB Z 033006.55       P 3E 28.05       S 3E                                  201
     -1
011187 PAISLEY   PA 181            12.5       5.0DDG    LKINTYRE,STRATHCLYDE   1
       45222.98  184.57/ 653.24   0.9 1.4                55.725   -5.431    2
  8 45 339 0.07  1.5  1.1 C B*D                                              3
PMS Z 045231.33       P 1ED37.45       S 1E                                  45
PGB Z 045233.90       P 1EU41.85       S 2E                                  61
PGB EW0452                                   3.9H0.11ML          1.0  200   61
PCA Z 045235.88       P 2EU45.49       S 2E                                  74
PCO Z 045238.20       P 1EU49.42       S 2E                                  88
     -1
051187 LOWNET    LN 564            12.5       5.0DWR    LLASSWADE,LOTHIAN      1
       191040.44  332.49/ 664.82   2.1 0.3                55.872   -3.079    2
  5  9 218 0.02  0.8  0.4 C A*D COALFIELD TYPE                               3
EDI Z 191042.45       P 1EU43.97       S 2E 16.6H0.30M           0.25 200    9
EDI NS1910               EU43.97       S  EU16.8H0.21ML          0.25 200    9
EDI EW1910               EU               E 10.7H0.24ML          0.25 200    9
EBL Z 191042.90       P 2E 44.62       S 3E                                  11
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EAU Z 191045.00       P 3E                                                    24
     -1
061187 LOWNET    LN 564            12.5       5.0DWR    LROSEWELL,LOTHIAN      1
       175536.47  328.39/ 662.67   2.4 0.2                55.852   -3.144    2
  6  8 163 0.08  0.5  0.7 B A*C COALFIELD TYPE                                 3
EDI Z 175538.39       P 1EU39.72       S 2E  9.5H0.28M           0.25 200    8
EDI NS1755               ED39.72       S  EU12.7H0.12ML         0.25 200    8
EDI EW1755               E                E 16.0H0.21ML         0.25 200    8
EBL Z 175538.72       P 2E 40.49       S 3E                                   11
EAU Z 175540.40       P 1ID42.90       S 2E                                   20
     -1
061187 LOWNET    LN 564    883     12.5       5.0DWR    LROSEWELL,LOTHIAN      1
       23 239.10  327.77/ 662.15   0.1 1.1             3+   55.847   -3.154    2
  9  9 129 0.09  0.3  0.4 B A*B COALFIELD TYPE,FELT      ROSLIN                 3
EDI Z 230241.25       P  ID42.75       S 1EU 7.6H0.25M           2.5 200     9
EDI NS2302               ID               IU 4.5H0.32ML          2.5 200     9
EDI EW2302               IU               IU13.5H0.21ML          2.5 200     9
EBL Z 230241.76       P 1ED43.62       S 2ED                                  11
EAU Z 230243.29       P  ID46.09       S 2ED                                  19
ESY Z 230245.96       P 2EU                                                   35
EBH Z 230248.49       P 1ED55.17       S 2EU                                  50
     -1
071187 LOWNET    LN 564    939     12.5       5.0DWR    LROSEWELL,LOTHIAN      1
        3 746.45  328.84/ 663.16   1.4-0.2                55.856   -3.137    2
  5  8 170 0.00  0.0  0.0 C A*D COALFIELD TYPE                                 3
EDI Z 030748.49       P 1ED49.98       S 2E  7.8H0.27M           0.25 200    8
EDI NS0307               E                ED 5.5H0.20ML          0.25 200    8
EDI EW0307               E                E  5.5H0.20ML          0.25 200    8
EBL Z 030748.98       P 2E 50.82       S 2E                                   11
EAU Z 030750.50       P 2E                                                    20
     -1
071187 LOWNET    LN 564    953     12.5       5.0DWR    LROSEWELL,LOTHIAN      1
        4 830.37  330.85/ 663.70   4.7-0.3                55.862   -3.105    2
  5  9 195 0.06  1.7  3.4 C B*D COALFIELD TYPE                                 3
EDI Z 040832.42       P 1ED33.73       S 2E  5.0H0.26M           0.25 200    9
EDI NS0408               E                E  3.3H0.20ML          0.25 200    9
EDI EW0408               E                ED 4.5H0.20ML          0.25 200    9
EBL Z 040832.61       P 2E 34.43       S 3E                                   11
EAU Z 040834.58       P 2E                                                    22
     -1
071187 LOWNET    LN 564    959     12.5       5.0DWR    LROSEWELL,LOTHIAN      1
        434 3.35  328.98/ 663.31   1.8-0.1                55.858   -3.135    2
  6  8 173 0.04  0.3  0.4 B A*C COALFIELD TYPE                                 3
EDI Z 043405.30       P 1E 06.73       S 2EU10.6H0.22M           0.25 200    8
EDI NS0434               E                EU 6.1H0.20ML          0.25 200    8
EDI EW0434               E                EU 7.6H0.18ML          0.25 200    8
EBL Z 043405.76       P 2E 07.65       S 3E                                   11
EAU Z 043407.39       P 2E 10.20       S 3E                                   20
     -1
071187 LOWNET    LN 564    960     12.5       5.0DWR    LROSEWELL,LOTHIAN      1
        440 6.43  329.30/ 663.31   1.4 0.0                55.858   -3.130    2
  5  8 176 0.03  0.5  0.6 C A*D COALFIELD TYPE                                 3
EDI Z 044008.50       P 1ED09.91       S 2EU 6.8H0.30M           0.25 200    8
EDI NS0440               E                E  8.4H0.13ML          0.25 200    8
EDI EW0440               E                IU12.0H0.21ML          0.25 200    8
EBL Z 044008.88       P 2E 10.78       S 2E                                   11
EAU Z 044010.55       P 1ID                                                   20
     -1
071187 LOWNET    LN 564   1144     12.5       5.0DWR    LLASSWADE,LOTHIAN      1
       175920.32  332.29/ 664.82   1.0-0.2                55.872   -3.082    2
  3  9 216 0.01  0.0  0.0 C A*D COALFIELD TYPE                                 3
EDI Z 175922.51       P 2E 24.10       S 3E  5.0H0.26M           0.25 200    9
EDI NS1759               E 24.10       S  E  3.3H0.29ML          0.25 200    9
EDI EW1759               E                E  4.0H0.20ML          0.25 200    9
EBL Z 1759                 24.90       S 3E                                   11
     -1
081187 LOWNET    LN 564   1443     12.5       5.0DWR    LROSEWELL,LOTHIAN      1
       152856.04  327.58/ 662.76   0.7 0.1                55.853   -3.157    2
  6  8 154 0.07  0.9  1.1 B A*C COALFIELD TYPE                                 3
EDI Z 152858.11       P 0ID59.51       S 2E 14.7H0.25M           0.25 200    8
EDI NS1528               ID               ED17.2H0.19ML          0.25 200    8
EDI EW1528               ID59.51       S  EU 7.3H0.20ML          0.25 200    8
EBL Z 152858.82       P 1ED60.69       S 2E                                   11
EAU Z 152859.90       P 2E 63.05       S 3E                                   19
     -1
081187 LOWNET    LN 564   1443     12.5       5.0DWR    LROSEWELL,LOTHIAN      1
       161328.70  327.33/ 662.99   2.4-0.4                55.855   -3.161    2
  5  8 153 0.03  0.4  0.4 C A*D COALFIELD TYPE                                 3
EDI Z 161330.50       P 1E 31.81       S 2E  3.8H0.28M           0.25 200    8
EDI NS1613               E                E  2.9H0.16ML          0.25 200    8
EDI EW1613               E 31.81       S  E  3.6H0.19ML          0.25 200    8
EBL Z 161331.22       P 3E 32.88       S 3E                                   12
EAU Z 161332.32       P 3E                                                    19
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      -1
091187                                          5.0IMI    LW.PEEL,ISLE OF MAN    1
       13314.95  215.26/ 484.42  17.7 2.3             4    54.222   -4.834    2
 39 13 146 0.27  0.6  0.5 C B*C FELT THROUGHOUT I.O.M                           3
WIM Z 013318.51       P 1IU21.91       S 2                                    13
WCB Z 013330.34       P 1ID40.97       S 1                                    96
WME Z 013331.18       P 1ID42.33       S 3                                    98
YRC Z 013332.27       P 1ID44.70       S 3                                   110
WLF Z 013332.33       P 1ID44.22       S 2                                   108
WPM Z 013334.72       P 3E 48.86       S 3                                   124
YRE Z 013336.84       P 1ID52.71       S 3                                   141
YRH Z 013338.70       P 2E 56.59       S 3                                   155
WLC Z 013338.42       P 3E 55.76       S 2                                   153
WBR Z 013339.79       P 3E 57.77       S 3                                   164
WVR Z 013341.65       P 3E 61.10       S 3                                   178
WFB Z 013341.77       P 2E 61.35       S 3                                   179
SBD Z 013341.98       P 3E 61.68       S 3                                   180
ECK Z 013338.50       P 2E 55.69       S 2                                   153
