

SECTION 9 SUMMARY OF RESULTS AND CONCLUSION

9.1 Purpose and Achievements of this study.

The purpose of this study was to develop a tool to compute the seismic hazard at any site east of the Rocky Mountains, and to apply it to ten test sites. Our most important achievement consists in the development of a novel methodology and associated software. The main features of the methodology are:

- o Use expert opinion to supplement the available data on zonation, seismicity and ground motion modeling.
- o Identify and assess the uncertainty in all the parameters of the analysis, and propagate that uncertainty using a Monte Carlo simulation approach. The parameters which vary in the simulation approach are described by a probability distribution. The zonation maps and the ground motion models have discrete probability distributions. All the other variable parameters have continuous probability distributions (i.e. a and b- values, upper magnitude cutoffs M_U and value of the standard deviation on the logarithm of the ground motion σ).
- o Preserve the diversity of opinion between the experts in the final results.
- o Incorporate the local geological site characteristics in a generic fashion in the analysis.
- o The necessary data (e.g. zonations data, recurrence models and ground motion models) were developed in a generic manner so that it can be used by any analyst to compute the hazard at any site east of the Rocky Mountains, either by using our methodology (and software) or some other standard analysis approach.

The sensitivity of the results to changes in various parameters was investigated. We validated our methodology and software both by comparing our results to the results obtained in other studies and by performing standard validation procedure on the software.

9.2 Summary and Interpretation of Results

The results of this study provide the NRC with the tools for characterizing the seismicity of the EUS and for describing the hazard at any location within that region. These tools are:

- a. A data base of estimates of the seismicity of the EUS, based on expert opinions of the seismicity, in the form of
 - o a catalogue of maps of zonation of the EUS along with

estimates, including a measure of uncertainty in the estimates, of the seismicity of each zone.

- o a catalogue of ground motion models for propagating the motion at the source to motion at any location within the EUS.
- b. A hazard methodology which uses the estimates in (a) to develop an estimate of the seismic hazard at any location in the EUS. The seismic hazard is described in terms of a hazard curve or a uniform hazard spectrum.

The data base for characterizing the seismicity of the EUS has been developed from an elicitation of the opinions of experts in

- o the geotectonic features and seismicity of the EUS.
- o ground motion modeling.

In using the data base it must be recognized that the results are based on information which was available to the experts at the time of the elicitation in 1984. As additional events occur and more data become available these may be a basis for a change in opinion. Thus, it is recommended that the NRC consider updating the current data base on a periodic basis. This is particularly true of the ground motion models where there is considerable activity in development of new and improved ground motion models. Methods are also being developed for using the historical records of events to complement the opinions of experts about the seismicity. These methods have the potential for upgrading the seismicity data base.

The hazard methodology is based on a probabilistic model of the occurrence and distribution of magnitudes of earthquakes and the attenuation of the ground motion from a source to a site. It also includes modeling of local site effects. The descriptions of the zonation, seismicity and choice of ground motion model and related parameters are assumed to be based on subjective opinions. The method assumes that these opinions are expressed in two ways:

- a. a "best estimate" or most likely zonation, model or value of a parameter.
- b. a collection of zonations or models with relative levels of confidence or a range of values for a parameter which is believed, by the expert, to represent the parameter with a high degree of confidence.

From these inputs the methodology can produce two types of estimates of the seismic hazard at a site:

- o a single "best estimate" hazard curve or spectrum based on the best estimate inputs.

- o A constant percentile hazard curve or spectrum which represents the uncertainty in the hazard as expressed by the
 - a. uncertainty of an individual expert.
 - b. variation in opinions among several experts.

When using these estimates, it is important that the user recognizes some characteristics and limitations of these results:

1. With respect to the "best estimate" hazard curve (spectrum), it should be recognized that this is a weighted average of the hazard curves based on the best estimate inputs of several experts. This is a single or point estimate of the hazard to which one associates no confidence that it represents the true hazard. Thus, it is not recommended that this curve (spectrum) be used as an absolute description of the seismic hazard at a site. This is particularly important since we found considerable variation in the best estimate hazards between experts associated with this project. Of course, it may be useful to consider point estimate hazard curves for a comparison of the seismic hazard at different locations. However, even then we suggest that the uncertainty, due to the uncertainties and variations in opinions, in the hazard be recognized in making such comparisons. Other point estimates which take uncertainty into considerations and which are optional outputs of the methodology are:
 - o the median CPHSs.
 - o the arithmetic or geometric mean hazard curve.

The question of the most appropriate point estimate of the seismic hazard, when the inputs are subject to uncertainty, is an important issue which we believe deserves additional research and investigation.

2. It should be recognized that the CPHCs, AMHCs or GMHCs which represent the uncertainties associated with estimating the hazard based on subjective opinions are not explicit hazard curves that are derived from a unique set of inputs. Neither are they a set of bounds to which can be associated a stated confidence, e.g. 90% confidence, that the true hazard curve is contained within the bounds. Rather, they are the locus of the 15th and 85th percentile points, of the uncertainty distribution in the hazard, i.e. $P(A > a)$, for each level a . Thus, an uncertainty statement, in the sense of uncertainty in the inputs, is applicable to the probability of the maximum PGA exceeding a specific level a . The same statement is not applicable over the entire range of a simultaneously.

Another point in interpreting the uncertainty bounds on the hazard

curve is the dependence of these bounds on the probability descriptions of the uncertainties in the inputs expressed by the experts. We have modeled this uncertainty by a triangular distribution. As illustrated by the sensitivity analyses of the effect of changing from the lognormal distribution to the triangular distribution to describe this uncertainty, the spread in the bounds of the hazard curve may be sensitive to the choice of the distribution. This is another issue which, we believe, requires additional investigation.

3. Another issue which affects both the point estimate of the hazard and the description in the uncertainty in the hazard is the choice of weights for combining estimates over the collection of expert opinions. Our approach was to calculate the hazard (or the uncertainty distribution of the hazard) based on the inputs from each pair of seismicity and ground motion experts and then use self ratings as a basis for weights for combining the estimates over all possible pairs of experts. Appropriate methods for combining information from multiple sources, particularly information based on subjective opinions, is a complex subject. Several methods, based on rankings of experts or strictly mathematical weights, are available in the literature. Based on some limitations on the methods we could use and the ranking information we could elicit, we chose self ranking as a basis of the weight. A comparison of several mathematical methods of combination is under study. However, we consider the issue of combining information, both from opinions as well as from both data based information and opinions, as a topic requiring further investigation.

9.3 Conclusions

The detailed conclusions reached in the course of this study are discussed in the appropriate sections of this report. The following is a summary of the most important ones:

- (1) There is substantial uncertainty in the estimated hazard. The typical range in the value of the probability of exceedance between the 15th and 85th percentile curves for the PGA is on the order of 40 times, for low PGA; it is more than 100 at high PGA values. This translates into an approximate factor of 4 for the 15th-85th range of values in the PGA given a fixed return period, and similarly an approximate factor of 4 for the range of values in the PSV for a given return period.

The range between the 15th and the 85th percentile hazard curves represents the uncertainty in estimating the seismic hazard at a site due to two sources of uncertainty:

- o the uncertainty of each expert in the zonation, models and

values of the parameters of the analyses

- o the variation in the hazard estimates due to the diversity of opinions between experts.

The latter or inter-expert variation is an important contributor to the overall uncertainty in the estimated hazard. Specifically, the magnitude of uncertainty introduced by the diversity of opinions between experts is of the same order, on the average, as the uncertainty in the hazard due to the uncertainty of an individual expert in the value of the parameters. In the example given in Section 4 (Fig. 4.3.8.b), the range between the 15th and 85th percentile hazard curves when both sources of uncertainty are included is approximately double that when the variation between best estimate hazard curves only is considered, i.e. when the diversity of opinions between experts is the only source of uncertainty.

- (2) The 50th percentile CPHC appears to be a stable estimator for the seismic hazard at a site. That is, it is the least sensitive to changes in the parameters, when compared to other estimators considered in this study.
- (3) The process is reasonably stable. Comparison with the SEP results indicated that there has not been a major shift in results over the past few years, although there have been some significant perturbations in the form of recent occurrences of EUS earthquakes and the completion of several major studies of the seismotectonics of the EUS. For the experts who participated in both studies, we found that individual experts modified their views, but not in a drastic manner. In the feedback performed in this study, there was only very minor changes introduced by members of the Seismicity Panel. Finally, comparisons with other studies indicated generally good agreement between results, particularly when differences in ground motion models and other systematic difference (e.g. lower bound magnitude used) were accounted for. Even on an absolute scale, the results from the different studies examined in Section 6 are in good agreement with our results.
- (4) It is difficult to rank the uncertainties, because zonation and the parameters of the recurrence models are hard to separate. Nevertheless, our results indicate that the uncertainty in zonation, and ground motion models is slightly more significant than the uncertainty associated with the seismicity parameters. The largest contribution to modeling uncertainty comes from the uncertainty of the ground motion. The correction for local site effects is a significant contribution to the overall uncertainty introduced by the ground motion models. However, as already noted, the uncertainty introduced by zonation and recurrence models is also significant and of the same order. Of lesser significance was the

uncertainties introduced by the choice of the recurrence model (LLNL model as compared to the truncated exponential model) and the uncertainties in the (a,b) values, the upper magnitude cutoff and the standard deviation of the GMP.

- (5) Based on comparisons between the results of our broad generic study and site specific studies, we conclude that the scale of our study is adequate. No major differences in zonation or results occurred between our study and site specific studies, which included the SEP study and several utility funded site specific studies. It is worthwhile to note the utility funded studies were for three sites located in regions of complex geology and tectonics (i.e. for sites where one might well expect that a detailed look at the local geology would introduce significant changes into a generic broadband zonation such as developed as part of this study).

Finally, it is difficult to assess if our results have either a conservative or unconservative bias. We insisted that our panel members not introduce such biases in their inputs and we spent considerable effort in developing a methodology which would allow the experts to properly express their uncertainty without having to introduce some conservative approximations. This was particularly true in the area of regional ground motion modeling and in the incorporation of multiple alternatives to account for any local site amplification of the ground motion. The comparisons with the historic approach did not indicate that our results have either a conservative or unconservative bias.

SECTION 10 REFERENCES

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APPENDIX A

Appendix A presents the final zonation and seismicity input developed for the analysis. The details of the development of this input data is given in Section B, Volume II of this report. In summary, the data presented in this section is the result of the following:

- o The response of the zonation/seismicity experts to a questionnaire on zonation and then a questionnaire on seismicity.
- o A feedback meeting with all zonation/seismicity experts.
- o The response of the zonation/seismicity experts to a feedback questionnaire.
- o A peer review critique and evaluation of the zonation and seismicity modeling.
- o A continuous and extensive interaction between the experts and LLNL.

We first present the zonation maps used as input for the analysis in Fig. A1 through A17. Then in Table A.1, the seismicity parameters and the probability of existence of each zone.

Table A.2 contains the information necessary to construct all the possible maps (i.e., the level of confidence in the boundary shapes and the alternate shapes). In addition, Table A2 provides the identification of the replacement zones, when a zone does not exist, i.e., in the case of a zone for which the probability of existence is less than 1. Table A2 describes what becomes the area delimited by the zone when it is assumed not to exist, in the enumeration of the simulation process.

In addition to the above mentioned input data, a summary of the contributions of each zone to the total hazard, for the best estimate case, is given in Table A3, for the 10 test sites and for all the zonation/seismicity experts.

TABLE A1

For each zonation/seismicity expert, Table A1 provides the following:

1. A set of four self weights given by the expert, to reflect his knowledge and confidence for each of the four regions of the EUS.
2. The number of seismic zones for the expert (No. of Zones =).
3. For each zone
 - o A sequence number in Table 1 (Seq. #)
 - o Zone area in km^2 .
 - o The index of one of the four regions to which the zone belongs.
 - o The probability of existence of the zone.
 - o The index of the zone as reference on the maps (Map Index No.).
4. The seismicity parameters for each zone
 - o The recurrence parameters (A & B).
 - o The upper magnitude cut-offs (Up Mag Co).
 - o The range of magnitude (or intensity) for validity of the linear model of recurrence.

SEISMICITY DATA FOR EXPERT 1

NO. OF ZONES= 40 SELF WEIGHTS ARE 7.0 9.0 9.0 10.0 LLNL MODEL PARTIAL CORRELATION

SEQ. # 1 LOC IN REG NO 2 MAP INDEX NO 1 PROB. OF EXISTENCE= 1.0 AREA= 1024339.
 OCCURRENCE MODEL IN INTENSITY LINEAR RANGE OF (A-B*I) MODEL IS 4.00 9.45

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	9.5	9.3	9.5
EST. OF N	1.900	1.700	2.200
A	2.680	2.600	2.940
B	-.600	-.640	-.590

SEQ. # 2 LOC IN REG NO 2 MAP INDEX NO 2 PROB. OF EXISTENCE= .8 AREA= 605.
 OCCURRENCE MODEL IN INTENSITY LINEAR RANGE OF (A-B*I) MODEL IS 4.00 10.00

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	10.0	9.5	10.5
EST. OF N	.830	.500	1.350
A	1.870	1.660	2.070
B	-.490	-.490	-.480

SEQ. # 3 LOC IN REG NO 2 MAP INDEX NO 3 PROB. OF EXISTENCE= 1.0 AREA= 169056.
 OCCURRENCE MODEL IN INTENSITY LINEAR RANGE OF (A-B*I) MODEL IS 4.00 8.80

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	8.8	8.5	9.0
EST. OF N	1.200	1.000	1.433
A	2.604	2.374	3.144
B	-.630	-.750	-.590

SEQ. # 4 LOC IN REG NO 2 MAP INDEX NO 4 PROB. OF EXISTENCE= 1.0 AREA= 401420.
 OCCURRENCE MODEL IN INTENSITY LINEAR RANGE OF (A-B*I) MODEL IS 4.00 9.10

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	9.1	8.9	9.5
EST. OF N	7.333	4.667	20.000
A	3.874	3.244	4.784
B	-.750	-.870	-.640

SEQ. # 5 LOC IN REG NO 4 MAP INDEX NO 5 PROB. OF EXISTENCE= 1.0 AREA= 290134.
 OCCURRENCE MODEL IN INTENSITY LINEAR RANGE OF (A-B*I) MODEL IS 4.00 9.80

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	9.8	9.1	10.2
EST. OF N	1.500	1.200	3.200
A	2.350	2.070	3.250
B	-.540	-.690	-.500

***** SEISMICITY DATA FOR EXPERT 1

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SEQ. # 6      LOC IN REG NO 4      MAP INDEX NO 6      PROB. OF EXISTENCE= .7      AREA= 71044.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      5.40

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      5.4      5.3      5.7
EST. OF N      .100      .087      .102
A      4.180      3.410      4.520
B      -1.480      -1.570      -1.270
*****

SEQ. # 7      LOC IN REG NO 4      MAP INDEX NO 7      PROB. OF EXISTENCE= 1.0      AREA= 97266.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      5.40

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      5.4      5.3      5.7
EST. OF N      .137      .120      .139
A      4.310      3.540      4.650
B      -1.480      -1.570      -1.270
*****

SEQ. # 8      LOC IN REG NO 4      MAP INDEX NO 8      PROB. OF EXISTENCE= .5      AREA= 327614.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      5.40

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      5.4      5.3      5.7
EST. OF N      .462      .403      .469
A      4.840      4.070      5.180
B      -1.480      -1.570      -1.270
*****

SEQ. # 9      LOC IN REG NO 4      MAP INDEX NO 9      PROB. OF EXISTENCE= 1.0      AREA= 6132.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      7.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      7.4      7.2      7.5
EST. OF N      .850      .825      .875
A      2.559      2.419      2.779
B      -.750      -.810      -.720
*****

SEQ. # 10     LOC IN REG NO 4      MAP INDEX NO 10     PROB. OF EXISTENCE= 1.0      AREA= 41607.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      7.10

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      7.1      6.9      7.2
EST. OF N      .850      .830      .880
A      2.790      2.740      2.960
B      -.820      -.870      -.810
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SEISMICITY DATA FOR EXPERT 1
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SEQ. # 11      LOC IN REG NO 4      MAP INDEX NO 11      PROB. OF EXISTENCE= 1.0      AREA= 58103.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      6.70

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.7      6.5      6.8
EST. OF N      .267      .267      .667
A      2.374      2.124      3.114
B      -.790      -.940      -.770
*****

SEQ. # 12      LOC IN REG NO 4      MAP INDEX NO 12      PROB. OF EXISTENCE= 1.0      AREA= 15237.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      5.70

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      5.7      5.5      5.9
EST. OF N      .790      .400      1.800
A      4.510      3.390      5.960
B      -1.320      -1.630      -1.080
*****

SEQ. # 13      LOC IN REG NO 4      MAP INDEX NO 13      PROB. OF EXISTENCE= .6      AREA= 36602.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      6.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.0      5.6      6.2
EST. OF N      1.300      .950      1.950
A      4.460      3.830      5.880
B      -1.240      -1.590      -1.100
*****

SEQ. # 14      LOC IN REG NO 4      MAP INDEX NO 14      PROB. OF EXISTENCE= 1.0      AREA= 62769.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      5.70

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      5.7      5.5      6.0
EST. OF N      .613      .460      .733
A      4.234      3.434      4.904
B      -1.270      -1.440      -1.080
*****

SEQ. # 15      LOC IN REG NO 3      MAP INDEX NO 15      PROB. OF EXISTENCE= 1.0      AREA= 1655732.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      5.80

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      5.8      5.7      6.0
EST. OF N      2.667      1.867      3.267
A      5.614      4.954      6.254
B      -1.480      -1.640      -1.340
*****
SEISMICITY DATA FOR EXPERT 1
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 SEQ. # 16 LOC IN REG NO 3 MAP INDEX NO 16 PROB. OF EXISTENCE= .7 AREA= 132305.
 OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.50 5.60

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	5.6	5.4	6.1
EST. OF N	1.267	.733	2.000
A	5.184	3.734	6.454
B	-1.450	-1.760	-1.110

 SEQ. # 17 LOC IN REG NO 3 MAP INDEX NO 17 PROB. OF EXISTENCE= .5 AREA= 396182.
 OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.50 5.20

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	5.2	5.1	5.3
EST. OF N	.638	.511	.798
A	5.630	4.650	5.841
B	-1.670	-1.700	-1.410

 SEQ. # 18 LOC IN REG NO 3 MAP INDEX NO 18 PROB. OF EXISTENCE= .7 AREA= 100330.
 OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.50 5.20

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	5.2	5.1	5.3
EST. OF N	.162	.129	.202
A	5.041	4.061	5.250
B	-1.670	-1.700	-1.410

 SEQ. # 19 LOC IN REG NO 3 MAP INDEX NO 19 PROB. OF EXISTENCE= .7 AREA= 238384.
 OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.50 6.50

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	6.5	6.1	7.0
EST. OF N	.500	.400	.667
A	2.954	2.274	3.714
B	-.930	-1.110	-.760

 SEQ. # 20 LOC IN REG NO 1 MAP INDEX NO 20 PROB. OF EXISTENCE= 1.0 AREA= 60994.
 OCCURRENCE MODEL IN INTENSITY LINEAR RANGE OF (A-B*I) MODEL IS 4.00 10.10

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	10.1	9.8	10.4
EST. OF N	1.067	1.033	1.267
A	2.014	1.900	2.234
B	-.500	-.530	-.470

***** SEISMICITY DATA FOR EXPERT 1 *****

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SEQ. # 21      LOC IN REG NO 1      MAP INDEX NO 21      PROB. OF EXISTENCE= .9      AREA= 16599.
OCCURRENCE MODEL IN INTENSITY      LINEAR RANGE OF      (A-B*I)      MODEL IS      4.00      11.10

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      11.1      10.7      11.6
EST. OF N      .500      .313      .700
A      1.218      .828      1.548
B      -.380      -.420      -.330
*****

SEQ. # 22      LOC IN REG NO 1      MAP INDEX NO 22      PROB. OF EXISTENCE= 1.0      AREA= 539405.
OCCURRENCE MODEL IN INTENSITY      LINEAR RANGE OF      (A-B*I)      MODEL IS      4.00      9.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      9.5      9.1      10.1
EST. OF N      2.450      1.000      4.000
A      2.829      1.999      3.429
B      -.610      -.710      -.500
*****

SEQ. # 23      LOC IN REG NO 4      MAP INDEX NO 23      PROB. OF EXISTENCE= ALT BRY      AREA= 1225270.
OCCURRENCE MODEL IN INTENSITY      LINEAR RANGE OF      (A-B*I)      MODEL IS      4.00      8.70

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      8.7      8.5      8.9
EST. OF N      1.700      1.400      2.000
A      3.000      2.710      3.260
B      -.690      -.740      -.640
*****

SEQ. # 24      LOC IN REG NO 4      MAP INDEX NO 24      PROB. OF EXISTENCE= ALT BRY      AREA= 20912.
OCCURRENCE MODEL IN INTENSITY      LINEAR RANGE OF      (A-B*I)      MODEL IS      4.00      10.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      4.3      3.8      4.5
EST. OF N      .010      0.000      .010
A      -5.000      -6.000      -5.000
B      -.500      -5.000      -.500
*****

SEQ. # 25      LOC IN REG NO 4      MAP INDEX NO 25      PROB. OF EXISTENCE= ALT BRY      AREA= 684253.
OCCURRENCE MODEL IN INTENSITY      LINEAR RANGE OF      (A-B*I)      MODEL IS      4.00      9.90

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      9.9      9.7      10.3
EST. OF N      12.000      10.000      21.000
A      3.830      3.540      4.370
B      -.690      -.760      -.630
*****
SEISMICITY DATA FOR EXPERT 1      *****

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SEQ. # 26 LOC IN REG NO 2 MAP INDEX NO 26A PROB. OF EXISTENCE= 1.0 AREA= 22496.
OCCURRENCE MODEL IN INTENSITY LINEAR RANGE OF (A-B*I) MODEL IS 4.00 10.20

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	10.2	9.8	10.6
EST. OF N	.333	.309	.404
A	1.367	1.197	1.617
B	-.460	-.500	-.430

SEQ. # 27 LOC IN REG NO 2 MAP INDEX NO 27 PROB. OF EXISTENCE= ALT BRY AREA= 145872.
OCCURRENCE MODEL IN INTENSITY LINEAR RANGE OF (A-B*I) MODEL IS 4.00 8.70

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	8.7	8.4	8.8
EST. OF N	1.200	1.000	1.800
A	2.720	2.480	3.240
B	-.660	-.750	-.620

SEQ. # 28 LOC IN REG NO 2 MAP INDEX NO 28 PROB. OF EXISTENCE= ALT BRY AREA= 188166.
OCCURRENCE MODEL IN INTENSITY LINEAR RANGE OF (A-B*I) MODEL IS 4.00 9.30

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	9.3	9.0	9.7
EST. OF N	.550	.450	.650
A	1.800	1.500	2.050
B	-.510	-.560	-.460

SEQ. # 29 LOC IN REG NO 3 MAP INDEX NO 29 PROB. OF EXISTENCE= ALT BRY AREA= 89117.
OCCURRENCE MODEL IN INTENSITY LINEAR RANGE OF (A-B*I) MODEL IS 4.00 8.90

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	8.9	8.3	9.8
EST. OF N	.580	.390	1.000
A	1.990	1.360	2.780
B	-.560	-.700	-.440

SEQ. # 30 LOC IN REG NO 4 MAP INDEX NO 30 PROB. OF EXISTENCE= ALT BRY AREA= 31795.
OCCURRENCE MODEL IN INTENSITY LINEAR RANGE OF (A-B*I) MODEL IS 4.00 9.90

