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UKOOA EXPLORATION STANDARDS AND PRACTICES

A. STANDARD FORMAT FOR POST PLOT SEISMIC POSITIONAL DATA TAPE

1. Specification of Digital Tape

½ inch magnetic tape IBM compatible. Number of tracks: 9. Number of bits per inch: 1,600 (800 is a permissible alternative).

Mode: Coded EBCDIC. Parity: Odd. Record length: 80 bytes, blocked, followed by an inter-record gap.

The tape reel and its case should be clearly labelled to describe its contents in the form of the header record described in 3. below.

2. Subdivision of Tape Contents

a. No operating system information should appear on the tape and no record or data should precede the header record described below (2c.).

b. Information relating to the survey only shall appear on each tape. This forms a logical record.

c. Each logical record shall open with four identification blocks (header record).

d. Any number of data record blocks may follow the header record.

e. A logical record comprising the four header blocks is terminated by an EOF block.

f. A logical record comprising the four header blocks and data record blocks is terminated by an EOF block, followed by an IBM file mark.

g. A logical record as described in 2f. may contain only data with co-ordinates referred to the same central meridian. If data extends over various Universal Transverse Mercator zones, data from each zone may appear on the same tape but must form a separate logical record and be recorded as described in 2c. 2d. 2e. 2f. above.

3. Form of Header Record

4 blocks (cards) to contain:

a. Name of survey, area, licence block number(s). Fortran format 10A8

b. Client, contractor, day, year. Fortran format 10A8

Survey Clock Time with respect to GMT. (eg. Clock display in advance of GMT clock expressed as GMT + N hours).

c. Source, primary positioning system with the calibration delays or fixed errors applied to each pattern, layback from each radio positioning antennae to source. Fortran format 10A8

d. Map scale if positional data hand digitised, spheroid, projection, central meridian, water depth datum if soundings reduced. For the North Sea, data should be based on the International Spheroid, European Datum and a Transverse Mercator projection, normally UTM. Fortran format 10A8

4. Form of Data Record

Each block (card) is to contain data for one shot point. The position recorded is to be that position of the shot point shown on the seismic section and plotted on the shot point maps. This is normally the position of the energy source.

a. Line name (left justified) Columns 1-16, Format 4A4

b. Shot point name (right justified) Columns 17-24, Format 2A4

c. Latitude (degrees, minutes and seconds with N or S; seconds to 1 decimal place) Columns 25-34, Format I3, I2, F4.1, A1.

d. Longitude (degrees, minutes and seconds with E or W; seconds to 1 decimal place) Columns 35-44, Format I3 I2, F4.1, A1.

e. Map grid Eastings (metres) Columns 45-52, Format I8

f. Map grid Northings (metres) Columns 53-60, Format I8

g. Water depth (metres to one decimal place) Columns 61-66, Format F6.1

h. Time (Julian days hours, minutes, seconds) (GMT or as stated in header record) Columns 67-75, Format I3, 3I2

The addition of Gravity or Magnetic data in the remaining 5 bytes of the block is permissible.

5. End of File Record

The data are terminated by a block (card) containing line name set to EOF. In addition an IBM file mark should be written after the EOF block.

NB. These positions are those of the energy source or shot point position. To obtain the subsurface position of the near trace for any record, the appropriate layback must be applied.