ESK Z 013339.30       P 3E 57.42       S 3                                   161
XAL Z 013341.72       P 3E                                                   184
HPK Z 013346.36       P 3E 68.24       S 3                                   212
HOY Z 013347.64       P 3E 71.24       S 3                                   224
DLE Z 013338.02       P 3E 55.20       S 3                                   153
DMU Z 013336.39       P 3E 53.00       S 3                                   141
WCB NS0133                                  8.0H0.08ML          2.50 200     96
WLC NS0133                                  9.6H0.08ML          2.50 200    153
      -1
091187 LOWNET    LN 564   1712     12.5       5.0DWR    LROSEWELL,LOTHIAN      1
       112811.14  329.76/ 663.91   0.4-0.2              55.863   -3.122    2
  5  8 185 0.14  1.6  1.4 C B*D COALFIELD TYPE                                 3
EDI Z 112813.10       P 1E 14.69       S 2E  6.7H0.25M          0.25 200     8
EDI NS1128               E                E  5.0H0.20ML          0.25 200     8
EDI EW1128               E 14.69       S  E  5.1H0.20ML          0.25 200     8
EBL Z 112813.80       P 2E 15.62       S 3E                                   11
EAU Z 112815.45       P 3E                                                   21
      -1
091187 LOWNET    LN564            12.5       5.0DWR    LROSEWELL,LOTHIAN      1
       2030 8.50  329.32/ 663.65   1.5 0.0              55.861   -3.129    2
  5  8 178 0.04  0.7  0.8 C A*D COALFIELD TYPE                                 3
EDI Z 203010.42       P 1E 11.92       S 2E  5.5H0.28M          0.25 200     8
EDI NS2030               E                E  8.4H0.13ML          0.25 200     8
EDI EW2030               E 11.92       S  ED10.4H0.19ML          0.25 200     8
EBL Z 203011.10       P 2E 12.80         3E                                   11
EAU Z 203012.62       P 2E                                                   20
      -1
101187 LOWNET    LN 564           12.5       5.0DWR    LROSEWELL,LOTHIAN      1
        85628.55  329.17/ 663.60   1.8-0.1              55.860   -3.132    2
  5  8 176 0.02  0.3  0.3 C A*D COALFIELD TYPE                                 3
EDI Z 085630.50       P 2E 31.87       S 2E  4.8H0.19M          0.25 200     8
EDI NS0856               E 31.87       S  EU 6.9H0.15ML          0.25 200     8
EDI EW0856               E                E  8.8H0.20ML          0.25 200     8
EBL Z 085631.01       P 3E 32.89       S 3E                                   11
EAU Z 085632.58       P 3E                                                   20
      -1
101187 KYLE                       12.5       5.0       LLOCHAILORT,HIGHLAND   1
       135259.87  178.48/ 785.33  14.4 0.7              56.906   -5.639    2
  5 36 338 0.25  4.8 10.9 D C*D                                               3
KPL Z 1353 0839       P 1E  14.15      S 3E                                   48
KPL NS1353                                  06.0H0.09ML          0.25 200     48
KPL EW1353                                  09.2H0.09ML          0.25 200     48
KSB Z 1353 06.10      P 2E  10.85      S 3E                                   36
KAC Z 1353 11.80      P 1E                                                   69
      -1
111187 LOWNET    LN564            12.5       5.0DWR    LROSEWELL,LOTHIAN      1
        93915.34  330.37/ 663.22   1.0-0.1              55.857   -3.113    2
  6  9 187 0.04  1.0  0.9 C B*D COALFIELD TYPE                                 3
EDI Z 093917.59       P 1EU19.10       S 3E 10.4H0.29M          0.25 200     9
EDI NS0939               EU19.10          E  6.3H0.21ML          0.25 200     9
EDI EW0939               E                E  5.7H0.16ML          0.25 200     9
EBL Z 093917.80       P 1ED19.70       S 3E                                   10
EAU Z 093919.70       P 1ED22.95       S 3E                                   22
      -1
121187 LOWNET    LN565    481     12.5       5.0DWR    LROSEWELL,LOTHIAN      1
       193828.52  328.12/ 663.37   2.2 0.0              55.858   -3.148    2
  5  8 163 0.06  0.8  1.1 C A*D COALFIELD TYPE                                 3
EDI Z 193830.30       P 1E 31.71       S 3E  6.0H0.30M          0.25 200     8
EDI NS1938               E                E  5.1H0.29ML          0.25 200     8
EDI EW1938               E                E  9.5H0.20ML          0.25 200     8
EBL Z 193831.10       P 3E 32.70       S 3E                                   12
EAU Z 193832.29       P 3E                                                   19
      -1
131187 CORNWALL                   12.5       5.0       LNW WENDRON,CORNWALL   1
       161811.12  167.17/  31.59   3.3 0.5              50.138   -5.259    2
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  9  4 289 0.03  0.4  0.7 C A*D                                                3
CCO Z 161812.08       P 0ID                                                    5
CCA Z 161812.25       P 0IU                                                    6
CR2 Z 161812.52       P 0ID13.52       S 1                                     7
CR2 NS1618                                2.2 H0.04ML          10.0 200       7
CR2 EW1618                                4.3 H0.05ML          10.0 200       7
CST Z 161812.83       P 0ID                                                    9
CBW Z 161813.00       P 0IU                                                   10
CGH Z 161813.26       P 4ID                                                   12
CRA Z 161812.30       P 0IU                                                    6
CME Z 161812.42       P 0IU13.37       S 1                                     7
     -1
131187 CORNWALL                    12.5       5.0       LNW WENDRON,CORNWALL    1
       17 015.50  167.49/  31.34   3.6-0.5                50.136   -5.254     2
  8  4 314 0.01  0.2  0.2 C A*D                                                3
CCO Z 170016.45       P 1                                                      4
CR2 Z 170016.87       P 1IU17.93       S 1                                     7
CR2 NS1700                                2.3 H0.05ML           1.0 200       7
CR2 EW1700                                3.6 H0.05ML           1.0 200       7
CST Z 170017.21       P 1 D                                                    9
CBW Z 170017.37       P 1 U                                                   10
CRA Z 170016.68       P 1 U                                                    6
CME Z 170016.77       P 1IU17.75       S 1                                     6
     -1
141187 LOWNET    LN 565   896      12.5       5.0DWR    LROSEWELL,LOTHIAN       1
       142 7.87  327.05/ 662.87   1.5-0.3                55.854   -3.165     2
  5  8 149 0.04  0.6  0.9 C A*D COALFIELD TYPE                                  3
EDI Z 014209.82       P 2E 11.35       S 3E  4.5H0.25M       0.25 200       8
EDI NS0142               E                E  3.9H0.19ML      0.25 200       8
EDI EW0142               E                E  3.9H0.19ML      0.25 200       8
EBL Z 014210.60       P 3E 12.40       S 3E                                    12
EAU Z 014211.60       P 3E                                                    18
     -1
141187 KYLE                        12.5       5.0       LLOCHAILORT,HIGHLAND    1
       8 948.47  178.92/ 786.31   2.4 1.5                56.915   -5.632     2
  5 35 337 0.06  5.0  4.6 D C*D                                                3
KPL Z 0809 57.05      P 1E                                                    47
KPL NS0809                              5.5H 1.0ML          0.25 200       47
KPL EW0809                63.05      S 3E  7.2H 1.0ML      0.25 200       47
KSB Z 0809 54.80      P 2E  59.55      S 3E                                    35
KAC Z 0809 60.37      P 2E                                                    68
     -1
141187 LOWNET    LN 562   1194      12.5       5.0DWR    LROSEWELL,LOTHIAN       1
       224840.78  328.81/ 662.61   0.7 1.6             2+   55.851   -3.137     2
  9  9 122 0.08  0.5  0.6 B A B COALFIELD TYPE,FELT      ROSLIN                  3
EDI Z 224842.98       P  IU44.31       S 2E 20.0H0.31M       2.5 200        9
EDI NS2248               IU                E 11.4H0.80ML      2.5 200        9
EDI EW2248               ID               ED 9.5H0.80ML       2.5 200        9
EBL Z 224843.31       P  ID44.75       S 3ED                                   11
EAU Z 224845.04       P 1ED47.91       S 3EU                                   20
ESY Z 224847.30       P 1ED                                                   34
EBH Z 224850.20       P 1IU56.64       S 3E                                    50
ELO Z 224854.61       P 2E 64.20       S 3E                                    78