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	9.9	9.5	10.7
EST. OF N	.620	.410	.630
A	1.670	1.180	1.840
B	-.470	-.510	-.390

***** SEISMICITY DATA FOR EXPERT 1 *****

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*****
SEQ. # 31      LOC IN REG NO 4      MAP INDEX NO 31      PROB. OF EXISTENCE= ALT BRY      AREA= 55854.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      7.20

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      7.2      7.0      7.4
EST. OF N      1.200      1.100      1.600
A      2.990      2.790      3.500
B      -.830      -.940      -.790
*****

SEQ. # 32      LOC IN REG NO 4      MAP INDEX NO 32      PROB. OF EXISTENCE= ALT BRY      AREA= 2540091.
OCCURRENCE MODEL IN INTENSITY      LINEAR RANGE OF      (A-B*I)      MODEL IS      4.00      10.20

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      10.2      9.6      11.2
EST. OF N      5.940      4.752      7.920
A      2.920      2.720      3.700
B      -.610      -.700      -.510
*****

SEQ. # 33      LOC IN REG NO 3      MAP INDEX NO 33      PROB. OF EXISTENCE= ALT BRY      AREA= 25717.
OCCURRENCE MODEL IN INTENSITY      LINEAR RANGE OF      (A-B*I)      MODEL IS      4.00      10.20

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      10.2      9.6      11.2
EST. OF N      .060      .048      .080
A      .920      .720      1.700
B      -.610      -.700      -.510
*****

SEQ. # 34      LOC IN REG NO 3      MAP INDEX NO 34      PROB. OF EXISTENCE= ALT BRY      AREA= 4711.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      7.20

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      7.2      7.0      7.4
EST. OF N      .170      .130      .200
A      1.340      0.000      1.620
B      -.600      -.660      -.540
*****

SEQ. # 35      LOC IN REG NO 3      MAP INDEX NO 35      PROB. OF EXISTENCE= ALT BRY      AREA= 5069.
OCCURRENCE MODEL IN INTENSITY      LINEAR RANGE OF      (A-B*I)      MODEL IS      4.00      11.20

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      11.2      9.7      12.0
EST. OF N      .220      .180      .260
A      .471      .181      .901
B      -.280      -.370      -.230
*****
SEISMICITY DATA FOR EXPERT 1
*****

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SEQ. # 36 LOC IN REG NO 1 MAP INDEX NO 36 PROB. OF EXISTENCE= ALT BRY AREA= 4199.
OCCURRENCE MODEL IN INTENSITY LINEAR RANGE OF (A-B*I) MODEL IS 4.00 11.40

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	11.4	11.0	12.0
EST. OF N	.325	.225	.363
A	.858	.478	1.008
B	-.340	-.360	-.280

SEQ. # 37 LOC IN REG NO 1 MAP INDEX NO 37 PROB. OF EXISTENCE= ALT BRY AREA= 97289.
OCCURRENCE MODEL IN INTENSITY LINEAR RANGE OF (A-B*I) MODEL IS 4.00 10.80

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	10.8	10.3	11.2
EST. OF N	1.100	.900	1.200
A	1.820	1.590	2.030
B	-.440	-.490	-.410

SEQ. # 38 LOC IN REG NO 1 MAP INDEX NO 38 PROB. OF EXISTENCE= ALT BRY AREA= 288686.
OCCURRENCE MODEL IN INTENSITY LINEAR RANGE OF (A-B*I) MODEL IS 4.00 10.00

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	10.0	9.5	10.3
EST. OF N	1.600	1.500	2.000
A	2.330	2.180	2.740
B	-.530	-.610	-.500

SEQ. # 39 LOC IN REG NO 1 MAP INDEX NO 39 PROB. OF EXISTENCE= ALT BRY AREA= 232598.
OCCURRENCE MODEL IN INTENSITY LINEAR RANGE OF (A-B*I) MODEL IS 4.00 9.40

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	9.4	9.1	9.8
EST. OF N	1.050	.800	1.250
A	2.260	1.890	2.540
B	-.560	-.610	-.500

SEQ. # 40 LOC IN REG NO 2 MAP INDEX NO 26B PROB. OF EXISTENCE= 1.0 AREA= 24833.
OCCURRENCE MODEL IN INTENSITY LINEAR RANGE OF (A-B*I) MODEL IS 4.00 10.20

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	10.2	9.8	10.6
EST. OF N	.367	.341	.446
A	1.410	1.240	1.660
B	-.460	-.500	-.430

SEISMICITY DATA FOR EXPERT 2

NO. OF ZONES= 34 SELF WEIGHTS ARE 3.0 6.0 9.0 10.0 LLNL MODEL NO CORRELATION

SEQ. # 1 LOC IN REG NO 4 MAP INDEX NO 1 PROB. OF EXISTENCE= 1.0 AREA= 1499.
 OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 2.00 5.00

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	7.0	6.0	7.5
EST. OF N	.300	.273	1.000
A	2.584	2.474	2.994
B	-.995	-1.240	-.884

SEQ. # 2 LOC IN REG NO 4 MAP INDEX NO 2 PROB. OF EXISTENCE= 1.0 AREA= 1227.
 OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 2.00 5.00

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	6.5	5.5	7.0
EST. OF N	.300	.273	.750
A	2.474	2.194	6.534
B	-.977	-3.270	-.789

SEQ. # 3 LOC IN REG NO 4 MAP INDEX NO 3 PROB. OF EXISTENCE= 1.0 AREA= 4621.
 OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 2.00 5.00

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	6.0	5.5	7.0
EST. OF N	.150	.100	.300
A	1.492	1.482	2.622
B	-.819	-1.370	-.527

SEQ. # 4 LOC IN REG NO 4 MAP INDEX NO 4 PROB. OF EXISTENCE= 0.9 AREA= 34145.
 OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 1.70 4.50

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	6.5	5.5	6.8
EST. OF N	.300	.273	1.000
A	2.434	2.344	2.584
B	-.906	-1.170	-.906

SEQ. # 5 LOC IN REG NO 4 MAP INDEX NO 5 PROB. OF EXISTENCE= 0.6 AREA= 15113.
 OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 2.10 5.00

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	6.0	5.5	6.3
EST. OF N	.300	.273	.750
A	2.382	2.312	4.702
B	-.553	-1.640	-.494

***** SEISMICITY DATA FOR EXPERT 2 *****

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SEQ. # 6      LOC IN REG NO 4      MAP INDEX NO 6      PROB. OF EXISTENCE= 0.6      AREA= 174123.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      1.70      5.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      5.8      5.5      6.0
EST. OF N      .250      .227      .833
A      2.294      2.144      2.314
B      -.883      -.899      -.841
*****

SEQ. # 7      LOC IN REG NO 4      MAP INDEX NO 7      PROB. OF EXISTENCE= 0.6      AREA= 4578.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      1.50      4.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.5      5.5      7.0
EST. OF N      .300      .240      1.200
A      2.612      2.612      2.902
B      -1.030      -1.200      -.965
*****

SEQ. # 8      LOC IN REG NO 4      MAP INDEX NO 8      PROB. OF EXISTENCE= 0.5      AREA= 2906.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      4.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      5.5      5.0      5.8
EST. OF N      .100      .050      .200
A      2.922      2.822      3.052
B      -1.940      -1.950      -1.900
*****

SEQ. # 9      LOC IN REG NO 4      MAP INDEX NO 9      PROB. OF EXISTENCE= 0.3      AREA= 377.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      2.00      4.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      5.3      5.0      5.5
EST. OF N      .100      .050      .200
A      5.272      4.812      6.112
B      -2.500      -2.860      -2.370
*****

SEQ. # 10     LOC IN REG NO 4      MAP INDEX NO 10     PROB. OF EXISTENCE= 0.4      AREA= 36329.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      4.00      6.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.5      5.5      6.8
EST. OF N      .050      .033      .100
A      3.500      3.000      4.000
B      -1.000      -1.000      -.800
*****
SEISMICITY DATA FOR EXPERT 2
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*****
SEQ. # 11      LOC IN REG NO 4      MAP INDEX NO 11      PROB. OF EXISTENCE= 0.4      AREA= 92280.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      5.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.0      5.0      6.3
EST. OF N      .100      .067      .200
A      2.011      1.171      3.171
B      -.874      -1.210      -.625
*****

SEQ. # 12      LOC IN REG NO 4      MAP INDEX NO 12      PROB. OF EXISTENCE= 0.5      AREA= 42237.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      5.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.0      5.5      6.5
EST. OF N      .200      .100      .400
A      4.899      1.249      4.899
B      -1.330      -1.500      -.577
*****

SEQ. # 13      LOC IN REG NO 3      MAP INDEX NO 13      PROB. OF EXISTENCE= 0.8      AREA= 288765.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      4.00      5.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.0      5.5      6.3
EST. OF N      .500      .333      .667
A      3.317      2.971      4.171
B      -1.020      -1.200      -.800
*****

SEQ. # 14      LOC IN REG NO 4      MAP INDEX NO 14      PROB. OF EXISTENCE= 0.5      AREA= 6290.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      4.00      5.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      5.5      4.5      5.8
EST. OF N      .100      .050      .111
A      2.301      1.301      3.101
B      -1.000      -1.200      -.800
*****

SEQ. # 15      LOC IN REG NO 4      MAP INDEX NO 15      PROB. OF EXISTENCE= 0.5      AREA= 65489.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      4.00      5.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.0      5.5      6.5
EST. OF N      .100      .075      .120
A      2.959      .959      3.459
B      -1.000      -1.200      -.800
*****
SEISMICITY DATA FOR EXPERT 2
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SEQ. # 16      LOC IN REG NO 4      MAP INDEX NO 16      PROB. OF EXISTENCE= 0.3      AREA= 45017.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.80      5.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.0      5.0      6.3
EST. OF N      .200      .125      .286
A      2.790      2.570      3.170
B      -.944      -1.200      -.800
*****

SEQ. # 17      LOC IN REG NO 4      MAP INDEX NO 17      PROB. OF EXISTENCE= 0.3      AREA= 77023.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      4.00      5.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.5      5.5      6.8
EST. OF N      .133      .100      .200
A      2.576      2.076      3.076
B      -1.000      -1.200      -.340
*****

SEQ. # 18      LOC IN REG NO 4      MAP INDEX NO 18      PROB. OF EXISTENCE= 1.0      AREA= 40555.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      7.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      7.8      7.5      8.0
EST. OF N      1.000      .857      1.500
A      2.246      1.890      2.770
B      -.621      -1.000      -.522
*****

SEQ. # 19      LOC IN REG NO 4      MAP INDEX NO 19      PROB. OF EXISTENCE= 1.0      AREA= 36358.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      6.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.5      5.5      7.0
EST. OF N      .400      .267      .500
A      2.837      2.624      3.024
B      -.912      -1.000      -.800
*****

SEQ. # 20      LOC IN REG NO 4      MAP INDEX NO 20      PROB. OF EXISTENCE= 0.8      AREA= 65815.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      6.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.5      5.8      7.3
EST. OF N      .333      .250      .400
A      2.060      1.975      2.266
B      -.653      -.759      -.634
*****
SEISMICITY DATA FOR EXPERT 2
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*****
SEQ. # 21      LOC IN REG NO 4      MAP INDEX NO 21      PROB. OF EXISTENCE= 0.5      AREA= 54633.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      4.00      5.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.0      5.5      6.5
EST. OF N      .100      .083      .125
A      2.529      2.180      2.880
B      -.923      -.959      -.887
*****

SEQ. # 22      LOC IN REG NO 3      MAP INDEX NO 22      PROB. OF EXISTENCE= 0.5      AREA= 11723.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      4.00      5.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.3      5.5      6.5
EST. OF N      .120      .060      .200
A      2.597      2.097      3.097
B      -1.000      -1.200      -.800
*****

SEQ. # 23      LOC IN REG NO 3      MAP INDEX NO 23      PROB. OF EXISTENCE= 0.3      AREA= 62498.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      5.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      5.5      5.3      6.0
EST. OF N      .088      .064      .100
A      2.700      2.200      3.200
B      -1.000      -1.200      -.800
*****

SEQ. # 24      LOC IN REG NO 3      MAP INDEX NO 24      PROB. OF EXISTENCE= 0.4      AREA= 17986.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      4.00      5.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.5      6.0      6.8
EST. OF N      .200      .133      .250
A      3.914      2.200      4.000
B      -1.118      -1.300      -.790
*****

SEQ. # 25      LOC IN REG NO 2      MAP INDEX NO 25      PROB. OF EXISTENCE= 0.3      AREA= 17236.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      4.00      5.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.0      5.5      6.3
EST. OF N      .050      .040      .060
A      2.501      2.001      3.001
B      -1.000      -1.200      -.800
*****
SEISMICITY DATA FOR EXPERT 2      *****

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*****
SEQ. # 26      LOC IN REG NO 3      MAP INDEX NO 26      PROB. OF EXISTENCE= 0.4      AREA= 39213.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      4.00      5.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.0      5.5      6.3
EST. OF N      .200      .167      .250
A      5.301      3.921      5.421
B      -1.470      -1.500      -1.000
*****

SEQ. # 27      LOC IN REG NO 2      MAP INDEX NO 27      PROB. OF EXISTENCE= 0.7      AREA= 275996.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      4.00      6.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.5      6.0      7.0
EST. OF N      2.500      1.819      2.858
A      4.167      2.947      5.387
B      -1.060      -1.226      -.901
*****

SEQ. # 28      LOC IN REG NO 2      MAP INDEX NO 28      PROB. OF EXISTENCE= 0.6      AREA= 81276.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      4.00      5.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.3      6.0      6.5
EST. OF N      .500      .417      .625
A      3.229      2.989      3.479
B      -.911      -.929      -.892
*****

SEQ. # 29      LOC IN REG NO 2      MAP INDEX NO 29      PROB. OF EXISTENCE= 0.5      AREA= 102370.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      4.00      5.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.5      6.0      6.8
EST. OF N      .350      .292      .438
A      2.830      2.500      3.100
B      -.876      -1.100      -.700
*****

SEQ. # 30      LOC IN REG NO 2      MAP INDEX NO 30      PROB. OF EXISTENCE= 0.7      AREA= 19023.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      4.00      6.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      7.5      7.0      7.8
EST. OF N      1.000      .882      1.154
A      2.530      2.300      2.700
B      -.671      -.800      -.500
***** SEISMICITY DATA FOR EXPERT 2 *****

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*****
SEQ. # 31      LOC IN REG NO 1      MAP INDEX NO 31      PROB. OF EXISTENCE= 0.7      AREA= 249106.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      4.00      6.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.5      6.3      7.0
EST. OF N      2.000      .160      2.222
A      3.965      3.845      4.045
B      -1.030      -1.200      -.800
*****

SEQ. # 32      LOC IN REG NO 1      MAP INDEX NO 32      PROB. OF EXISTENCE= 0.7      AREA= 74153.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      4.00      6.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      7.8      7.5      8.0
EST. OF N      1.200      .800      1.714
A      2.453      2.399      2.599
B      -.685      -.800      -.500
*****

SEQ. # 33      LOC IN REG NO 3      MAP INDEX NO 33      PROB. OF EXISTENCE= .4      AREA= 34582.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      4.00      6.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.5      6.3      7.0
EST. OF N      .200      .167      .250
A      3.224      2.844      3.604
B      -.970      -1.000      -.950
*****

SEQ. # 34      LOC IN REG NO 2      MAP INDEX NO 34-C.Z.      PROB. OF EXISTENCE= 1.0      AREA= 7275363.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      4.00      6.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      7.3      6.5      7.5
EST. OF N      5.000      3.333      10.000
A      4.660      4.520      4.920
B      -1.100      -1.250      -.900

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SEISMICITY DATA FOR EXPERT 3

NO. OF ZONES= 24 SELF WEIGHTS ARE 5.0 10.0 5.0 50.0 TRUNCATED EXPONENTIAL PARTIAL CORRELATION

SEQ. # 1 LOC IN REG NO 4 MAP INDEX NO 1 C. Z. PROB. OF EXISTENCE= 1.0 AREA= 9256935.
 OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 4.00 6.25

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	6.5	6.0	7.3
EST. OF N	2.750	2.000	4.000
A	4.549	3.549	5.149
B	-1.100	-1.400	-.800

SEQ. # 2 LOC IN REG NO 1 MAP INDEX NO 2 PROB. OF EXISTENCE= .9 AREA= 32309.
 OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 4.00 6.00

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	6.8	6.3	7.3
EST. OF N	.200	.133	.333
A	.883	.583	1.083
B	-.590	-.630	-.550

SEQ. # 3 LOC IN REG NO 1 MAP INDEX NO 3 PROB. OF EXISTENCE= .75 AREA= 11526.
 OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 4.00 6.00

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	7.3	6.8	7.8
EST. OF N	.267	.133	.400
A	1.223	.983	1.463
B	-.520	-.570	-.470

SEQ. # 4 LOC IN REG NO 1 MAP INDEX NO 4 PROB. OF EXISTENCE= .9 AREA= 76904.
 OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 4.00 5.00

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	6.6	6.0	7.3
EST. OF N	.769	.385	1.538
A	3.436	2.865	4.005
B	-1.000	-1.130	-.870

SEQ. # 5 LOC IN REG NO 1 MAP INDEX NO 5 PROB. OF EXISTENCE= .7 AREA= 31767.
 OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 4.00 5.00

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	6.6	6.0	7.3
EST. OF N	.769	.385	1.538
A	3.392	2.823	3.963
B	-1.000	-1.130	-.870

***** SEISMICITY DATA FOR EXPERT 3 *****


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*****
SEQ. # 6      LOC IN REG NO 1      MAP INDEX NO 6      PROB. OF EXISTENCE= .8      AREA= 179318.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      4.00      6.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.5      5.8      7.3
EST. OF N      1.091      .727      1.818
A      4.060      3.560      4.560
B      -1.100      -1.200      -1.000
*****

SEQ. # 7      LOC IN REG NO 1      MAP INDEX NO 7      PROB. OF EXISTENCE= .7      AREA= 92810.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      4.00      6.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.5      5.8      7.3
EST. OF N      1.091      .727      1.818
A      4.064      3.564      4.564
B      -1.100      -1.200      -1.000
*****

SEQ. # 8      LOC IN REG NO 2      MAP INDEX NO 8      PROB. OF EXISTENCE= .9      AREA= 193049.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      4.00      5.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.6      5.8      7.3
EST. OF N      .800      .533      1.333
A      3.824      3.124      4.524
B      -1.040      -1.190      -.890
*****

SEQ. # 9      LOC IN REG NO 2      MAP INDEX NO 8ALT      PROB. OF EXISTENCE= ALT BDY      AREA= 101067.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      4.00      5.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.6      5.8      7.3
EST. OF N      .400      .267      .667
A      2.974      2.524      3.424
B      -.900      -1.000      -.800
*****

SEQ. # 10     LOC IN REG NO 2      MAP INDEX NO 9      PROB. OF EXISTENCE= .9      AREA= 12585.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      4.00      5.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.0      5.4      7.0
EST. OF N      .167      .083      .500
A      2.855      1.925      3.785
B      -.980      -1.190      -.770
*****
SEISMICITY DATA FOR EXPERT 3
*****

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*****
SEQ. # 11      LOC IN REG NO 2      MAP INDEX NO 10
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      .9      4.00      AREA=      42570.
                                     BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
PARAMETER      UP MAG CO      EST. OF N
A      6.8      6.0      7.5
B      .615      .308      1.923
      3.116      2.516      3.716
      -.940      -1.070      -.810
*****

SEQ. # 12      LOC IN REG NO 2      MAP INDEX NO 10ALT
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      ALT BDY      AREA=      209705.
                                     BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
PARAMETER      UP MAG CO      EST. OF N
A      7.0      6.0      7.5
B      .769      .385      2.308
      3.236      2.586      3.886
      -.950      -1.090      -.810
*****

SEQ. # 13      LOC IN REG NO 2      MAP INDEX NO 11
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      .85      4.00      AREA=      44071.
                                     BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
PARAMETER      UP MAG CO      EST. OF N
A      6.5      6.0      7.3
B      .389      .194      1.000
      2.875      2.285      3.465
      -.930      -1.060      -.800
*****

SEQ. # 14      LOC IN REG NO 2      MAP INDEX NO 11ALT
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      ALT BDY      AREA=      162152.
                                     BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
PARAMETER      UP MAG CO      EST. OF N
A      6.3      5.8      7.3
B      .389      .194      1.000
      3.395      2.655      4.135
      -1.010      -1.170      -.850
*****

SEQ. # 15      LOC IN REG NO 2      MAP INDEX NO 12
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      .4      4.00      AREA=      23276.
                                     BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
PARAMETER      UP MAG CO      EST. OF N
A      6.0      5.0      6.8
B      .300      .200      1.000
      1.166      1.196      1.736
      -.670      -.740      -.600
*****
SEISMICITY DATA FOR EXPERT 3
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*****
SEQ. # 16      LOC IN REG NO 2      MAP INDEX NO 13      PROB. OF EXISTENCE= .4      AREA= 5430.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      4.00      5.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.0      5.0      6.8
EST. OF N      .300      .200      1.000
A      .831      .561      1.101
B      -.670      -.740      -.600
*****

SEQ. # 17      LOC IN REG NO 3      MAP INDEX NO 14      PROB. OF EXISTENCE= .5      AREA= 45936.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      4.00      5.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.0      5.0      6.8
EST. OF N      .300      .200      1.000
A      1.760      1.490      2.030
B      -.670      -.740      -.600
*****

SEQ. # 18      LOC IN REG NO 3      MAP INDEX NO 21      PROB. OF EXISTENCE= .25      AREA= 5106.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      4.00      5.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.0      5.0      6.8
EST. OF N      .300      .200      1.000
A      .806      .536      1.076
B      -.670      -.740      -.600
*****

SEQ. # 19      LOC IN REG NO 4      MAP INDEX NO 15      PROB. OF EXISTENCE= .95      AREA= 29994.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      6.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      7.4      6.8      7.8
EST. OF N      1.000      .667      3.000
A      3.324      2.904      3.744
B      -.910      -1.000      -.820
*****

SEQ. # 20      LOC IN REG NO 4      MAP INDEX NO 16      PROB. OF EXISTENCE= .75      AREA= 56339.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      5.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      7.0      6.3      7.4
EST. OF N      .357      .179      1.071
A      2.550      2.050      3.050
B      -.810      -.910      -.710
*****
SEISMICITY DATA FOR EXPERT 3      *****

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*****
SEQ. # 21      LOC IN REG NO 4      MAP INDEX NO 17
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      PROB. OF EXISTENCE= .75      AREA= 77660.
                                           3.75      5.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      7.0      6.3      7.4
EST. OF N      .357      .179      1.071
A      2.694      2.194      3.194
B      -.810      -.910      -.710
*****

SEQ. # 22      LOC IN REG NO 4      MAP INDEX NO 18
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      PROB. OF EXISTENCE= .5      AREA= 281629.
                                           3.75      5.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.0      5.5      6.2
EST. OF N      1.000      .500      2.000
A      4.400      3.750      5.050
B      -1.300      -1.450      -1.150
*****

SEQ. # 23      LOC IN REG NO 3      MAP INDEX NO 19
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      PROB. OF EXISTENCE= .25      AREA= 113300.
                                           3.75      5.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.0      5.5      6.2
EST. OF N      1.000      .500      2.000
A      4.004      3.354      4.654
B      -1.300      -1.450      -1.150
*****

SEQ. # 24      LOC IN REG NO 3      MAP INDEX NO 20
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      PROB. OF EXISTENCE= .25      AREA= 495833.
                                           3.75      5.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.0      5.5      6.2
EST. OF N      1.000      .500      2.000
A      4.646      3.996      5.296
B      -1.300      -1.450      -1.150

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SEISMICITY DATA FOR EXPERT 4

NO. OF ZONES= 26 SELF WEIGHTS ARE 8.5 6.0 7.0 9.0 TRUNCATED EXPONENTIALFULL CORRELATION

SEQ. # 1 LOC IN REG NO 4 MAP INDEX NO 1 PROB. OF EXISTENCE= 0.5 AREA= 71965.
 OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.75 6.10

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	6.1	5.9	6.3
EST. OF N	.210	.140	.320
A	2.700	2.150	3.260
B	-.900	-1.000	-.800

SEQ. # 2 LOC IN REG NO 4 MAP INDEX NO 2 PROB. OF EXISTENCE= 0.5 AREA= 93833.
 OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.75 5.60

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	5.6	5.4	5.8
EST. OF N	.070	.050	.110
A	2.220	1.790	2.790
B	-.900	-1.000	-.800

SEQ. # 3 LOC IN REG NO 4 MAP INDEX NO 3 PROB. OF EXISTENCE= 1.0 AREA= 42569.
 OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.75 6.60

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	6.6	6.4	6.8
EST. OF N	.600	.390	.910
A	3.150	2.590	3.710
B	-.900	-1.000	-.800

SEQ. # 4 LOC IN REG NO 4 MAP INDEX NO 4 PROB. OF EXISTENCE= 1.0 AREA= 19944.
 OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.75 7.50

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	7.5	7.3	7.7
EST. OF N	4.030	2.640	6.150
A	3.980	3.420	4.540
B	-.900	-1.000	-.800

SEQ. # 5 LOC IN REG NO 4 MAP INDEX NO 5 PROB. OF EXISTENCE= 1.0 AREA= 58666.
 OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.75 6.50

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	6.5	6.3	6.7
EST. OF N	4.480	3.320	5.740
A	3.060	2.510	3.620
B	-.900	-1.000	-.800

***** SEISMICITY DATA FOR EXPERT 4 *****

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*****
SEQ. # 6      LOC IN REG NO 3      MAP INDEX NO 6      PROB. OF EXISTENCE= 0.75      AREA= 62355.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      6.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.0      5.8      6.2
EST. OF N      .170      .110      .260
A      2.610      2.040      3.160
B      -.900      -1.000      -.800
*****

SEQ. # 7      LOC IN REG NO 3      MAP INDEX NO 7      PROB. OF EXISTENCE= 0.75      AREA= 3836.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      6.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.0      5.8      6.2
EST. OF N      .170      .110      .260
A      2.610      2.040      3.160
B      -.900      -1.000      -.800
*****

SEQ. # 8      LOC IN REG NO 2      MAP INDEX NO 8      PROB. OF EXISTENCE= 1.0      AREA= 154611.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      6.20

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.2      6.0      6.4
EST. OF N      .260      .170      .390
A      2.790      1.860      3.720
B      -.900      -1.100      -.700
*****

SEQ. # 9      LOC IN REG NO 2      MAP INDEX NO 9      PROB. OF EXISTENCE= 1.0      AREA= 83835.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      6.20

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.2      6.0      6.4
EST. OF N      .260      .170      .390
A      2.790      1.860      3.720
B      -.900      -1.100      -.700
*****

SEQ. # 10     LOC IN REG NO 2      MAP INDEX NO 10     PROB. OF EXISTENCE= 1.0      AREA= 25207.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      6.80

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.8      6.6      7.0
EST. OF N      .910      .910      1.400
A      3.330      2.580      4.270
B      -.900      -1.100      -.700
***** SEISMICITY DATA FOR EXPERT 4 *****

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*****
SEQ. # 11      LOC IN REG NO 2      MAP INDEX NO 11      PROB. OF EXISTENCE= 1.0      AREA= 126963.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      5.70

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      5.7      5.7      5.9
EST. OF N      .090      .060      .140
A      2.330      1.400      3.270
B      -.900      -1.100      -.700
*****

SEQ. # 12      LOC IN REG NO 2      MAP INDEX NO 12      PROB. OF EXISTENCE= 1.0      AREA= 103437.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      6.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.0      5.8      6.2
EST. OF N      .170      .110      .260
A      2.610      1.670      3.540
B      -.900      -1.100      -.700
*****

SEQ. # 13      LOC IN REG NO 2      MAP INDEX NO 13      PROB. OF EXISTENCE= 1.0      AREA= 1531917.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      5.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      5.5      5.3      5.7
EST. OF N      .060      .040      .090
A      2.150      1.600      2.700
B      -.900      -1.000      -.800
*****

SEQ. # 14      LOC IN REG NO 3      MAP INDEX NO 14      PROB. OF EXISTENCE= 1.0      AREA= 10054.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      5.60

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      5.6      5.4      5.8
EST. OF N      .100      .070      .130
A      2.380      1.850      2.860
B      -.900      -1.000      -.800
*****

SEQ. # 15      LOC IN REG NO 1      MAP INDEX NO 15      PROB. OF EXISTENCE= 1.0      AREA= 25218.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      5.60

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      5.6      5.4      5.8
EST. OF N      .070      .050      .110
A      2.220      1.320      3.170
B      -.900      -1.100      -.700
*****
SEISMICITY DATA FOR EXPERT 4
*****

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*****
SEQ. # 16      LOC IN REG NO 1      MAP INDEX NO 16      PROB. OF EXISTENCE= 1.0      AREA= 88787.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      6.80

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.8      6.6      7.0
EST. OF N      .910      .910      1.400
A      3.330      2.960      3.900
B      -.900      -1.000      -.800
*****

SEQ. # 17      LOC IN REG NO 1      MAP INDEX NO 17      PROB. OF EXISTENCE= 1.0      AREA= 10357.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      5.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      5.5      5.3      5.7
EST. OF N      .060      .040      .090
A      2.150      1.230      3.080
B      -.900      -1.100      -.700
*****

SEQ. # 18      LOC IN REG NO 1      MAP INDEX NO 18      PROB. OF EXISTENCE= 1.0      AREA= 29927.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      6.30

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.3      6.1      6.5
EST. OF N      .320      .210      .480
A      2.880      2.320      3.430
B      -.900      -1.000      -.800
*****

SEQ. # 19      LOC IN REG NO 1      MAP INDEX NO 19      PROB. OF EXISTENCE= 1.0      AREA= 14524.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      6.70

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.7      6.5      6.9
EST. OF N      .740      .480      1.130
A      3.240      2.680      3.800
B      -.900      -1.000      -.800
*****

SEQ. # 20      LOC IN REG NO 1      MAP INDEX NO 20      PROB. OF EXISTENCE= 1.0      AREA= 123754.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      6.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.5      6.3      6.7
EST. OF N      .480      .320      .740
A      3.060      2.510      3.620
B      -.900      -1.000      -.800
*****
SEISMICITY DATA FOR EXPERT 4
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*****
SEQ. # 21      LOC IN REG NO 1      MAP INDEX NO 21      PROB. OF EXISTENCE= 1.0      AREA= 51251.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      6.10

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.1      5.9      6.3
EST. OF N      .210      .177      .320
A      2.700      1.830      3.630
B      -.900      -1.100      -.700
*****

SEQ. # 22      LOC IN REG NO 1      MAP INDEX NO 22      PROB. OF EXISTENCE= 1.0      AREA= 25012.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      7.20

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      7.2      7.0      7.4
EST. OF N      2.100      1.400      3.260
A      3.700      2.770      4.640
B      -.900      -1.100      -.700
*****

SEQ. # 23      LOC IN REG NO 1      MAP INDEX NO 23      PROB. OF EXISTENCE= 1.0      AREA= 55187.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      5.60

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      5.6      5.4      5.8
EST. OF N      .070      .050      .110
A      2.220      1.700      2.790
B      -.900      -1.000      -.800
*****

SEQ. # 24      LOC IN REG NO 4      MAP INDEX NO 25      PROB. OF EXISTENCE= 1.0      AREA= 1460650.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      5.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      5.5      5.3      5.7
EST. OF N      .060      .040      .090
A      2.150      1.600      2.700
B      -.900      -1.000      -.800
*****

SEQ. # 25      LOC IN REG NO 2      MAP INDEX NO 26      PROB. OF EXISTENCE= 0.5      AREA= 5870.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      6.10

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.1      5.9      6.3
EST. OF N      .210      .090      .320
A      2.700      1.580      3.630
B      -.900      -1.100      -.700
*****
SEISMICITY DATA FOR EXPERT 4      *****

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SEQ. # 26 LOC IN REG NO 3 MAP INDEX NO C.Z. PROB. OF EXISTENCE= 1.0 AREA= 4253262.
 OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.75 5.50

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	5.5	5.3	5.7
EST. OF N	.160	.110	.250
A	2.590	2.000	3.130
B	-.900	-1.000	-.800

SEISMICITY DATA FOR EXPERT 5

NO. OF ZONES= 23 SELF WEIGHTS ARE 10.0 9.0 8.0 7.0 LLNL MODEL PARTIAL CORRELATION

SEQ. # 1 LOC IN REG NO 1 MAP INDEX NO 1 PROB. OF EXISTENCE= 1.0 AREA= 632324.
 OCCURRENCE MODEL IN INTENSITY LINEAR RANGE OF (A-B*I) MODEL IS 4.00 12.00

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	10.0	9.0	11.0
EST. OF N	5.000	3.000	10.000
A	3.083	2.383	3.783
B	-.680	-.900	-.400

SEQ. # 2 LOC IN REG NO 1 MAP INDEX NO 2 PROB. OF EXISTENCE= 1.0 AREA= 12.00 0.
 OCCURRENCE MODEL IN INTENSITY LINEAR RANGE OF (A-B*I) MODEL IS 4.00 12.00

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	5.0	3.0	6.0
EST. OF N	.100	.050	.200
A	3.456	2.456	4.456
B	-.500	-.700	-.300

SEQ. # 3 LOC IN REG NO 1 MAP INDEX NO 3 PROB. OF EXISTENCE= .6 AREA= 131245.
 OCCURRENCE MODEL IN INTENSITY LINEAR RANGE OF (A-B*I) MODEL IS 4.00 12.00

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	11.0	10.0	12.0
EST. OF N	5.000	3.000	7.000
A	1.751	1.351	2.151
B	-.500	-.700	-.300

SEQ. # 4 LOC IN REG NO 1 MAP INDEX NO 4 PROB. OF EXISTENCE= 1.0 AREA= 541043.
 OCCURRENCE MODEL IN INTENSITY LINEAR RANGE OF (A-B*I) MODEL IS 4.00 12.00

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	9.0	8.0	10.0
EST. OF N	2.000	.250	5.000
A	2.447	1.947	2.947
B	-.610	-.700	-.400

SEQ. # 5 LOC IN REG NO 3 MAP INDEX NO 5 PROB. OF EXISTENCE= 1.0 AREA= 29686.
 OCCURRENCE MODEL IN INTENSITY LINEAR RANGE OF (A-B*I) MODEL IS 4.00 12.00

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	9.0	7.0	10.0
EST. OF N	.200	.050	.500
A	2.528	2.028	3.028
B	-.740	-.900	-.400

***** SEISMICITY DATA FOR EXPERT 5

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*****
SEQ. # 6      LOC IN REG NO 3      MAP INDEX NO 6      PROB. OF EXISTENCE= .5      AREA= 2078.
OCCURRENCE MODEL IN INTENSITY      LINEAR RANGE OF      (A-B*I)      MODEL IS      4.00      12.00

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PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      9.0      7.0      10.0
EST. OF N      .200      .050      .500
A      2.728      1.728      3.528
B      -.500      -.900      -.300

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*****
SEQ. # 7      LOC IN REG NO 1      MAP INDEX NO 7      PROB. OF EXISTENCE= .3      AREA= 1214.
OCCURRENCE MODEL IN INTENSITY      LINEAR RANGE OF      (A-B*I)      MODEL IS      4.00      12.00

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PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      8.0      7.0      9.0
EST. OF N      1.000      .500      2.000
A      1.678      1.178      2.178
B      -.500      -.700      -.300

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*****
SEQ. # 8      LOC IN REG NO 2      MAP INDEX NO 8      PROB. OF EXISTENCE= .7      AREA= 428586.
OCCURRENCE MODEL IN INTENSITY      LINEAR RANGE OF      (A-B*I)      MODEL IS      4.00      12.00

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PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      8.0      7.0      9.0
EST. OF N      .300      .100      1.000
A      2.268      1.868      2.668
B      -.660      -.800      -.400

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*****
SEQ. # 9      LOC IN REG NO 2      MAP INDEX NO 9      PROB. OF EXISTENCE= .8      AREA= 17532.
OCCURRENCE MODEL IN INTENSITY      LINEAR RANGE OF      (A-B*I)      MODEL IS      4.00      12.00

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PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      11.0      10.0      12.0
EST. OF N      1.000      .200      2.000
A      2.736      2.036      3.236
B      -.540      -.800      -.300

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*****
SEQ. # 10     LOC IN REG NO 2      MAP INDEX NO 10     PROB. OF EXISTENCE= .8      AREA= 254857.
OCCURRENCE MODEL IN INTENSITY      LINEAR RANGE OF      (A-B*I)      MODEL IS      4.00      12.00

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PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      8.0      7.0      9.0
EST. OF N      .500      .200      1.000
A      2.524      1.724      3.324
B      -.640      -.800      -.400

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***** SEISMICITY DATA FOR EXPERT 5 *****

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*****
SEQ. # 11      LOC IN REG NO 2      MAP INDEX NO 11      PROB. OF EXISTENCE= 1.0      AREA= 322336.
OCCURRENCE MODEL IN INTENSITY      LINEAR RANGE OF      (A-B*I)      MODEL IS      4.00      12.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      9.0      8.0      10.0
EST. OF N      1.800      1.000      2.500
A      4.093      2.693      4.493
B      -.820      -.900      -.400
*****

SEQ. # 12      LOC IN REG NO 3      MAP INDEX NO 12      PROB. OF EXISTENCE= 1.0      AREA= 27087.
OCCURRENCE MODEL IN INTENSITY      LINEAR RANGE OF      (A-B*I)      MODEL IS      4.00      12.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      9.0      8.0      10.0
EST. OF N      .300      .100      .500
A      2.591      1.991      2.991
B      -.600      -.700      -.400
*****

SEQ. # 13      LOC IN REG NO 3      MAP INDEX NO 13      PROB. OF EXISTENCE= .5      AREA= 33915.
OCCURRENCE MODEL IN INTENSITY      LINEAR RANGE OF      (A-B*I)      MODEL IS      4.00      12.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      9.0      8.0      10.0
EST. OF N      .100      .050      .200
A      1.101      .801      1.901
B      -.480      -.700      -.300
*****

SEQ. # 14      LOC IN REG NO 4      MAP INDEX NO 14      PROB. OF EXISTENCE= 1.0      AREA= 164697.
OCCURRENCE MODEL IN INTENSITY      LINEAR RANGE OF      (A-B*I)      MODEL IS      4.00      12.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      9.0      8.0      10.0
EST. OF N      .500      .200      2.000
A      2.938      2.238      3.538
B      -.640      -.800      -.400
*****

SEQ. # 15      LOC IN REG NO 4      MAP INDEX NO 15      PROB. OF EXISTENCE= 1.0      AREA= 23606.
OCCURRENCE MODEL IN INTENSITY      LINEAR RANGE OF      (A-B*I)      MODEL IS      4.00      12.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      12.0      12.0      12.0
EST. OF N      2.000      1.000      10.000
A      2.977      2.377      3.577
B      -.560      -.800      -.400
*****
SEISMICITY DATA FOR EXPERT 5
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*****
SEQ. # 16      LOC IN REG NO 1      MAP INDEX NO 16      PROB. OF EXISTENCE= 1.0      AREA= 392334.
OCCURRENCE MODEL IN INTENSITY      LINEAR RANGE OF      (A-B*I)      MODEL IS      4.00      12.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      8.0      7.0      9.0
EST. OF N      .200      .050      .500
A      1.721      1.221      2.221
B      -.500      -.700      -.300
*****

SEQ. # 17      LOC IN REG NO 4      MAP INDEX NO 17      PROB. OF EXISTENCE= 1.0      AREA= 37129.
OCCURRENCE MODEL IN INTENSITY      LINEAR RANGE OF      (A-B*I)      MODEL IS      4.00      12.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      9.0      8.0      10.0
EST. OF N      .100      .020      1.000
A      2.215      1.215      3.215
B      -.500      -.700      -.300
*****

SEQ. # 18      LOC IN REG NO 4      MAP INDEX NO 18      PROB. OF EXISTENCE= 1.0      AREA= 24981.
OCCURRENCE MODEL IN INTENSITY      LINEAR RANGE OF      (A-B*I)      MODEL IS      4.00      12.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      9.0      8.0      10.0
EST. OF N      .100      .020      1.000
A      1.367      .867      2.367
B      -.500      -.700      -.300
*****

SEQ. # 19      LOC IN REG NO 2      MAP INDEX NO 21      PROB. OF EXISTENCE= 1.0      AREA= 321869.
OCCURRENCE MODEL IN INTENSITY      LINEAR RANGE OF      (A-B*I)      MODEL IS      4.00      12.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      7.0      5.0      8.0
EST. OF N      .100      .020      1.000
A      3.118      2.018      4.018
B      -.920      -1.000      -.400
*****

SEQ. # 20      LOC IN REG NO 4      MAP INDEX NO C.Z.      PROB. OF EXISTENCE= 1.0      AREA= 6503392.
OCCURRENCE MODEL IN INTENSITY      LINEAR RANGE OF      (A-B*I)      MODEL IS      4.00      12.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      8.0      7.0      9.0
EST. OF N      3.000      1.000      5.000
A      4.170      3.370      4.970
B      -.920      -1.000      -.400
***** SEISMICITY DATA FOR EXPERT 5 *****

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*****
SEQ. # 21      LOC IN REG NO 2      MAP INDEX NO 19      PROB. OF EXISTENCE= ALT BDY      AREA= 1596770.
OCCURRENCE MODEL IN INTENSITY      LINEAR RANGE OF      (A-B*I)      MODEL IS      4.00      12.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      12.0      12.0      12.0
EST. OF N      8.000      3.000      12.000
A      2.103      1.803      2.303
B      -.400      -.600      -.300
*****

SEQ. # 22      LOC IN REG NO 4      MAP INDEX NO 20      PROB. OF EXISTENCE= ALT BDY      AREA= 349315.
OCCURRENCE MODEL IN INTENSITY      LINEAR RANGE OF      (A-B*I)      MODEL IS      4.00      12.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      9.0      7.0      10.0
EST. OF N      .500      .100      2.000
A      2.251      1.951      2.551
B      -.540      -.600      -.300
*****

SEQ. # 23      LOC IN REG NO 2      MAP INDEX NO ALT C.Z      PROB. OF EXISTENCE= ALT BDY      AREA= 0.
OCCURRENCE MODEL IN INTENSITY      LINEAR RANGE OF      (A-B*I)      MODEL IS      4.00      12.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      11.0      10.0      12.0
EST. OF N      3.000      1.000      10.000
A      2.783      2.583      3.183
B      -.550      -.600      -.300

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SEISMICITY DATA FOR EXPERT 6

NO. OF ZONES= 48 SELF WEIGHTS ARE 9.0 7.0 5.0 5.0 TRUNCATED EXPONENTIAL PARTIAL CORRELATION

SEQ. # 1 LOC IN REG NO 3 MAP INDEX NO 1 PROB. OF EXISTENCE= 1.0 AREA= 7430606.
OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.50 6.00

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	6.0	5.5	6.5
EST. OF N	2.010	1.500	2.500
A	4.196	3.196	5.196
B	-1.040	-1.140	-.940

SEQ. # 2 LOC IN REG NO 1 MAP INDEX NO 2 PROB. OF EXISTENCE= 1.0 AREA= 177674.
OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.75 5.25

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	7.0	6.5	7.2
EST. OF N	.330	.200	.500
A	3.414	2.414	4.414
B	-1.040	-1.140	-.940

SEQ. # 3 LOC IN REG NO 1 MAP INDEX NO 3 PROB. OF EXISTENCE= 1.0 AREA= 126300.
OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.50 7.00

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	7.3	6.5	7.5
EST. OF N	.590	.400	.800
A	2.158	1.158	3.158
B	-.640	-.740	-.540

SEQ. # 4 LOC IN REG NO 1 MAP INDEX NO 4 PROB. OF EXISTENCE= 1.0 AREA= 209777.
OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.50 6.50

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	7.0	6.5	7.2
EST. OF N	1.500	1.200	2.000
A	4.135	3.135	5.135
B	-1.080	-1.180	-.980

SEQ. # 5 LOC IN REG NO 1 MAP INDEX NO 5 PROB. OF EXISTENCE= 1.0 AREA= 290085.
OCCURRENCE MODEL IN MAGNITUDE BILINEAR MODEL USED RANGE BETWEEN 3.50 5.04 6.50

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	7.0	6.5	7.2
EST. OF N	.940	.800	1.200
A	3.145	2.145	4.145
B	-.850	-.950	-.750
A	5.465	4.465	6.465
B	-1.310	-1.410	-1.210

***** SEISMICITY DATA FOR EXPERT 6 *****


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*****
SEQ. # 6      LOC IN REG NO 3      MAP INDEX NO 6      PROB. OF EXISTENCE= 1.0      AREA= 60618.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      5.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.5      6.0      7.0
EST. OF N      .220      .150      .400
A      1.313      .313      2.313
B      -.670      -.770      -.570
*****

SEQ. # 7      LOC IN REG NO 2      MAP INDEX NO 7      PROB. OF EXISTENCE= .7      AREA= 52148.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      5.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.5      6.0      7.0
EST. OF N      .210      .150      .300
A      2.280      1.280      3.280
B      -.770      -.870      -.670
*****

SEQ. # 8      LOC IN REG NO 2      MAP INDEX NO 8      PROB. OF EXISTENCE= .9      AREA= 67064.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      5.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.5      6.0      7.0
EST. OF N      .430      .300      .600
A      4.235      3.235      5.235
B      -1.180      -1.330      -1.030
*****

SEQ. # 9      LOC IN REG NO 2      MAP INDEX NO 9      PROB. OF EXISTENCE= 1.0      AREA= 147252.
OCCURRENCE MODEL IN MAGNITUDE      BILINEAR MODEL USED      RANGE BETWEEN      3.50      4.79      6.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      7.0      6.5      7.2
EST. OF N      1.010      .800      1.200
A      3.110      2.110      4.110
B      -.840      -.940      -.750
A      5.786      4.786      6.786
B      -1.400      -1.500      -1.350
*****

SEQ. # 10     LOC IN REG NO 2      MAP INDEX NO 10     PROB. OF EXISTENCE= 1.0      AREA= 108907.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      6.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      7.3      6.5      7.5
EST. OF N      1.130      .900      1.400
A      4.064      3.064      5.064
B      -1.070      -1.170      -.970
*****
SEISMICITY DATA FOR EXPERT 6
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*****
SEQ. # 11      LOC IN REG NO 2      MAP INDEX NO 11      PROB. OF EXISTENCE= .4      AREA= 18916.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      5.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.5      6.0      7.0
EST. OF N      .070      .050      .150
A      2.250      1.250      3.250
B      -.900      -1.200      -.700
*****

SEQ. # 12      LOC IN REG NO 2      MAP INDEX NO 12      PROB. OF EXISTENCE= .5      AREA= 26162.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      4.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.0      5.5      6.5
EST. OF N      .060      .020      .100
A      2.200      1.200      3.200
B      -.900      -1.200      -.700
*****

SEQ. # 13      LOC IN REG NO 2      MAP INDEX NO 13      PROB. OF EXISTENCE= .4      AREA= 28079.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      4.20