EDU Z 224854.61       P 2E 64.32       S 3E                                    78
EAB Z 224855.32       P 3E                                                    84
     -1
161187N WALES                                5.0RITCHIELLLEYN AFTERSHOCK      1
       119 8.11  239.38/ 343.14  23.4 0.6                52.961   -4.392     2
 19  3  86 0.10  0.3  0.6 A A*A                                                3
YRE Z 011912.12       P 3E 14.47       S 2                                     3
YLL Z 011913.54       P 2E 16.61       S 2                                    25
YRC Z 011914.82       P 2E 19.30       S 3                                    35
WLF Z 011914.97       P 1E 19.78       S 1                                    37
WPM Z 011916.47       P 2E 22.11       S 3                                    46
WCB Z 011916.87       P 3E 22.66       S 2                                    48
WCB NS0119                              4.0  0.06ML          0.25 200       48
WCB EW0119                              3.5  0.05ML          0.25 200       48
YRH Z 011913.23       P 1IU16.75       S 1                                    21
WBR Z 011914.94       P 3E 19.48       S 3                                    36
WFB Z 011915.39       P 2E 20.38       S 3                                    39
WLC Z 011915.87       P 1IU21.17       S 1                                    41
WLC NS0119                             20.0 0.11ML          0.25 200       41
WLC EW0119                              9.0  0.11ML          0.25 200       41
     -1
161187 HEREFORD                    12.5       5.0IMI    LBOLTON,LANCASHIRE      1
       25449.90  372.67/ 414.22  16.8 2.3                53.624   -2.413     2
 21 48 130 0.19  1.0  1.7 C B*C                                                3
SBD Z 025505.50       P  ID17.03       S 2                                    98
BBR Z 025509.31       P  IU23.11       S 3                                   121
CWF Z 025509.32       P 0E 23.13       S 1                                   123
CWF NS0255                             18.0H0.10ML          1.00 200       123
CWF EW0255                             15.5H0.10ML          1.00 200       123
HLM Z 025509.88       P  ID24.37       S 1                                   127
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BFR Z 025511.48        P  IU                                                136
HCG Z 025515.12        P 2E 33.63        S 3                                167
HOY Z 025459.02        P  IU                                                 54
HPK Z 025500.90        P  IU08.75        S 1                                64
XAL Z 025511.50        P 1E 26.40        S 3                               138
ECK Z 025516.52        P 1E                                                180
ESK Z 025518.50        P 1E 38.50        S 3                               195
ESK NS0255                                    9.5H0.22ML          0.25 200  195
ESK EW0255                                   11.0H0.30ML          0.25 200  195
XSO Z 025520.14        P 1E                                                208
BMY Z 025458.33        P  IU64.72        S 3                                48
     -1
171187 LOWNET    LN 565   2155     12.5       5.0DWR    LCLACKMANNAN,CENTRAL   1
       191019.48  292.83/ 690.50   4.5 1.1                 56.095   -3.723    2
  7 22 136 0.26  1.9  5.0 C C*C COALFIELD TYPE                                3
EBH Z 191023.79        P  ID26.91        S 2ED                              22
EAU Z 191025.79        P 1ED                                               33
EDI Z 191026.01        P 1EU31.10        S 2E  6.4H0.43M          0.25 200  39
EDI NS1910                E                 E  5.7H0.50ML         0.25 200  39
EDI EW1910                EU31.10       S  EU 5.8H0.52ML         0.25 200  39
EAB Z 191026.52        P 1E                                                40
ELO Z 191027.02        P 1E                                                42
     -1
171187 LOWNET    LN 565   2171     12.5       5.0DWR    LROSEWELL,LOTHIAN      1
       201822.03  328.10/ 663.11   2.4 0.2                 55.856   -3.149    2
  6  8 162 0.09  0.6  0.9 B A*C COALFIELD TYPE                                3
EDI Z 201823.81        P 1E 25.16        S 2E  7.8H0.24M          0.25 200   8
EDI NS2018                E                 E 10.0H0.21ML         0.25 200   8
EDI EW2018                E 25.16           IU15.1H0.21ML         0.25 200   8
EBL Z 201824.58        P 1E 26.00        S 2E                               11
EAU Z 201825.74        P 1E 28.50        S 2E                               19
     -1
181187 LOWNET    LN565    2249     12.5       5.0DWR    LCLACKMANNAN,CENTRAL   1
        15848.83  292.11/ 690.61   1.1 0.2                 56.096   -3.735    2
  7 22 137 0.16  1.1  2.0 C B*C COALFIELD TYPE EVENT                          3
EBH Z 015853.30        P 0ED56.70        S 2E                               22
EAU Z 015855.22        P 1E 60.01        S 3E                               33
EDI Z 015855.90        P 3E 61.20        S 2E  1.6H0.12M          0.25 200  39
EDI NS0158                E 61.20       S  E  2.0H0.15ML         0.25 200  39
EDI EW0158                E                 E  1.9H0.15ML         0.25 200  39
EAB Z 015856.10        P 2E                                                39
     -1
181187NORTH SEA                              5.0BS      NORTH SEA             1
        91950.12                  6.2 1.7                 59.684    1.822    2
 15175 177 0.83  6.3  7.0 D D*D                                              3
SUE Z 092022.70        P 1E 46.50        S 3E                              223
HYA Z 092031.90        P 1E 57.70        S 4E                              292
ODD Z 092029.40        P 1E 57.50        S 3E                              274
KMY Z 092020.70        P 2E 42.70        S 3E                              202
ASK Z 092020.80        P 1E 43.70        S 3E                              208
LRW Z 092019.20        P 1E 35.80        S 3E                              175
LRW NS0920                                   03.0H0.05ML          01.0 200  175
LRW EW0920                                   03.0H0.11ML          01.0 200  175
SAN Z 092016.60        P 2E 35.60        S 3E                              175
YEL Z 092019.90        P 1E 39.70        S 3E                              188
     -1
201187 LOWNET                        10.0       5.0DDG    LARDNAMURCHAN,HIGHLAND 1
         3 739.39  173.14/ 763.76   0.5 2.6              3+   56.710   -5.707    2
 21 58 214 0.16  1.6  1.0 C B*D FELT LOCHAILORT                              3
EAB Z 030757.11        P 1IU68.85        S 3E                              103
ELO Z 030800.79        P 1IU15.43        S 2E                              125
EBH Z 030803.08        P 1E 20.75        S 2E                              145
EAU Z 030805.91        P 2E 27.20        S 2E                              170
EDU Z 030806.80        P 2E                                                166
EDI Z 030807.41        P 1EU29.10        S 2E  6.0H0.15M           1.0 200  179
EBL Z 030809.21        P 3E 32.25        S 3E                              196
ESY Z 030811.42        P 3E 36.82        S 3E                              211
KPL Z 030751.80        P 0I                                                 70
KPL NS0307                                    6.0H0.19M          10.0 200   70
KPL EW0307                61.10       S 3E  6.5H0.10M          10.0 200   70
KSB Z 030750.01        P 0I                                                58
KAC Z 030755.10        P 0I 67.24        S 4E                              91
EDI NS0308                                    9.6H0.12ML           1.0 200  179
EDI EW0308                                    9.0H0.11ML           1.0 200  179
PMS Z 030758.75        P 1IU                                              113
PCO Z 030800.70        P 2ED                                              128
PGB NS0308                                    8.5H0.21ML           2.5  200 126
PGB Z 030800.40        P 1E                                               126
PGB EW0308                                    8.0H0.20ML           2.5  200 126
     -1
211187 LOWNET    LN 566   1106     12.5       5.0DWR    LROSEWELL,LOTHIAN      1
       155626.92  329.08/ 663.38   0.2-0.4                 55.858   -3.133    2
  4  8 174 0.04  0.0  0.0 C A*D COALFIELD TYPE                                3
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EDI Z 155628.82       P 2E 30.40       S 3E  3.4H0.30M          0.25 200    8
EDI NS1556               E                E  3.0H0.20ML         0.25 200    8
EDI EW1556               E 30.40       S  E  3.4H0.24ML         0.25 200    8