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.0      5.5      6.5
EST. OF N      .030      .010      .060
A      1.521      .521      2.521
B      -.900      -1.200      -.700
*****

SEQ. # 14      LOC IN REG NO 3      MAP INDEX NO 14      PROB. OF EXISTENCE= .8      AREA= 41253.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      5.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.0      5.5      6.5
EST. OF N      .100      .040      .200
A      4.186      3.186      5.186
B      -1.400      -1.500      -1.300
*****

SEQ. # 15      LOC IN REG NO 3      MAP INDEX NO 15      PROB. OF EXISTENCE= .8      AREA= 30500.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      5.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.0      5.5      6.5
EST. OF N      .040      .010      .080
A      1.795      .795      2.795
B      -.900      -1.100      -.800
*****
SEISMICITY DATA FOR EXPERT 6
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*****
SEQ. # 16      LOC IN REG NO 3      MAP INDEX NO 16      PROB. OF EXISTENCE= 1.0      AREA= 62394.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      5.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.0      6.0      7.0
EST. OF N      .200      1.50      .300
A      2.761      1.761      3.761
B      -.920      -1.020      -.820
*****

SEQ. # 17      LOC IN REG NO 4      MAP INDEX NO 17      PROB. OF EXISTENCE= 1.0      AREA= 218664.
OCCURRENCE MODEL IN MAGNITUDE      BILINEAR MODEL USED      RANGE BETWEEN      3.50      5.38      7.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      7.5      6.5      7.5
EST. OF N      1.480      1.100      1.600
A      3.570      2.570      4.570
B      -.910      -1.010      -.810
A      1.315      .315      2.315
B      -.490      -1.000      -.450
*****

SEQ. # 18      LOC IN REG NO 4      MAP INDEX NO 18      PROB. OF EXISTENCE= .4      AREA= 23756.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      4.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.0      5.5      6.5
EST. OF N      .040      .010      .080
A      2.097      1.097      3.097
B      -.900      -1.200      -.700
*****

SEQ. # 19      LOC IN REG NO 4      MAP INDEX NO 19      PROB. OF EXISTENCE= .4      AREA= 37539.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      4.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.0      5.5      6.5
EST. OF N      .100      .020      .150
A      2.397      1.397      3.397
B      -.900      -1.200      -.700
*****

SEQ. # 20      LOC IN REG NO 4      MAP INDEX NO 20      PROB. OF EXISTENCE= .2      AREA= 91134.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.40      4.40

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.0      5.5      6.5
EST. OF N      .090      .020      .150
A      2.207      1.207      3.207
B      -.900      -1.200      -.700
***** SEISMICITY DATA FOR EXPERT 6 *****

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 SEQ. # 21 LOC IN REG NO 4 MAP INDEX NO 21 PROB. OF EXISTENCE= .2 AREA= 36549.
 OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.50 4.50

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	6.0	5.5	6.5
EST. OF N	.080	.040	.150
A	2.177	1.177	3.177
B	-.900	-1.200	-.700

 SEQ. # 22 LOC IN REG NO 4 MAP INDEX NO 22 PROB. OF EXISTENCE= .7 AREA= 74184.
 OCCURRENCE MODEL IN MAGNITUDE BILINEAR MODEL USED RANGE BETWEEN 3.50 4.28 6.00

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	6.5	6.0	7.0
EST. OF N	.300	.150	.450
A	4.687	3.687	5.687
B	-1.410	-1.510	-1.310
A	1.047	.047	2.047
B	-.560	-1.000	-.500

 SEQ. # 23 LOC IN REG NO 3 MAP INDEX NO 23 PROB. OF EXISTENCE= .7 AREA= 109274.
 OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.50 5.50

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	6.0	5.5	6.5
EST. OF N	.210	.100	.300
A	3.097	2.097	4.097
B	-1.000	-1.100	-.900

 SEQ. # 24 LOC IN REG NO 3 MAP INDEX NO 24 PROB. OF EXISTENCE= .4 AREA= 38932.
 OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.50 6.00

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	6.0	5.5	6.5
EST. OF N	.080	.040	.150
A	2.447	1.447	3.447
B	-.900	-1.200	-.700

 SEQ. # 25 LOC IN REG NO 3 MAP INDEX NO 25 PROB. OF EXISTENCE= .5 AREA= 36674.
 OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.50 5.50

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	6.0	5.5	6.5
EST. OF N	.100	.050	.200
A	.900	.500	2.000
B	-.520	-.900	-.500

***** SEISMICITY DATA FOR EXPERT 6 *****

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*****
SEQ. # 26      LOC IN REG NO 3      MAP INDEX NO 26      PROB. OF EXISTENCE= 1.0      AREA= 102763.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      5.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.0      5.5      6.5
EST. OF N      .210      .100      .300
A      3.397      2.397      4.397
B      -1.110      -1.210      -1.010
*****

SEQ. # 27      LOC IN REG NO 3      MAP INDEX NO 27      PROB. OF EXISTENCE= .6      AREA= 77016.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      5.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.0      5.5      6.5
EST. OF N      .190      .100      .300
A      3.117      2.117      4.117
B      -1.040      -1.140      -.940
*****

SEQ. # 28      LOC IN REG NO 3      MAP INDEX NO 28      PROB. OF EXISTENCE= .7      AREA= 23691.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      5.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.5      6.0      7.0
EST. OF N      .410      .200      .600
A      4.487      3.487      5.487
B      -1.180      -1.280      -1.080
*****

SEQ. # 29      LOC IN REG NO 4      MAP INDEX NO 29      PROB. OF EXISTENCE= .4      AREA= 100487.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      5.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.0      5.5      6.5
EST. OF N      .180      .100      .300
A      2.397      1.397      3.397
B      -.810      -.910      -.710
*****

SEQ. # 30      LOC IN REG NO 4      MAP INDEX NO 30      PROB. OF EXISTENCE= .4      AREA= 34282.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      5.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      7.0      6.5      7.2
EST. OF N      .100      .050      .200
A      1.577      .577      2.577
B      -.690      -.900      -.590
***** SEISMICITY DATA FOR EXPERT 6 *****

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*****
SEQ. # 31      LOC IN REG NO 1      MAP INDEX NO 31      PROB. OF EXISTENCE= ALT BDY      AREA= 101482.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      5.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      7.0      6.5      7.2
EST. OF N      .210      .100      .300
A      3.186      2.186      4.186
B      -1.000      -1.100      -.900
*****

SEQ. # 32      LOC IN REG NO 1      MAP INDEX NO 32      PROB. OF EXISTENCE= ALT BDY      AREA= 67330.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      7.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      7.3      6.5      7.5
EST. OF N      .570      .300      .800
A      2.199      1.199      3.199
B      -.650      -.850      -.550
*****

SEQ. # 33      LOC IN REG NO 1      MAP INDEX NO 33      PROB. OF EXISTENCE= ALT BDY      AREA= 15773.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      5.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.0      5.5      6.5
EST. OF N      .150      .050      .300
A      3.636      2.636      4.636
B      -1.230      -1.400      -1.030
*****

SEQ. # 34      LOC IN REG NO 1      MAP INDEX NO 34      PROB. OF EXISTENCE= ALT BDY      AREA= 70427.
OCCURRENCE MODEL IN MAGNITUDE      BILINEAR MODEL USED      RANGE BETWEEN      3.50      4.52      6.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      7.0      6.5      7.2
EST. OF N      .910      .700      1.200
A      5.610      4.610      6.610
B      -1.540      -1.600      -1.300
A      1.680      .680      2.680
B      -.670      -.900      -.570
*****

SEQ. # 35      LOC IN REG NO 2      MAP INDEX NO 35      PROB. OF EXISTENCE= ALT BDY      AREA= 78570.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      5.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.5      6.0      7.0
EST. OF N      .460      .250      .650
A      3.638      2.638      4.638
B      -1.080      -1.180      -.980
***** SEISMICITY DATA FOR EXPERT 6 *****

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SEQ. # 36      LOC IN REG NO 3      MAP INDEX NO 36      PROB. OF EXISTENCE= ALT BDY      AREA= 33421.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      5.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.0      5.5      6.5
EST. OF N      .210      .100      .300
A      3.140      2.140      4.140
B      -1.010      -1.210      -.810
*****

SEQ. # 37      LOC IN REG NO 1      MAP INDEX NO 37      PROB. OF EXISTENCE= ALT BDY      AREA= 162158.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      6.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      7.0      6.5      7.2
EST. OF N      1.040      .800      1.400
A      3.186      2.186      4.186
B      -.860      -.960      -.760
*****

SEQ. # 38      LOC IN REG NO 1      MAP INDEX NO 38      PROB. OF EXISTENCE= ALT BDY      AREA= 83797.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      6.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      7.0      6.5      7.2
EST. OF N      1.200      .100      .300
A      1.957      .957      2.957
B      -.670      -.870      -.570
*****

SEQ. # 39      LOC IN REG NO 3      MAP INDEX NO 39      PROB. OF EXISTENCE= ALT BDY      AREA= 31577.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      5.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.5      6.0      7.0
EST. OF N      .190      .100      .300
A      3.414      2.414      4.414
B      -1.080      -1.280      -.880
*****

SEQ. # 40      LOC IN REG NO 2      MAP INDEX NO 40      PROB. OF EXISTENCE= ALT BDY      AREA= 50195.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      5.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.5      6.0      7.0
EST. OF N      .330      .150      .450
A      3.365      2.365      4.365
B      -1.030      -1.230      -.830
***** SEISMICITY DATA FOR EXPERT 6 *****

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 SEQ. # 41 LOC IN REG NO 2 MAP INDEX NO 41 PROB. OF EXISTENCE= ALT BDY AREA= 22853.
 OCCURRENCE MODEL IN MAGNITUDE BILINEAR MODEL USED RANGE BETWEEN 3.50 5.00 7.00

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	7.3	6.5	7.5
EST. OF N	1.010	.800	1.200
A	4.350	3.350	5.350
B	-1.180	-1.230	-1.080
A	.950	-.050	1.950
B	-.500	-1.000	-.500

 SEQ. # 42 LOC IN REG NO 2 MAP INDEX NO 42 PROB. OF EXISTENCE= ALT BDY AREA= 25709.
 OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.50 6.00

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	7.0	6.5	7.2
EST. OF N	.120	.050	.250
A	1.410	.410	2.410
B	-.640	-.840	-.540

 SEQ. # 43 LOC IN REG NO 2 MAP INDEX NO 43 PROB. OF EXISTENCE= ALT BDY AREA= 28609.
 OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.50 5.50

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	6.5	6.0	7.0
EST. OF N	.240	.100	.450
A	3.396	2.396	4.396
B	-1.070	-1.170	-.970

 SEQ. # 44 LOC IN REG NO 2 MAP INDEX NO 44 PROB. OF EXISTENCE= ALT BDY AREA= 17427.
 OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.50 5.00

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	6.0	5.5	6.5
EST. OF N	.120	.050	.250
A	2.091	1.091	3.091
B	-.820	-.920	-.720

 SEQ. # 45 LOC IN REG NO 2 MAP INDEX NO 45 PROB. OF EXISTENCE= ALT BDY AREA= 16582.
 OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.50 5.00

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	6.5	6.0	7.0
EST. OF N	.330	.150	.700
A	2.847	1.847	3.847
B	-.900	-1.000	-.700

***** SEISMICITY DATA FOR EXPERT 6 *****

SEQ. # 46 LOC IN REG NO 4 MAP INDEX NO 46 PROB. OF EXISTENCE= ALT BDY AREA= 93245.
 OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.50 7.50

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	7.3	6.5	7.5
EST. OF N	.990	.500	1.800
A	2.025	1.025	3.025
B	-.600	-.700	-.500

SEQ. # 47 LOC IN REG NO 4 MAP INDEX NO 47 PROB. OF EXISTENCE= ALT BDY AREA= 95243.
 OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.50 6.00

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	7.0	6.5	7.2
EST. OF N	.410	.200	.700
A	2.975	1.975	3.975
B	-.890	-.990	-.790

SEQ. # 48 LOC IN REG NO 4 MAP INDEX NO 48 PROB. OF EXISTENCE= ALT BDY AREA= 32203.
 OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.50 5.00

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	6.5	6.0	7.0
EST. OF N	.090	.040	.200
A	2.816	1.816	3.816
B	-1.060	-1.160	-.960

SEISMICITY DATA FOR EXPERT 7

NO. OF ZONES= 28 SELF WEIGHTS ARE 9.0 7.0 6.0 7.0 TRUNCATED EXPONENTIAL PARTIAL CORRELATION

SEQ. # 1 LOC IN REG NO 4 MAP INDEX NO 1 PROB. OF EXISTENCE= 0.9 AREA= 1047586.
OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.50 5.70

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	5.2	4.7	5.7
EST. OF N	.500	.400	.700
A	3.300	3.300	3.300
B	-.900	-1.100	-.700

SEQ. # 2 LOC IN REG NO 4 MAP INDEX NO 2-CZ PROB. OF EXISTENCE= 1.0 AREA= 5674489.
OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.50 5.70

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	6.7	6.2	7.2
EST. OF N	2.800	1.900	3.600
A	3.900	3.900	3.900
B	-.900	-1.100	-.700

SEQ. # 3 LOC IN REG NO 3 MAP INDEX NO 3 PROB. OF EXISTENCE= 1.0 AREA= 1359986.
OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.50 5.70

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	5.5	5.0	6.0
EST. OF N	.200	.150	.400
A	2.900	2.900	2.900
B	-.900	-1.100	-.700

SEQ. # 4 LOC IN REG NO 3 MAP INDEX NO 4 PROB. OF EXISTENCE= 0.75 AREA= 282292.
OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.50 5.70

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	5.5	5.0	6.0
EST. OF N	.300	.200	.500
A	1.600	1.600	1.600
B	-.700	-.900	-.500

SEQ. # 5 LOC IN REG NO 4 MAP INDEX NO 5 PROB. OF EXISTENCE= 0.9 AREA= 170614.
OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.00 7.00

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	6.5	6.0	7.0
EST. OF N	1.250	1.000	2.500
A	3.600	3.600	3.600
B	-.900	-1.000	-.800

***** SEISMICITY DATA FOR EXPERT 7 *****

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*****
SEQ. # 6      LOC IN REG NO 4      MAP INDEX NO 6      PROB. OF EXISTENCE= 1.0      AREA= 5920.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.00      7.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      8.0      7.5      8.2
EST. OF N      .600      .400      1.000
A      3.300      3.300      3.300
B      -.900      -1.000      -.800
*****

SEQ. # 7      LOC IN REG NO 2      MAP INDEX NO 7      PROB. OF EXISTENCE= 0.9      AREA= 266095.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      6.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.2      5.7      6.7
EST. OF N      1.500      1.200      2.000
A      3.700      3.700      3.700
B      -.900      -1.100      -.700
*****

SEQ. # 8      LOC IN REG NO 2      MAP INDEX NO 8      PROB. OF EXISTENCE= 0.9      AREA= 121987.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      6.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.0      5.5      6.5
EST. OF N      .500      .300      .800
A      3.300      3.300      3.300
B      -.900      -1.100      -.700
*****

SEQ. # 9      LOC IN REG NO 2      MAP INDEX NO 9      PROB. OF EXISTENCE= 0.75      AREA= 42768.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      6.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      5.7      5.2      6.2
EST. OF N      .400      .200      .600
A      3.100      3.100      3.100
B      -.900      -1.050      -.750
*****

SEQ. # 10     LOC IN REG NO 2      MAP INDEX NO 10     PROB. OF EXISTENCE= 0.9      AREA= 7714.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      6.70

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      7.2      6.7      7.5
EST. OF N      .250      .150      .400
A      2.700      2.700      2.700
B      -.800      -1.000      -.600
***** SEISMICITY DATA FOR EXPERT 7 *****

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SEQ. # 11      LOC IN REG NO 3      MAP INDEX NO 11      PROB. OF EXISTENCE= 0.9      AREA= 2356.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      5.70

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      5.7      5.2      6.0
EST. OF N      .200      .100      .300
A      2.900      2.900      2.900
B      -.900      -1.050      -.750
*****

SEQ. # 12      LOC IN REG NO 3      MAP INDEX NO 12      PROB. OF EXISTENCE= 0.9      AREA= 1172.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      6.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.2      5.7      6.7
EST. OF N      .200      .100      .300
A      2.900      2.900      2.900
B      -.900      -1.050      -.750
*****

SEQ. # 13      LOC IN REG NO 2      MAP INDEX NO 13      PROB. OF EXISTENCE= 0.9      AREA= 12492.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.00      6.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.0      5.2      6.3
EST. OF N      .200      .100      .300
A      2.900      2.900      2.900
B      -.900      -1.050      -.750
*****

SEQ. # 14      LOC IN REG NO 1      MAP INDEX NO 15      PROB. OF EXISTENCE= 0.9      AREA= 542.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      2.50      5.70

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      5.7      5.2      6.2
EST. OF N      .050      .030      .100
A      2.200      2.200      2.200
B      -.900      -1.100      -.700
*****

SEQ. # 15      LOC IN REG NO 1      MAP INDEX NO 16      PROB. OF EXISTENCE= 0.8      AREA= 10017.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.00      6.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      5.0      4.5      5.5
EST. OF N      .050      .030      .100
A      2.200      2.200      2.200
B      -.900      -1.050      -.750
*****
SEISMICITY DATA FOR EXPERT 7
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*****
SEQ. # 16      LOC IN REG NO 1      MAP INDEX NO 17      PROB. OF EXISTENCE= 1.0      AREA= 137800.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.00      6.70

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.0      5.5      6.5
EST. OF N      1.000      .800      1.200
A      3.100      3.100      3.100
B      -.900      -1.000      -.800
*****

SEQ. # 17      LOC IN REG NO 1      MAP INDEX NO 18      PROB. OF EXISTENCE= 0.8      AREA= 2578.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      6.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.2      5.7      6.5
EST. OF N      .200      .100      .300
A      2.900      2.900      2.900
B      -.900      -1.050      -.750
*****

SEQ. # 18      LOC IN REG NO 1      MAP INDEX NO 19      PROB. OF EXISTENCE= 0.8      AREA= 30753.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      6.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.2      5.7      6.7
EST. OF N      .200      .100      .300
A      2.600      2.600      2.600
B      -.900      -1.050      -.750
*****

SEQ. # 19      LOC IN REG NO 1      MAP INDEX NO 20      PROB. OF EXISTENCE= 0.8      AREA= 1916.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      6.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.0      5.5      6.5
EST. OF N      .100      .080      .150
A      2.600      2.600      2.600
B      -.900      -1.050      -.750
*****

SEQ. # 20      LOC IN REG NO 1      MAP INDEX NO NOT USE      PROB. OF EXISTENCE= 0.8      AREA= 0.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      6.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.2      5.7      6.7
EST. OF N      .012      .006      .018
A      .980      .980      .980
B      -.900      -1.050      -.750
*****
SEISMICITY DATA FOR EXPERT 7
*****

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SEQ. # 21 LOC IN REG NO 1 MAP INDEX NO 22(24) PROB. OF EXISTENCE= 0.8 AREA= 1727.
 OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.00 6.00

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	6.5	6.0	6.7
EST. OF N	.005	.004	.006
A	1.170	1.170	1.170
B	-.900	-1.050	-.750

SEQ. # 22 LOC IN REG NO 1 MAP INDEX NO 23 PROB. OF EXISTENCE= 0.9 AREA= 3399.
 OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.50 6.20

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	6.2	5.7	6.6
EST. OF N	.100	.080	.150
A	2.600	2.600	2.600
B	-.900	-1.050	-.750

SEQ. # 23 LOC IN REG NO 1 MAP INDEX NO 24 PROB. OF EXISTENCE= 1.0 AREA= 346886.
 OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.00 6.00

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	6.5	6.0	6.7
EST. OF N	1.000	.800	1.200
A	3.500	3.500	3.500
B	-.900	-1.050	-.750

SEQ. # 24 LOC IN REG NO 1 MAP INDEX NO 26 PROB. OF EXISTENCE= 1.0 AREA= 4765.
 OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 2.50 6.70

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	7.2	6.7	7.5
EST. OF N	.400	.300	.500
A	1.900	1.900	1.900
B	-.600	-.750	-.450

SEQ. # 25 LOC IN REG NO 1 MAP INDEX NO 27 PROB. OF EXISTENCE= 1.0 AREA= 21711.
 OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.00 5.70

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	5.5	5.2	5.7
EST. OF N	.450	.350	.550
A	3.200	3.200	3.200
B	-.900	-1.050	-.750

***** SEISMICITY DATA FOR EXPERT 7 *****

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*****
SEQ. # 26      LOC IN REG NO 3      MAP INDEX NO 28      PROB. OF EXISTENCE= 0.8      AREA= 11629.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.00      5.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      5.5      5.2      5.7
EST. OF N      .100      .080      .120
A      2.500      2.500      2.500
B      -.900      -1.050      -.750
*****

SEQ. # 27      LOC IN REG NO 2      MAP INDEX NO 29      PROB. OF EXISTENCE= 0.9      AREA= 60464.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.00      5.70

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      5.0      4.5      5.5
EST. OF N      .050      .030      .100
A      1.700      1.700      1.700
B      -.700      -.850      -.550
*****

SEQ. # 28      LOC IN REG NO 4      MAP INDEX NO 30      PROB. OF EXISTENCE= 0.75      AREA= 260253.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.50      5.70

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.5      6.0      7.0
EST. OF N      .200      .100      .300
A      3.300      3.300      3.300
B      -.900      -1.100      -.700
*****

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SEISMICITY DATA FOR EXPERT 10

NO. OF ZONES= 35 SELF WEIGHTS ARE 10.0 8.0 9.0 8.0 LLNL MODEL PARTIAL CORRELATION

SEQ. # 1 LOC IN REG NO 1 MAP INDEX NO 1 PROB. OF EXISTENCE= .8 AREA= 134314.
OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.75 6.25

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	6.3	6.0	6.8
EST. OF N	.250	.130	.400
A	3.050	2.930	3.170
B	-.950	-1.000	-.900

SEQ. # 2 LOC IN REG NO 1 MAP INDEX NO 2 PROB. OF EXISTENCE= .8 AREA= 36112.
OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.75 5.50

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	5.5	5.3	6.0
EST. OF N	.110	.080	.140
A	2.450	2.330	2.570
B	-.920	-.970	-.870

SEQ. # 3 LOC IN REG NO 1 MAP INDEX NO 3 PROB. OF EXISTENCE= .8 AREA= 121138.
OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.75 5.50

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	5.5	5.3	6.0
EST. OF N	.050	.040	.070
A	3.040	2.920	3.160
B	-1.080	-1.130	-1.030

SEQ. # 4 LOC IN REG NO 2 MAP INDEX NO 4 PROB. OF EXISTENCE= .8 AREA= 427423.
OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.75 5.75

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	6.0	5.8	6.8
EST. OF N	.678	.485	.872
A	3.496	3.376	3.616
B	-1.000	-1.050	-.950

SEQ. # 5 LOC IN REG NO 2 MAP INDEX NO 5 PROB. OF EXISTENCE= .7 AREA= 104872.
OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.75 5.50

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	5.5	5.3	6.0
EST. OF N	.250	.150	.350
A	2.520	2.400	2.640
B	-.820	-.870	-.770

***** SEISMICITY DATA FOR EXPERT 10 *****


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*****
SEQ. # 6      LOC IN REG NO 1      MAP INDEX NO 6      PROB. OF EXISTENCE= .7      AREA= 30638.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      6.25

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.3      6.0      6.8
EST. OF N      .400      .300      .500
A      3.120      3.000      3.240
B      -.960      -1.010      -.910
*****