EBL Z 155629.69       P 2E                                                  11
EAU Z 155631.20       P 2E                                                  20
     -1
231187 PAISLEY   PA 184            12.5       5.0DDG    LRENFREW,STRATHCLYDE   1
       74215.26  247.65/ 666.66   6.0 0.5                  55.869   -4.435    2
  6  7 247 0.04  0.5  0.6 C A*D                                               3
PGB Z 074217.12       P 0ID18.39       S 1IU                                 7
PGB NS0742                                  14.2H0.16ML          1.0  200    7
PGB EW0742                                   7.1H0.10ML          1.0  200    7
PMS Z 074219.13       P 0IU21.85       S 1EU                                20
PCA Z 074219.50       P 1E 22.60       S 2ED                                22
     -1
231187 LOWNET    LN 566   1826     12.5       5.0DWR    LROSEWELL,LOTHIAN      1
       201133.48  329.53/ 663.31   0.5-0.1                  55.858   -3.126    2
  5  8 179 0.03  0.7  0.9 C A*D COALFIELD TYPE                                 3
EDI Z 201135.62       P 2E 37.01       S 2E 10.0H0.19M          0.25 200    8
EDI NS2011               E 37.01       S  EU 6.5H0.19ML         0.25 200    8
EDI EW2011               E                E  7.0H0.19ML         0.25 200    8
EBL Z 201136.12       P 2E 38.08       S 2E                                  11
EAU Z 201137.81       P 1E                                                  21
     -1
241187 LOWNET    LN 566   1910     12.5       5.0DWR    LROSEWELL,LOTHIAN      1
        221 4.22  329.52/ 663.68   2.1 0.1                  55.861   -3.126    2
  6  8 181 0.05  0.5  0.5 C A*D COALFIELD TYPE                                 3
EDI Z 022106.15       P 0ID07.42       S 1E 11.9H0.25M          0.25 200    8
EDI NS0221               ED               EU 8.4H0.20ML         0.25 200    8
EDI EW0221               EU07.42       S  EU10.0H0.20ML         0.25 200    8
EBL Z 022106.62       P 1ED08.40       S 2E                                  11
EAU Z 022108.20       P 1E 11.33       S 3E                                  21
     -1
241187 LOWNET    LN566    1989     12.5       5.0DWR    LROSEWELL,LOTHIAN      1
         8 242.91  330.38/ 663.53   0.5-0.1                  55.860   -3.112    2
  6  8 189 0.09  2.0  1.8 C B*D COALFIELD TYPE                                 3
EDI Z 080245.10       P 1EU46.51       S 2E  7.1H0.28M          0.25 200    8
EDI NS0802               E                E  5.4H0.19ML         0.25 200    8
EDI EW0802               E 46.51       S  EU 6.5H0.20ML         0.25 200    8
EBL Z 080245.61       P 1E 47.35       S 2E                                  11
EAU Z 080247.23       P 2E 50.81       S 3E                                  22
     -1
251187 LOWNET    LN 566   2301     12.5       5.0DWR    LLASSWADE,LOTHIAN      1
       64525.43  331.59/ 664.83   2.3 0.3                  55.872   -3.093    2
  6  8 209 0.04  0.5  0.4 C A*D COALFIELD TYPE                                 3
EDI Z 064527.30       P 0ID28.69       S 2E  4.9H0.11M          1.0  200    8
EDI NS0645               ED               EU 7.5H0.10ML         1.0  200    8
EDI EW0645               EU28.69       S  EU 3.6H0.19ML         1.0  200    8
EBL Z 064527.90       P 2E 29.60       S 2E                                  11
EAU Z 064529.75       P 1ED33.10       S 3E                                  23
     -1
251187 LOWNET    LN 567            12.5       5.0DWR    LROSEWELL,LOTHIAN      1
       165045.92  330.71/ 663.95   2.2 0.2                  55.864   -3.107    2
  6  8 195 0.06  0.7  0.7 C A*D COALFIELD TYPE,LOW FREQ.                       3
EDI Z 165047.92       P 1EU49.20       S 2E  5.2H0.29M          1.0 200     8
EDI NS1650               EU               ED 3.2H0.21ML         1.0 200     8
EDI EW1650               E                E  2.0H0.30ML         1.0 200     8
EBL Z 165048.30       P 1ED50.00       S 2E                                  11
EAU Z 165050.02       P 2E 53.35       S 3E                                  22
     -1
261187 LOWNET    LN 567    228      12.5       5.0DWR    LROSEWELL,LOTHIAN      1
        04418.01  328.72/ 662.83   0.5 0.5                  55.853   -3.139    2
  6  8 167 0.06  0.7  0.8 B A*C COALFIELD TYPE                                 3
EDI Z 004420.16       P  IU21.52       S 2E  4.4H0.25M          1.0 200     8
EDI NS0044               IU               E  6.1H0.15ML         1.0 200     8
EDI EW0044               ED               EU 8.0H0.21ML         1.0 200     8
EBL Z 004420.71       P 1E 22.53       S 2EU                                 11
EAU Z 004422.18       P  ID25.30       S 2E                                  20
     -1
261187 LOWNET    LN 567    496      25.0       5.0DWR    LROSEWELL,LOTHIAN      1
       195816.61  328.74/ 662.79   0.2 1.1                  55.853   -3.138    2
  9  8 121 0.06  0.3  0.3 B A*B COALFIELD TYPE                                 3
EDI Z 195818.80       P 1ID20.05       S 2E  6.9H0.23M          2.5 200     8
EDI NS1958               ED               E  4.5H0.30ML         2.5 200     8
EDI EW1958               EU               EU12.5H0.20ML         2.5 200     8
EBL Z 195819.29       P  ID21.19       S 2E                                  11
EAU Z 195820.85       P  ID23.96       S 3E                                  20
ESY Z 195823.20       P 2EU                                                 34
EBH Z 195826.10       P 2EU32.71       S 3E                                  50
     -1
271187 LOWNET    LN 567    752      12.5       5.0DWR    LROSEWELL,LOTHIAN      1
       134137.43  330.26/ 663.02   1.2 1.0                  55.855   -3.114    2
  8  9 113 0.09  0.6  1.0 B A*B COALFIELD TYPE,LOW FREQ.                       3
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EDI Z 134139.67        P  IU41.24        S 2E  8.3H0.30M             2.5 200     9
EDI NS1341                IU                E  3.7H0.65ML            2.5 200     9
EDI EW1341                E                IU 7.0H0.20ML            2.5 200     9
EBL Z 134139.94        P  ID41.60        S 2EU                                   10
EAU Z 134141.71        P  ID                                                     21
ESY Z 134143.40        P 2E 49.71        S 3E                                    32
EBH Z 134146.98        P 2E 53.50        S 3E                                    50
      -1
281187NORTH SEA                                  5.0BS      NORTH SEA             1
       124622.08                      5.0 2.9                 59.479    2.132     2
 23199 171 0.42  1.9  2.8 D C*D                                                   3
FOO Z 124703.60        P 1E 31.00        S 2E                                   285
FOO NS1247                                    12.2H0.12ML          01.0 200   285
FOO EW1247                                    13.2H0.11ML          01.0 200   285
FRO Z 124704.80        P 1E 33.80        S 2E                                   295
LRW Z 124655.10        P 1ED73.62        S 2E                                   200
LRW NS1246                                    06.5H0.13ML          02.5 200   200
LRW EW1246                                    06.5H0.11ML          02.5 200   200
SAN Z 124652.30        P 1E 73.30        S 3E                                   199
WAL Z 124656.80        P 2E                                                     227
YEL Z 124653.70        P 1E 78.30        S 2E                                   216
SUE Z 124656.30        P 1E 80.70        S 3E                                   228
HYA Z 124704.50        P 1E 30.70        S 4E                                   293
BER Z 124653.50        P 1E 74.40        S 3E                                   205
KMY Z 124652.50        P 4E 71.30        S 4E                                   180
ASK Z 124653.30        P 1E 74.40        S 3E                                   204
MCD Z 1247                 51.80         S 3E                                   379
MCD NS1247                                 03.5H0.10ML          01.0 200   379
MCD EW1247                                 04.0H0.08ML          01.0 200   379
MME Z 124715.40        P 1E 52.70        S 3E                                   383
MVH Z 1247                 56.80         S 3E                                   405
MLA Z 1247                 43.50         S 3E                                   343
      -1
291187 LEIC/BIRM                 12.5        5.0ADS    LMOSSLEY,LANCASHIRE      1
       202042.75  406.65/ 406.62  7.1 1.1                 53.556   -1.900     2
  5 20 288 0.09  2.3  3.8 C B*D                                                  3
BBR Z 202058.56        P 2E 70.88        S 4                                    106
BFR Z 202062.37        P 4E                                                     126
HPK Z 202051.38        P 1E 58.38        S 2                                     48
HPK NS                                                                          48
HPK EW                                        14.0H0.18ML          0.25 200    48
BMY Z 202049.02        P 1E 53.70        S 1                                     36
HOY Z 202046.75        P 0IU49.67        S 2                                     20
CWF NS2020                                    10.7H0.03ML          0.25 200    99
CWF Z 202057.37        P 2E 68.52        S 3                                     99
CWF EW                                        10.9H0.05ML          0.25 200    99
      -1
291187N WALES                                    5.0RITCHIELW.OF HOLYHEAD,GWYNEDD 1
       223420.23  201.12/ 379.23  10.0 1.1                53.272   -4.983     2
 19 27 196 0.10  0.4  0.6 C A*D                                                  3
YRC Z 223425.25        P 1IU28.52        S 2                                     27
WCB Z 223425.81        P 1IU29.49        S 1                                     31
WCB NS2234                                     9.5 H0.07ML          1.0  200    31
WCB EW2234                                     6.3 H0.09ML          1.0  200    31
WLF Z 223427.00        P 1IU31.44        S 1                                     39
WME Z 223428.37        P 1IU33.55        S 3                                     47
YLL Z 223429.91        P 2E 36.35        S 3                                     56
YRH Z 223429.59        P 2E 35.70        S 2                                     54
WBR Z 223434.56        P 2E 44.26        S 3                                     86
WLC Z 223434.89        P 3E 44.51        S 2                                     86
WLC NS2234                                    16.5H0.08ML          0.25 200    86
WLC EW2234                                     7.5 H0.11ML          0.25 200    86
WFB Z 223435.51        P 3E                                                     91
WVR Z 223437.44        P 2E                                                    107
ETA Z 223437.3         P 2IU                                                   104
      -1
021287KYLE                       12.5        5.0SIMPSONLLOCH ALSH,HIGHLAND      1
         6 535.62  179.69/ 825.58  8.3-0.4                 57.268   -5.654     2
  4  8 246 0.22  0.0  0.0 C B*D                                                  3
KPL Z 0605 37.75       P 1E  39.75       S 3E                                     8
KPL NS0605                                    06.5H0.09ML          0.25 200     8
KPL EW0605                                    07.9H0.09ML          0.25 200     8
KSB Z 0605 39.00       P 1E  40.70       S 3E                                    15
      -1
021287 CORNWALL                  12.5        5.0ABW    LWEST OF SCILLY ISLES    1
       101724.91   -2.09/  31.49  6.0 2.6                 50.047   -7.618     2
  5146 358 0.24  9.8  0.9 D D*D                                                  3
CPZ Z 101747.92        P 1EU                                                   146
CCO Z 101751.95        P 1E                                                    174
CCA Z 101752.17        P 1EU                                                   172
CR2 Z 101752.52        P 2E 72.50        S 2                                    176
CR2 NS1017                                     6.6 H0.12ML          2.5 200    176
CR2 EW1017                                     7.1 H0.10ML          2.5 200    176
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      -1
031287N WALES                                    5.0RITCHIELLLEYN AFTERSHOCK      1
        9 824.69  238.42/ 342.68  23.9 0.9                 52.957   -4.406     2
 21  3 106 0.11  0.4  0.6 B A*B                                                  3
YRE Z 090828.45       P 1ID31.27       S 1                                     3
YLL Z 090830.23       P 1EU34.15       S 2                                    26
WLF Z 090831.70       P 2E 36.21       S 3                                    37
YRC Z 090831.83       P 3E 35.97       S 3                                    35
WCB Z 090833.64       P 3E 39.30       S 2                                    48
WCB NS0908                                  4.8 H0.08ML          0.25 200    48
WCB EW0908                                  9.0 H0.08ML          0.25 200    48
YRH Z 090829.76       P 0IU33.21       S 1                                    20
WST Z 090830.82       P 3E 34.83       S 2                                    28
WBR Z 090831.32       P 3E 36.34       S 2                                    36
WFB Z 090832.10       P 3E 36.51       S 3                                    39
WLC Z 090832.55       P 1IU37.96       S 1                                    42
WLC NS0908                                 19.0H0.12ML          0.25 200    42
WLC EW0908                                 19.5H0.10ML          0.25 200    42
WVR Z 090834.53       P 3E                                                    57
      -1
031287KYLE                                       5.0SIMPSONLLOCH MORAR,HIGHLAND   1
       155245.50  183.79/ 789.86   1.4 0.6                 56.950   -5.556     2
  5 30 337 0.16 10.9  9.5 D D*D                                                3
KPL Z 1552 53.50      P 1E  59.60      S 3E                                   44
KPL NS1552                                 04.0H0.15ML          0.25 200    44
KPL EW1552                                 05.8H0.10ML          0.25 200    44
KSB Z 1552 51.25      P 1E  54.70      S 3E                                   30
KAC Z 1552 56.91      P 1E                                                    63
      -1
031287KYLE                                       5.0SIMPSONLBENBECULA,W.ISLES     1
       16 114.90   60.54/ 849.07  20.0 1.3                 57.405   -7.654     2
  4121 352 0.20  0.0  0.0 C B*D                                                3
KPL Z 1601 33.70      P 1E  47.40      S 3E                                  121
KPL NS1601                                 03.7H0.11ML          0.25 200   121
KPL EW1601                                 08.0H0.13ML          0.25 200   121
KAC Z 1601 36.90      P 1E  51.70      S 3E                                  142
      -1
031287HEREFORD   HF 444           12.5       5.0IMI    LSE BRIDGWATER,SOMERSET1
       203339.64  345.01/ 129.43   6.3 2.1                 51.061   -2.785     2
 10 64 328 0.08  2.2  4.3 C B*D                                                3
HGH Z 203350.49       P 1E                                                    64
MCH Z 203356.84       P 1E 69.42       S 1                                   105
MCH NS2033                                 12.0H0.07ML          1.00 200   105
MCH EW2033                                 18.5H0.12ML          1.00 200   105
HAE Z 203357.56       P 2E 70.78       S 2                                   110
HTR Z 203359.00       P 1E 72.87       S 3                                   118
HCG Z 203364.51       P 1E                                                  153
HLM Z 203364.80       P 3E 84.30       S 2                                   162
      -1
051287LOWNET     LN 568   1006      12.5      5.0DWR    LROSEWELL,LOTHIAN      1
        74437.08  328.66/ 663.21   2.9 1.3            3+   55.857   -3.140     2
  8  8 119 0.06  0.3  1.3 B A*B COALFIELD TYPE,FELT      ROSLIN                  3
EDI Z 074438.90       P  ID40.11       S 2E 12.9H0.22M          2.5  200     8
EDI NS0744               ID                E 12.4H0.21ML       2.5  200     8
EDI EW0744               EU               EU19.2H0.20ML       2.5  200     8
EBL Z 074439.36       P  ID41.15       S 2EU                                  11
EAU Z 074440.90       P  ID44.03       S 4E                                   20
ESY Z 074443.28       P 2E                                                    34
EBH Z 074446.02       P 1IU52.11       S 2ED                                  49
ELO Z 074450.60       P 2E                                                    77
EDU Z 074450.62       P 2E                                                    77
EAB Z 074451.20       P 3E                                                    84
      -1
051287WALES                           12.5       5.0       LMANCHESTER          1
       102258.50  401.63/ 399.22   8.8 2.6            4+   53.489   -1.975     2
 31 27 108 0.20  0.7  1.9 C B*C FELT OVER WIDE AREA OF    GREATER MANCHESTER     3
WLF Z 102323.65       P 2E 43.0        S 3                                   163
YLL Z 102322.35       P 1ID40.0        S 2                                   151
WLC Z 102319.95       P 1IU35.3        S 2                                   133