SEQ. # 7      LOC IN REG NO 1      MAP INDEX NO 7      PROB. OF EXISTENCE= .99      AREA= 129794.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      6.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.5      6.3      7.0
EST. OF N      1.600      1.000      2.000
A      3.480      3.360      3.600
B      -.920      -.970      -.870
*****

SEQ. # 8      LOC IN REG NO 1      MAP INDEX NO 8      PROB. OF EXISTENCE= 1.0      AREA= 2269.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      7.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      7.0      6.8      7.5
EST. OF N      .800      .400      1.200
A      2.720      2.600      2.840
B      -.760      -.810      -.710
*****

SEQ. # 9      LOC IN REG NO 3      MAP INDEX NO 9      PROB. OF EXISTENCE= .7      AREA= 5803.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      5.75

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.0      5.8      6.5
EST. OF N      .080      .040      .120
A      1.730      1.560      1.900
B      -.780      -.880      -.680
*****

SEQ. # 10     LOC IN REG NO 3      MAP INDEX NO 10     PROB. OF EXISTENCE= .8      AREA= 19361.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      5.75

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.0      5.8      6.5
EST. OF N      .060      .030      .100
A      2.620      2.500      2.740
B      -1.000      -1.050      -.950
*****
SEISMICITY DATA FOR EXPERT 10
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*****
SEQ. # 11      LOC IN REG NO 4      MAP INDEX NO 12A
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      PROB. OF EXISTENCE= .95      AREA= 15527.
(A-B*M)      MODEL IS      3.75      7.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      7.5      7.0      7.5
EST. OF N      2.000      1.400      2.600
A      3.410      3.290      3.530
B      -.870      -.920      -.820
*****

SEQ. # 12      LOC IN REG NO 4      MAP INDEX NO 12B
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      PROB. OF EXISTENCE= ALT BDY      AREA= 24398.
(A-B*M)      MODEL IS      3.75      7.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      7.5      7.0      7.5
EST. OF N      2.000      1.400      2.600
A      3.590      3.470      3.710
B      -.900      -.950      -.850
*****

SEQ. # 13      LOC IN REG NO 4      MAP INDEX NO 13
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      PROB. OF EXISTENCE= .98      AREA= 97362.
(A-B*M)      MODEL IS      3.75      6.25

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.3      6.0      6.8
EST. OF N      1.500      1.000      2.000
A      4.200      4.080      4.320
B      -1.060      -1.110      -1.010
*****

SEQ. # 14      LOC IN REG NO 2      MAP INDEX NO 15
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      PROB. OF EXISTENCE= .9      AREA= 6922.
(A-B*M)      MODEL IS      3.75      7.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      7.0      6.8      7.3
EST. OF N      .150      .100      .250
A      1.750      1.580      1.920
B      -.700      -.800      -.600
*****

SEQ. # 15      LOC IN REG NO 1      MAP INDEX NO 16
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      PROB. OF EXISTENCE= .75      AREA= 33229.
(A-B*M)      MODEL IS      3.75      6.25

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.3      6.0      6.8
EST. OF N      .600      .400      .800
A      2.820      2.700      2.940
B      -.850      -.900      -.800
***** SEISMICITY DATA FOR EXPERT 10 *****

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SEQ. # 16      LOC IN REG NO 1      MAP INDEX NO 17      PROB. OF EXISTENCE= .7      AREA= 18111.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      7.25

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      7.3      7.0      7.5
EST. OF N      .340      .150      .500
A      1.690      1.520      1.860
B      -.570      -.670      -.470
*****

SEQ. # 17      LOC IN REG NO 1      MAP INDEX NO 18      PROB. OF EXISTENCE= .95      AREA= 39646.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      7.25

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      7.3      7.0      7.5
EST. OF N      .340      .150      .500
A      1.690      1.520      1.860
B      -.570      -.670      -.470
*****

SEQ. # 18      LOC IN REG NO 3      MAP INDEX NO 19      PROB. OF EXISTENCE= 1.0      AREA= 7560144.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      5.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      5.5      5.3      6.0
EST. OF N      11.450      6.870      16.030
A      5.169      5.048      5.189
B      -1.160      -1.210      -1.110
*****

SEQ. # 19      LOC IN REG NO 1      MAP INDEX NO 20      PROB. OF EXISTENCE= .9      AREA= 4561.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      6.25

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.3      6.0      6.8
EST. OF N      .050      .030      .080
A      1.640      1.470      1.810
B      -.720      -.820      -.620
*****

SEQ. # 20      LOC IN REG NO 1      MAP INDEX NO 21      PROB. OF EXISTENCE= .9      AREA= 3282.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      6.25

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.3      6.0      6.8
EST. OF N      .060      .030      .090
A      1.750      1.580      1.920
B      -.760      -.860      -.660
*****
SEISMICITY DATA FOR EXPERT 10
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*****
SEQ. # 21      LOC IN REG NO 1      MAP INDEX NO 22
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      .9      3.75      AREA=      6501.
                                     BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
PARAMETER      UP MAG CO      EST. OF N
A      .050      1.030      6.0
B      1.200      1.030      6.8
      -.700      -.800      -.600
*****

SEQ. # 22      LOC IN REG NO 1      MAP INDEX NO 23
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      .85      3.75      AREA=      51363.
                                     BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
PARAMETER      UP MAG CO      EST. OF N
A      .230      1.150      6.0
B      2.840      2.720      6.8
      -.920      -.970      -.300
      2.960
      -.870
*****

SEQ. # 23      LOC IN REG NO 1      MAP INDEX NO 24
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      ALT BDY      3.75      AREA=      289343.
                                     BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
PARAMETER      UP MAG CO      EST. OF N
A      .740      3.500      6.0
B      3.640      3.520      6.8
      -1.000      -1.050      1.000
      3.760
      -.950
*****

SEQ. # 24      LOC IN REG NO 1      MAP INDEX NO 25
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      .8      3.75      AREA=      2349.
                                     BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
PARAMETER      UP MAG CO      EST. OF N
A      .020      1.010      6.0
B      1.600      1.430      6.8
      -.760      -.860      .030
      1.770
      -.660
*****

SEQ. # 25      LOC IN REG NO 3      MAP INDEX NO 26
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      .9      3.75      AREA=      246139.
                                     BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
PARAMETER      UP MAG CO      EST. OF N
A      6.0      5.8      6.5
      3.230      .450      .850
      -.940      .110      3.350
      10      -.990      -.890
***** SEISMICITY DATA FOR EXPERT 10 *****

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*****
SEQ. # 26      LOC IN REG NO 3      MAP INDEX NO 26A      PROB. OF EXISTENCE= ALT BDY      AREA=      9564.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      5.75

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.0      5.8      6.5
EST. OF N      .200      .100      .300
A      2.120      1.950      2.290
B      -.760      -.860      -.660
*****

SEQ. # 27      LOC IN REG NO 3      MAP INDEX NO 26B      PROB. OF EXISTENCE= ALT BDY      AREA=      5703.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      5.75

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.0      5.8      6.5
EST. OF N      .030      .020      .050
A      1.450      1.280      1.620
B      -.800      -.900      -.700
*****

SEQ. # 28      LOC IN REG NO 3      MAP INDEX NO 27      PROB. OF EXISTENCE= .9      AREA=      210046.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      5.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      5.5      5.3      6.0
EST. OF N      .040      .030      .050
A      2.440      2.320      2.560
B      -1.000      -1.050      -.950
*****

SEQ. # 29      LOC IN REG NO 2      MAP INDEX NO 28      PROB. OF EXISTENCE= .9      AREA=      187013.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      6.25

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.3      6.0      6.8
EST. OF N      .780      .550      1.000
A      3.380      3.260      3.500
B      -.920      -.970      -.870
*****

SEQ. # 30      LOC IN REG NO 2      MAP INDEX NO 28A      PROB. OF EXISTENCE= .8      AREA=      20689.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      6.25

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.3      6.0      6.8
EST. OF N      .220      .150      .300
A      2.610      2.440      2.780
B      -.890      -.890      -.790
*****
SEISMICITY DATA FOR EXPERT 10      *****

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*****
SEQ. # 31      LOC IN REG NO 4      MAP INDEX NO 29
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      0.7      3.75      AREA= 249906.
                                           6.25

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.3      6.0      6.8
EST. OF N      1.000      .700      1.300
A      3.190      3.070      3.310
B      -.900      -.950      -.850
*****

SEQ. # 32      LOC IN REG NO 4      MAP INDEX NO 30
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      ALT BDY      3.75      AREA= 61956.
                                           6.25

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.3      6.0      6.8
EST. OF N      .800      .500      1.000
A      3.140      3.020      3.260
B      -.900      -.950      -.850
*****

SEQ. # 33      LOC IN REG NO 4      MAP INDEX NO 31
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      ALT BDY      3.75      AREA= 31026.
                                           6.25

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.3      6.0      6.8
EST. OF N      .400      .300      .500
A      3.060      2.940      3.180
B      -.900      -.950      -.850
*****

SEQ. # 34      LOC IN REG NO 4      MAP INDEX NO 32
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      0.7      3.75      AREA= 94290.
                                           6.25

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.3      6.0      6.8
EST. OF N      .350      .250      .500
A      2.850      2.730      2.970
B      -.900      -.950      -.850
*****
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      5.75

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.0      5.8      6.8
EST. OF N      .022      .016      .028
A      2.001      1.881      2.121
B      -1.000      -1.050      -.950

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SEISMICITY DATA FOR EXPERT 11

NO. OF ZONES= 21 SELF WEIGHTS ARE 8.0 10.0 6.0 6.0 LLNL MODEL NO CORRELATION

SEQ. # 1 LOC IN REG NO 1 MAP INDEX NO 1 PROB. OF EXISTENCE= 0.8 AREA= 210566.
 OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.75 5.75

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	5.8	5.4	6.1
EST. OF N	1.000	.800	1.500
A	3.750	3.600	3.900
B	-1.000	-1.200	-.600

SEQ. # 2 LOC IN REG NO 1 MAP INDEX NO 2 PROB. OF EXISTENCE= 0.9 AREA= 104861.
 OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.75 5.75

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	5.8	5.4	6.1
EST. OF N	1.300	1.000	1.600
A	3.400	3.300	3.500
B	-.900	-1.200	-.700

SEQ. # 3 LOC IN REG NO 1 MAP INDEX NO 3 PROB. OF EXISTENCE= 0.95 AREA= 71960.
 OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.75 7.00

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	7.0	6.7	7.4
EST. OF N	1.200	1.000	1.600
A	2.300	2.200	2.400
B	-.600	-.800	-.500

SEQ. # 4 LOC IN REG NO 1 MAP INDEX NO 4 PROB. OF EXISTENCE= 0.5 AREA= 15440.
 OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.75 6.50

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	6.5	6.2	7.0
EST. OF N	.100	.020	.150
A	2.000	1.800	2.700
B	-.800	-1.300	-.600

SEQ. # 5 LOC IN REG NO 2 MAP INDEX NO 5 PROB. OF EXISTENCE= 0.8 AREA= 111033.
 OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.75 6.50

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	6.5	6.2	7.0
EST. OF N	.900	.500	1.500
A	3.700	3.600	3.900
B	-1.000	-1.300	-.800

***** SEISMICITY DATA FOR EXPERT 11 *****

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*****
SEQ. # 6      LOC IN REG NO 2      MAP INDEX NO 6A      PROB. OF EXISTENCE= 1.0      AREA= 140552.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      5.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.5      6.2      7.0
EST. OF N      1.800      .600      3.000
A      4.000      3.500      4.200
B      -1.000      -1.300      -.800
*****

SEQ. # 7      LOC IN REG NO 2      MAP INDEX NO 6B      PROB. OF EXISTENCE= 1.0      AREA= 11766.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      5.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.5      6.2      7.0
EST. OF N      .100      .020      .150
A      2.750      2.000      2.900
B      -1.000      -1.300      -.800
*****

SEQ. # 8      LOC IN REG NO 2      MAP INDEX NO 7A      PROB. OF EXISTENCE= 1.0      AREA= 156526.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      5.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      5.8      5.4      6.1
EST. OF N      1.000      .600      1.600
A      3.750      3.500      3.950
B      -1.000      -1.200      -.800
*****

SEQ. # 9      LOC IN REG NO 2      MAP INDEX NO 7B      PROB. OF EXISTENCE= 1.0      AREA= 13603.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      5.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      5.8      5.4      6.1
EST. OF N      .050      .010      .100
A      2.500      1.800      2.800
B      -1.000      -1.200      -.800
*****

SEQ. # 10     LOC IN REG NO 2      MAP INDEX NO 8      PROB. OF EXISTENCE= 0.9      AREA= 783248.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      7.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      7.0      6.7      7.4
EST. OF N      .450      .300      .800
A      2.250      2.050      2.500
B      -.700      -1.200      -.500
***** SEISMICITY DATA FOR EXPERT 11 *****

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*****
SEQ. # 11      LOC IN REG NO 3      MAP INDEX NO 9      PROB. OF EXISTENCE= 0.7      AREA= 110795.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      5.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.5      6.0      6.8
EST. OF N      .800      .400      1.600
A      3.650      3.350      3.950
B      -1.000      -1.200      -.700
*****

SEQ. # 12      LOC IN REG NO 3      MAP INDEX NO 10     PROB. OF EXISTENCE= 0.9      AREA= 234139.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      6.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.5      6.0      6.8
EST. OF N      1.600      1.200      2.600
A      3.600      3.400      3.800
B      -.900      -1.200      -.800
*****

SEQ. # 13      LOC IN REG NO 4      MAP INDEX NO 11     PROB. OF EXISTENCE= 1.0      AREA= 41823.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      7.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      7.0      6.7      7.4
EST. OF N      .500      .300      .900
A      2.700      2.400      3.000
B      -.800      -1.000      -.400
*****

SEQ. # 14      LOC IN REG NO 2      MAP INDEX NO 12     PROB. OF EXISTENCE= 0.95     AREA= 16891.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      5.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      5.8      5.4      6.1
EST. OF N      .150      .100      .200
A      2.900      2.700      3.100
B      -1.000      -1.300      -.800
*****

SEQ. # 15      LOC IN REG NO 2      MAP INDEX NO 13     PROB. OF EXISTENCE= 0.7      AREA= 46019.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      5.75

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      5.8      5.4      6.1
EST. OF N      .100      .020      .200
A      2.000      1.300      2.300
B      -.800      -1.300      -.600
*****
SEISMICITY DATA FOR EXPERT 11      *****

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*****
SEQ. # 16      LOC IN REG NO 4      MAP INDEX NO 14
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      0.9      3.75      AREA= 624214.
                                           5.00
PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      5.8      5.4      6.1
EST. OF N      .700      .300      1.000
A      4.370      4.000      4.500
B      -1.200      -1.400      -.900
*****

SEQ. # 17      LOC IN REG NO 4      MAP INDEX NO 15
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      0.95      3.75      AREA= 80360.
                                           6.50
PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.5      6.2      7.0
EST. OF N      .400      .300      .600
A      2.600      2.500      2.750
B      -.800      -1.100      -.500
*****

SEQ. # 18      LOC IN REG NO 4      MAP INDEX NO 16
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      0.9      3.75      AREA= 106271.
                                           5.75
PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      5.8      5.4      6.1
EST. OF N      .400      .250      .700
A      3.350      3.150      3.600
B      -1.000      -1.200      -.800
*****

SEQ. # 19      LOC IN REG NO 3      MAP INDEX NO 17
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      0.7      3.75      AREA= 286133.
                                           5.75
PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      5.8      5.4      6.1
EST. OF N      .700      .200      1.200
A      3.600      3.000      3.850
B      -1.000      -1.100      -.900
*****

SEQ. # 20      LOC IN REG NO 3      MAP INDEX NO 18
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      0.8      3.75      AREA= 235835.
                                           5.75
PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      5.8      5.4      6.1
EST. OF N      .400      .300      .600
A      3.350      3.200      3.500
B      -1.000      -1.200      -.700
***** SEISMICITY DATA FOR EXPERT 11 *****

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*****
SEQ. # 21      LOC IN REG NO 3      MAP INDEX NO 19-C.Z.      PROB. OF EXISTENCE= 1.0      AREA= 6513245.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      5.75

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      5.8      5.5      6.3
EST. OF N      7.500      5.000      10.000
      A      4.250      4.050      4.450
      B      -.900      -1.000      -.800

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SEISMICITY DATA FOR EXPERT 12

NO. OF ZONES= 22 SELF WEIGHTS ARE 9.0 9.0 9.0 9.0 TRUNCATED EXPONENTIAL NO CORRELATION

SEQ. # 1 LOC IN REG NO 3 MAP INDEX NO 1-C.Z. PROB. OF EXISTENCE= 1.0 AREA= 2913009.
OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.75 5.50

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	5.0	4.8	5.3
EST. OF N	4.630	2.550	4.730
A	5.311	4.601	5.851
B	-1.280	-1.400	-1.150

SEQ. # 2 LOC IN REG NO 2 MAP INDEX NO 2 PROB. OF EXISTENCE= 0.85 AREA= 208198.
OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 4.00 5.50

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	5.8	5.7	6.3
EST. OF N	1.570	1.210	1.670
A	3.636	3.116	4.116
B	-0.950	-1.050	-0.850

SEQ. # 3 LOC IN REG NO 1 MAP INDEX NO 3 PROB. OF EXISTENCE= 0.9 AREA= 881925.
OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 4.25 6.00

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	5.7	5.6	5.8
EST. OF N	4.440	1.650	4.540
A	3.614	3.044	4.044
B	-0.960	-1.050	-0.850

SEQ. # 4 LOC IN REG NO 2 MAP INDEX NO 4 PROB. OF EXISTENCE= 0.85 AREA= 79884.
OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 4.00 5.25

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	5.0	4.7	5.3
EST. OF N	0.520	0.420	0.620
A	2.763	2.143	3.793
B	-0.800	-0.950	-0.700

SEQ. # 5 LOC IN REG NO 2 MAP INDEX NO 5 PROB. OF EXISTENCE= 0.85 AREA= 301844.
OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 4.00 5.25

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	5.0	4.8	5.2
EST. OF N	0.360	0.250	0.460
A	2.388	1.848	3.498
B	-0.800	-0.950	-0.700

***** SEISMICITY DATA FOR EXPERT 12 *** *****

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*****
SEQ. # 6      LOC IN REG NO 2      MAP INDEX NO 6      PROB. OF EXISTENCE= 1.0      AREA= 1423849.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      4.00      4.75

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      5.0      4.8      5.1
EST. OF N      1.050      1.580      1.150
A      1.701      1.541      2.931
B      -.640      -.950      -.600
*****

SEQ. # 7      LOC IN REG NO 3      MAP INDEX NO 7      PROB. OF EXISTENCE= 0.65      AREA= 66278.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      5.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      5.3      5.0      5.8
EST. OF N      .120      .070      .220
A      2.166      1.766      2.366
B      -.900      -.950      -.800
*****

SEQ. # 8      LOC IN REG NO 4      MAP INDEX NO 8      PROB. OF EXISTENCE= 0.98      AREA= 47237.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      4.75

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.0      5.0      6.3
EST. OF N      .210      .100      .310
A      2.586      2.066      3.066
B      -.950      -1.050      -.800
*****

SEQ. # 9      LOC IN REG NO 3      MAP INDEX NO 9      PROB. OF EXISTENCE= 0.98      AREA= 34341.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      5.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.0      5.0      6.3
EST. OF N      .330      .220      .430
A      2.886      2.286      3.286
B      -.950      -1.050      -.800
*****

SEQ. # 10     LOC IN REG NO 3      MAP INDEX NO 10     PROB. OF EXISTENCE= 0.65      AREA= 51194.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      5.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      5.3      5.0      5.3
EST. OF N      .170      .070      .270
A      2.586      1.986      2.986
B      -.950      -1.050      -.800
*****
SEISMICITY DATA FOR EXPERT 12
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*****
SEQ. # 11      LOC IN REG NO 4      MAP INDEX NO 11      PROB. OF EXISTENCE= 0.9      AREA= 82385.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      6.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO
EST. OF N
A      6.3      6.2      6.5
B      1.100      .750      1.200
      3.571      2.911      4.041
      -.950      -1.050      -.800
*****

SEQ. # 12      LOC IN REG NO 4      MAP INDEX NO 12      PROB. OF EXISTENCE= 0.98      AREA= 25415.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      5.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO
EST. OF N
A      7.4      7.3      7.5
B      1.810      1.030      1.910
      3.811      3.231      3.981
      -1.000      -1.050      -.900
*****

SEQ. # 13      LOC IN REG NO 3      MAP INDEX NO 13      PROB. OF EXISTENCE= 0.85      AREA= 6254.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      5.25

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO
EST. OF N
A      5.3      5.2      5.5
B      .230      .130      .330
      2.651      2.051      3.051
      -.950      -1.050      -.800
*****

SEQ. # 14      LOC IN REG NO 2      MAP INDEX NO 14      PROB. OF EXISTENCE= 0.95      AREA= 40973.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      5.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO
EST. OF N
A      7.0      6.7      7.2
B      .520      .420      .620
      3.580      3.020      3.700
      -1.020      -1.050      -.900
*****

SEQ. # 15      LOC IN REG NO 2      MAP INDEX NO 15A      PROB. OF EXISTENCE= 0.6      AREA= 18011.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      5.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO
EST. OF N
A      6.6      5.6      6.2
B      .300      .200      .400
      2.459      2.159      3.359
      -.800      -1.050      -.750
***** SEISMICITY DATA FOR EXPERT 12 *****

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*****
SEQ. # 16      LOC IN REG NO 2      MAP INDEX NO 15B      PROB. OF EXISTENCE= 0.6      AREA= 15987.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      4.75

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.0      5.6      6.2
EST. OF N      .070      .020      .170
A      1.629      1.459      2.509
B      -1.800      -1.050      -1.750
*****

SEQ. # 17      LOC IN REG NO 1      MAP INDEX NO 16      PROB. OF EXISTENCE= 0.85      AREA= 50717.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      5.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.5      6.0      6.8
EST. OF N      .630      .530      .730
A      2.899      2.399      3.399
B      -1.000      -1.100      -.900
*****

SEQ. # 18      LOC IN REG NO 1      MAP INDEX NO 17      PROB. OF EXISTENCE= 0.98      AREA= 128594.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      4.50      6.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.5      6.2      6.8
EST. OF N      1.580      .869      1.689
A      3.731      3.306      4.306
B      -.950      -1.050      -.850
*****

SEQ. # 19      LOC IN REG NO 1      MAP INDEX NO 18      PROB. OF EXISTENCE= 1.0      AREA= 24123.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      6.75

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      7.0      6.6      7.2
EST. OF N      1.200      .500      1.300
A      2.180      1.670      2.670
B      -.640      -.750      -.550
*****

SEQ. # 20      LOC IN REG NO 3      MAP INDEX NO 19      PROB. OF EXISTENCE= 0.85      AREA= 2827.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      4.25      5.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      5.3      5.0      5.8
EST. OF N      .100      .050      .150
A      2.586      2.186      2.986
B      -.950      -1.050      -.850
*****
SEISMICITY DATA FOR EXPERT 12      *****

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*****
SEQ. # 21      LOC IN REG NO 1      MAP INDEX NO 20
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      PROB. OF EXISTENCE= 1.0      AREA= 1429795.
(A-B*M)      MODEL IS      4.00      5.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      5.5      5.3      5.8
EST. OF N      1.850      1.260      1.950
A      3.186      2.736      3.736
B      -.840      -.950      -.750
*****
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      4.50      6.00

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.5      6.2      6.8
EST. OF N      .020      .011      .021
A      2.295      1.405      2.405
B      -.950      -1.050      -.850