WLC NS1023                                 12.0H0.15ML          2.5  200   133
WLC EW1023                                 8.1 H0.21ML          2.5  200   133
WVR Z 102320.09       P 1IU35.22       S 2                                   134
SBD Z 102316.03       P 1I 29.13       S 2                                   108
HLM Z 102318.38       P 1I 33.14       S 2                                   124
HOY Z 102303.47       P  IU07.96       S 3                                    27
BMY Z 102306.00       P  ID10.92       S 3                                    44
HPK Z 102308.24       P 1EU15.12       S 2                                    57
BUR Z 102309.91       P 1EU                                                   66
CWF Z 102313.95       P 2E 25.31       S 2                                    95
CWF NS1023                                 12.3H0.10ML          2.50 200    95
CWF EW1023                                  9.5H0.12ML          2.50 200    95
WCB Z 102325.11       P 2E 44.1        S 2                                   172
WCB NS1023                                 14.6H0.15ML          1.0  200   172
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WCB EW1023                                  12.5H0.15ML          1.0  200  172
YRC Z 102325.44       P 2E 45.85       S 3                                 175
YRE Z 102325.25       P 1IU45.57       S 3                                 173
WPM Z 102319.72       P 2E 34.8        S 2                                 131
WBR Z 102322.0        P 1IU38.89       S 2                                 146
      -1
051287HEREFORD                      12.5       5.0IMI    LMANCHESTER           1
       164722.36  403.17/ 400.71   7.7 2.1                  53.503   -1.952    2
 28 25 127 0.31  0.9  1.9 C C*C POSSIBLE A/S OF EVENT @  10:23 GMT ON 05-12-87 3
HOY Z 164727.12       P  IU30.09       S 2                                  25
BMY Z 164729.69       P  ID34.70       S 3                                  42
HPK Z 164732.01       P 1E 38.88       S 1                                  55
HPK NS1647                                  34.5H0.10ML          1.00 200   55
HPK EW1647                                  23.0H0.11ML          1.00 200   55
CWF Z 164737.88       P 2E 49.61       S 1                                  95
CWF NS1647                                   8.0H0.12ML          1.00 200   95
CWF EW1647                                  11.5H0.11ML          1.00 200   95
BBR Z 164739.17       P 2  51.41       S 3                                 100
SBD Z 164739.72       P 1E 52.78       S 1                                 110
HLM Z 164742.89       P 2E 57.00       S 2                                 126
HAE Z 164748.96       P  IU67.96       S 3                                 168
HCG Z 164749.78       P 1E                                                 174
MCH Z 164750.55       P 3E 71.42       S 1                                 182
MCH NS1647                                  21.0H0.10ML          0.25 200   182
MCH EW1647                                  24.0H0.13ML          0.25 200   182
HGH Z 164754.76       P 3E                                                 215
WLC Z 164743.9        P 1ID59.41       S 2                                 135
WVR Z 164743.85       P 2E 59.23       S 3                                 136
WBR Z 164745.82       P 3E 63.0        S 3                                 148
WFB Z 164748.49       P 3E 67.47       S 3                                 167
      -1
061287HEREFORD                      12.5       5.0IMI    LSE BRIDGWATER,SOMERSET1
        02058.38  338.50/ 130.58   2.0 1.5                  51.071   -2.878    2
 10 63 327 0.15 12.8  9.8 D D*D                                               3
HGH Z 002109.41       P 1EU18.06       S 3                                  63
MCH Z 002115.57       P 2E 28.21       S 1                                 104
MCH NS0021                                  10.5H0.09ML          0.25 200   104
MCH EW0021                                  16.5H0.12ML          0.25 200   104
HAE Z 002116.79       P 1E 30.05       S 2                                 110
HTR Z 002117.70       P 2E 31.64       S 3                                 115
HCG Z 002123.09       P 3E 40.49       S 3                                 149
      -1
071287 LOWNET    LN 568   1846      12.5       5.0DWR    LROSEWELL,LOTHIAN     1
       20 229.45  328.57/ 662.79   1.6 0.1                  55.853   -3.141    2
  6  8 165 0.14  0.9  1.2 B A*C COALFIELD TYPE                                 3
EDI Z 200231.40       P  IU32.92       S 1EU 7.4H0.30M      0.25 200    8
EDI NS2002               IU               EU 4.3H0.60ML     0.25 200    8
EDI EW2002               E                EU 3.6H0.5 ML     0.25 200    8
EBL Z 200232.14       P 1ED33.50       S 2E                                 11
EAU Z 200233.50       P 2E 36.39       S 3E                                 20
      -1
081287 KYLE                                 5.0SIMPSONLSHIEL BRIDGE,HIGHLAND 1
       16 539.92  194.42/ 819.53   1.2-0.3                  57.220   -5.405    2
  4  2 210 0.13  0.0  0.0 C A*D                                               3
KPL Z 1605 44.13      P 1ED 50.19      S 3EU                                20
KPL NS1605                                  05.0H0.10ML          0.25 200   20
KPL EW1605                                  03.7H0.10ML          0.25 200   20
KSB Z 1605 40.40      P 1E                                                  2
KAC Z 1605 46.40      P 1ED 49.42      S 3EU                                32
      -1
101287          340                         5.0SIMPSONLSOUTH MORAR,HIGHLAND  1
       122155.29  183.84/ 784.75  18.0 1.2                  56.904   -5.550    2
  5 35 340 0.12  2.1  2.7 C B*D                                               3
KPL Z 1222 04.09      P 1ED 09.99      S 3EU                                49
KPL NS1222                                  07.0H0.11ML          01.0 200   49
KPL EW1222                                  03.0H0.10ML          01.0 200   49
KSB Z 1222 01.89      P 1I  06.40      S 3ED                                35
KAC Z 1222 07.54      P 1ED 09.60      S 3ED                                68
      -1
121287 LOWNET    LN 569             12.5       5.0DDG    LLASSWADE,LOTHIAN     1
       142843.10  331.91/ 664.63   0.3 1.3             3+   55.870   -3.088    2
  7  9 112 0.04  0.3  0.5 B A*B COALFIELD TYPE,FELT      LASSWADE              3
EDI Z 142845.26       P  ID46.77       S 1ID 9.0H0.21M      2.5  200    9
EDI NS1428                                  10.0H0.24ML          2.5  200    9
EDI EW1428                                  10.1H0.38ML          2.5  200    9
EBL Z 142845.87       P 1ED47.90       S 1ID                                11
EAU Z 142847.85       P 1IU49.91       S 3EU                                23
ESY Z 142849.07       P 1ED                                                 30
EBH Z 142852.53       P 2ED                                                 50
EDU Z 142856.52       P 3E                                                  76
      -1
121287MORAY                         12.5       5.0       LULLAPOOL,HIGHLAND    1
       223734.56  208.64/ 900.23   7.1 1.7                  57.950   -5.234    2
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  7 50 230 0.09  1.6  2.4 C B*D                                                3
MCD Z 2237 54.90       P 1EU 69.30       S 3ED                                 125
MCD NS2237                                    03.5H0.12ML          01.0 200  125
MCD EW2237                                    03.5H0.10ML          01.0 200  125
MDO Z 2237 47.40       P 2EU 56.20       S 4E                                   77
MVH Z 2237 45.01       P 2EU 51.19       S 4E                                   63
MLA Z 2237 53.60       P 1E  66.30       S 3E                                  117
KPL Z 2237 48.80       P 4ED 55.40       S 3E                                   73
KPL NS2237                                    06.2H0.10ML          01.0 200   73
KPL EW2237                                    05.2H0.10ML          01.0 200   73
KAC Z 2237 43.31       P 2EU 48.80       S 4E                                   50
ELO Z 223806.10        P 2E 27.48        S 2E                  0.25 200        189
EAB Z 223807.50        P 3E 31.90        S 2E                                  204
PGB Z 223810.50        P 2E 35.85        S 3EU                                 243
PGB NS2238                                     4.0H0.25ML          0.25 200   243
PGB EW2238                                     4.0H0.20ML          0.25 200   243
EDU Z 223808.50        P 2E 31.45        S 3E                                  206
EBH Z 223811.11        P 2E 35.50        S 3E                                  217
EDI Z 223814.6         P 4E 43.32        S 3E                                  258
EDI NS2238                E                E  1.5H0.20ML          0.25 200   258
EDI EW2238                E                E  1.6H0.20ML          0.25 200   258
     -1
121287N WALES                          12.5       5.0       LL'DRINDOD WELLS,POWYS 1
       233438.84  314.54/ 265.00   8.5 1.7                  52.276   -3.253     2
 23 22  98 0.14  0.5  1.8 B A*C                                                  3
WCB Z 233462.62        P 2E 79.94        S 2                                   151
WCB NS2334                                     9.5 H0.08ML          0.25 200   151
WCB EW2334                                    10.6H0.07ML          0.25 200   151
YRC Z 233461.00        P 2E 77.68        S 2                                   140
YRE Z 233457.2         P 1IU                                                   112
WPM Z 233458.09        P 1IU71.10        S 2                                   118
WLF Z 233460.50        P 3E 76.28        S 2                                   137
WME Z 233461.55        P 2E 77.30        S 3                                   143
YLL Z 233457.18        P 2E 70.25        S 2                                   114
MCH Z 233445.09        P 1ID49.7         S 1                                    36
MCH NS2334                                    15.7 0.09 ML          2.5  200    36
MCH EW2334                                    12.0 0.08 ML          2.5  200    36
SBD Z 233450.61        P 1IU                                                   70
HAE Z 233448.21        P 1ID55.19        S 2                                    55
HCG Z 233444.19        P 1ID47.65        S 2                                    28
HGH Z 233451.85        P 1ID                                                   77
HTR Z 233443.12        P 1ID                                                   22
HLM Z 233445.19        P 1IU                                                   37
CWF Z 233501.82        P 1E 17.44        S 2                                   142
CWF NS2335                                    12.5H0.08ML          2.50 200   142
CWF EW2335                                     6.2H0.09ML          2.50 200   142
     -1
131287HEREFORD   HF445                 12.5       5.0IMI    LL'DRINDOD WELLS,POWYS 1
        315 6.74  315.33/ 264.91   7.4 0.0                  52.275   -3.241     2
  8 22 121 0.07  0.4  1.5 B A*C POSSIBLE A/S OF EVENT @  23:34 GMT ON 12-12-87 3
HTR Z 031511.02        P  ID14.00        S 3                                    22
HCG Z 031512.08        P 1EU15.58        S 3                                    29
MCH Z 031512.85        P 3E 17.61        S 1                                    35
MCH NS0315                                     7.5H0.10ML           0.25 200   35
MCH EW0315                                     8.0H0.10ML           0.25 200   35
HLM Z 031513.24        P 2E 17.75        S 3                                    36
     -1
161287HEREFORD   HF446                          5.0IMI    LNW OF BRECON,POWYS     1
       231556.33  296.03/ 238.21  12.6 1.4                 52.032   -3.516     2
 23 18 238 0.18  1.0  1.0 C B*D                                                  3
HTR Z 231600.27        P  IU02.42        S 2                                    18
HCG Z 231602.52        P 1ED07.10        S 1                                    34
MCH Z 231602.61        P 1E 07.54        S 1                                    36
MCH NS2316                                    15.0H0.08ML          1.00 200   36
MCH EW2316                                    16.5H0.07ML          1.00 200   36
HAE Z 231607.41        P 2E 15.88        S 2                                    67
HLM Z 231607.71        P 2E 16.47        S 2                                    69
SBD Z 231612.24        P 3E                                                     99
WFB Z 231609.61        P  ID19.17        S 2                                    81
WVR Z 231610.56        P  ID20.79        S 2                                    85
WBR Z 231612.09        P 1ED22.84        S 3                                    95
WLC Z 231614.02        P 1E 26.37        S 1                                   109
WLC NS2316                                    10.5H0.11ML          0.25 200   109
WLC EW2316                                    11.5H0.11ML          0.25 200   109
BSE Z 231613.36        P 1ID                                                   103
BZO Z 231614.58        P 2E                                                    112
BFR Z 231614.62        P 2E                                                    112
BBR Z 231618.24        P 1ID                                                   135
     -1
171287KYLE                                     5.0SIMPSONLKNOYDART,HIGHLAND     1
       14 432.86  184.89/ 798.33   9.0 0.3                  57.026   -5.545     2
  4 22 330 0.01  0.0  0.0 C A*D                                                  3
KPL Z 1404 39.20       P 2ED 43.60       S 3ED                                  36
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KPL NS1404                                    05.5H0.09ML          0.25 200   36
KPL EW1404                                    04.0H0.09ML          0.25 200   36
KSB Z 1404 37.10      P 1ED 40.00      S 3E                                    22
KAC Z 1404 42.80      P 2E                                                     55
     -1
171287 LOWNET    LN 570    527      12.5      5.0DWR    LROSEWELL,LOTHIAN      1
       2316 2.49  328.60/ 661.94   0.1 0.6                55.845   -3.140     2
  8  9 127 0.06  0.3  0.4 B A*B COALFIELD TYPE                                  3
EDI Z 231604.73       P  EU06.30       S 3E  6.8H0.28M          1.0 200     9
EDI NS2316               IU               E  3.3H0.6 ML        1.0 200     9
EDI EW2316               ED              EU 6.1H0.20ML         1.0 200     9
EBL Z 231605.01       P  ED06.80       S 2ED                                  10
EAU Z 231606.80       P  ID09.71       S 3E                                   20
ESY Z 231609.18       P 3E                                                    34
EBH Z 231612.08       P 2E                                                    50
     -1
181287N WALES                                 5.0RITCHIELLLEYN AFTERSHOCK      1
       235254.28  239.39/ 343.36  23.8 1.0                52.963   -4.392     2
 25  3  85 0.09  0.3  0.5 A A*A                                               3
YRE Z 235258.01       P 1ID60.80       S 2                                     3
YLL Z 235259.78       P 1IU63.55       S 2                                    25
WLF Z 235261.20       P 2E 65.99       S 2                                    36
WPM Z 235262.66       P 1IU68.30       S 3                                    46
WME Z 235262.92       P 2E 68.72       S 3                                    49
WCB Z 235263.03       P 2E 68.55       S 1                                    47
WCB NS2352                                    9.5 H0.06ML          0.25 200   47
WCB EW2352                                    12.5H0.05ML          0.25 200   47
YRC Z 235261.00       P 2ED65.72       S 2                                    34
YRH Z 235259.51       P 1IU62.98       S 2                                    22
WST Z 235260.20       P 2IU64.11       S 3                                    27
WBR Z 235261.10       P 2E 65.84       S 2                                    36
WFB Z 235261.67       P 2E 66.60       S 3                                    39
WLC Z 235262.07       P 1IU67.40       S 1                                    41
WLC NS2352                                    9.0 H0.12ML          1.0  200   41
WLC EW2352                                    3.5 H0.15ML          1.0  200   41
WVR Z 235263.89       P 3E 69.80       S 3                                    56
     -1
201287MORAY,KYLE                   12.5       5.0SIMPSONLULLAPOOL,HIGHLAND     1
        03150.09  211.56/ 898.42   8.4 1.3                57.935   -5.183     2
 11 49 226 0.32  2.9  4.6 D C*D                                               3
KPL Z 0031 62.21      P 2E  70.30      S 3EU                                  72
KPL NS0031                                    03.5H0.08ML          01.0 200   72
KPL EW0031                                    02.5H0.10ML          01.0 200   72
KAC Z 0031 58.61      P 1ED 64.31      S 3E                                   49
MCD Z 0031 70.15      P 1ED 84.50      S 3ED                                 121
MCD EW0031                                    03.0H0.10ML          01.0 200  121
MDO Z 0031 62.60      P 1EU                                                   74