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SEISMICITY DATA FOR EXPERT 13

NO. OF ZONES= 17 SELF WEIGHTS ARE 6.0 9.0 7.0 9.0 LLNL MODEL NO CORRELATION

SEQ. # 1 LOC IN REG NO 4 MAP INDEX NO 1 PROB. OF EXISTENCE= 0.9 AREA= 143124.
OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.75 5.00

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	6.3	6.0	6.7
EST. OF N	.530	.430	.630
A	4.300	3.400	5.000
B	-1.200	-1.500	-.900

SEQ. # 2 LOC IN REG NO 4 MAP INDEX NO 2 PROB. OF EXISTENCE= 0.4 AREA= 9973.
OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.75 4.75

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	7.0	6.0	7.3
EST. OF N	.240	.120	.360
A	3.940	2.740	5.140
B	-1.200	-1.200	-1.000

SEQ. # 3 LOC IN REG NO 4 MAP INDEX NO 3 PROB. OF EXISTENCE= 0.8 AREA= 46999.
OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.75 5.00

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	6.3	6.0	6.6
EST. OF N	.450	.350	.550
A	4.600	4.000	5.200
B	-1.300	-1.500	-1.100

SEQ. # 4 LOC IN REG NO 4 MAP INDEX NO 4 PROB. OF EXISTENCE= 0.9 AREA= 18806.
OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.75 4.75

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	7.0	6.0	7.3
EST. OF N	.460	.230	.690
A	4.220	3.020	5.420
B	-1.200	-1.200	-1.000

SEQ. # 5 LOC IN REG NO 4 MAP INDEX NO 5 PROB. OF EXISTENCE= 1.0 AREA= 3079.
OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 1.60 6.20

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	7.3	7.1	7.4
EST. OF N	.860	.560	1.330
A	3.270	3.190	3.350
B	-.890	-.930	-.850

***** SEISMICITY DATA FOR EXPERT 13 *****

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*****
SEQ. # 6      LOC IN REG NO 4      MAP INDEX NO 6      PROB. OF EXISTENCE= 0.6      AREA= 16778.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      5.50

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.3      6.0      6.7
EST. OF N      .210      .080      .340
A      2.300      1.800      3.000
B      -.790      -1.000      -.590
*****

SEQ. # 7      LOC IN REG NO 3      MAP INDEX NO 7      PROB. OF EXISTENCE= 0.7      AREA= 41192.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      5.25

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.3      6.0      6.7
EST. OF N      .190      .060      .320
A      2.500      2.000      3.000
B      -.860      -1.100      -.660
*****

SEQ. # 8      LOC IN REG NO 2      MAP INDEX NO 8      PROB. OF EXISTENCE= 0.85      AREA= 158114.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      5.75

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.5      6.2      6.7
EST. OF N      .990      .600      1.300
A      3.820      3.400      4.300
B      -1.020      -1.170      -.870
*****

SEQ. # 9      LOC IN REG NO 2      MAP INDEX NO 9      PROB. OF EXISTENCE= 0.7      AREA= 21064.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      6.75

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.8      6.6      6.9
EST. OF N      .490      .350      .640
A      2.540      2.200      3.600
B      -.760      -.880      -.700
*****

SEQ. # 10     LOC IN REG NO 1      MAP INDEX NO 10     PROB. OF EXISTENCE= 0.6      AREA= 70008.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      5.75

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      5.9      5.8      6.2
EST. OF N      .440      .300      .600
A      4.000      3.500      4.500
B      -1.160      -1.300      -1.000
***** SEISMICITY DATA FOR EXPERT 13 *****

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*****
SEQ. # 11      LOC IN REG NO 1      MAP INDEX NO 11      PROB. OF EXISTENCE= 0.85      AREA= 41989.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      5.75

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.0      5.5      6.3
EST. OF N      .260      .120      .400
A      2.300      2.000      3.200
B      -.760      -.950      -.650
*****

SEQ. # 12      LOC IN REG NO 1      MAP INDEX NO 12      PROB. OF EXISTENCE= 0.85      AREA= 18386.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      6.75

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.8      6.6      6.9
EST. OF N      .200      .100      .350
A      1.500      1.400      2.500
B      .590      -.850      -.500
*****

SEQ. # 13      LOC IN REG NO 2      MAP INDEX NO 13      PROB. OF EXISTENCE= ALT BDY      AREA= 569990.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      6.75

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.3      6.0      6.9
EST. OF N      1.226      .400      2.000
A      3.900      3.000      5.000
B      -1.020      -1.220      -.800
*****

SEQ. # 14      LOC IN REG NO 4      MAP INDEX NO 14      PROB. OF EXISTENCE= ALT BDY      AREA= 25265.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      4.75

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      7.0      6.0      7.3
EST. OF N      .700      .350      1.050
A      4.400      3.200      5.600
B      -1.200      -1.200      -1.000
*****

SEQ. # 15      LOC IN REG NO 3      MAP INDEX NO 15-C.Z.      PROB. OF EXISTENCE= 1.0      AREA= 6063659.
OCCURRENCE MODEL IN MAGNITUDE      LINEAR RANGE OF      (A-B*M)      MODEL IS      3.75      6.25

PARAMETER      BEST ESTIMATE      LOWER LIMIT      UPPER LIMIT
UP MAG CO      6.3      6.0      6.5
EST. OF N      1.520      .740      2.297
A      4.270      3.870      4.670
B      -1.090      -1.180      -.990
*****
SEISMICITY DATA FOR EXPERT 13      *****

```

 SEQ. # 16 LOC IN REG NO 4 MAP INDEX NO 16-C.Z. PROB. OF EXISTENCE= 1.0 AREA= 1637300.
 OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.75 5.20

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	5.2	5.0	5.6
EST. OF N	.410	.200	.621
A	3.700	3.301	4.101
B	-1.090	-1.200	-.990

 SEQ. # 17 LOC IN REG NO 2 MAP INDEX NO 17-C.Z. PROB. OF EXISTENCE= 1.0 AREA= 475189.
 OCCURRENCE MODEL IN MAGNITUDE LINEAR RANGE OF (A-B*M) MODEL IS 3.75 5.90

PARAMETER	BEST ESTIMATE	LOWER LIMIT	UPPER LIMIT
UP MAG CO	5.9	5.5	6.2
EST. OF N	.120	.058	.180
A	3.164	2.764	3.564
B	-1.090	-1.180	-.990

EXPERT 1

TABLE A2

If Zones 6, 8, 13, 16, 18, 19, do not exist, they become part of Zone 15.

Zone 2 becomes part of Zone 1.

Zone 21 becomes part of Zone 22.

ALTERNATIVE BOUNDARIES

<u>Zone Index</u>	<u>Level of Confidence in Boundary Shape</u>
1, 2, 6, 7, 8	0.65
23, 26, 28	0.35
3	0.65
26, 27	0.35
4, 5	0.6
25	0.4
10, 11, 12	0.7
30, 31	0.3
14	0.6
29	0.4
15, 16, 17, 18, 19	0.65
32, 33, 34, 35	0.35
20	0.5
37	0.5
21	0.6
36	0.4
22	0.5
38, 39	0.5

Expert 1 provided the relation $I_0 = 2.16 m_blg - 4.4$

Zones for which M_u or M_{uu} was limited by Saturation Value of Magnitude Scale

<u>Map Zone No.</u>	<u>Saturation Value</u>
35	12
36	12
9	7.5

EXPERT 2

TABLE A2

If Zones 4, 6, 11, 12, 13, 14, 15, 16, 17, 20 to 33 do not exist, they become part of the complementary zone.

Zones 5, 8, 9, 10 becomes part of 12.

Zone 7 becomes part of 4.

No alternative boundaries were given by Expert 2

M_u was not limited by saturation for Expert 2.

EXPERT 3

TABLE A2

If Zones 2, 4, 6, 8, 10, 11, 12, 13, 14, 15, 16, 18 to 21 do not exist, they become part of Zone 1.

Zone 3 becomes part of 2

Zone 7 becomes part of 6.

Zone 9 becomes part of 8.

Zone 11 becomes part of 10.

Zone 17 becomes part of 16.

ALTERNATIVE BOUNDARIES

<u>Zone Index</u>	<u>Level of Confidence in Boundary Shape</u>
8	0.5
8 ALT	0.5
10	0.75
10 ALT	0.25
11	0.75
11 ALT	0.25

Expert 3 did not limit M_U because of saturation.

EXPERT 4

TABLE A2

If Zones 1, 2, 6, and 7, not exist, they become part the complementary zone.

Zone 26 becomes part of 8.

No alternative sets of boundaries given.

M_u was not limited by saturation by Expert 4.

EXPERT 5

TABLE A2

If Zones 7, 8, and 10 do not exist, they become part of Zone 1.

Zone 3 becomes part of 4

Zone 6 becomes part of 5.

Zone 9 becomes part of 8.

Zone 13 becomes part of 20 (C.Z.).

ALTERNATIVE BOUNDARIES

<u>Zone Index</u>	<u>Level of Confidence in Boundary Shape</u>
3, 4, 5, 6, 12, 14, 15	0.95
19, 20	0.05

Notes

Zone 2 not used. Our zone No. 20 Map Index C.Z. was used in place of Zone 2 which covered the same area.

Zones 15 and 19 were limited by the saturation of the MMI scale at XII.
The other zones were not.

EXPERT 6

TABLE A2

If Zones 11, 13, 18, 19, 20, 21, 22, 23, 24, 25, 27, 28, 29, 30 do not exist, they become part of Zone 1.

Zone 7 becomes part of 4.

Zone 8 and 12 become part of 9.

Zone 14 and 15 become part of 16.

ALTERNATIVE BOUNDARIES

<u>Zone Index</u>	<u>Level of Confidence in Boundary Shape</u>
2	0.7
31	0.3
3	0.6
32	0.4
4	0.8
33, 34, 35	0.2
5	0.8
35, 37, 38	0.2
6	0.6
39	0.4
8	0.6
40	0.4
9	0.7
43, 44, 45	0.3
10	0.6
41, 42	0.4
17	0.8
46, 47, 48	0.2

Notes

Expert 6 used a bilinear model for the magnitude recurrence relation in some zones.

M_u was limited by saturation for Expert 6.

EXPERT 7

TABLE A2

If Zones 1, 5, 7, 8, 11, 12, 13, 15, 28, 29 do not exist, they become part of Zone 2 (C.Z.).

Zone 4 becomes part of 3.

Zone 9 becomes part of 7.

Zone 10 becomes part of 8.

Zones 16, 19, 22, 23 become part of 24.

Zone 18 becomes part of 17.

Zone 22 becomes part of 19.

No alternative boundaries were given.

Notes

In the first questionnaire, Zones 21 and 22 were identified. In the second questionnaire, Expert 7 stated that Zone 21 should be incorporated in Zone 19 and 22 into Zone 24. Because the digitization was already completed, it was simpler to leave Zones 19 and 22 in the model and adjust the seismicity parameters accordingly. Zone 30 was added after the feedback.

M_u was not limited by saturation for Expert 7.

EXPERT 10

TABLE A2

If Zones 1, 2, 3, 4, 5, 6, 7, 10, 12A, 13, 16, 18, 26, 27, and 28 do not exist, they become part of Zone 19 (C.Z.).

Zone 20 becomes part of 1.

Zone 15 becomes part of 4.

Zone 9 becomes part of 10.

Zone 17 becomes part of 18.

Zone 21, 22, 25 becomes part of 23.

Zone 23 becomes part of 1.

Zone 28A becomes part of 28

ALTERNATIVE BOUNDARIES

<u>Zone Index</u>	<u>Level of Confidence in Boundary Shape</u>
12A, 13	0.6
13B, 30, 31	0.4
17, 18	0.5
29, 32	0.5
9, 10, 26, 27	
26A, 26B	
20, 1, 21, 22, 23, 25	0.6
24	0.4

Notes

Expert 10 gave a saturation value for M_U of 7.5. This limited M_U in Zones 8, 12A, 12B, 17, 18.

Expert 10 provided the relation $m_b = 0.44 + 0.67 I_0$ which was for all zones.

EXPERT 11

TABLE A2

If Zones 1, 4, 8, 6, 9, 10, 11, 12, 13, 14, 15, 17, 18 do not exist, they become part of 0 (C.Z.).

Zone 2 becomes part of 3.

Zone 3 becomes part of 5.

Zone 5 becomes part of 6.

Zone 16 becomes part of 5.

Notes

Expert 11 indicated a saturation for M_u of 7.0 but provided larger values for Zone 3 and 9. These larger values were used in the analysis.

EXPERT 12

TABLE A2

If Zones 3, 7, 8, 9, 10, 11, 12, 13, 19 do not exist, they become part of 1 (C.Z.).

Zones 2, 16, 4, 5, 15A become part of 3.

Zones 14, 15B become part of 5.

Zone 17 becomes part of 20.

No alternative boundaries given.

Notes

Expert 12 gave a saturation value of $7\frac{1}{4}$ for M_U for Zone 12 but gave larger values for the range of M_U relation

EXPERT 13

TABLE A2

If Zones 1, 2, 3, 6, 7, 8, 9, 10, 11, 12 do not exist, they become part of 15 (C.Z.)

Zone 4 becomes part of 5

ALTERNATIVE BOUNDARIES