ELO Z 003221.2        P 3E 43.3        S 3E                                  186
MVH Z 0031 59.90      P 1EU 66.50      S 3ED                                  59
MLA Z 0031 68.80      P 1EU 81.70      S 3E                                  115
EDU Z 003223.8        P 2E                                                  203
EAB Z 003223.9        P 3E 47.2        S 3E                                  201
EBH Z 003226.3        P 3E                                                  214
     -1
201287KYLE,MORAY                              5.0SIMPSONLULLAPOOL,HIGHLAND     1
       1828 3.95  209.72/ 899.11   8.0 1.5                57.941   -5.215     2
  7 49 244 0.09  1.4  2.2 C B*D                                               3
KPL Z 1828 20.50      P 4ED 28.20      S 4EU                                  72
KPL NS1828                                    07.0H0.19ML          0.25 200   72
KPL EW1828                                    07.0H0.19ML          0.25 200   72
KAC Z 1828 12.50      P 2ED 18.50      S 3ED                                  49
MCD Z 1828 24.05      P 2EU 38.50      S 4ED                                 123
MCD NS1828                                    03.2H0.10ML          01.0 200  123
MCD EW1828                                    04.5H0.09ML          01.0 200  123
MDO Z 1828 16.53      P 1ED                                                   75
MVH Z 1828 14.20      P 2E  21.00      S 4ED                                  61
MLA Z 1828 22.85      P 2ED 35.80      S 3ED                                 116
ELO Z 182834.7        P 2E 57.1        S 3E                                  187
EAB Z 182837.1        P 3E 60.8        S 3E                                  202
EDU Z 182837.6        P 3E 62.0        S 3E                                  204
EBH Z 182839.5        P 3E 62.9        S 3E                                  215
     -1
221287HEREFORD   HF446             12.5       5.0IMI    LASHBOURNE,DERBYSHIRE  1
        63346.92  420.88/ 350.96  12.3 2.2                53.055   -1.688     2
 21 44 138 0.17  0.7  1.6 C B*C                                               3
BBR Z 063355.91       P 2E                                                    50
BZO Z 063357.89       P 2E 65.17       S 3                                    66
BFR Z 063359.06       P 2E                                                    74
HLM Z 063363.30       P 1E 75.15       S 3                                   101
SBD Z 063364.34       P 1ED76.49       S 3                                   107
HAE Z 063367.27       P 2E 81.90       S 3                                   127
MCH Z 063369.75       P 2E 87.20       S 1                                   148
MCH NS0633                                    13.0H0.10ML          0.25 200  148
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MCH EW0633                                    15.5H0.10ML          0.25 200  148
HTR Z 063370.72       P 3E 88.67       S 3                                   153
HCG Z 063371.76       P 3E 89.22       S 3                                   156
CWF Z 063354.68       P 0I 59.97       S 2                                    44
HOY Z 063357.01       P 1  64.13       S 3                                    60
HPK Z 063363.42       P 0IU74.90       S 3                                   100
HPK NS0633                                 12.5H0.14ML          2.50 200  100
HPK EW0633                                 12.1H0.20ML          2.50 200  100
     -1
221287 LOWNET    LN 570   2177      12.5      5.0DWR    LROSEWELL,LOTHIAN      1
       214220.14  328.72/ 662.87   0.7 1.2            2+   55.854   -3.139    2
  9  8 121 0.09  0.5  0.7 B A B COALFIELD TYPE,FELT      ROSLIN                 3
EDI Z 214222.29       P  ID23.52       S 2E 13.3H0.25M          2.5 200    8
EDI NS2142               ID               ED12.0H0.16ML          2.5 200    8
EDI EW2142               IU               EU18.9H0.21ML          2.5 200    8
EBL Z 214222.73       P  ID24.51       S 3E                                  11
EAU Z 214224.30       P  ID27.41       S 3E                                  20
ESY Z 214226.70       P 2EU                                                  34
EBH Z 214229.44       P 1ED35.71       S 3E                                  50
ELO Z 214233.91       P 2E 43.50       S 3E                                  77
EDU Z 214234.09       P 2E 43.70       S 3E                                  78
EAB Z 214234.78       P 2E                                                   84
     -1
231287 LOWNET    LN 570   2277      12.5      5.0DWR    LROSEWELL,LOTHIAN      1
        15150.42  328.72/ 662.26   0.3 1.1              55.848   -3.139    2
  8  9 124 0.05  0.2  0.2 B A*B COALFIELD TYPE                               3
EDI Z 015152.63       P  IU54.19       S 3E  8.8H0.30M          2.5 200    9
EDI NS0151               IU               ED 3.6H0.7 ML          2.5 200    9
EDI EW0151               ID               ED 5.9H0.30ML          2.5 200    9
EBL Z 015152.99       P 1ED54.81       S 3E                                  10
EAU Z 015154.70       P 1ED57.60       S 3E                                  20
ESY Z 015156.99       P 2E                                                   34
EBH Z 015159.89       P 2EU                                                  50
     -1
241287HEREFORD   HF447             12.5       5.0IMI    LBRIDGNORTH,SALOP      1
       185041.89  376.54/ 294.75  13.5 0.5              52.550   -2.346    2
 11  8 176 0.20  1.8  1.6 C B*C                                              3
HLM Z 185048.72       P 1E 53.31       S 2                                   37
HAE Z 185052.02       P 2E                                                   59
MCH Z 185054.12       P 3E 63.52       S 2                                   76
MCH NS1850                                 5.5H0.07ML          0.25 200   76
MCH EW1850                                 5.0H0.08ML          0.25 200   76
HTR Z 185055.26       P 3E                                                   82
BSE Z 185044.98       P 1IU46.47       S 3                                    8
BZO Z 185046.45       P 3E 48.54       S 3   5.4H0.15ML          0.25 200   18
BBR Z 185048.77       P 1IU                                                  39
     -1
291287MORAY,KYLE                  12.5       5.0SIMPSONLLOCH TORRIDON,HIGHLAND1
        3 5 5.81  179.70/ 859.18   4.2 1.1              57.569   -5.684    2
  6 24 293 0.04  0.6  0.7 C A*D                                              3
MCD Z 0305 28.10      P 2E  46.20      S 3ED                                145
MCD NS0305                                 01.5H0.09ML          01.0 200  145
MCD EW0305                                 02.5H0.06ML          01.0 200  145
MDO Z 0305 20.80      P 1ED 28.50      S 3ED                                 81
MVH Z 0305 23.20      P 2E  34.40      S 3E                                  98
KPL Z 0305 10.69      P 1EU 14.20      S 3E                                  26
KPL NS0305                                 06.5H0.11ML          01.0 200   26
KPL EW0305                                 09.5H0.10ML          01.0 200   26
KSB Z 0305 13.60      P 1EU 19.10      S 3E                                  43
KAC Z 0305 10.40      P 1EU 13.80      S 2ED                                 24
ELO Z 030534.1        P 3E 53.5        S 3E  3.2H0.10M          0.25 200  171
EAB Z 030534.6        P 3E 54.4        S 3E                                 174
EBH Z 030536.8        P 3E 60.7        S 3E                                 198
EDU Z 030538.4        P 3E                                                  198
     -1
```
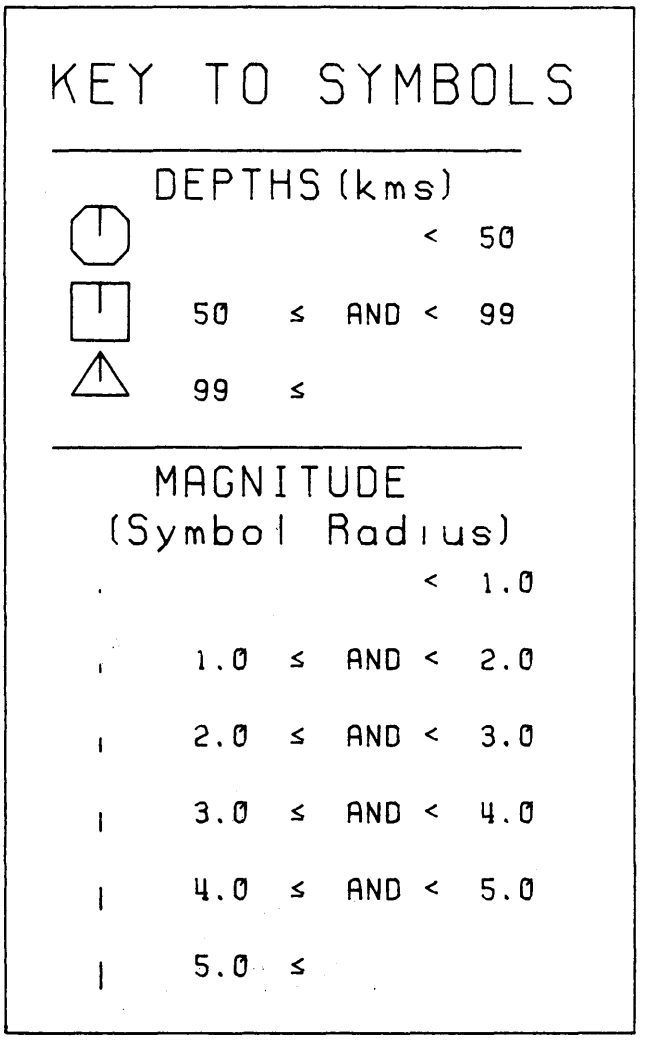

TABLE 6 Typical depth / crustal velocity model for Britain

Depth to top of layer (km)	P-wave velocity (km/s)
0.0	4.0
2.52	5.9
7.55	6.45
18.87	7.0
34.15	8.0

Vp/Vs = 1.73



KEY TO EPICENTRE MAPS, FIGURES 3 TO 6.

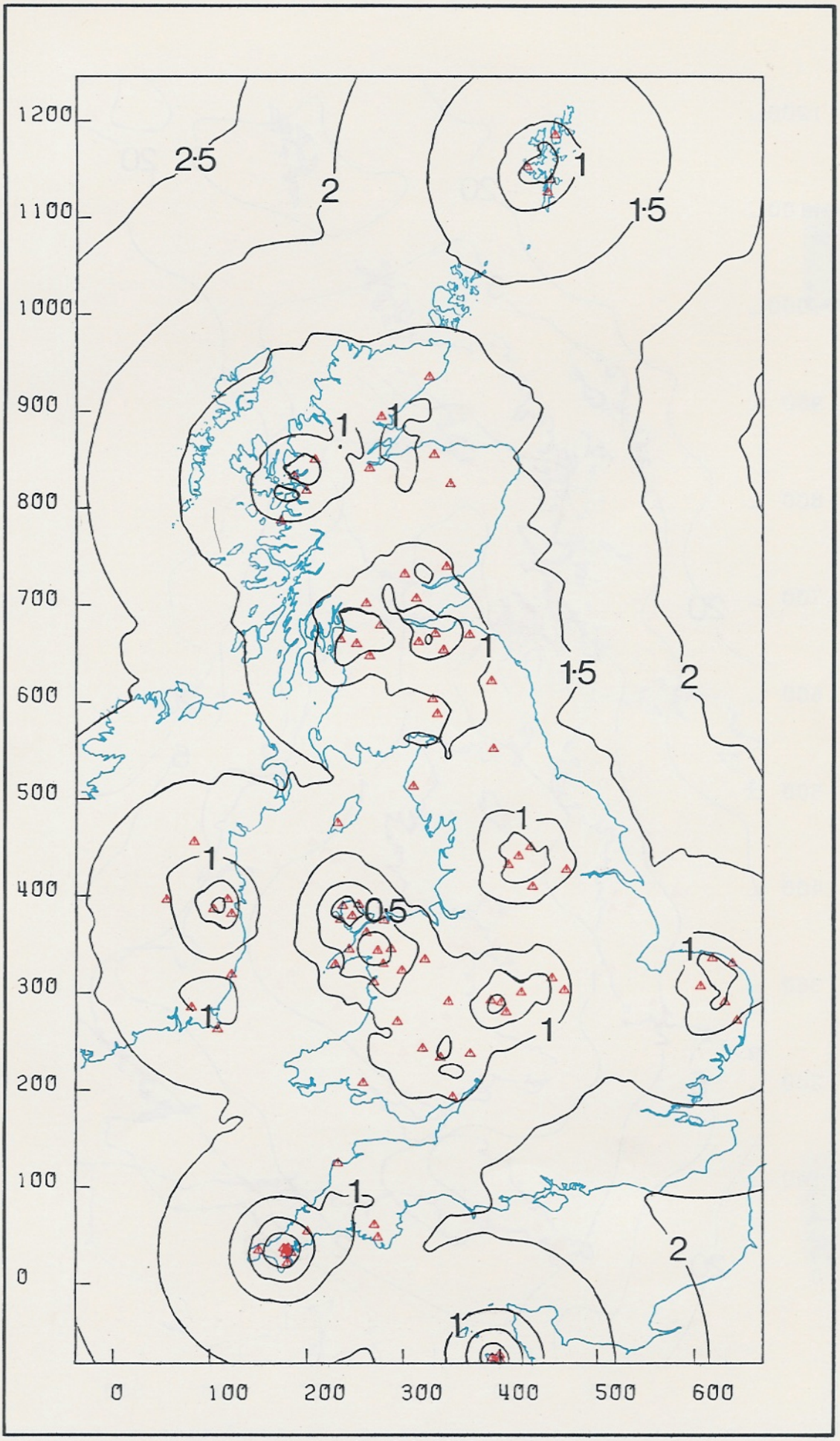


Fig.1 : BGS and DIAS seismographs (▲) 1987, and their detection capabilities for magnitudes in 0.5ML steps, with average noise conditions

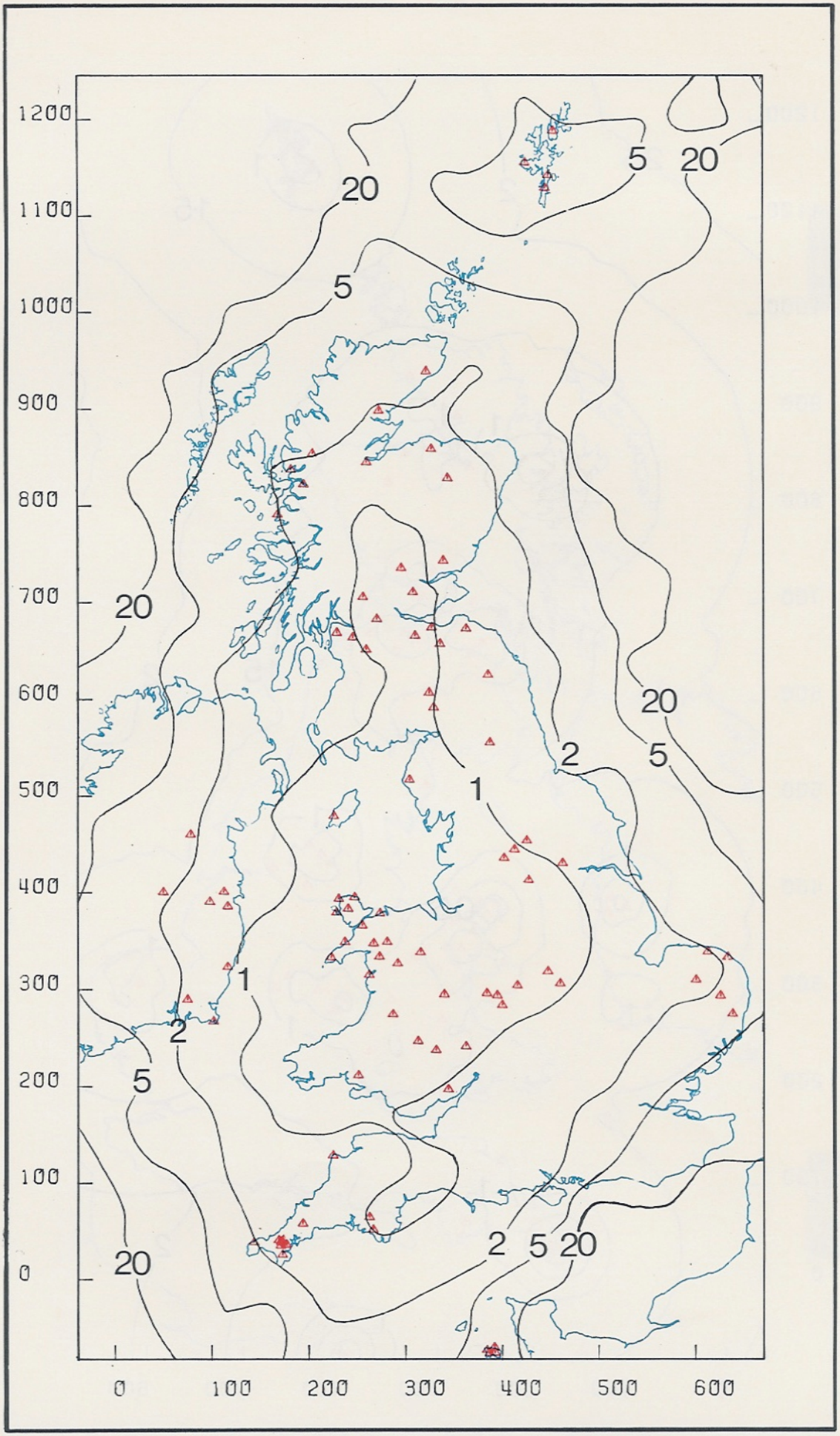


Fig.2 : Theoretical epicentral location errors in km
for a magnitude 2.0ML earthquake

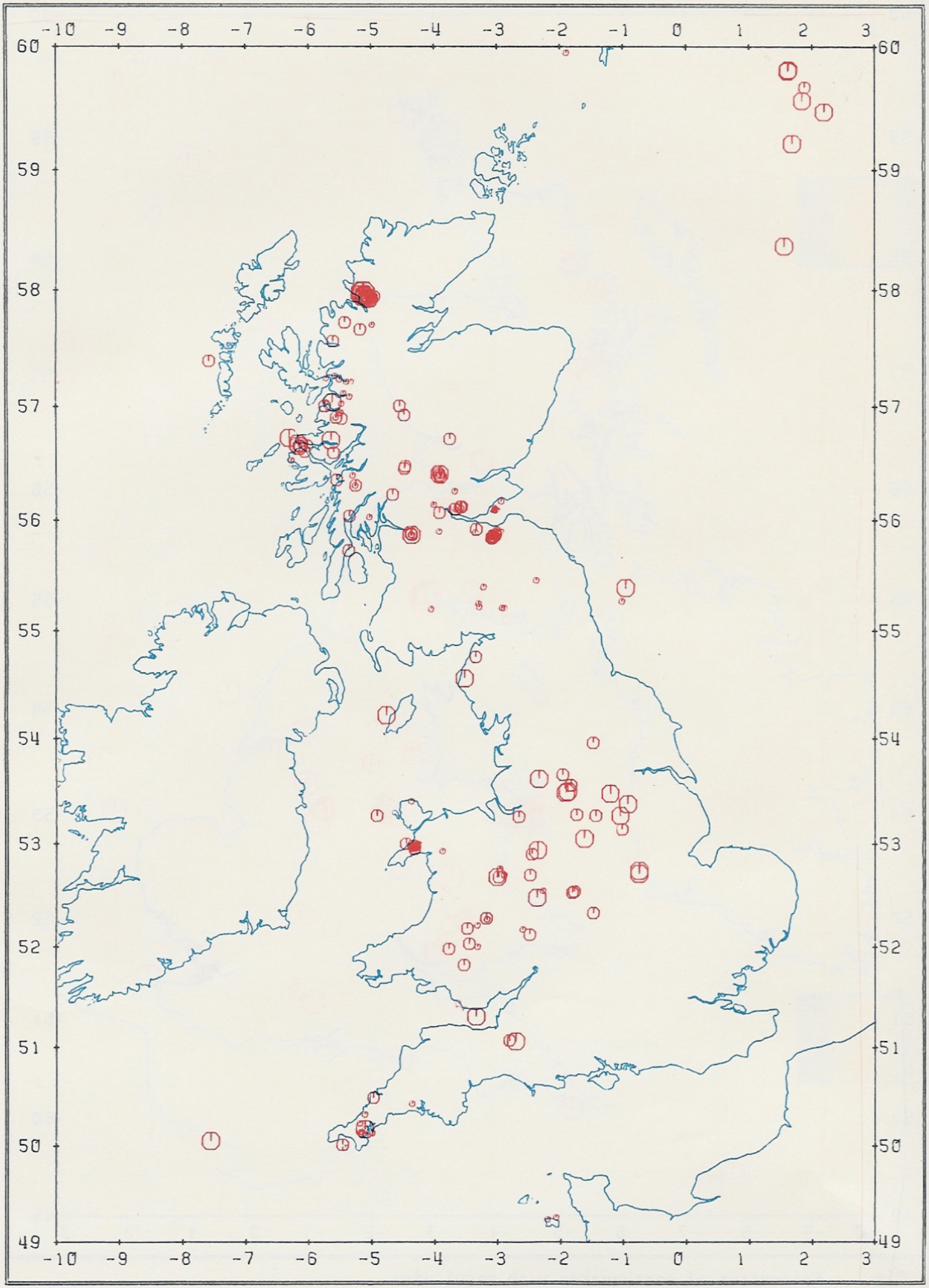


Fig.3 : Epicentres of all earthquakes, 1987

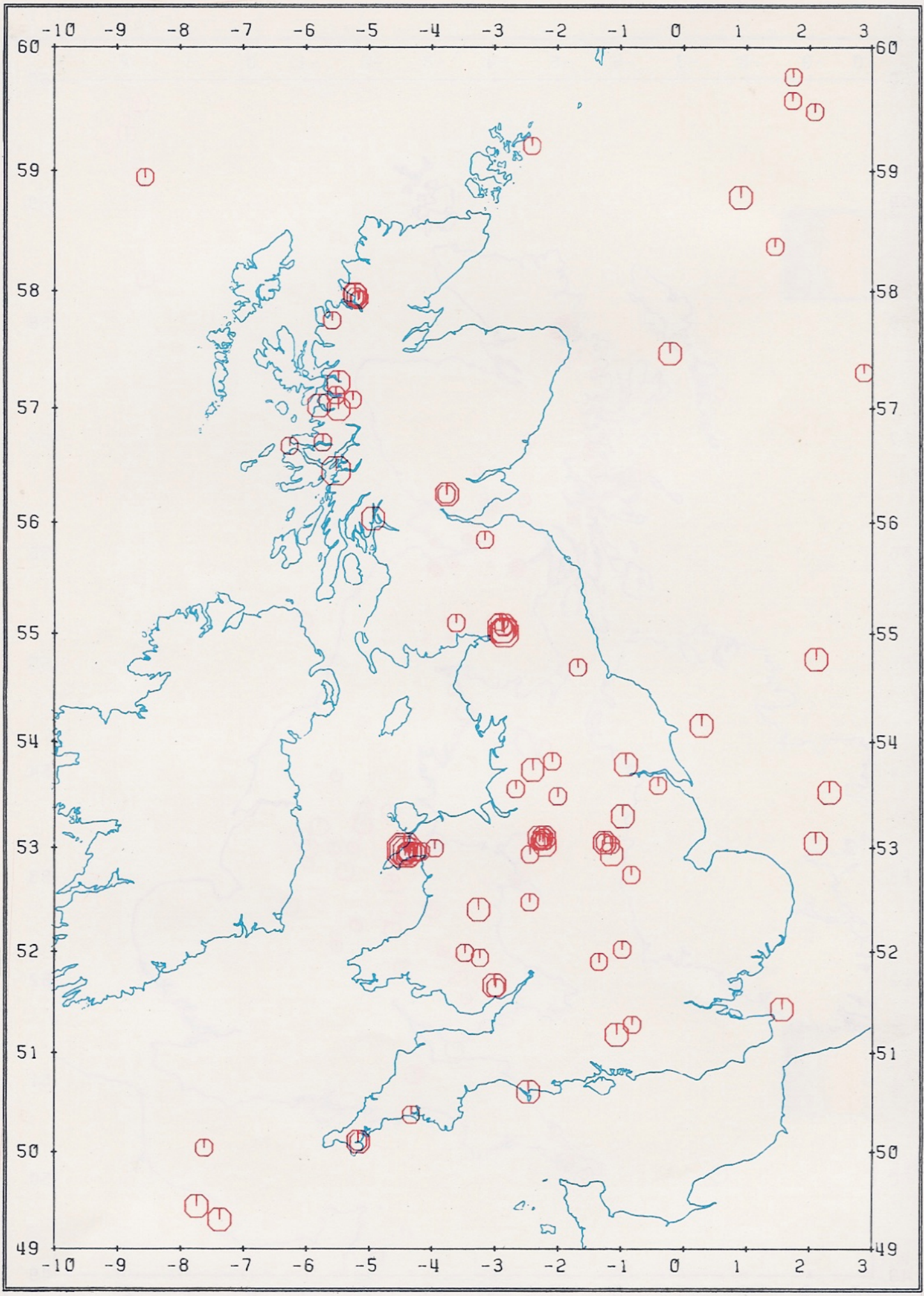


Fig.4 : Epicentres of earthquakes with magnitudes 2.5ML or greater, 1979-87

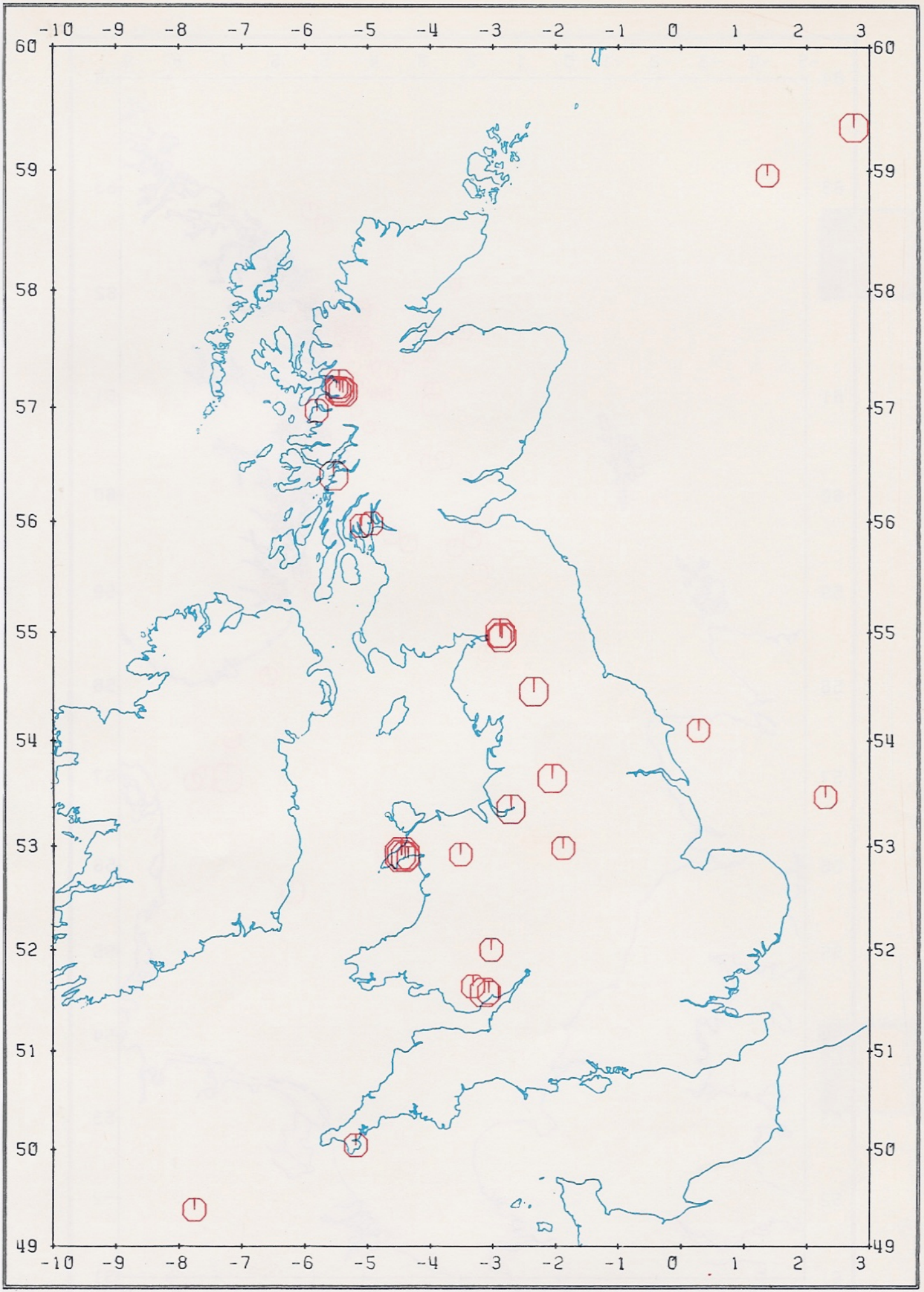


Fig.5 : Epicentres of earthquakes with magnitudes 3.5ML or greater, 1969-87

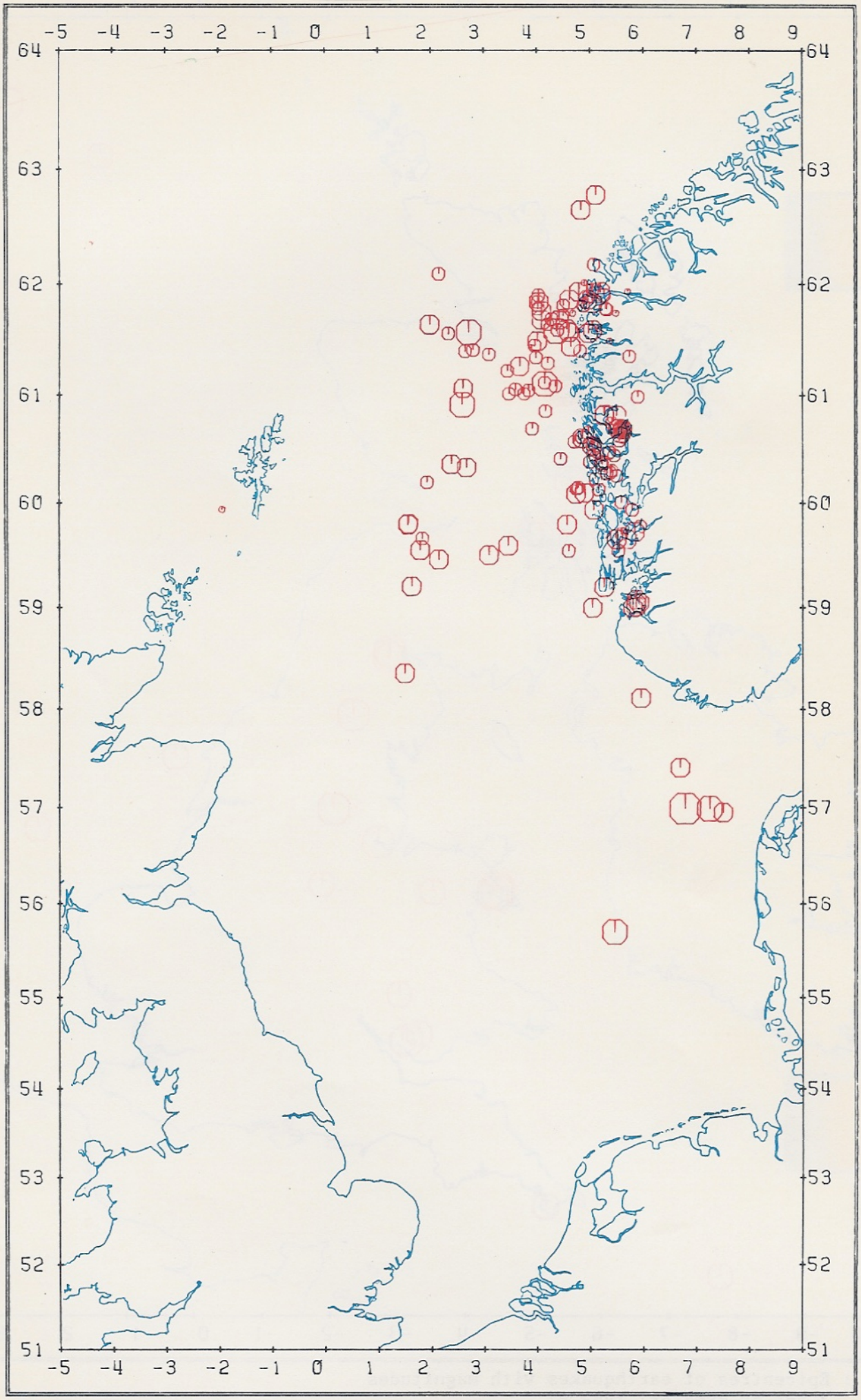
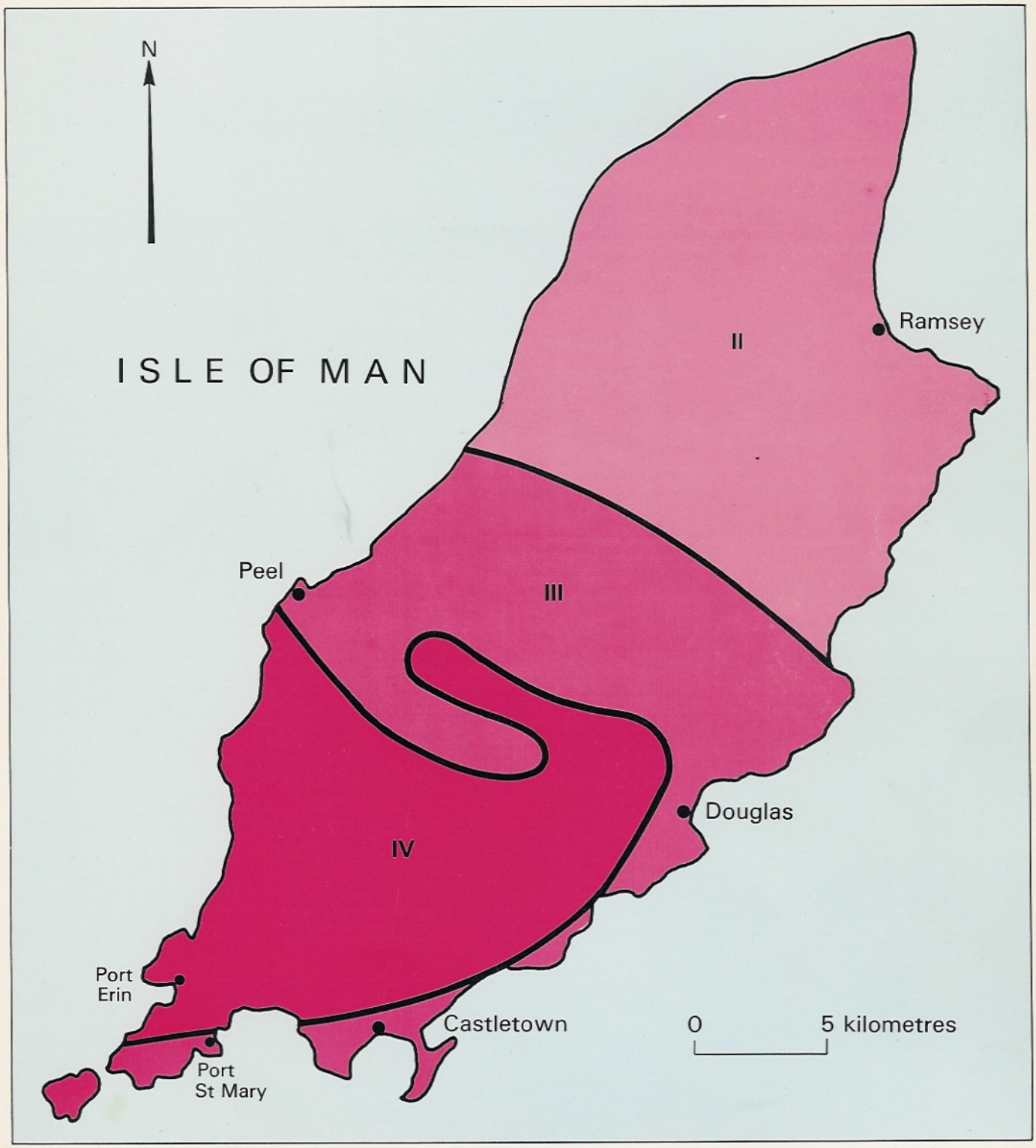


Fig.6 : Epicentres in the North Sea, 1987

Natural Environment Research Council



Isle of Man Earthquake 9 November 1987 01:33 GMT (2.3 ML) -MSK INTENSITIES