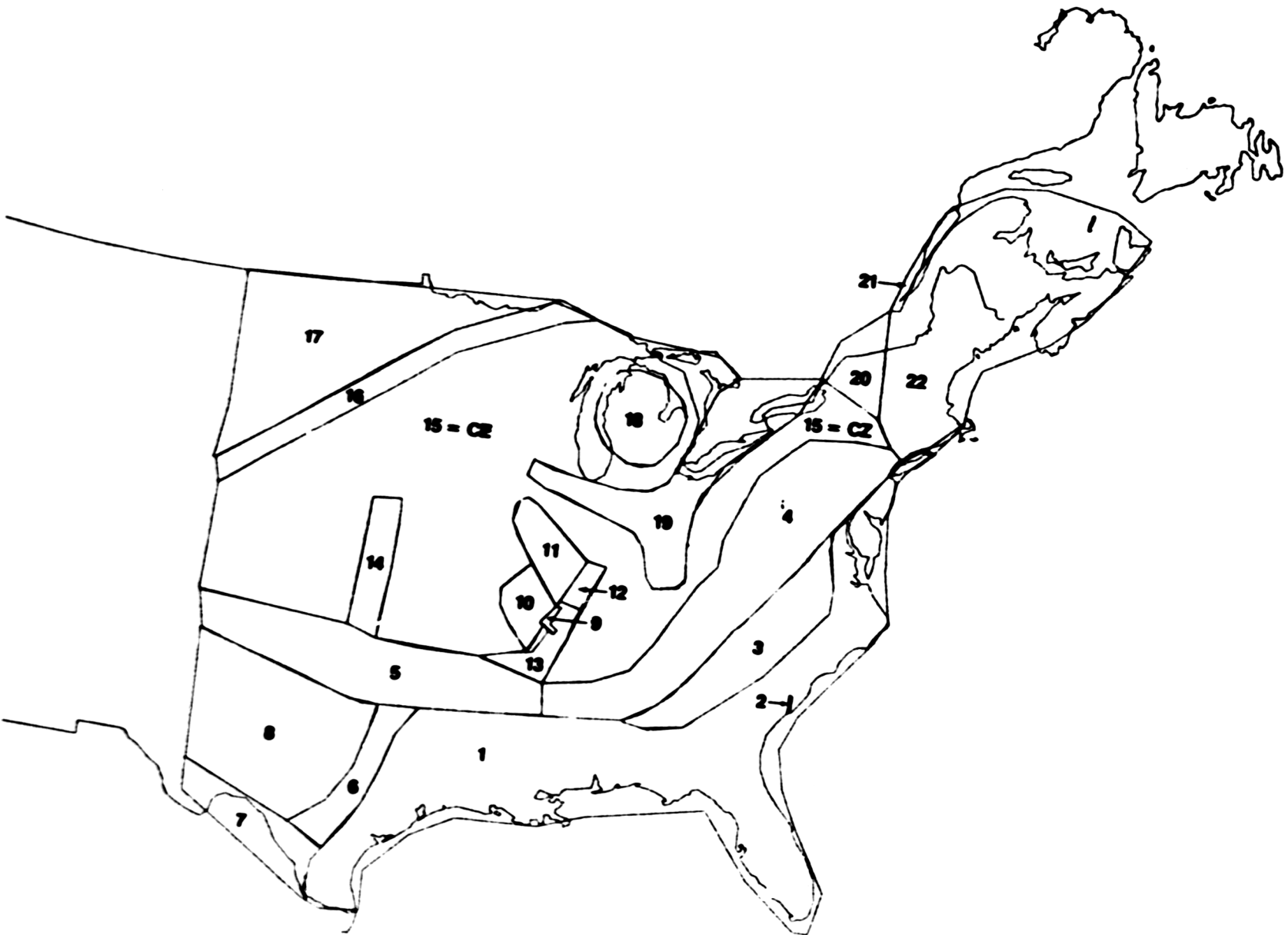
<u>Zone Index</u>	<u>Level of Confidence in Boundary Shape</u>
1, 8, 9, 10	0.75
13	0.25
4	0.8
14	0.2

Notes

Expert 3 used the M_s scale when responding to Q 2-2, 2-3 and 2-4 for Zone 5 and gave the relation

$$M_s = 2 m_b - 5.65$$

which we used to compute the values given in Table 1 for Zone 5.



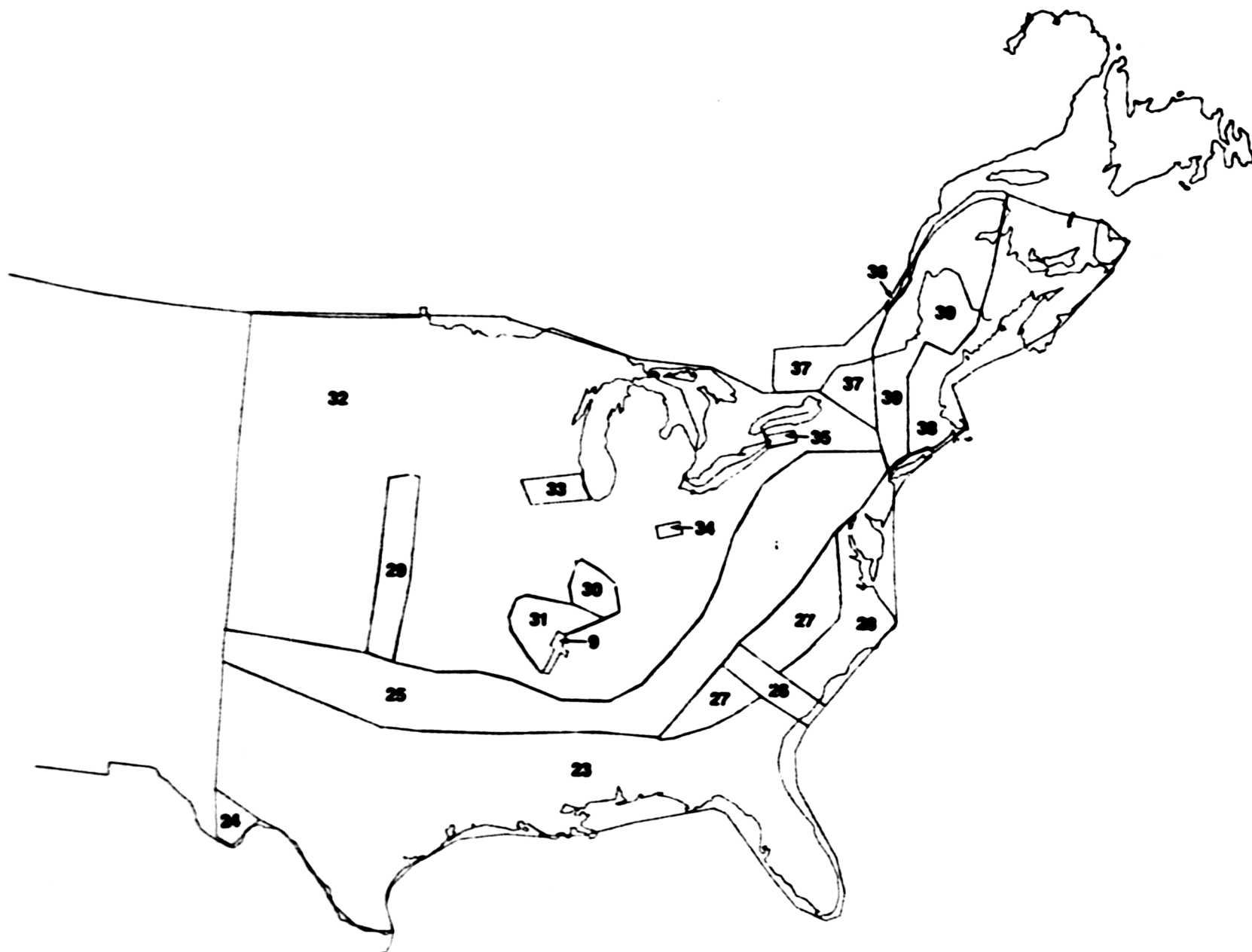


Figure A2. Map of alternative seismic zonation to Expert 1's base map.

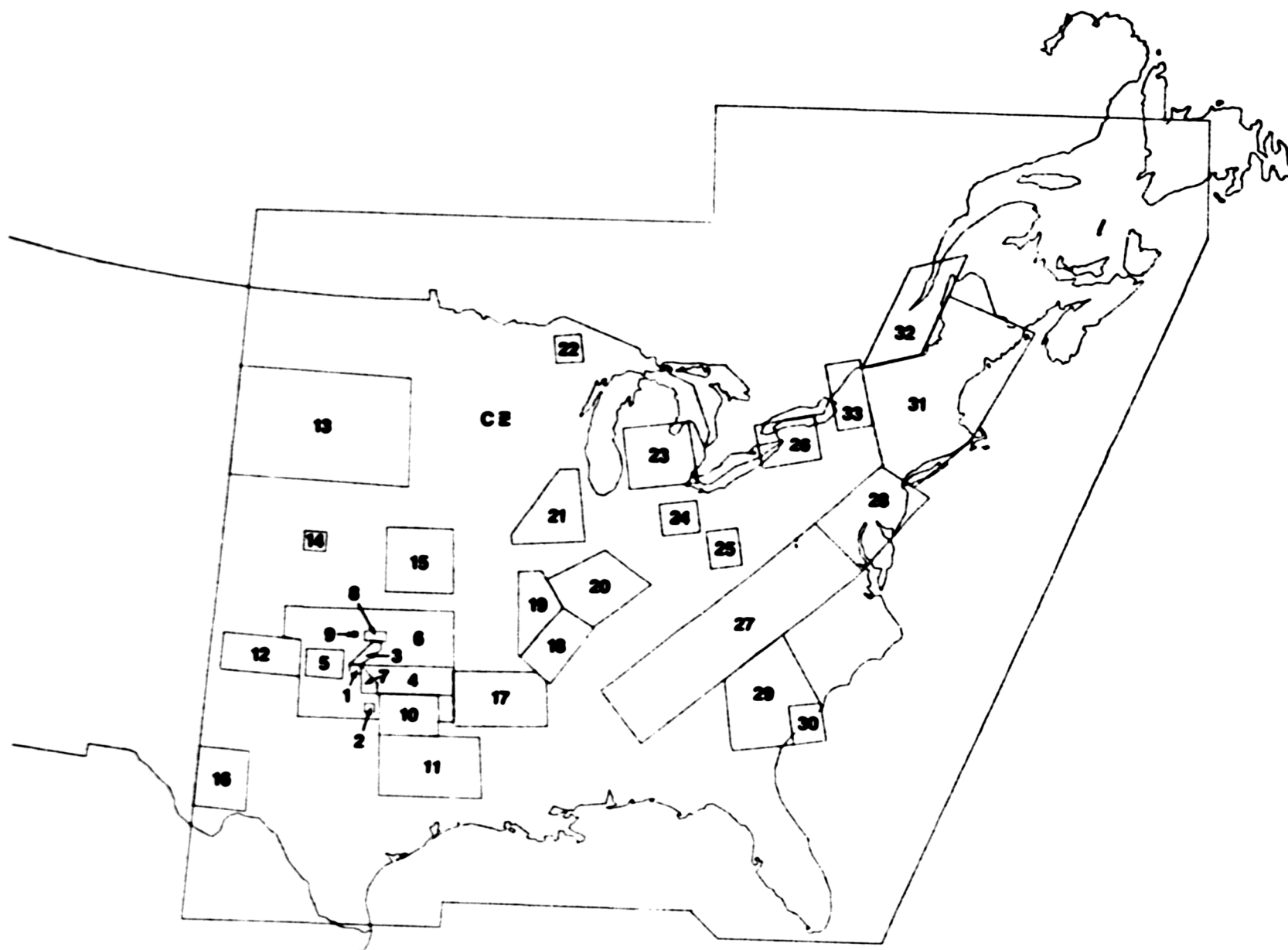


Figure A3. Seismic zonation base map for Expert 2

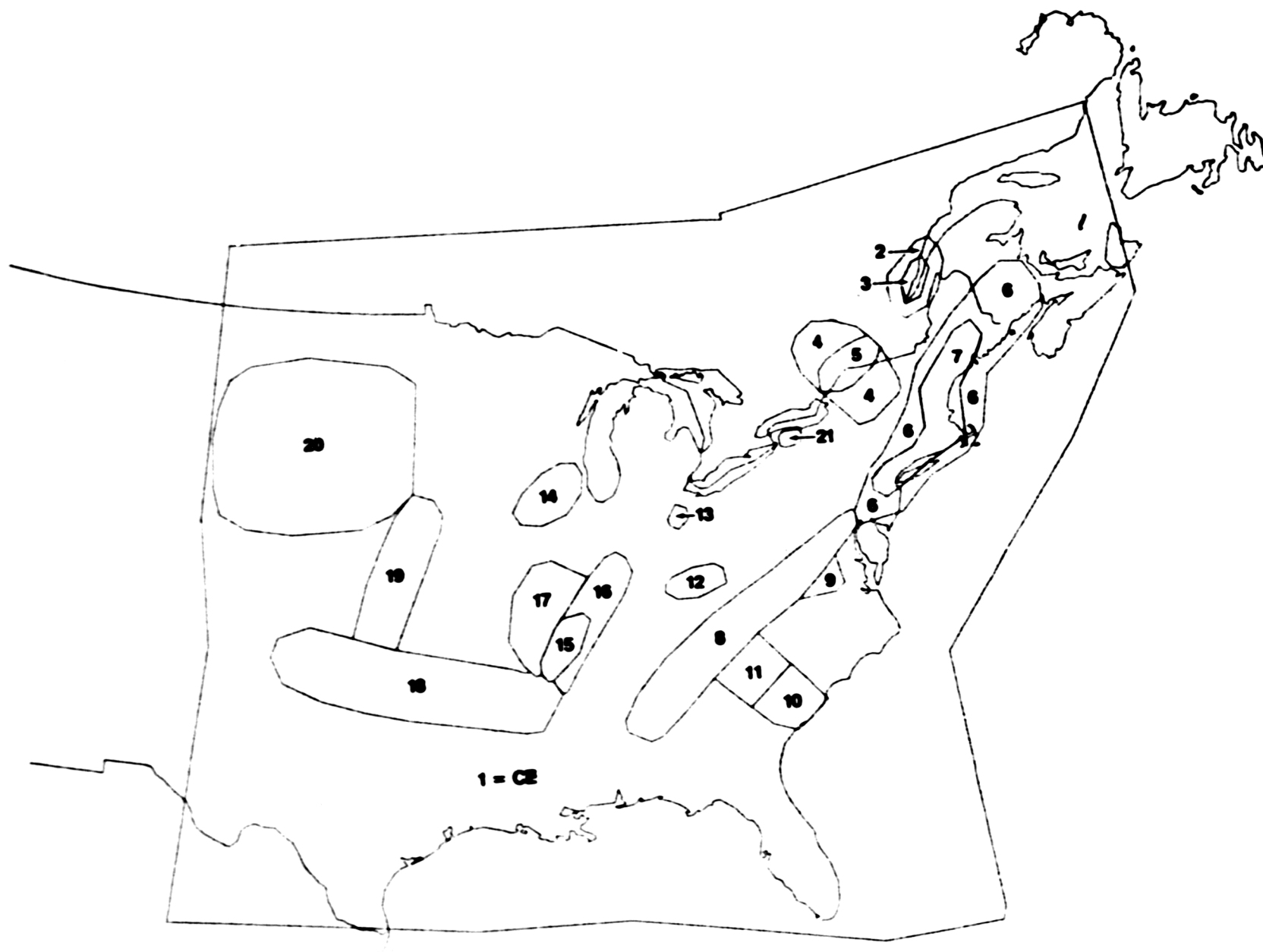


Figure A4. Seismic zonation base map for Expert 3.

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Figure A5. Map of the Northeastern United States and southeastern Canada showing sampling locations 8A, 8B, 8C, 11A, and 10A.

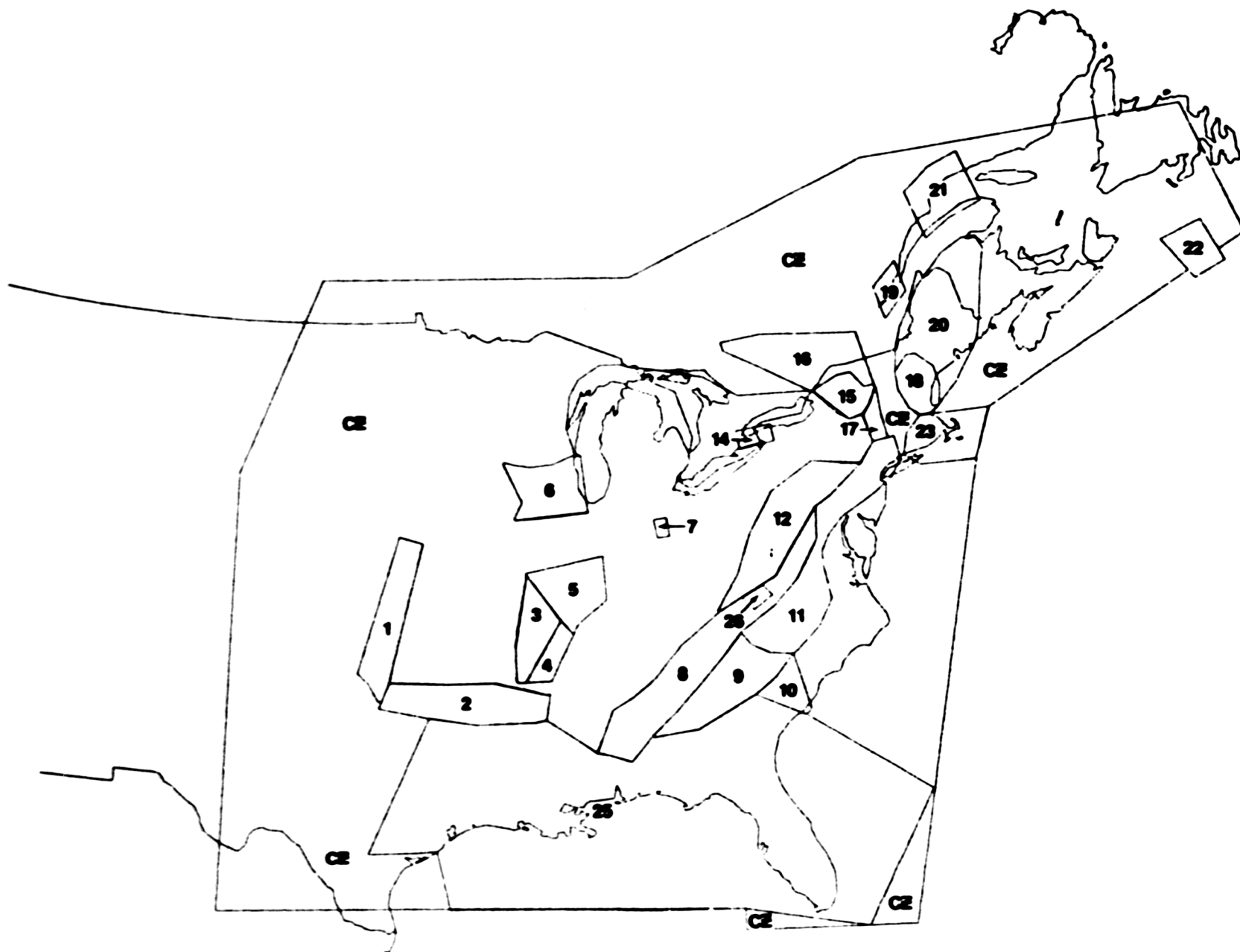


Figure A6. Seismic zonation base map for Expert 4.

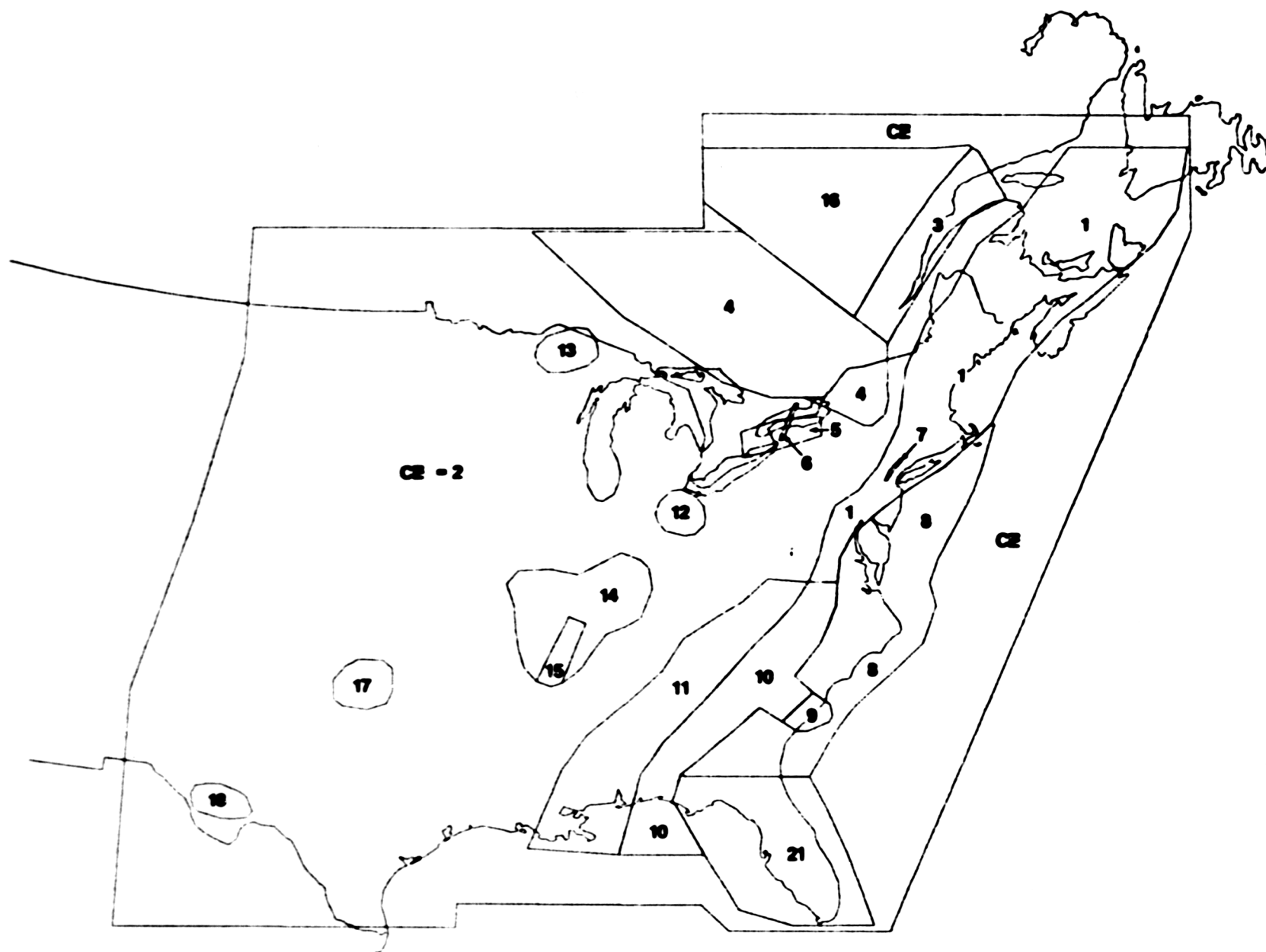


Figure A7 Seismic zonation base map for Expert 5

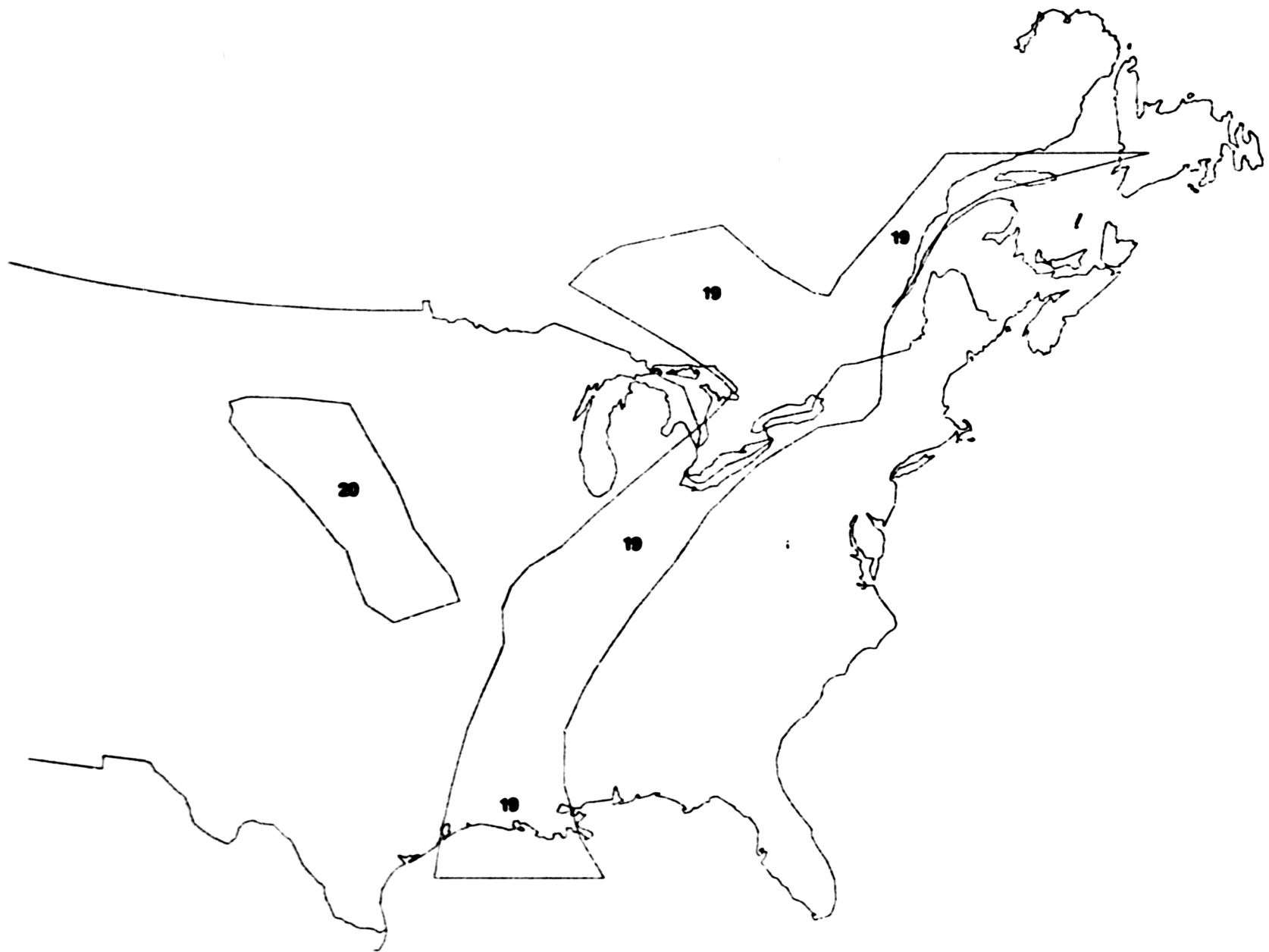


Figure A8. Map of alternative seismic zonation to Expert 5's base map.

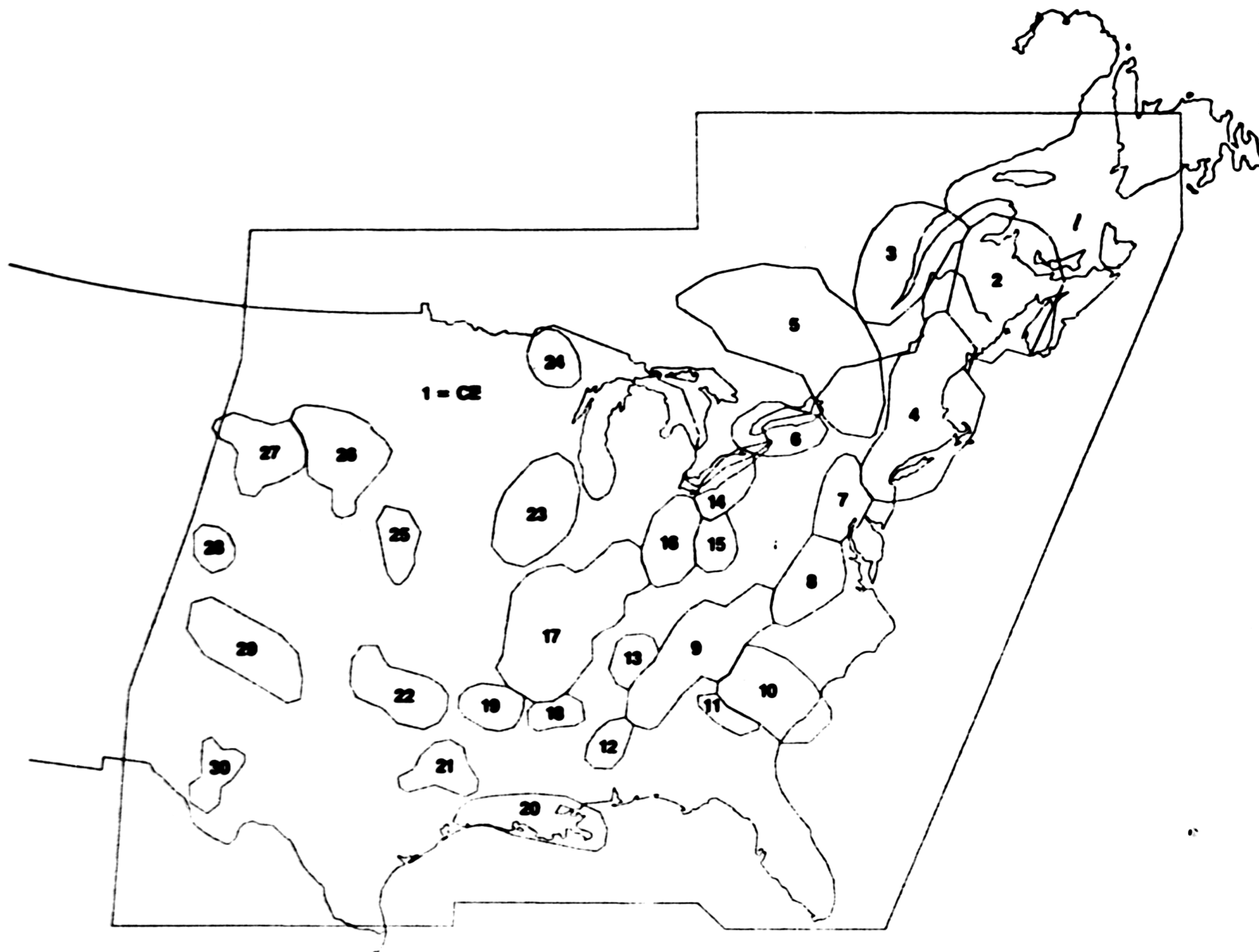


Figure A9. Seismic zonation base map for Expert 6.



Figure A10. Map of alternative seismic z rations to Expert 6's base map.

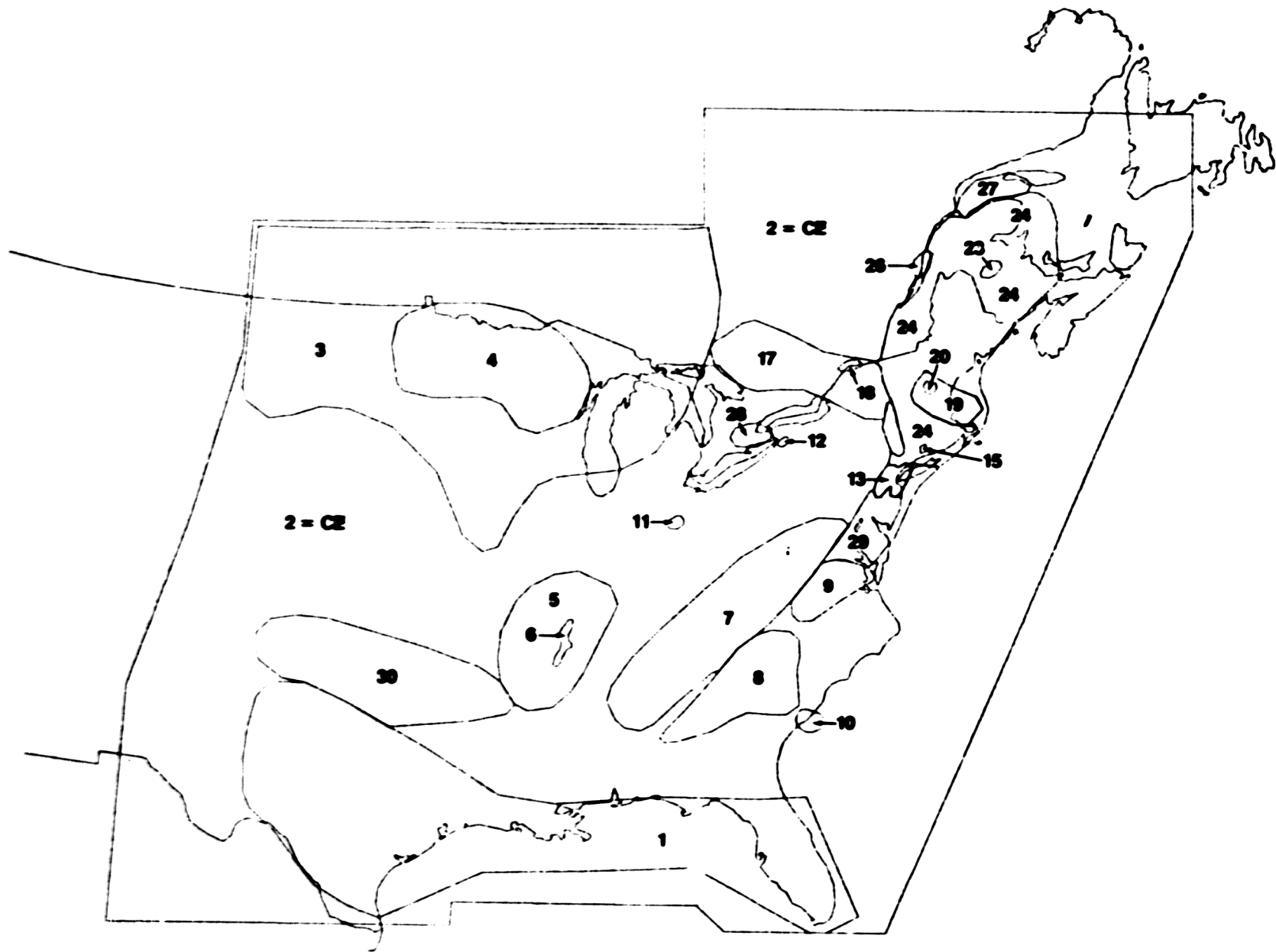


Figure A11 Seismic zonation base map for Expert 7

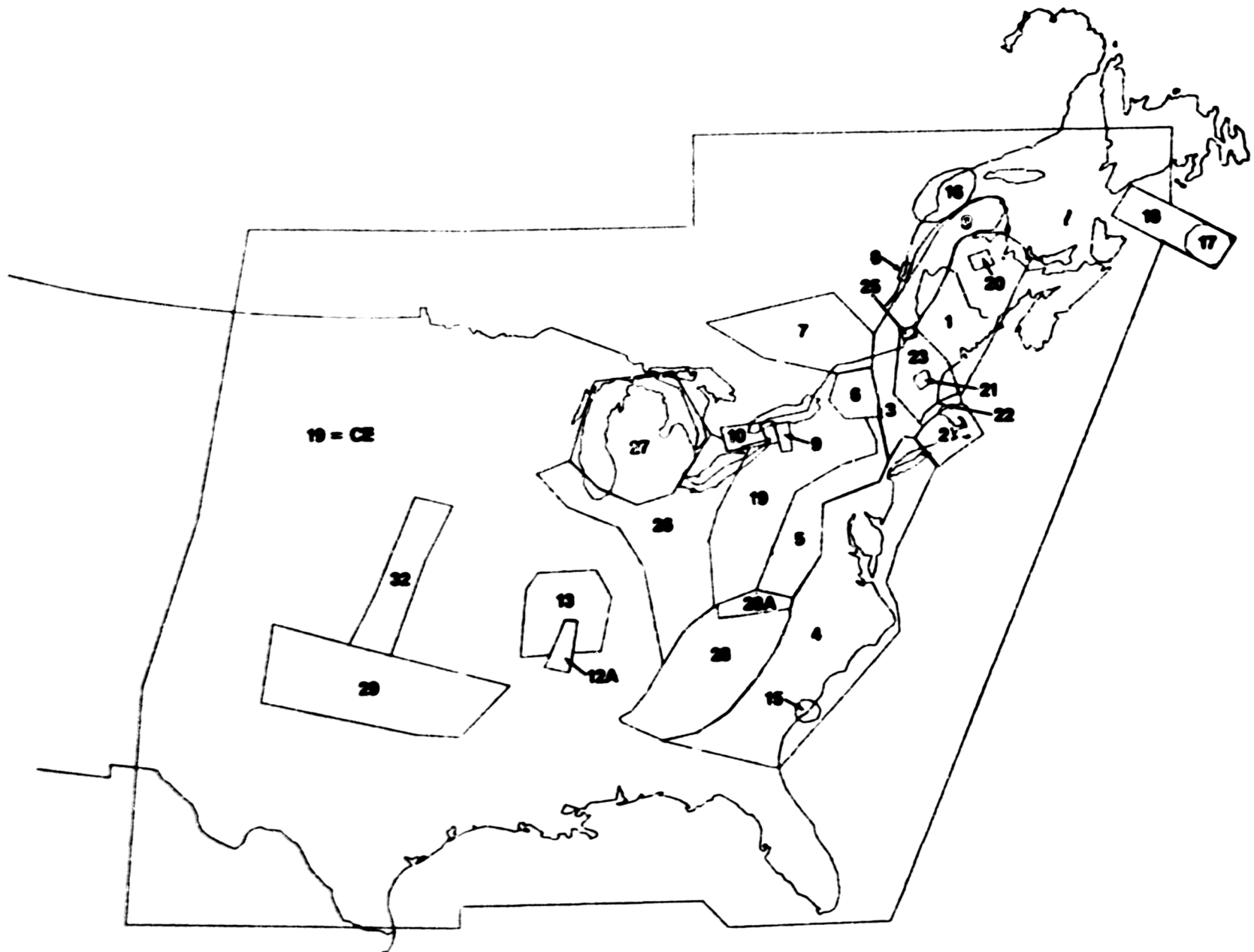


Figure A12. Seismic zonation base map for Expert 10.

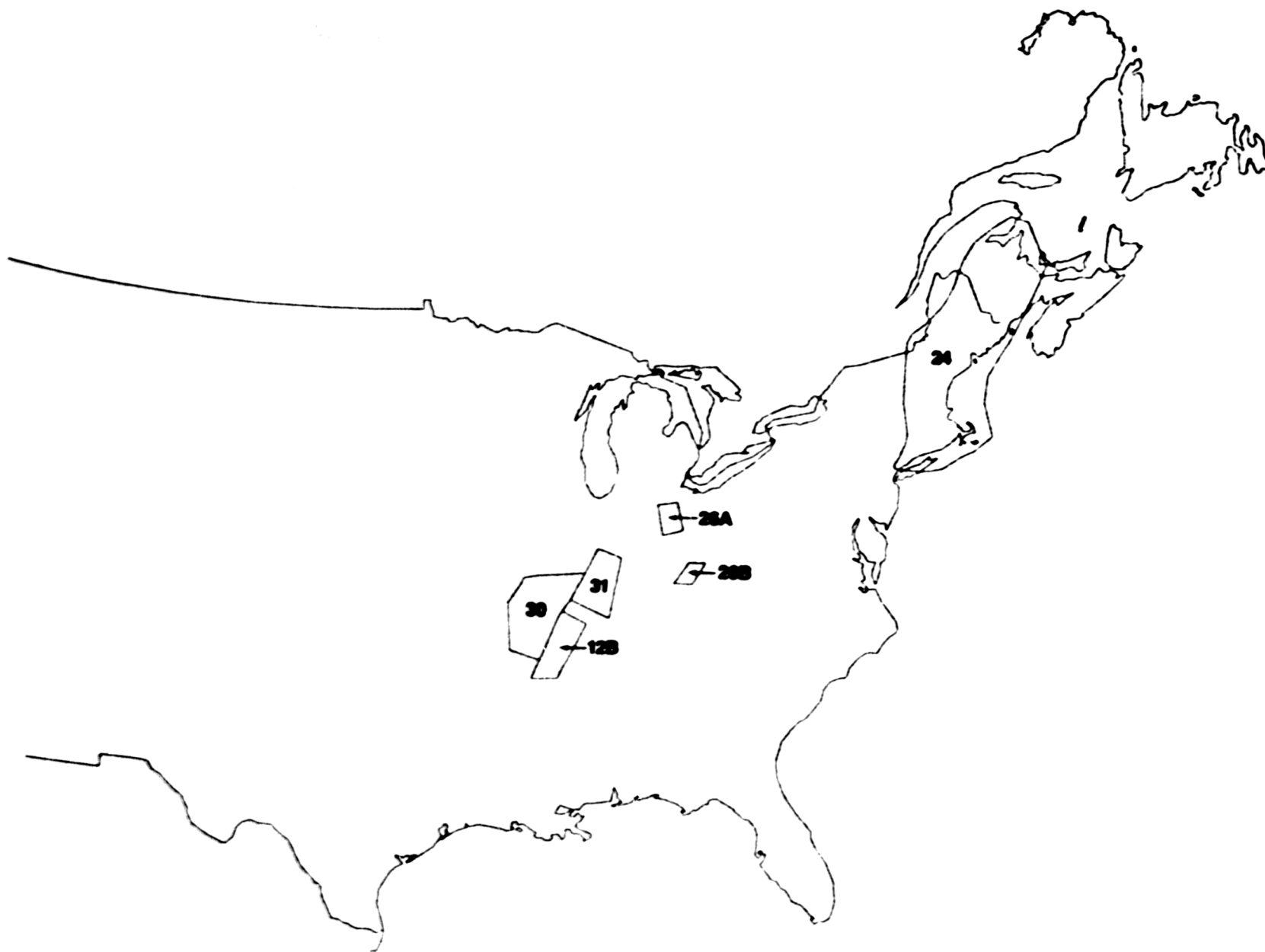


Figure A13. Map of alternative seismic zonation to Expert 10's base map.

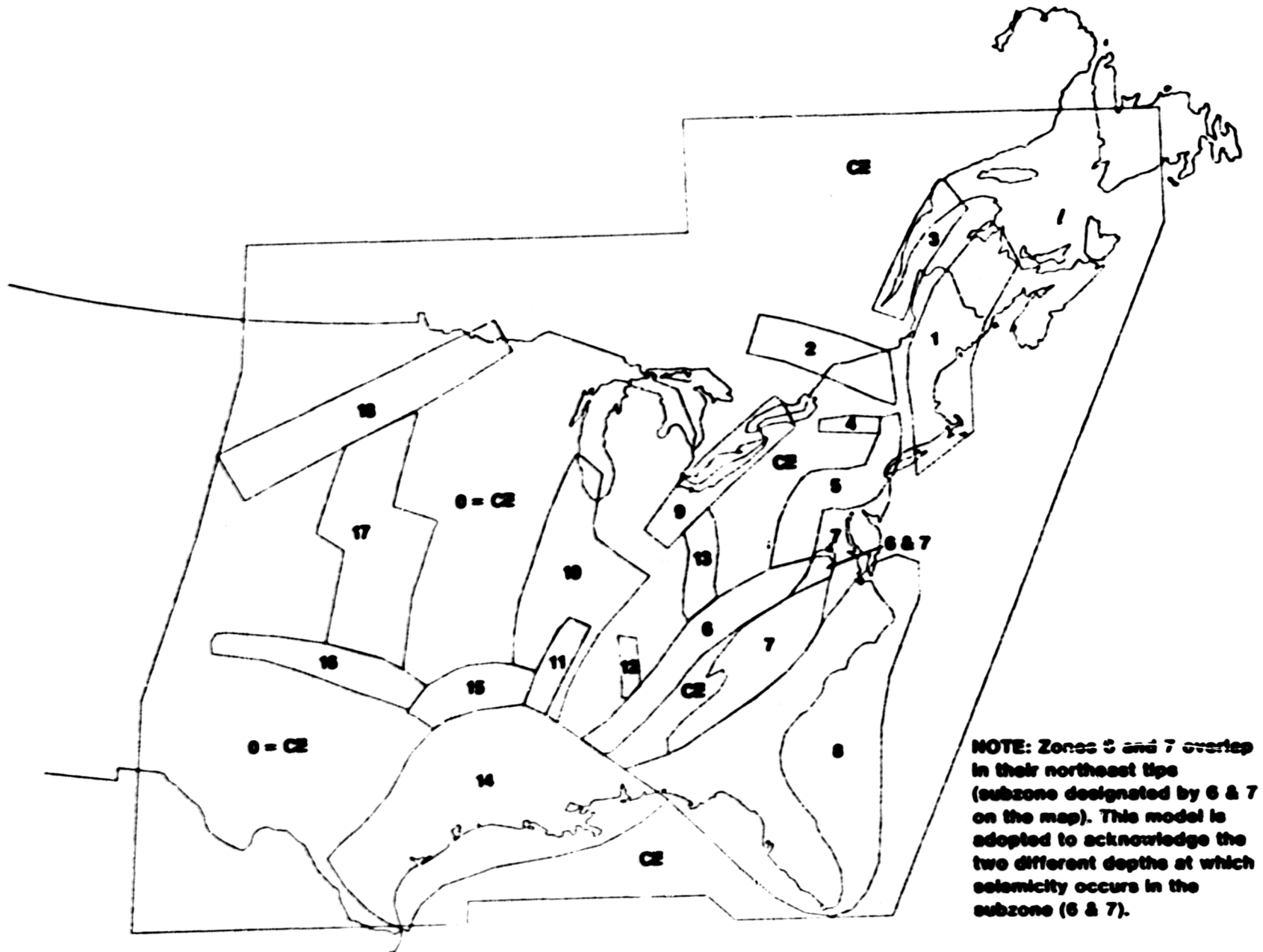


Figure A14. Seismic zonation base map for Expert 11.

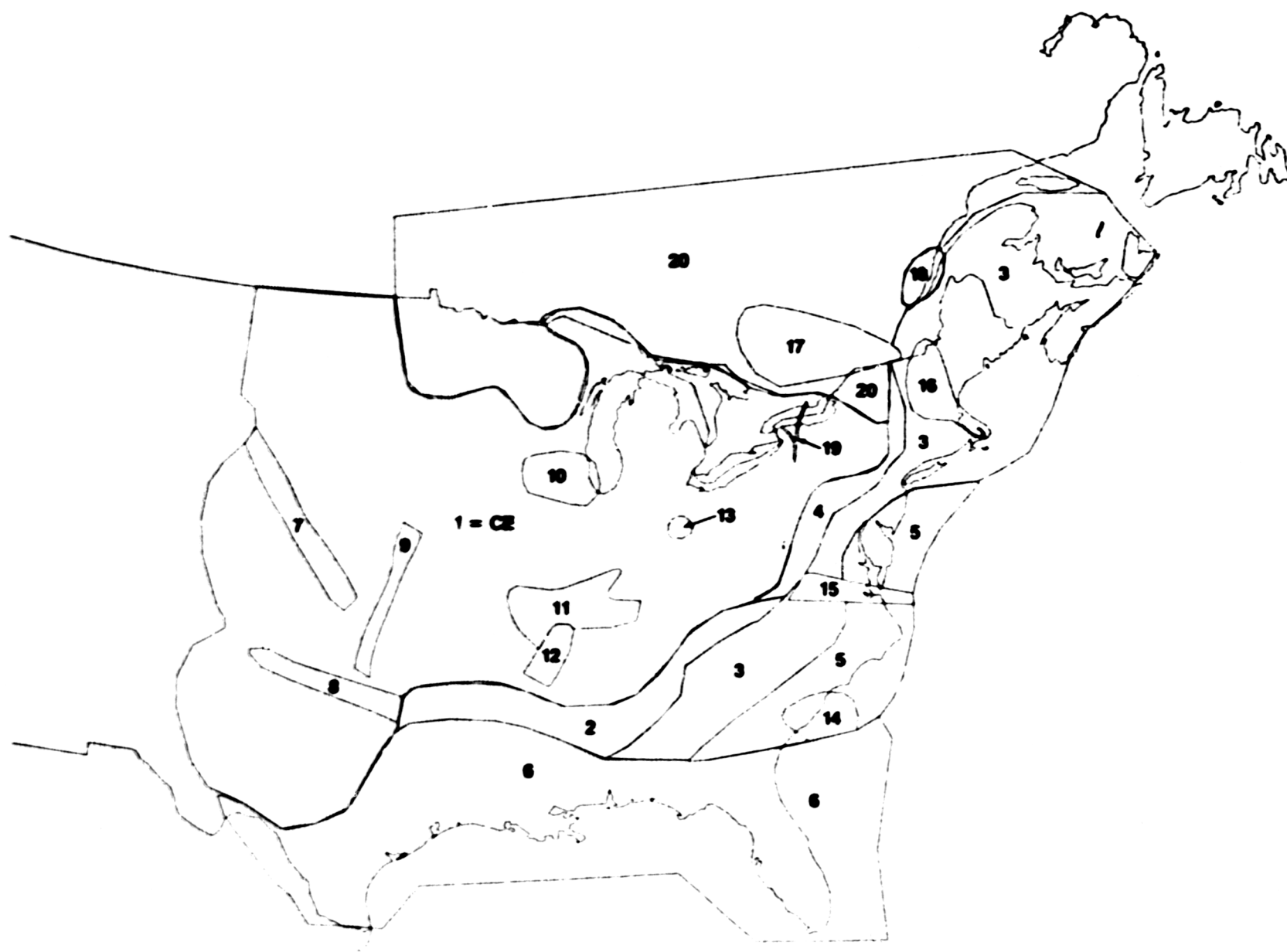


Figure A15. Seismic zonation base map for Expert 12.

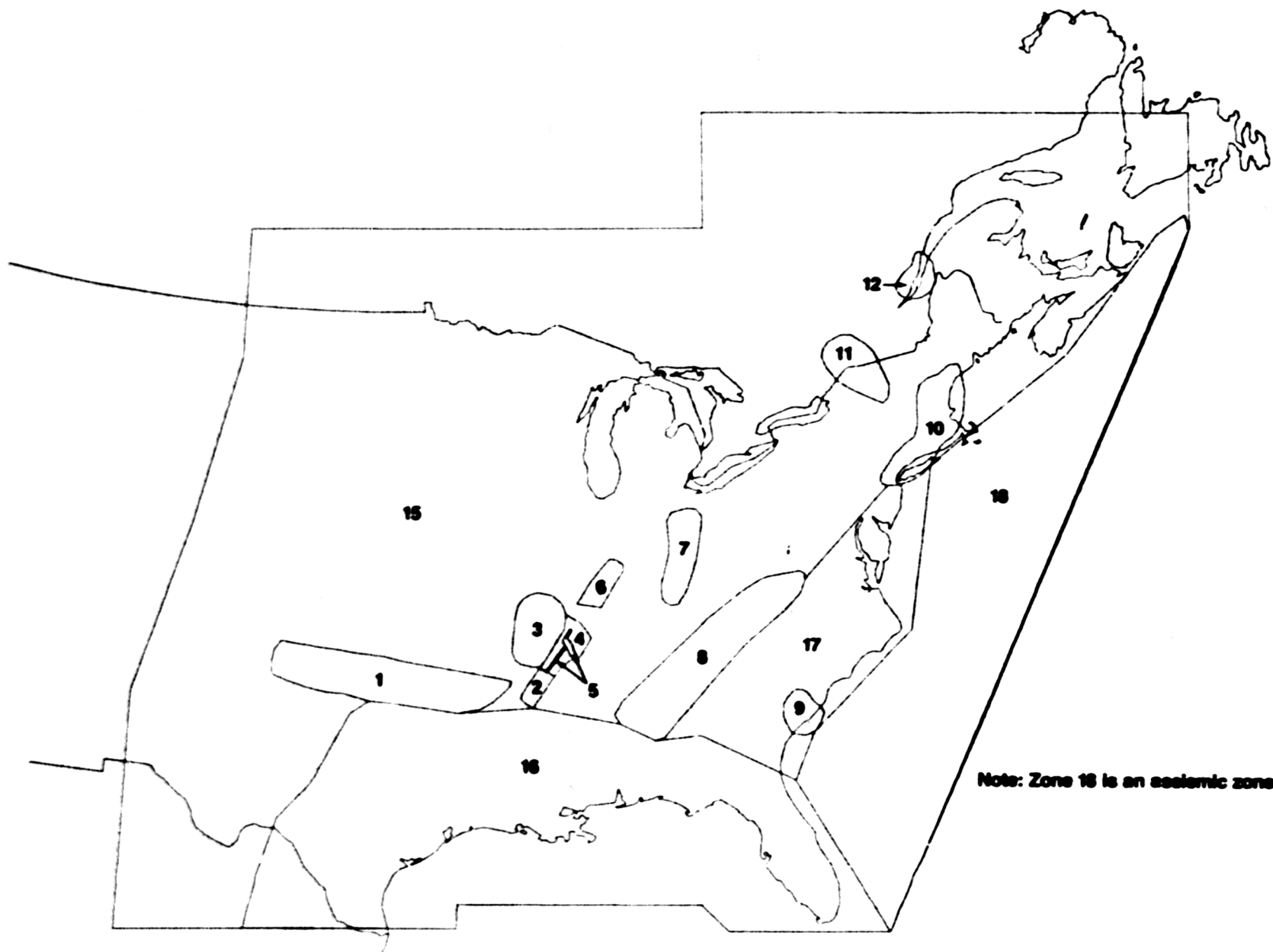


Figure A16. Seismic zonation base map for Expert 13.



Figure A17. Map of alternative seismic zonation to Expert 13's base map.

APPENDIX B

B.1 Introduction

In this Appendix, we describe the ground motion models in a form as close as possible to the form used in the actual calculations. The path used to develop the ground motion models is described in detail in the Section 3.4. In summary, the data presented in this section is the result of the following:

- o The responses of the five Ground Motion panel members questionnaire to Q5 on ground motion models.
- o A feedback meeting with all Ground Motion experts.
- o The response of the Ground Motion Experts to the feedback questionnaire, Q6.
- o A peer review evaluation of the ground motion modeling.
- o A continuous and extensive interaction between the experts and LLNL.

The ground motion models' parameter values are presented in Table B.1, the portions of computer code giving the exact equations of the ground motion models used in the analysis are described and given in Table B.2. and the plots of the ground motion models, sorted by expert, are given in Figures B.1 through B.18.

B.2 Description of the Ground Motion Models Used in the Analysis

The original analytical forms of the equations selected by the ground motion experts are given and described in detail in Appendix B, Volume II. Among all the various forms of equations actually used, it appeared that they were only ten intrinsically different forms.

Nine of these different forms are given in Table B.2, which is an exact copy of a section of the computer code used in the analysis. Note that each of the nine models (i.e., Model A,B,..., I, with model index 1,2,...,9) returns the logarithm of the ground motion. The tenth model is Trifunac Anderson's model and is given in Table B.3.

Models A through I have a parameter L whose value is either 0 or 10. Since each model is described by the means of 20 parameters, (see Table B.1), it is possible to use two different forms of a same model depending on the magnitude (or intensity). Then if the magnitude (or intensity) is smaller than a certain value, L will be 0, and 10 otherwise.

The variables XM, and XI represent the magnitude, and intensity. R and ALR represent the distance and its logarithm, and the array ATTN is the array of model parameters. When reading the Table B.1, the values loaded in the array ATTN are as follows:

The four values read from the first line of each model (title line) are loaded in ATTN(9), ATTN(10), ATTN(19), ATTN(20) respectively. For example if we consider the model number 21 whose title is: Equation A3-G41, X2 (selected by expert number 2), we have:

- (a) ATTN(9) = 15.
- (b) ATTN(10) = 999.
- (c) ATTN(19) = 1.1
- (d) ATTN(20) = 0

- (a) Means that if the distance R is smaller than 15 km, then R is reset to 15 km, thus creating a saturation in ground motion.
- (b) Since the magnitude (or intensity) will never be greater than 999., the value of L will be 0, thus only ATTN(1) through ATTN(8) will be used.
- (c) ATTN(19) is the model index number. Thus the model number 21 has a model index number equal to 1. Therefore the model A (see Table B.3) is used.
- (d) ATTN(20) is not used when the ground motion parameter is either acceleration or velocity. It is used only in the case of the spectra, when the model is a Newmark-Hall spectrum. In this case, ATTN(19) is the model index number for the acceleration branch, ATTN(20) is for the velocity branch, the parameters ATTN (1) through ATTN (8) are for the velocity branch and ATTN (11) through ATTN (18) are for the acceleration branch.

A graphical representation of the ground motion models is given in Figures B.1 through B.18. Figures B1 to B10 give plots of the ground motion parameter acceleration, for each of the 5 ground motion experts (sorted per region when the number of models is large.) The plots represent the attenuation of the of the ground motion acceleration in cm/sec^2 as a function of the distance for the magnitudes 4.5 and 6.5. Figure B11 to B18 represent the pseudo spectral velocity in cm/sec models for magnitudes 4.5 and 6.5 for an observer located 15 km away from the source.